

"Proud Past...Promising Future"
Celebrating

75 *Years*

ANARRATIVE HISTORY OF THE TENNESSEE AGRICULTURAL EXTENSION SERVICE 1914-1989

"Proud Past...Promising Future"

Published by the Tennessee Agricultural Extension Service
in celebration of its 75th anniversary... and in anticipation
of its role in the forthcoming 200th anniversary of the
University of Tennessee in the year 1994.

FOREWORD

PROUD PAST. . .PROMISING FUTURE!

For the last 75 years (1914-1989), the University of Tennessee Agricultural Extension Service, and in more recent years, our sister institution, Tennessee State University, has been engaged in a unique educational mission of delivering research-based agricultural and home economics technology to the rural people of our state.

Our PAST history has been awesome in scope, exciting in content, compassionate in delivery and aggressive and forward looking in program planning. Because the Extension Service is a "people" oriented endeavor, we have learned from past experiences in preparing for a PROMISING FUTURE.

Our story has been written and rewritten in the lives of rural and urban families, 4-H Club members, single parents, the disadvantaged and the affluent. Long before civil rights became the law of the land we were taking our educational message to all people, regardless of race, color, creed, national origin or gender. Our staff of over 500 college trained professionals epitomize the highest standards in American education, are teachers par excellence and humanitarians extraordinaire.

As we enter the 21st century, the Extension Service remains committed to the rural people of Tennessee. Our promising future encompasses long-range initiatives that address critical issues facing rural families. We will bring the people along with us into an exciting and visionary new century of agricultural and home economics information.

In 1994, the University of Tennessee will be celebrating its 200th anniversary. We are proud to be a part of this great heritage. We are a part of its story. . .its history. . .its claim to excellence in education.

Within these pages you will be witness to our work. Written by many staff authors in their own journalistic styles, our PAST unfolds. But, the story is still being written. You are the cast and players -- the audience -- the reason for our PROMISING FUTURE.

Betty L. Sewell,
Personnel Assistant and
History Project Coordinator

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Through the Decades

On May 8, 1914, President Woodrow Wilson signed the Smith-Lever Act which legally established the Extension Service as the educational branch of the U.S. Department of Agriculture. The Extension Service of today continues to be a unique nationwide system, guided and funded by a partnership of federal, state and county governments. It is an organization with a proud past and a promising future.

1910s -- The Poverty Years

- * Poverty takes hold in rural America.
- * Girls' tomato clubs and boys' corn clubs meet for the first time.
- * Extension hires its first home economics specialists.
- * World War I begins (1917).
- * Extension works to improve food production and food preservation.
- * America's new slogan is, "Food Will Win the War."
- * Agents teach canning, butter making, bread baking and poultry care.
- * Agents organize clubs to reach many more families with educational information.

1920s -- The Pre-Depression Years

- * Farm prices crash, causing economic problems for farmers.
- * The Division of Extension changes its name to the Agricultural Extension Service.
- * Farmers realize that prosperity will depend on the use of modern farming methods.
- * The first 4-H Club camps open their doors to American youth.

1930s -- The Lean Years

- * Economic depression sweeps the nation.

- * Extension formulates relief programs to counteract rapidly falling prices.
- * Agents teach home and money management.
- * The cotton market slumps during a high-yield year. Agents respond by teaching families how to use surplus cotton to make mattresses.
- * Extension agents conduct a massive meat canning program which makes use of surplus meat and saves grain.
- * Farmers diversify and grow strawberries, tobacco and capons for special markets.
- * Farmers begin to use new phosphate fertilizers, developed by the Tennessee Valley Authority.
- * Thousands of Tennessee farm families wire their homes for electricity.

1940s -- World War II

- * Extension organizes a system of neighborhood leaders who deliver urgent war information to farm families.
- * Neighborhood leaders inform rural families of the nation's need for products and resources such as: scrap rubber, iron, enriched flour and increased war bond sales.
- * Extension organizes groups to discuss critical issues, including: wartime farm policy, farm equipment sharing and fire prevention and control.
- * Communication by radio and telephone becomes available to virtually everyone, partially because of work done through the neighborhood leader system.
- * The "frozen food revolution" begins after the war with the opening of cooperative community freezer plants. Agents have the opportunity to teach proper freezing methods.
- * Extension helps Young Farmers and Homemakers organize into an effective group.

1950s -- The Prosperous Years

- * Technological advances bring to the farm improved hybrids, new varieties, high analysis fertilizers and artificial breeding techniques.
- * Extension home economists diversify into new areas, such as consumer education.
- * The urban consumer welcomes a new audience for Extension information.
- * Marketing and distribution of commodities takes on increased importance.
- * Weed control in field crops begins to change from hand and machine cultivation to herbicide use.
- * Farmers switch from hand harvesting of crops to using combines.
- * Farm families actively seek out information about modernizing equipment, improving farm management techniques and upgrading livestock.
- * The new emphasis in 4-H Club work is on project-related activities.
- * The Tennessee 4-H Club Foundation is organized to support 4-H through private funding.

1960s -- The Turbulent Years

- * As a result of societal changes, Extension's audience becomes more diverse.
- * Agricultural agents teach farmers scouting techniques which help establish an "economic threshold" before spraying crops for insect and disease control.
- * The Expanded Food and Nutrition Program helps improve diets of lower income families.
- * Tennessee farmers focus on marketing commodities such as timber, feeder calves and feeder pigs.
- * Extension places a renewed emphasis on consumer education.
- * Agents help farmers' group meetings become better organized and more focused on the real needs of farmers. New opportunities emerge, as the statewide Farm Management Schools.

- * 4-H continues to be project-oriented. New projects include: horse, dog, automotive, personal development and photography.

1970s -- The Years of Accountability

- * Economic conditions lead to the "back-to-basics" movement in Extension.
- * Extension programs focus on timely issues such as the new technologies, the energy crisis, inflation and family stress.
- * The increased use of print and electronic media gives Extension the ability to reach larger and more diverse groups of people.
- * Enrollment in the 4-H Club programs reaches a new high as National 4-H Club Congress winners exemplify all that's best in American youth.
- * Extension responds to clientele needs through an increased emphasis on family life education programs, including child development, parenting, and family relations.
- * Consumers express a new interest in nutrition and food safety. Extension responds with programs geared to consumer needs.
- * Farm exports increase sharply as farms gain in acreage.
- * Farm income becomes highly variable.

1980s -- The Move to Issue-Based Interdisciplinary Programs

- * Extension programs continue to benefit from the use of mass media, including video conferencing.
- * Helping families deal with stress becomes a top priority of the Extension Service.
- * The uncertain economy and tightening federal budget prompt Extension to take a fresh look at program priorities.
- * Teams of volunteers and Extension staff teach leadership techniques statewide through the Family Community Leadership program.
- * Net farm income declines sharply in mid-decade; this lead to a financial crisis for many farm families.

- * Farmers start using the MANAGE program, an intensive educational package which teaches financial management, family economics and stress management.
- * Extension programs continue to place a strong emphasis on consumer education.
- * Tennessee takes part in the 4-H LABO Exchange Program, in which Tennessee 4-H Club families host Japanese young people and 4-H Club members, in turn can visit Japan.
- * The Tennessee Extension Homemakers Council organizes and is granted membership in the National Extension Homemakers Council.

1990s -- New Opportunities

- * Extension programs focus on the "initiatives" -- critical issues facing the people of Tennessee now and into the 21st century.
 - * Competitiveness and Profitability of Tennessee Agriculture
 - * Alternative Agricultural Opportunities
 - * Water Quality
 - * Conservation and Management of Natural Resources
 - * Revitalizing Rural Tennessee
 - * Improving Nutrition, Diet and Health
 - * Family and Economic Well-Being
 - * Building Human Capital
 - * Youth at Risk
- * Through the use of electronic technology, the Extension system will be more efficient than ever in delivering educational programs to the people it serves.

ADMINISTRATION

In partnership with the United States Department of Agriculture, state and county governments and the University of Tennessee, the Tennessee Agricultural Extension Service has been shaped by political winds, global economic forces, demographic patterns and a rich and diversified cultural heritage.

Within this unique framework, the technological and scientific advances in agriculture and home economics have been passed along to an eager public.

During the 75 year history of the Tennessee Agricultural Extension Service, only six individuals have held the position of dean/director. Each man brought his own ideas, style of administration and personality into the leadership role. Each was fitting for the era in which he served. Each helped to shape the destiny of the organization.

The following administrative overview will help the reader establish an understanding and appreciation for the vast and interesting history of collective efforts to serve Tennessee farm families with expertise, dignity and honor.

An Overview

M. Lloyd Downen, Dean Emeritus, Agricultural Extension Service

The signing of the Smith-Lever Act on May 8, 1914, set into motion the establishment of what became known as the Cooperative Extension Service. President Woodrow Wilson, upon signing the act, called it "one of the most significant and far-reaching measures for the education of adults ever adopted by the government." The Congress clearly stated that its purpose was "to aid in diffusing among the people of the United States useful and practical information on subjects related to agriculture and home economics and to encourage the application of the same."

Extension work was to "consist of giving instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities and imparting to such persons information on said subjects through field demonstrations, publications and otherwise." The underlying philosophy was to help people help themselves by taking the university to the people.

The act brought into being a partnership of federal (U.S. Department of Agriculture [USDA]), state (the land-grant university), and local (county) governments. The Cooperative Extension Service is a uniquely American institution. No other country has focused such attention on the practical (applied) dimension of education, i.e., extending and applying the knowledge base of the land-grant universities to real life where people live and work.

Formative Years for Extension in Tennessee

Extension-type work started in a few Tennessee counties prior to 1914. In 1909 a representative of USDA was stationed in Jackson to stimulate interest in farm demonstration work in Tennessee. Until 1912, federal funds for demonstration work could be used only in cotton producing counties.

The first county agricultural agent in Tennessee using USDA funds was appointed Dec. 1, 1910. By Feb. 1, 1911, there were six agricultural agents working three days per week. Federal funds for demonstration work were increased and the number of agents increased to 16. In 1913, the Tennessee General Assembly authorized county courts to appropriate money to be used in cooperation with the USDA in support of county demonstration work.

The Boys' Corn Club and Canning Club work got underway during this same period. In 1910, through the cooperation of county school superintendents, boys' corn clubs were organized in 12 counties. In the same year, work started with women and girls in developing canning clubs. The first home economics agents in Tennessee were employed in six counties during the canning season of 1911. Funds were provided by the state Department of

Education and the Rockefeller General Education Board in cooperation with local county boards of education.

An early annual report had this to say about the value of the club work and its influence in farm homes: "It has helped the farm women to earn while they learn. They have learned to work in larger groups and have a larger realization of the home in its entirety. They also realize that the home is not four square walls, but that their influence is needed in the community, in the county, in the state, in the nation. She had learned to have an open mind for men and progressive things."

The passage of the Smith-Lever Act incorporated the experiences of many states in off-campus educational work. It also reflected a growing desire by many people to share in the benefits of the land-grant college without being on a campus.

On July 1, 1914, the College of Agriculture, University of Tennessee and the USDA, cooperating under the provisions of the Smith-Lever Act, organized the Division of Extension, now known as the Agricultural Extension Service. The Farmers' Cooperative Demonstration work (included agriculture and home economics) and Boys' and Girls' Club work, which up to that time had not been associated with the college, were merged with the Division of Extension. Headquarters were established at UT in Knoxville.

On June 30, 1915, at the end of the first fiscal year, there were county agents employed in 31 counties and there were 26 county agents in home economics. Three specialists had been employed -- one livestock, one dairy, and one crops specialist.

Thus, Extension got off to a modest beginning in Tennessee. Although this new agency had considerable support, there were those who questioned its value. As one of the first agents wrote, "A small percentage of the farmers were really interested in the new county agent and his program. Most of the farmers wanted to wait and see."

The economic and social conditions that resulted in legislation that created the Cooperative Extension Service contributed to the organization of the county, state and American Farm Bureau. In Tennessee, the movement grew into what was known initially as the County Council of Agriculture. By the end of 1920, Tennessee had 17 permanent County Councils of Agriculture, 19 temporary councils and four in the process of organization. The first County Council of Agriculture in Tennessee was organized in Blount County in 1919.

The county councils of agriculture were the forerunners of the county farm bureaus in Tennessee. The organizational movement grew out of the Agricultural Extension activities. The leaders of the County Council of Agriculture and Extension agents worked closely to identify educational programs for local farm families. Thus, the basis was established early for the

UT Agricultural Extension Service to place top priority on solving problems of local clientele with research based educational programs.

In June 1921, a group of agricultural leaders including representatives of the county councils of agriculture were invited to meet on the UT campus. The meeting was presided over by Captain Thomas Peck, state commissioner of agriculture. The purposes of the meeting were to discuss the problems of agriculture and the possibility of organizing a state federation of county councils of agriculture. C. E. Brehm, assistant director of the Agricultural Extension Service represented Extension.

On July 1921, a group of agricultural leaders met in Nashville to consider changing the name of the organization from County Council of Agriculture to County Farm Bureau and to discuss plans for the organization of a State Farm Bureau Federation.

According to the account of the meeting published by the Columbia Daily Herald: "This meeting convened on the morning of July 29 in the auditorium of the Nashville Chamber of Commerce Building. J. F. Porter, chairman of the organization, called the meeting together and stated the purpose of the gathering. Director C. A. Keffer, and assistant director C. E. Brehm of the Extension Service, and C. A. Wilson of the University of Tennessee were present along with county agents and representatives from 39 temporary and permanent county councils of agriculture . . ."

The meeting continued through July 30 and resulted in a temporary Tennessee Farm Bureau Federation. It was voted that the name be changed from County Council of Agriculture to County Farm Bureau.

At the annual meeting in July 1923 of the temporary Farm Bureau Federation, the organization was changed into a permanent Tennessee Farm Bureau Federation

In the late 1950s, one of the first county agents wrote that: "After World War I, county courts that had voted for county agents during the war then voted the agents out. This led to an insecure feeling with the county agents. Was it a career or just a job until the county court decided to cut expenses? In the early twenties, the Farm Bureau came into existence. One of the Farm Bureau's first projects was to sponsor the Extension Service in the counties. This has helped a great deal and now a county agent can feel secure with a career as county agent."

The County Farm Bureau and the Tennessee Farm Bureau Federation have had a very positive impact upon the Agricultural Extension Service in Tennessee.

It is the view of many that the first three years of operation under the Smith-Lever Act settled the principles and methods for the successful and permanent establishment of a national system of Extension work in

agriculture, home economics and related areas. In that system, federal, state, and county forces were to cooperate closely in an off-campus educational program for citizens who would participate by the millions. Nevertheless, the Extension system has had difficulties and uncertainties to cope with throughout its existence.

Extension Funding and Programs

The Smith-Lever Act of 1914 established a federal appropriation to encourage states to participate in Cooperative Extension work. Federal funding for fiscal year 1915 was based on an annual allocation of \$10,000 per state. In fiscal year 1916, the appropriation added \$600,000 above the base to be distributed to the states according to each states percentage of rural population as determined by the 1910 census.

Through the years, various formulas for distribution of federal funds to the states were debated. The Capper-Ketcham Act of 1928 increased the basic formula to \$20,000 per state with the remainder based on rural population. The Bankhead-Jones Act of 1935 used farm rather than rural population as a basis for distribution to the states. During both World War I and II, emergency federal funds were allocated in addition to the regular formula.

The Agricultural Extension Service at UT has fared relatively well in the distribution of funds based on rural and/or farm population. This is due to Tennessee being more rural and having a larger number of farms compared with other states.

The Tennessee General Assembly passed the Agriculture and Home Economics Cooperative Extension Act in 1929. Section I states that, "The purpose of this act is to extend practical demonstration instruction in agriculture, home economics and marketing to boys, girls, men and women in rural communities in a greater number of counties in the state of Tennessee, and make such instruction more permanent through increased financial support and reduced county appropriations, to carry on the work in the several counties of Tennessee."

Section 3 states, in part, "That in order to cooperate with the U.S. Department of Agriculture and the University of Tennessee . . . is hereby appropriated . . . for the year beginning July 1, 1929, to June 30, 1930, the sum of one hundred sixty thousand dollars (\$160,000) . . . and annually thereafter one hundred sixty thousand dollars (\$160,000) to be used to offset and supplement allotments of federal appropriations available to the state of Tennessee for carrying on this work . . . "

This act is probably the most significant single piece of state legislation impacting the Agricultural Extension Service in Tennessee. It established the basis for regular state appropriations as the major source of matching funds for federal appropriations and made it possible to expand Extension into all 95 counties.

At the federal level, the Bankhead-Flannagan bill of 1945 established for the first time a two percent allocation to the federal Extension office and four percent to the secretary of agriculture for special state needs with the remainder allocated to states on the basis of farm population. The Consolidation bill of 1953 combined nine other acts with the Smith-Lever Act, froze the 1953 appropriation and provided that future increases in state allocations would be based upon the decennial census with funds allocated as follows: four percent for special needs, 48 percent on the basis of rural population, and 48 percent on the basis of farm population. The 1953 bill also authorized Congress to increase the appropriation without special authorization.

A 1962 amendment to the Smith-Lever Act provided four percent to the Federal Extension office with the remaining 96 percent to the states for fund increases above the existing level. Twenty percent of this money was to be distributed equally, 40 percent based on rural population and 40 percent on farm population.

Many amendments to the Smith-Lever Act have broadened the scope of Extension work or have defined more explicit activities that are to be included. Examples of broadened and/or redefined Extension work include activities such as 4-H Club work, education in rural health and sanitation, solar energy, farm and home safety, rural development, forestry (production, marketing, harvesting, utilization), aquaculture and the marketing, transportation, and distribution of agricultural products. Often these amendments brought additional funding, but in some cases additional education responsibilities without added funds.

In the early years of Extension, the primary attention of Congress was given to the distribution formula on the basis of farm or rural population. Earmarking appropriations for specific purposes has become more common in recent years. The 1953 amendment to the Smith-Lever Act, section 3(d), stated: "The federal Extension Service shall receive such additional amounts as Congress shall determine for administration, technical and other services and for coordinating the Extension work of the department and the several states, territories and possessions."

Section 3(d) authorization was used in 1961 to provide funds for resource and community development area agents and again in 1965, for the distribution of funds for pesticide chemical programs and Extension work in Appalachia. Although these funds were contained in a supplemental appropriation, they established the precedent for appropriations under section 3(d).

The significance of earmarked funds may be noted by the fact that in 1957 Smith-Lever 3(b) and 3(c) funds accounted for 98 percent of federal payment to states. By 1989, 3(d) allocations accounted for 24 percent to the states and formula funds had dropped from 98 percent to 74 percent. The most significant of the 3(d) funds has been the appropriation for the Expanded Food and Nutrition Educational Program (EFNEP). Other

earmarked 3(d) funds have included farm and home development, rural development, urban 4-H, small farmer Extension work, farm safety, pesticide impact assessment, integrated pest management, urban gardening, water quality and other projects.

During the 1980s, Congress provided funding through the Renewable Resource Extension Act (RREA) for educational programs on renewable natural resources. These funds may be used for forestry, wildlife, fisheries and range management programs. In Tennessee, RREA funds have been used to enhance the educational program in forestry.

In Tennessee, the Agricultural Extension Service has used the Smith-Lever 3(d) funds to expand the scope of the program and/or to enhance ongoing educational programs. The 3(d) funds do not require matching funds. The size of such fully funded projects has been determined by the funds allocated. Although new 3(d) projects have been added through the years, funding for existing 3(d) projects has not kept pace with inflation and the cost of conducting programs. This has led to a shrinkage in the size of individual 3(d) projects. For example, funding for EFNEP has been about level over the 20 years of its existence. Because of the level funding and higher costs, EFNEP was in about one half as many counties in 1989 as when it was fully implemented about 20 years earlier.

The Extension Service has also received funds for specific program activities from other USDA agencies as well as non-USDA agencies. The pass-through of agency funds to state Extension Services has been successfully employed in many cases. There is, however, a history of some confusion and sometimes lack of continuity in some efforts provided through this technique. Often Extension becomes involved in commitments initially funded by pass-through funds which are then withdrawn. With the educational requirements remaining, Extension is often perceived as obligated to continue its educational programs -- often without the dollar support required to maintain the effort.

The Tennessee Valley Authority (TVA) has been by far the most important non-USDA Agency with which the UT Agricultural Extension Service has cooperated.

The U.S. Congress created the TVA in 1933. It was created as a government corporation with a three-member board of directors. TVA was given broad responsibilities for protecting soil, water, forestry, agriculture, transportation, electricity and other resources by working with and through the people of the Tennessee valley.

TVA was encouraged to work with farmer groups, industry and the agricultural university in carrying out these responsibilities. Rather than create a new staff to work with rural people in the Tennessee valley, TVA contracted with the Agricultural Extension Services in the seven valley states to conduct agreed upon educational activities. The added personnel were Agricultural Extension

Service employees who were responsible to the dean/director of Extension rather than to TVA.

During the early years, Extension assisted with the resettlement of farmers who had to relocate because of the construction of TVA dams. Extension's efforts reduced the stress of farm families involved.

The formative years emphasized valley-wide programs on a broad scale, especially with respect to the introduction of concentrated phosphatic fertilizers and their use in ways designed to halt soil and water losses.

One feature of this program was the use of demonstration as an educational method on selected farms. The testing of new forms of fertilizer, primarily new forms of phosphates, under practical farm conditions was another feature of this work. A third feature was testing and demonstrating the value and effect of liberal amounts of fertilizers in an attempt to develop improved farming systems. The designated test-demonstration, when applied to the TVA-Extension program, has its origin in these the chief features of that program. The test-demonstration method, though not untried, had never been used on such a scale as was begun at that time.

The period from the early 1930s to the late 1950s was one during which the UT Agricultural Extension Service, in cooperation with TVA, used unit test demonstration farms, terracing associations, fertilizer tests and demonstrations and other established methods to improve soil fertility, control soil erosion and to increase farm income.

From the early 1960s to the mid-1980s the emphasis of the TVA-UTAES cooperative program shifted to that of improving management skills of farmers.

Rapid Adjustment Farms (RAF) were established to serve as laboratories for professional agricultural workers where farm management solutions to resource use problems could be analyzed and new approaches demonstrated.

Resource Management Farms (RMF) helped to spread improved technology and management techniques demonstrated on the RAF's to others. Both programs contributed significantly to overall Extension farm management programs in Tennessee. The UT Agricultural Extension Service is now recognized as one of the leading Extension Services in the nation in the area of farm management.

The mid-1980s brought a shift in TVA-Extension cooperative program emphasis to water quality, development of alternative agricultural enterprises and new markets for special farm products.

The cooperative TVA-Extension agreements since the establishment of TVA have contributed to the betterment of farmers, agriculture and rural

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communities. These agreements have enhanced Extension programs and have helped both TVA and Extension carry out their responsibilities.

The Tennessee Agricultural Extension Committee Act of 1955 required all counties cooperating with the Agricultural Extension Service to elect an Agricultural Extension committee with seven members. Three of these are elected from county commission and four are elected who are not members of county commission. Two of these four shall be farmers and two are to be farm women.

The functions of the committee are: to act with duly authorized representatives of the state Agricultural Extension Service in the employment and/or removal of personnel receiving funds from county extension appropriations; to act with duly authorized representatives of the state Agricultural Extension Service in formulating the county extension budget and to serve as liaison between the Extension Service and county commission on financial and other matters relating to the work; to act in advisory capacity on county extension program formulation; and to act in an advisory capacity on activities performed in connection with carrying out the program."

This act formalized and standardized the role of county government in Tennessee as a partner in the Agricultural Extension Service. This act keeps local people involved in the program and helps assure that the extension education program will remain focused on solving problems of local concern. County government provides office space, utilities, janitorial services and part of the salaries and fringe benefits in personnel cooperatively supported in the county.

The Tennessee General Assembly, from time to time, has made special appropriations for very specific purposes. Three of the more important of these are making a long time impact upon Extension programs in the state.

Funds were appropriated in 1984 for a comprehensive plant pest identification and disease diagnostic laboratory. In addition, funds were provided to add the following four Extension specialists: plant pathologist, entomologist, nematologist and weed scientist, plus support staff. The new laboratory and additional staff enabled the Agricultural Extension Service to expand and intensify its educational program in plant pest and disease control with farmers and others. This further increased the capability of Extension to make environmentally sound recommendations for pesticide use.

Funds were appropriated in 1985 and 1986 to strengthen Extension's educational program with the rapidly growing nursery-turf-flower industry in the state. A statewide turf specialist was added, plus three area specialists in ornamental horticulture.

The Agricultural Financial and Family Counseling Act of 1986 was passed and funded. It expanded Extension's capacity in the areas of farm and family financial management and in emotional stress management. The act

authorized 12 new positions of area specialists-farm management, plus three state specialists-farm management, family economics and family life (stress management).

The UT Agricultural Extension Service is the off-campus educational division of the Institute of Agriculture. It is statewide and funded jointly by state, federal and local governments. In its educational role, the Agricultural Extension Service interprets, disseminates and encourages practical use of knowledge. It conducts programs of education for action and stresses organizational and educational leadership. These programs are in four broad areas: agriculture, home economics, 4-H and community resource development.

Because of the emphasis upon helping people to solve their specific problems, most Tennesseans have contact with the Agricultural Extension Service through Extension agents in their local county office -- one office in each county. Extension agents are reinforced by area and statewide subject matter specialists. Many educational activities are now multi-disciplinary due to the complex nature of many problems faced by clientele.

Throughout its history, the programs carried out by the Agricultural Extension Service have had a direct impact on the economy of the state, the welfare of the agricultural industry, and the standard of living of all Tennesseans. The mission of the Agricultural Extension Service is an essential ingredient of UT as the state's land-grant college.

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Profiles of Leadership

Dr. Charles Albert Keffer was a natural choice for the first director of the Tennessee Agricultural Extension Service. As a noted authority on horticulture and landscape design, he came to the University of Tennessee in 1900 as head of the horticulture department. From an organization of less than 40 employees in 1914, Keffer saw his staff grow to almost 500, including officials, specialists and county agricultural agents in all 95 counties, home agents in 70 counties and 4-H Club agents in 62 counties. He passed away on Dec. 30, 1935. As a lasting tribute to his contributions to the rural people of Tennessee, the 4-H Club boys and girls chose his name for the battleship launched under their sponsorship in June 1944.

Dr. C.E. Brehm, who had served as assistant director for 15 years, became the second director following the death of Keffer. Brehm joined the Extension Service in 1917 as a marketing specialist. His first work was the formation of cooperative wool marketing pools, which still function successfully in the state. Through his training and great understanding of farm and home problems, and his well known organizational skills, he was popular throughout the South. He served from 1936 until his appointment as president of the University of Tennessee in 1948.

Dr. J.H. McLeod became director of the Extension Service in 1947 and served for 10 years. He joined the staff in 1921 as a swine specialist. His outstanding work in two-litter development and later as coordinator of the AAA corn-hog program is legendary. He was largely responsible for setting up the cooperative Extension-TVA Test Demonstration Program in the 1930s. His work in agricultural economics and program planning gained wide recognition. Because of his long association with Extension work and his broad knowledge of agricultural conditions, he rendered a wide service to the farm people of Tennessee.

Dr. Vernon W. Darter succeeded McLeod as the director of Extension in 1957. He had previously served as a county agent, and professor and leader of the Extension training and studies department which he organized at UT. In June 1968, his title was changed to dean of Agricultural Extension. Under his leadership, professional competency of personnel was greatly improved. Nearly half of the county agents acquired advanced college degrees and more than half of the state specialists held Ph.D.s. The administrative staff was reorganized under his direction, with more emphasis placed on educational programs in agriculture, home economics and youth at the county level. Darter retired in June 1972.

Dr. William D. Bishop was named dean of Extension in 1972. He had received a master's degree from the UT in 1954 and was appointed associate agronomist. After earning the Ph.D. from Purdue University, he was promoted

to head of the agronomy department. Two years later he was named state leader of Extension agricultural programs. Under Bishop's leadership the Extension Service continued to grow, especially through widespread development of soil testing and increased activity in 4-H Club programs. He retired in March 1977.

Dr. M. Lloyd Downen is the present dean of the Tennessee Agricultural Extension Service. He assumed his duties in 1977 after having served as professor and leader of the Extension agricultural economics department and as assistant dean for five years immediately prior to his present position. He is recognized nationally for his administrative skills. Consequently, he has served on many advisory boards and councils, including the National Extension Committee on Organization and Policy (ECOP) and the National 4-H Council Board of Trustees. He was selected by his peers to chair the Southern Directors Association. He has emphasized balanced programming among the agriculture, home economics, 4-H and community resource development components.

During his administration, Downen has led Tennessee's 4-H Club program to an unprecedented 10 years with more national project winners than any other state in the nation. Under his leadership, the Agricultural Extension Service programs are helping farmers and farm families in Tennessee meet the social and economic crisis which they face in a changing agricultural economy. As dean, Downen has seen the Extension Service come to a crossroads in a changing agricultural environment, both in Tennessee and in the nation. He is now addressing the issues that will face our society not only today, but long into the 21st century.

The Staff

Betty L. Sewell, Personnel Assistant

It has always been the professional staff who have created the Extension Service story. Along with a fine clerical and supportive staff, these professional educators have been totally dedicated and technically trained to fulfill the mission set forth by the U.S. Congress in the 1914 Smith-Lever Act:

"To aid in the diffusing among the people of the United States of America useful and practical information on agriculture, home economics and subjects related thereto and to encourage application of the same . . ."

From the very beginning, most all county Extension agents and specialists were college trained in agriculture or home economics. It soon became apparent that the bachelor of science degree was essential for defining standards for performance and for establishing creditability among clientele. Those wishing to become a part of this new and exciting career field found ways to finance a college education and to pave the way for making their mark in the world.

The tradition continues. The high standards for employment and performance evaluation are still viewed as the basic strength of the Tennessee Extension Service.

For many years the recruitment of staff was a rather haphazard process. There were no formal rules and when an agent was needed, the district agent (now called district supervisor) simply handpicked someone who was known to them through personal contact or upon the verbal recommendation of college professors. Each Extension district office operated independently in their efforts to attract intelligent young adults into the profession. Many an applicant was "courted" by one or more district supervisors at the same time. Competition among the districts was fierce and applicants were left bewildered as to which district was the best place to launch their careers. In frustration, some applicants sought employment elsewhere.

With the official establishment of County Agricultural Advisory Committees in 1951, order was brought to the employment process. This seven member committee was to act with duly authorized representatives of the Agricultural Extension Service in the employment and/or removal of personnel receiving funds from county Extension appropriations. Thus, the Extension Service took on a more formal and equitable posture in the selection of qualified personnel.

To further refine and assure a steady supply of qualified applicants for employment at the county level, a full-time career education and recruitment position was created in 1961 by Dean Vernon Darter. Betty L. Sewell, a home economist and former 4-H Club agent in Washington County was tapped for the position of personnel assistant and serves in that role to this day. She has conducted over 5,000 personal in-depth interviews with applicants and over 75 percent of the present staff have come on board during her years of service.

Through the years Sewell has worked closely with the colleges and universities of the state where agricultural and home economic degree programs are offered. Students are given an opportunity to attend Extension career seminars and faculty members have been nurtured to encourage promising students toward Extension careers. The resulting efforts have favored both students and the Extension Service.

With the advent of the Equal Employment Opportunity and Affirmation Action laws of 1971, employment criteria was established to ensure that recruitment activities were designed to reach, attract and employ candidates for all positions, regardless of race, creed, color or national origin. The law made provision for the employees to enhance skills to perform at their highest potential and to advance in accordance with their abilities. The EEO program also encouraged the use of incentive awards, recognition and performance evaluation procedures to support the equal opportunity concept.

In 1973, Lewis H. Dickson returned to the Extension Service as director of personnel. As civil rights officer for the organization he brought order and understanding of the complex civil rights laws to an anxious staff and helped to reconfirm Extension's commitment to equality for all personnel. Under his direction, job descriptions were updated, performance review procedures were redirected and the organization enjoyed a period of employment stability. Dickson served as director of personnel until 1975 when he elected to return to the Extension education section which he had established in 1957.

In very recent years, the recruitment area has been expanded well beyond the borders of our state to reach the 16 1890 land-grant colleges. With a student body that is predominately black, these colleges produce some of the best minority agricultural and home economics students in the nation. Many have chosen to begin their careers with the Tennessee Extension Service and are viewed as strong role models for other undergraduate students.

From its humble beginning to the present day, Extension employees have brought hope to farm families, shared in their failures and successes, motivated young people to excel beyond their dreams and fostered the reputation of the farmer as an honorable and cherished occupation.

As we celebrate the 75th anniversary of the Tennessee Agricultural Extension Service, the staff now employees some 400 agricultural and home economics agents in all 95 counties of the state, has a staff of over 100 subject matter

specialists headquartered on the Knoxville campus of the University of Tennessee, Tennessee State University in Nashville and at district headquarters in Nashville and Jackson.

For a detailed listing of all professional personnel who have served in the Tennessee Agricultural Extension Service from May 1914 through June 1989, a special personnel directory is available for reading at any of the 95 county Extension or district offices. Personal copies, owned by present and former employees, could possibly be shared with interested readers.

DISTRICT I

Headquarters: Jackson

Cradled between the banks of the mighty Mississippi and the north flowing sweep of the beautiful Tennessee River, District I encompasses 21 West Tennessee counties. One can gaze at endless rows of cotton and soybeans, enjoy the world's largest fish fry and experience the excitement of the great Mid-South Fair. From the geologically unique Reelfoot Lake to the shaded path of the Natchez Trace, District I is traditionally Southern in attitude and agriculture.

Benton	Henderson
Carroll	Henry
Chester	Lake
Crockett	Lauderdale
Decatur	Madison
Dyer	McNairy
Fayette	Obion
Gibson	Shelby
Hardeman	Tipton
Hardin	Weakley
Haywood	

District I

James W. McKee, District Supervisor

Even though the passage of the Smith-Lever Act on May 8, 1914, officially marked the beginning of the Agricultural Extension Service, the actual beginning dates back to 1910. At that time, H.S Nichols came to West Tennessee as an agricultural demonstrator. He was a graduate of Mississippi State University and a cotton specialist with the U.S. Department of Agriculture. The work was conducted on a project demonstration basis dealing with individual projects on different farms located in several West Tennessee counties.

Representing the USDA, Nichols spent some of his time planting the idea of an Agricultural Extension Service in the minds of county leaders in several West Tennessee counties. This time of planning ideas and encouraging counties to start an Extension Service proved to be fruitful in a short period of time.

The Dyer County Extension Service was started on Jan. 20, 1911, with Crockett, McNairy and Tipton counties starting their Extension Services on Feb. 1, 1911. Chester County Extension had its beginning on Feb. 28, 1911, and Obion County followed on March 1, 1911. Those six counties were followed quickly by Gibson, Henry, Madison and Shelby counties whose Extension Services began in the fall of 1911. On Nov. 20, 1917, Benton County became the last West Tennessee county with an Agricultural Extension Service.

With passage of the Smith-Lever Act, Nichols was named as district director for West Tennessee. He served in this capacity until 1934 when he moved to the University of Tennessee-Knoxville to work as a specialist in state Farm Demonstration work. In 1936, Mr. Nichols was named assistant director of the Agricultural Extension Service. C.E. Brehm was director of Extension.

Madison County was the first county in the state to make an appropriation for cooperation in Extension work. On Oct. 2, 1911, the county court appropriated \$337.50 to match a like amount from the federal government. Sid S. Bond, a local farmer, was employed as county agent to work nine months of the year at \$75 per month.

The early agents were very much like circuit rider preachers. In many instances, they would leave on Monday and travel by horseback to visit farmers and homemakers in the county communities before returning to their home base on weekends. Food and lodging would be provided by some of those who were being visited.

In 1911, the first county home demonstration agent employed in West Tennessee went to work in Madison County. Maggie Lansden served as the first home agent and worked during the canning season.

In the beginning of adult home economics Extension work, teaching was organized on an individual basis with actual demonstrations given to individuals in their homes.

The organization of community clubs in 1916 was a step toward extending the home economics program to more people. From these community clubs, the women formed home demonstration clubs so they could have more specialized programs. The main focus of these clubs was to help women improve homemaking skills by providing monthly educational programs in all areas of family living.

Records show that the first home demonstration clubs had their beginning around 1916. The Gleason Sunshine Extension Community Club was organized in Weakley County by Mrs. R.E. Ellis in June 1916 with 12 members. This club became the Sunshine Extension Club and is still active in 1990.

Other counties organized during the 1920s and several counties began the work with home demonstration clubs in the 1930s and 1940s. On Oct. 1, 1985, the home demonstration clubs changed their names to extension homemaker clubs.

Two years after the passage of the Smith-Lever Act, the director of Extension work in Tennessee appointed two black women and three black men as agents in Fayette County. Their first work was largely through community adult organizations. They soon found, however, that the most effective way to reach adults was through their children. Therefore, the first black 4-H clubs in Fayette County were organized in 1917. Some of the early black agents in West Tennessee were R.I. Anderson, E.R. Shockley, Bessie Walton, W.H. Williamson and Mrs. Yuger Umble.

When the United States entered World War I, the number of black agents in Fayette County increased to five women and seven men.

The early black agents make a valuable contribution toward helping their clientele during those hard times. The black agents, as was true with the white agents, worked under extreme hardships for many years. Their only means of transportation was by horse, buggy, wagon or foot. Most of the roads were dirt, so muddy road conditions were a problem during rainy weather.

Agents were later able to buy cars, which made their work more efficient. The black agents became highly respected in their counties because of their good work. Many of them were called "professor," which speaks highly of the esteem in which they were held.

Judd Brooks started organizing community clubs when he became an Extension Agent in Madison County.

According to T.W. Hillsman, retired county agent in Madison County (1936-1965), Brooks set a standard which Agricultural Extension agents tried to emulate for many years. Brooks was a UT graduate and began work in 1916. In his early days as an agent, he organized 20 to 25 community clubs. People got to know him all over Madison County because of the programs he presented to the community clubs.

One thing Brooks was known for, according to Hillsman, was his use of his old T Model Ford car to power a movie projector. Brooks would remove the back wheel of his car, attach a belt, which would provide power to the projector. This was used to show silent movies throughout Madison County. Brooks was instrumental in organizing the Madison County Farm Bureau in 1921. It was formed through the Community Club Council. The only organized, incorporated co-op in the state was organized. It was known as the Madison County Marketing Association, a subsidiary of the Madison County Farm Bureau. The marketing association ordered spray materials, fertilizers and lime for farmers. Brooks served as manager.

Another reason for organizing the marketing association was to provide a means for shipping finished cattle to St. Louis.

While in Madison County, Brooks was a major promoter and supporter of 4-H Club work. He realized that these 4-H'ers would be the future leaders in communities throughout Madison County and West Tennessee.

Brooks was named district agent on March 1, 1934, replacing Nichols. Throughout the remainder of his career, Brooks was known as an advocate of the farmer, supporter of 4-H, a people's man, a Christian gentleman and a big fan of UT football. According to Hillsman, Brooks's philosophy was simply "work hard and help the people."

Known as a quiet, very modest man, Brooks was more comfortable working in the background because he did not enjoy appearing before groups. Many agents experienced the familiar grip of the arm and subsequent squeeze and being asked in his quite but firm way to perform a particular task.

Because he was a leader who people respected, Brooks had an influence in the formation and good work of many New Deal organizations such as ASCS, FHA and SCS. They even asked for his recommendations concerning personnel for these new organizations.

An example of the high esteem people had for Brooks is found in the comments of a 1928 4-H award recipient. Dallas McKee was named winner of the state 4-H cotton production contest that year. The crop production winners were awarded a trip to the Southwest. Brooks served as their chaperon and tour guide. McKee said that Brooks not only saw that they had

a good learning experience on the trip, but also taught those country boys social graces so they would know how to conduct themselves at banquets and meetings. Brooks made sure that they became friends. According to McKee, some of those on the trip continue to correspond and maintain their friendship after 61 years.

Considering the close relationship that existed between Farm Bureau and Extension from the very beginning, it is easy to understand why the telephone in some of the county Extension offices were answered, "_____ County Farm Bureau." The secretary performed both Extension and Farm Bureau duties. Since the Farm Bureau, in many instances, provided office space and typewriters, it was only natural in those early days for the secretary to mention Farm Bureau first.

As support for Extension increased and the Farm Bureau became stronger financially, separate offices were established, usually in separate buildings.

In the early days of Extension, the first county agents were sometimes practical farmers in their county who generally served for a short period of time. Several of the early agents only worked for nine months of the year. In other instances, like in Chester County, the agent would work three days per week. Several counties who had county agents and home demonstration agents in the early days had problems receiving county appropriations on a consistent basis. For example, Hardin County had an agent from April 1, 1914, until Sept. 1, 1916. With no county appropriation for Extension, they did not have an agent from Sept. 1, 1916, until Oct. 1, 1917. Extension was represented from October 1917 until February 1919. There was no agent from February 1919 until May 15, 1922.

Also in the early days, home demonstration agents could not be married and continue to work for Extension. As a result, people lost the benefits of a number of well trained, dedicated home agents who had to resign when they got married.

Extension was involved in many ways with the formation and early work of many organizations. Agents continued to be involved in new challenges and experiences as time progressed. During the depression, that adjustment meant learning to live on less money since their salaries were cut. Home demonstration agents served as pioneers in their early days. They were called on to perform many important duties. Katherine Bass started showing people how to can beef when County Court in Crockett County purchased a pressure cooker for her. She said that neighbors came from far and near to see the demonstrations. She would drive her car as far as she could before being picked up by wagon. Once she reached her destination, she would wear her white uniform and get down to the business of cutting up and canning beef. One year she canned 56 beef.

According to Bass, she did an English pea canning demonstration one time in the Broadway community of Crockett County. At mid-afternoon they had two

tubs of peas, a group of homemakers and a wood burning stove. She finished the demonstration between midnight and 1 a.m. She had to stay because no one else knew how to operate the pressure cooker. During one beef canning demonstration in the Cairo community in November, it was so cold that the water froze before they could use it.

Those long days and rough working conditions paid off because it encouraged families to purchase pressure canners, which they shared with their neighbors. That was the objective -- not only to teach how to use the pressure cooker, but to encourage people to purchase and use them.

Early records show that Martha C. Thomas was appointed to serve as the first District I home economics supervisor in 1918. With a tenure of one year, she was followed by Ruth Avery, who served until 1925. Mildred Jacocks was then named to the home economics supervisor position in 1925 after serving as home demonstration agent in Fayette County from 1921 to 1925. Jacocks was known for the way she challenged the home agents to work diligently to meet the needs of the people and to conduct themselves as professionals.

While serving as a home economics supervisor until 1959, her set of standards for quality Extension work was developed and followed by the agents. She served as supervisor during periods of tremendous turmoil, trials and tribulations that farm families had to face. Low farm prices, economic depression, formulation of relief programs, mattress making, meat canning programs, the tragedy of World War II, rationing of gasoline, sugar, etc., the advent of rural electrification and telephones for rural areas, the "frozen food revolution and diversification of the Extension home economist into such areas as consumer education were some of the problems which had to be faced. Plans for solving those problems were formulated and acted on.

This was a time when Extension really shined. Because of the foresight, talent, diligence and organizational skills of agents, problems were identified and solutions formulated.

Simple solutions were utilized and taught to county family members. For example, Bass said that every spring they would get calls from people saying that their chickens could not get up. Agents encouraged their clients to use balanced rations for their chickens, which would solve the problem, and also enable them to produce more eggs. The simple ration consisted of milk, green feed and grain. When clients followed this simple ration the problem was eliminated. However, there were some skeptics who offered resistance to change. A lady named Mrs. Sewell told Bass, "I don't believe God meant for chickens to eat milk. If he had, he would have put "teats on hens."

To encourage people to grow more chickens, Bass set up a lamp brooder with a runway on the courthouse lawn. Using an oil can with wick and chimney on top, she paid all of the cost from her own funds. The chickens thrived and the people learned from the example.

During the late teens through the early 1960s, a giant of a county agent emerged to provide leadership. L.J. Kerr was a long time county agent in Shelby and other West Tennessee counties. Highly respected as a county agent, an agricultural leader and a gentleman, Kerr is the only Tennessee county agent to ever serve as president of the National Association of County Agricultural Agents.

Charlie B. Jacocks was so impressed with the Corn Club, which was the forerunner of the 4-H Club, and the impact it had on his life when he won the corn yield contest as a youngster, he and his family have sponsored the Haywood County 4-H corn yield contest for about 40 years. He presents a wristwatch to the first place winner and the second highest yield receives a .22 rifle.

Jacocks was a successful businessman who owned an insurance agency and real estate firm during his professional career. After his death, his daughter and grandson continued the sponsorship.

During a year with high yields of cotton, the cotton market slumped. Agents responded by teaching families to use surplus cotton to make mattresses. According to Farmer Paschal, retired county agent in Lauderdale County, home agents and county agents throughout West Tennessee used surplus cotton provided by the federal government to make mattresses, which were provided for county residents. He said that the home agent and the women in Lauderdale County made 1,200 50-pound mattresses for families in the county. Later, they received a cotton mattress which was made fluffier by a five horsepower motor. They established a mattress making center at the high school in Ripley. After making 4,650 mattresses at that location, they moved to Halls High School where they made an additional 1,200 mattresses. All of these were given to families in Lauderdale County. Other counties reported similar results. Hardin County reporting 5,648 mattresses being made along with 141 new 108 inch sheets and 381 quilts.

Bass said that they made 150 to 200 mattresses a day. A total of 2,400 mattresses were made in Crockett County. National Youth Association girls from Newbern helped make the ticks prior to mattress making day. The cotton was stuffed into ticks on a sawhorse platform -- usually broom handles -- until the cotton was smooth. Mattress needles were used for tuffing and roll around the edges.

Distribution of the mattresses was welcomed and appreciated because most people slept on feather beds.

In addition to the use of surplus cotton, Mildred Jacocks promoted, encouraged and recognized the accomplishments of home agents in cheese making. Agents in Hardin County reported making 295 pounds of cheese as a result of their educational program. This was quite an accomplishment since there were no dairies in the county.

Throughout the early days of Extension, county appropriation struggled to keep the Extension programs going. Even though that was a source of frustration for the agents, they continued organizing groups, conducting meetings and demonstrations and providing information that improved the way of life for farm people during those troubled years.

W.T. McKell, county agent in McNairy County, described the increased support he was getting from the county court. He said that the court stood two to one in favor of demonstration work. According to McKell's report, farmers realized that Extension brought results to them in many ways, both direct and in direct. He further stated that although both the county court and farmers support demonstration work, the business interest was still a great hindrance.

The next year was a bad year for demonstration work. McKell said that "It has been made a football by the county politicians and those who have been opposed to farm progress. As a result, the county court has discontinued the appropriation for another year." This was a devastating blow to the agents and their supporters. The following year, Farm Bureau took care of the county appropriation until July 1, after which the county court appropriated money for the following 12-month period. During this time, because of the loss of county appropriation, the county lost the benefit of McKell's abilities and knowledge.

Brooks and Jacocks played a major role in providing leadership and a base of support for many projects that came about as people began trying to recover from the depression. They immediately began organizing people to provide the support needed during World War II.

Community clubs organized by Extension agents provided a place for people to get together since times were hard and money was scarce. This also provided Extension agents an opportunity to present programs on how people might cope with their plight. County agents had major responsibility for a new program known as AAA (Ag, Adjustment Administration), which helped people deal with the big depression.

In Dyer County, the county agent was primarily responsible for directing 25 to 50 percent of the cotton acreage being plowed up. This was done on a voluntary basis. The county was given a quota of acreage to be destroyed. Farmers received \$473,413 for destroying 16,800 acres of cotton. A statement was made by the Weakley County agent that he spent 90 percent of his time carrying out his responsibilities for the AAA program. Even though he did not have access to the modern day mass media, he succeeded in getting all but about 50 farms involved in the conservation program. In 1938, 4,255 farms participated in the program. The 50 holdouts did not grow cotton or tobacco. Regular programs were presented about the AAA farm program so the farmers could take full advantage of them. In Lauderdale County, Paschal said that information on the AAA program was presented in meetings held every three months in 15 counties.

With the passage of the Rural Electrification bill, Extension agents became immediately involved in showing communities how to secure electricity by organizing a cooperative. The agents conducted training sessions in parliamentary procedure and leadership development and demonstrated how to use electric powered appliances and equipment. The advent of electricity allowed use of poultry brooders, refrigerators, electric ranges, washing machines, water systems and electric motors. Extension agents became educators, taking valuable and timely information to their clients.

Along with the passage of the Rural Electrification bill, came other programs, such as the Farm Credit Association, soil conservation, district farmers cooperatives, livestock associations and a plant to prosper program. Again, Extension agents played a major role in the formation of these organizations, which have grown in strength and impact over the years. Despite all of these responsibilities, one county reported that the county agents salary remained at \$100 per month and the home agents salary was \$50 per month from 1934 to 1948.

The Farm Credit Association was organized during the 1930s to help with farmers with monetary problems.

With the advent of the soil conservation districts and employment of the district conservationist, the county agent gradually saw one of his responsibilities and jobs shifted to SCS personnel. Prior to SCS development, county agents spent a lot of time laying out terraces and doing other conservation work. Practically all of the terraces in the Middlefork community in Henderson County were surveyed and designed by J.E. Bonner, an extension agent who worked in that county from 1935 to 1947. Those terraces are still maintained and used by farmers.

Farmer's cooperatives were organized with Extension agent assistance to make farm supplies available that were difficult to obtain or were otherwise not available. Because of insufficient funds, some agents actually took orders for such items as fertilizer, ordered the fertilizer, contacted those farmers when the orders arrived and helped unload the rail car.

It was reported that O.U. McKnight, county agent in Haywood County, would take orders for mostly 4-8-8 or 3-9-6 fertilizer. When he received enough orders for a freight car load, he would place the order. Farmers were notified when the rail car came in and McKnight would stay at the railroad dock unloading 150-pound bags of fertilizer until all had been picked up. Nitrate of soda would be ordered in the summer for use in side dressing cotton and corn. The co-op soon became strong enough to hire someone to manage the store. Even after a manager was employed, the county agent attended every board of directors meeting, where he served as an ex officio member. The same applied to Farm Bureau. Several Extension leaders served as an advisory directors of Farm Bureau as well as farm credit services.

Livestock associations were organized during this time to further develop and improve livestock production in the various counties. Feeder pig and feeder calf sales were organized at Brownsville, Huntingdon, Lexington, Newbern, Paris, Parsons and Savannah. This has resulted in improved quality, more producers following recommended production practices and better sale prices.

County leaders who developed through livestock association into statewide leadership roles include John Smith, Neil Smith and Mike Nichols from Madison County; Robert Wilson, Hillsman Rogers, Wallace Bryan, Jack Battle and John Charles Wilson from Shelby County; P.H. White and Milton Magee from Dyer County; Henry Gibson, Larry Paul Harris, John L. Roberts, Don Enochs and James Meadows from Henderson County; Hank Liles, Earl Woods and Dennis Stokes from Carroll County; Doug Vise and Newman Ivy, Decatur County; Rod Barnes, Linda Barnes and Guy Wayne Cox from McNairy County; Jimmy Lash and Jimmy Clendenin from Henry County; Bill Spence, Will Spence and Harold Park from Crockett County; and Aaron Reed from Weakley County. There are others that could be named who have emerged as leaders who have served in state and national leadership positions.

County and home agents cooperated with the Memphis Commercial Appeal in a region-wide Plant to Prosper Program. This successful program brought much attention to the progress farm families could make by following Extension recommendations. There were divisions for black and white landowners and tenant farmers. Many records were kept. Visits by the judges to the farms of those participating were always welcomed with excitement and anxiety. The highlight for participants and the agent was the big awards banquet in Memphis.

The Plant to Prosper Program did much to instill a new sense of pride and accomplishment after years of hard times. Extension capitalized on the publicity and benefited from the challenge of working closely with families in the program. Information gained proved to be helpful in showing other farm families what they could accomplish by following Extension recommendations.

During World War II, agents played major roles. They did everything from helping farmers complete deferment papers to presenting programs on how to use ration coupons and make them last. Lauderdale County agents helped 2,000 farmers complete deferment papers one year and 1,200 were helped another year. The draft board wanted the papers filled out in a uniform way so they could make fair decisions about who would go to war and who would either farm or go to war later.

Between 1941 and 1945, most work by Extension agents was directed toward the war. In Dyer County, 60 neighborhood victory committees were formed to keep communities informed about the war effort and to insure that agriculture production was increased to meet the demands of World War II. This proved to be a difficult task because of rationing needed agricultural supplies.

Because of the supply scarcity, agents had to be innovative in their approach and in their ideas. They performed admirably, however, as they gave demonstrations on the use of syrup or honey to replace sugar and farm and home machinery repair. Demonstrations during the depression were continued by showing how to make clothing out of feed, fertilizer and flour sacks.

As part of the foods for victory program, agents enrolled many families in another plant to prosper program encouraging them to grow as much food as they could for family consumption and additional farm income. Dairying was promoted as an additional source of income. Throughout West Tennessee more milk and cream counties developed as the number of dairies increased.

As we reached the late 1950s, Brooks and Mildred Jacocks retired. H.T. Short was appointed district supervisor and Estelle Vines, home economics supervisor to carry Extension through the turbulent years of the 1960s and into the 1970s.

Short had served as county agent in Decatur County prior to assuming the position of district supervisor. He developed quite a following because of his dedicated, innovative work with the people in that rural county. He had the foresight to assist in the organization of the Decatur County Fair during his tenure. He was also instrumental in providing leadership for developing strong programs in crop and livestock production, developing and supporting a strong 4-H program and starting an outstanding community club program.

Vines came to the District I office after serving as home economics supervisor in District IV from 1955 to 1959. Prior to that, she developed an outstanding home economics program in Henderson County. People in the county still talk about the workshops she conducted. Many people remember the Friday and Saturday nights she spent at their community clubs and/or rural schools. She and Short enjoyed working with 4-H members. They recognized that those 4-H'ers were going to be leaders and that has certainly come true.

Extension agents worked with leaders in various communities to organize community clubs. The organization of these community clubs coincided with the consolidation of schools in several counties. The community clubs met each month and agents presented ideas to help with the improvement of the communities. Development of community pride, many paint-up, cleanup and fix-up campaigns, names on mail boxes, road name signs, new and painted mail box posts and cleanup of dump sites were the result. Working together and developing community pride resulted in better living and better farming for those community club members.

Another major role of Extension agents working with community clubs was the presentation of educational programs at their monthly meetings. People participating were among the first to adopt the latest recommended farm and home practices.

District supervisors planned the district awards program, which involved judging in the counties and on the district level. The district winner went to state competition.

Throughout the year, community clubs worked diligently to prepare for the county, district and state competition. Traveling throughout the district during the peak of this program, one could easily see the benefits. Not only was community pride enhanced, but lasting friendships were developed.

The advent of chemical weed control came during the 1950s. Extension agents geared up for change. They demonstrated how to build and set up spray equipment. They also taught farmers how to properly calibrate their spray equipment. The early days of herbicide use proved to be a challenge to agents who set the stage for herbicide use in the years to come.

Hand harvesting to mechanical harvesting presented another challenge. Again, agents had to learn how the machines operated so they could answer questions and assist farmers in learning how to operate the equipment.

Going into the 1960s, the Extension administration recognized the need for a third person to be added to the district supervisory staff. Prior to that time, each district staff was composed of one home economics agent and one agent in agriculture. When the third person was added, titles changed to a district supervisor and two associate district supervisors -- one for agriculture and one for home economics. More time was allocated for personnel administration, program planning and implementation. In 1961, O. Clinton Shelby joined the district staff as associate supervisor of agriculture. He was followed by Gene W. Turner in 1965.

In the 1960s, agricultural agents began teaching farmers scouting techniques, which help establish "economic threshold" before spraying crops for insect and disease control. This program is now known as Integrated Pest Management (IPM). Farmers enrolled their crops (in the beginning cotton only, then in later years, cotton, corn, soybeans and grain sorghum) in the program, paid a set fee per acre and an Extension trained scout checked the crop on a weekly basis during the summer. This program had grown to over 70,000 acres enrolled in 1989.

Considerable time was spent by Extension agents on further developing the cooperative program of marketing feeder calves and feeder pigs. Excellent cooperative feeder calf sales were held in Brownsville, Huntingdon and Newbern during the 1960s. Feeder pig sales operated at Brownsville, Huntingdon, Lexington and Savannah. All of these sales were operated by a board of directors from various county livestock associations.

In addition to the marketing of feeder calves and feeder pigs, Extension agents conducted educational programs. These were related to the purchase of performance tested bulls, selection of other good quality herd sires, selection and culling of cows, sows, bulls and boars, nutrition programs,

proper vaccination, castration and dehorning, transportation, management and other timely production and management practices.

Extension agents organized several tours to the Midwest so that producers could show potential buyers the high quality products they had to sell.

As a result of these educational programs, beef producers bought large numbers of performance tested bulls. During the mid-1960s, the Brownsville feeder calf sale began advertising that over 50 percent of the calves selling in their feeder calf sales were sired by performance tested bulls. The "Angus Journal" featured articles detailing the success of this educational program. The number of bulls purchased, the source of these bulls and the impact on some of the Angus herds was noted.

Utilizing some new techniques, agents throughout District I began to conduct a series of farm management schools. Obion County has offered these farm management schools since the early 1950s. Attendance ranges from 30 to 300 farmers for five to 10 programs yearly. Other counties have continued their farm management sessions from the 1960s to the present. Topics range from production to marketing to management of crops and livestock.

A major thrust during the 1960s came as a result of the Expanded Food and Nutrition program to improve diets of lower income families. Carroll, Chester, Decatur, Dyer, Gibson, Henry and Shelby counties participated in the early days of the program. EFNEP are conducted in Dyer, Gibson, Henry and Shelby counties.

Objectives of the EFNEP are to assist families and youth in acquiring the knowledge, skills, attitudes and changed behavior necessary for nutritionally sound diets and to contribute to their development of total family diet and nutritional welfare.

The program resulted in improved diets and nutritional welfare for the total family, increased knowledge of the essentials of human nutrition, improved practices in food production, preparation, storage, safety and sanitation and increased ability to manage food budgets and related resources such as food stamps. The EFNEP is an avenue by which Extension has been able to reach the hard-to-reach. As Vines has stated, "Nutrition education is one of Extensions greatest challenges." Maybe through EFNEP, it will not require a generation to bring about change.

With the passage of the Civil Rights Act in 1964, black agents and white agents were moved into one Extension office. Under the vision and strong leadership of Short, Vines and Turner, the consolidation of the offices occurred with no problem or disruption of services.

With the integration of schools, public buildings and all segments of society, Extension work progressed with very few problems. This was due to the close working relationship between the black and white agents. It was also due to

the positive attitude of agents and county officials working within the provisions of the Civil Rights Act.

As Extension moved into the 1970s, agents faced the challenge of helping farm families make decisions affecting their family life. As farm income became highly variable, families placed more emphasis on family life education programs, including child development, parenting and family relations. Decisions included the size of their operation. Should they continue to diversify or change to all crops and plant fence row to fence row? Should they build new swine facilities? How much herbicide to use? Should they follow the trend of leaving cotton and switching to soybeans?

It became critical that agents be prepared to meet the needs of farmers as they made major changes in their operations. They met this challenge and assisted farmers in learning about new herbicides, the economics of growing soybeans or cotton, new techniques of construction and new plans for swine farrowing, nursery and finishing facilities.

Changes occurred throughout West Tennessee. In many counties, farmers sold their cattle, tore down fences, plowed up pastures and planted soybeans. Several counties capitalized on the extra labor not used for cotton production to farrow and/or finish swine in new swine facilities.

Agents also provided the latest research information and recommended practices to their farmers, which resulted in some of the highest corn and soybean yields to that point.

Problems arose, however, because erosion was increasing on those rolling hills and yields began to fall. This would become the next big problem for agricultural agents. It would take a cooperative effort to solve.

Vine's goal as a supervisor of home economics programs was to have quality, on-target programs. Extension home economists faced the challenge of developing and carrying out programs to solve problems in the area of nutrition, food safety and family life. Two counties started family living programs with agents funded by Tennessee State University. Agents and program assistants in Henderson and Lauderdale counties conducted family living programs on a one-to-one contact basis and by use of newsletters, news articles, radio programs and small groups. This program began in 1973 and continues to provide critically needed educational information in all areas of family living, including foods and nutrition, clothing, family relations, etc.

Also in 1973, TSU provided funds for Extension agents, program assistants and secretaries to work in the area of community resource development in Crockett and Dyer counties. The purpose of this program was to develop community organizations to facilitate group action between local, state and federal agencies on problems and opportunities. It also was designed to improve the level of quality living for disadvantaged citizens in Crockett County through education and to enhance their worth in self, state and nation.

By working with various agencies and organizations, Community Resource Development agents have been able to conduct a summer youth nutrition program and to develop an exchange of ideas and programs through regular group meetings.

With the retirement of Short and Vines in 1977 and 1979, respectively, Haywood Luck, Gene W. Turner and Alpha H. Worrell provided strong leadership, direction and support for Extension agents and programs in District I.

Luck brought a wide range of Extension and Experiment Station experience to the position of district supervisor. He began his professional career in Henderson County working in the test demonstration program from 1947 to 1952. In 1954, he began an 18 year career as a plant and soil science specialist where he became known as "Mr. Cotton." He became superintendent of the West Tennessee Experiment Station in 1972 where he served until he was named district supervisor of the District I Agricultural Extension Service in 1977. He received many prestigious awards and recognitions including a "Progressive Farmer" man of the year award and a distinguished service award from the National Association of County Agricultural Agents. He also served as president of the Tennessee Association of Agricultural Agents and Specialists.

Turner began his career as a 4-H agent in Hardeman County in 1953. He then built a reputation as an excellent leader and agent as county agent in Decatur County. In 1963, he became a resource development specialist. He became a specialist in the Extension agricultural economics department in 1965 where he served until being named associate district supervisor of agriculture for District I in 1966.

Worrell served as Extension home economist two different times. She was originally employed from 1955 until 1961. She again joined the Crockett County staff in 1973 where she developed programs in both adult and 4-H home economics that received widespread recognition. She joined the district supervisory team in 1979 as associate district supervisor of home economics. Worrell brought to the position a wealth of knowledge about county programming and a reputation for developing programs that met the needs of her clientele. Her programs were known as proactive rather than just reactive.

During the 1980s, Luck and Turner drew on their wide range of experiences and knowledge to develop programs to address the problem of soil erosion. Through the primary leadership of Turner and with the encouragement and support of Luck, a resource management conservation program was developed. Using his organizational and program planning skills, Turner involved the district resource development committee, TVA, SCS, ASCS, FHA, division of forestry, wildlife resource agency and other organizations and agencies in the development of this program.

Estel Hudson, Extension agricultural economics specialist played a major role in formulating plans and writing the proposal and rules by which the program would operate. Additional adult agricultural agents in some of the counties designated part of their time to the RMC program, as well as three area agents who were devoted strictly to the RMC program. With a set goal in each county, agents worked with the CRD committee in their counties to select and enroll RMC farmers.

Agents developed plans that would lower soil erosion to acceptable tolerances and at the same time maintain or increase farm income. The promotion of no-till farming, proper allocation of crops to the land and the SCS recommended mechanical practices helped to cut the amount of soil loss throughout West Tennessee.

The RMC farms were host to many field days and tours. The largest of these was the big SOS Day in Gibson County that was held on one of the RMC farms and attracted thousands of farmers and agri-businesspeople.

Agents did a masterful job of promoting the No-Till Field Day at Milan each year so their farmers could learn, first-hand, how no-till farming could fit into their operation. This day is now known as the largest No-Till Field Day in the country.

Much progress has been made in lowering the soil loss in West Tennessee because of the leadership of District I supervisors. It is not at a tolerable level, but it is certainly moving in that direction.

During the time of low farm prices, dry weather and high input cost, farmers found themselves in a tremendous financial crisis. This financial stress caused family problems because it affected the financial stability of the family. To address this problem, a program called MANAGE was developed and funded by the Tennessee Legislature. Under the leadership of the district supervisory staff, the District I MANAGE program was initiated with three area farm management agents employed. They were Jim Castellaw, headquartered in Selmer, Samuel (Chuck) Danehower, headquartered in Ripley and Carleton S. Davis, headquartered in Trenton.

Extension agents worked cooperatively to promote the program in their counties and provided many opportunities for the area specialist to explain the program in group meetings. The Extension home economist worked diligently with the farm families in areas of stress management and family financial management.

As a result of Extension agents efforts, many of those families were able to survive the financial problems they faced. Others learned to cope with the problems they encountered.

The biggest changes that have occurred in Extension's direction, programming and delivery involve technology and mass media techniques that are available for agent's use.

Advances have brought about a wider range of technology and expertise that agents must be familiar with. This has resulted in the need for more in-depth training through workshops and in-service training. With the development of a wide range of pesticides, genetic, engineering, biotechnology, different cultural practices, feed additives, embryo transplants, concern about fats, cholesterol and sodium and new marketing technology, it becomes more important for all agents and specialists to keep up-to-date in order to provide unbiased research information to a more sophisticated clientele.

The communication system used by Extension today is a vast improvement over that used in the earlier days. With the availability of television, satellite downlink, VCR, video cameras, computers, big screen projection, overhead projectors, slide projectors and FAX machines, agents have a wide range of techniques and mass media approaches that can be used to reach their clientele. They also have the time-proven methods of news articles, newsletters, personal letters, group meetings and radio.

Agents realize that their clientele have access to more information so they have to use all available means to get the information to the people or their community will get the information elsewhere. Extension agents are dedicated to being the first and best source of unbiased, research-based information.

As previously stated in this narrative, many counties faced hardships in getting county funding for Extension. However, by 1917, all counties had received appropriations for at least one agent. After that time, some counties in District I would go for a short period of time without an agent. During the early 1920s, this was especially true. Funds were not available for Extension in some counties in the 1930s due to the depression. As attempts were made to recover from the depression, county leaders saw the need for Extension and appropriations came on a regular basis for both county agents and home agents.

After World War II, several of the counties were able to have county agents, home agents and 4-H agents. In many instances, however, the Extension offices were located in cramped courthouse quarters.

One of the major changes that has occurred in recent years has been the improvement in office facilities in terms of space, convenience and parking. Currently only one Extension office in District I is located in the county courthouse. Dyer, Gibson, Madison and Shelby counties have offices in buildings constructed especially to meet their needs. Several other counties, including Fayette, Hardeman, Decatur, Henderson, Chester, Benton, Haywood, Tipton, Lauderdale, Obion and Lake have had their offices remodeled, expanded or otherwise upgraded in the last few years.

Every county in District I has received funding for the purchase of a computer to use in the Extension offices. Some counties received funding for the purchase of two computers. District I was the first district in the state to have computers in each county office.

Appropriations have increased in most of the counties to cover all of the telephone expenses, including long distance calls. The generosity of the county commissions, who saw the need for additional equipment, enabled several counties to purchase copy machines, video marketing equipment, electronic stencil machines, VCR's, TV monitors and Tote-Shows. Gibson, Hardin, Lake, Obion, Henderson and Fayette counties have received county funds to install radio communications between their office and their work vehicles.

Funding was received from the state for construction of a new West Tennessee Center for Agricultural Research, Extension and Public Service. Moving into this new facility in February 1989 the District I supervisory and specialist staff is now housed in the same building with the UT Agricultural Experiment Station research staff, Institute for Public Service staff and Tennessee Department of Agriculture plant industry personnel. It is a center to use in training meetings and seminars for agents, farmers and homemakers. Groups up to 400 can be accommodated in this new facility, which features excellent meeting and laboratory space.

The entire District I Extension staff continues the business of anticipating and identifying problems, working toward developing programs to solve those problems and meeting the needs of the people in this district.

Worrell continues to do a masterful job of providing leadership for two important and far-reaching changes in Extension programming. With her expertise and interest in leadership development, she has provided support for the development and performance of leaders in the Extension Homemaker Council. This resulted from the change in name from home demonstration clubs to Extension Homemaker Council in October 1985. These emerging leaders have performed in a superior manner in planning and conducting county, district and state events. The first state president of the Tennessee Extension Homemakers Council was Verna Brown Thompson, Lauderdale County homemaker, who served effectively in this position for three years.

Agents have also seen the advantages and need for developing leaders through a Family Community Leadership Program (FCL). Because of the enthusiasm and interest of several agents and leaders, including Worrell, at least one agent and one lay leader in 20 of the 21 District I counties have received the 30 hours of training in the FCL program. Those people have gone back to their counties and have conducted training meetings and other sessions in their efforts to locate, develop, encourage, train and utilize these leaders.

A major current concern of agents is water quality. Members of a water quality committee chaired by George Smith have given agents valuable training in this important initiative. With the cooperation of TVA and specialists Ozzie Vaigneur and Estel Hudson, five water quality demonstrations are being conducted.

One involves the use of waste water from the Puryear city lagoon to irrigate and fertilize hybrid Bermuda, which city managers harvest and sell for hay. Another demonstration on the Marvin Sanderlin farm in Haywood County utilizes waste water from a swine lagoon to irrigate and fertilize a commercial vegetable growing enterprise. The Coy and Tony Jones demonstration in Henderson County utilizes swine lagoon waste for furrow irrigation and fertilization of corn. A traveling gun is used to transfer swine waste from a lagoon to a Bermuda grass pasture used to graze steers and heifers on the Dennis Stokes farm in Carroll County. A demonstration has been set up on the Mark Smith farm in Madison County to irrigate and fertilize a permanent pasture used to graze cattle.

With a grand past, we move into the 1990s and the 21st century anticipating a glorious future.

Extension stood the test of time and withstood many trials and hardships in the past. Strong, progressive programming and well trained, dedicated professionals and support staff have overcome those difficulties and accomplished much good. No doubt the people are better off because of Extension.

Depressions, skepticism, doubters, wars, droughts and other tragedies did not stop Extension personnel from charging ahead, satisfying the directives they had been given in the Smith-Lever Act of 1914.

We see a bright future for the Agricultural Extension Service if we continue to direct our attention and efforts to proactive programming. Our energies must be focused on anticipating and identifying problems and opportunities and developing active programs to solve those problems while meeting the needs of our clientele. Administrative and supervisory staff must provide the time and resources to keep our Extension staff's well trained and motivated.

With the worldwide need for food in the future, with larger populations concentrated in smaller areas and with new technology being developed at a faster pace than ever before, at no time has there been a greater need for the Agricultural Extension Service. In the future, people will demand ever more, up-to-date, unbiased, researched-based information.

Who is better prepared to deliver this information than Extension?

From 1985, the 4-H program in District I continued to make progress and face challenges under the leadership of Haywood Luck, Gene W. Turner and Alpha H. Worrell. The major challenge was continuing to have quality 4-H

programming during times when we were unable to have full staffing due to a shortage of funds. From 1985 through 1989, at one time or another, there were 4-H agent vacancies in the following counties: Benton, Carroll, Decatur, Dyer, Gibson, Henderson, Madison, McNairy, Obion, Shelby, Tipton and Weakley.

In spite of the shortage of agents, District I continued to have a number of state and national winners. The following District I 4-H'ers were named national winners:

In 1985 -- Sonja Gwin, Automotive, Tipton County; Buddy Coleman, Bicycle, Henderson County; and Kim Rickman, Home Environment, Hardin County.

In 1986 -- Terry Turner, Electric, Tipton County; Dena Rich, Health, Shelby County; Angela Roberts, Safety, Shelby County; Vicki Hopper, Career Scholarship, Henderson County; Melanie Jackson, Ag Career Awareness Scholarship, Tipton County; Ted Harris, Ag Career Awareness Scholarship, Tipton County; Titus Jackson, Ag Career Awareness Scholarship, Tipton County; and Cotton Ivy, Alumni, Decatur County.

In 1987 -- Greg Stube, Bicycle, Tipton County; Kelly Mayfield, Electric, Tipton County; Marshall Fennell, Petroleum Power, Obion County; Cassandra Farrow, Ag Career Awareness Scholarship, Tipton County; Tyrone Whitson, Ag Career Awareness Scholarship, Tipton County.

In 1988 -- Nicole Taylor, Health, Henderson County; Kate Bell, Ag Careers, Dyer County; Stephanie Bonds, Ag Careers Awareness Scholarship, Shelby County; and Darlene Pasley, Ag Careers Awareness Scholarship, Tipton County.

In 1989 -- Kelly Carmack, Dairy Foods, Lauderdale County; and Donna Lovett, Photography, Obion County.

In 1989, the Golightly Foundation provided funding for a Golightly 4-H awards program and a Golightly intern program. A total of \$37,200 was provided by the Golightly Foundation for sponsorship of the following 4-H awards: Golightly 4-H achievement awards banquet; appropriate awards of the participants, which included medallions and certificates; transportation of the Senior Achievement Day winners to 4-H Roundup; and Golightly internships of \$3,000 each for agriculture and home economics.

These funds will provide for appropriate recognition for deserving junior high and senior 4-H'ers for 1989, 1990 and 1991. In addition, two former 4-H'ers who are now enrolled in agriculture and home economics will have an opportunity to receive valuable training and a better insight into the total Extension program while serving as interns for the three years mentioned.

References

Bass, Kathryn. Retired Extension agent, Gibson County, Trenton.

Brazzle, Ernest. Retired Extension agent, Shelby County, Memphis.

Gaines, Alberta. Retired Extension agent, Shelby County, Memphis.

Hillsman, Thomas W. Retired Extension agent, Lauderdale County, Ripley.

Paschall, Farmer. Retired Extension agent, Lauderdale County, Ripley.

Vines, Estelle. Retired associate supervisor, home economics, Jackson.

"Celebrating 75 Years -- Personnel Directory, Tennessee Agricultural Extension Service, May 1914-June 1989"; University of Tennessee Agricultural Service, Knoxville, 1989.

District II

Headquarters: Nashville

Country music, Tennessee walking horses, antebellum homes. . .all are reflective of the District II personality. The 22 Middle Tennessee counties of the Great Basin of Tennessee support a diversified agricultural base that nurtures strong family ties, pride in stewardship of the land and industrial progress.

Bedford
Cheatham
Davidson
Dickson
Giles
Hickman
Houston
Humphreys
Lawrence
Lewis
Lincoln

Marshall
Maury
Montgomery
Perry
Robertson
Rutherford
Stewart
Sumner
Wayne
Williamson
Wilson

District II

Gordon Pafford, District Supervisor
Patricia Ganter, Associate District Supervisor
Herb Lester, Associate District Supervisor

Our Heritage

The Agricultural Extension Service had its beginning in 1904 when Seaman A. Knapp of the U.S. Department of Agriculture went to Houston, established the first Extension office and made the first contract with a farmer to follow his instructions. From 1904 to 1914 it was known as Farmers' Cooperative Demonstration work.

Farmers' Cooperative Demonstration work spread to Tennessee in the fall of 1909 when W.W. Campbell of Texas, a representative of the USDA, was stationed at Jackson to stimulate interest in the movement. He devoted a major portion of his time to establishing Boys' Corn Clubs.

On Oct. 1, 1910, H.D. Tate, who had been working in Mississippi and was later assistant director of Extension in Tennessee under the Smith-Lever Act from 1914 to 1916, succeeded Campbell as state agent. He made his headquarters at Memphis since funds provided for the work could only be used in cotton counties.

In a report of the work for the fiscal year 1910 and 1911, Tate said: "The plan for the work in Tennessee is practically the same as in other states, namely: first, demonstration as to better cultural methods in the case of cotton; second, demonstration in the production of home supplies; and, third, demonstration in other crops for the purpose of rotation and diversification. The necessity for those three lines of work is apparent. The cotton farmer must be placed on a new basis where he can be self-sustaining, whether he raises a cotton crop or not, and he must do his farming on a cash system and not under the advance system. The tendency of the cash system is to demand that the farmer put all of his land in cotton, which is a mistake from the standpoint of modern farming."

In 1911, funds were increased and the number of agents was also increased to 16. Twelve of these were county agents. Two agents were employed to work over considerable territory, mainly to assist in the organization of the Boys' Corn Club work. They, however, conducted a few scattered demonstrations with adult farmers in several counties.

In the latter part of 1912, the restrictions confining work to the cotton area of the state were removed and headquarters were established at Nashville.

In 1913, the General Assembly authorized county courts to appropriate money to be used in cooperation with the USDA in support of county farm demonstration work.

In 1910, Campbell, through cooperation of county school superintendents, organized the Boys' Corn Club in 12 Tennessee counties with a total membership of 1,685. Bedford County, one of the 12 counties, had a membership of 24 boys. For the first few years the work consisted only of growing corn.

Virginia P. Moore was appointed the first agent in Tennessee on Dec. 12, 1910, to work with women and girls in developing canning clubs. Her office was in Nashville where she worked in cooperation with the state Department of Education. She was assistant director in charge of home demonstration work and leader of the Girls' Club work under the Smith-Lever Act from 1914 to 1919, when she resigned to join the Florida Extension Service as Extension home improvement specialist.

For the first few years, work with girls in Tennessee focused on canning tomatoes and raising poultry.

The first home demonstration agents in Tennessee were employed during the canning season of 1911. Myra Tandy, Lawrence County, was the first home demonstration agent in District II or Middle Tennessee.

The first home demonstration agents were employed by the state Department of Education and the Rockefeller General Education Board, in cooperation with local county boards of education. They worked only during the canning season in 1911, but in 1912 and later years, until the passage of the Smith-Lever Act, some were employed for six months, others eight, 10 and 12 months. They were known as county co-laborators, received \$50 per month and paid their own traveling expenses. While some of them were employed for only a few months of the year, they worked the whole year.

Home Demonstration work helped the farm women to earn while they learned. They worked in large groups and had a larger realization of the home in its entirety. They realized that the home was not four square walls, but that their influence was needed in the community, in the county, in the state, and in the nation. They learned to have an open mind for families and progressive things.

The exact birthplace of the 4-H movement in Tennessee is not clear. However, on Nov. 16, 1910, Thomas A. Early was appointed the first professional worker to give primary attention to Boys' Corn Club work.

The first Girls' Canning Club in Tennessee was organized in Benton County in 1911 by Moore. O.H. Benson, a former Iowa school superintendent, who had been employed by the USDA as an assistant in club work, advised Moore.

In 1912, a farm boys encampment was held in Nashville in conjunction with the Tennessee State Fair. All expenses were paid by the fair for one boy from each county in the state. Seventy counties took advantage of this week-long encampment.

The Cooperative Extension Service was officially established by the Smith-Lever Act in 1914. It represents a partnership arrangement between the USDA and each land-grant institution cooperating with state and local governments.

On July 1, 1914, the College of Agriculture of the University of Tennessee and the USDA, cooperating under the provisions of the Smith-Lever Act, organized a division of Extension, now known as the Agricultural Extension Service. Charles A. Keffer, then head of the college horticultural department, was director. The Farmers' Cooperative Demonstration work and Boys' and Girls' Club Work, which up to that time had been disassociated from the college, were merged with the division. Tate was assistant director in charge of the farm demonstration work, and Moore became assistant director in charge of home demonstration work. Headquarters were established at UT-Knoxville.

At that time, in addition to Tate and Moore as state agents, several more were employed. There were two district agents, H.S. Nichols from West Tennessee, and J.M. Dean from Middle Tennessee, 20 county agents, four agents who worked in more than one county and 22 county home demonstration agents or co-laborators as they were then called, for a total of 50 people.

On June 30, 1915, the end of the first fiscal year of the division of Extension, county agents were employed in 31 counties and the number of home demonstration agents (then known as county agents in home economics) had increased to 26.

In his first annual report, June 30, 1915, Extension director Keffer had the following to say: "In planning the work of the division of Extension, an effort was made to bring into close relation all agencies interested in the development of agriculture and in the improvement of all conditions affecting life on the farm. It was felt that the problems to be solved were largely educational problems, and from the first, an effort was made to find a basis of cooperation with the public school system of the state. The Extension Service had the cooperation and financial support of county courts, county school boards, chambers of commerce and other organizations of businessmen, banks and individual citizens.

"The entire work of the division of Extension for the year ending June 30, 1915, was done under one general project, since it was thought that a year could well be taken for general study of the field. The principal work was a continuation of Farm Demonstration work and Girls' Canning Club work."

In April 1916, Lena A. Warner was employed as health specialist for rural work and a district home demonstration agent for Middle Tennessee was employed in May. The home demonstration agent was Kate M. Wells.

In 1916, Tate, assistant director, resigned and was succeeded by W.A. Schoenfeld. Schoenfeld had been employed during the fiscal year 1915 to 1916 as specialist in markets and rural organization.

On April 6, 1917, the United States entered World War I, which gave sudden and tremendous impetus to the work of the Extension Service. Established methods of the organization were interrupted and every effort was made to promote the increase of food supplies in the states.

In District II, as well as across the state, a campaign to increase food production was launched and the number of agents was increased rapidly under the stress of the emergency.

State and county councils of defense and county food supply committees were set up with the close cooperation of the agents. The slogan was "Food will win the war." Practically all Extension Service efforts were centered on increased production of food and feed crops for the duration of the War (1917-1918).

In 1920, 4-H Club work began to develop a more unified program in Middle Tennessee. A more definite club program of rallies, regular meetings, camps, playground games, singing, educational trips and other interesting events was developed. Camps were held in 30 counties. It was about this time that the name "4-H Club work" was first used in Tennessee. The purpose now was to give the club member a broader training and not confine it to methods of increasing crop yields.

The state camp was held for the first time in 1923 at UT-Knoxville. Attendance was primarily from what is presently included in Extension supervisory districts III, IV, and V the first few years because these districts had no district camps. Because of the depression, the state camp was discontinued in 1932.

The crash of farm prices in 1920 and 1921 caused a wave of panic to sweep over the country. Many county courts declined to make appropriations for a continuation of the work even though they realized its value. In 1923, a favorable reaction set in and the number of counties making appropriations for the work began to increase from year to year until in 1933. During the emergency of the depression, agents were employed in each of the 20 counties of District II.

In 1923, the name of the organization in Tennessee was changed from division of Extension to the Agricultural Extension Service. That year the work began to expand in growth and service.

District 4-H camps were held for the first time at the Experiment Stations at Columbia and Jackson in 1924. These were joint camps for boys and girls. The attendance at Columbia was 125 boys and girls from five counties and, at Jackson, 212 attended from seven counties. The district camps proved to be more valuable than the county camps. Equipment at the Experiment Stations made possible the development of better class work than could be given at county camps.

There developed a need for special camp buildings and equipment. The administration building was the only one available at Columbia. One room was used for a kitchen and club members were served meals outside. The other rooms, halls and porches were used as sleeping quarters for girls and the auditorium was sleeping quarters for boys. Tents were loaned to the camp by the U.S. Cavalry Troop at Columbia in 1925. This made possible the establishment of a separate headquarters for boys.

Funds were donated by friends of club work to supplement small available funds from the Extension Service. A 4-H Club building was erected on the Experiment Station at Columbia in 1927.

The early District headquarters were at Columbia. It is believed that the brick building standing at the William P. Ridley 4-H Center was headquarters for both the district Extension staff and the Middle Tennessee Experiment Station.

In 1936, a branch office of the Extension Service was established at 2321 West End Avenue in Nashville. District agents in Middle Tennessee, District II and the state offices of the AAA and Farm Security Administration were located there. Seven of the Extension specialists also had headquarters in that office. A.B. Harmon and Helen Cullens were District II agents during this time.

Later, the District II office was moved from West End Avenue to 810 Broadway, downtown Nashville. District headquarters were once again moved in April 1969 to 5201 Marchant Drive, current home of the district staff, soil & forage testing lab, entomology and plant pathology diagnostic lab and headquarters for subject matter specialists in animal science, beef, horse, dairy and swine and entomology and plant pathology.

District II agent Dean served until 1922. Harmon succeeded Dean in 1922 and served until his death in 1956. Following Harmon's death, Milburn E. Jones, who was assistant district agent, was appointed district agent. He served in this capacity until his retirement in 1979.

After Jones' retirement, Melvin Arnett, extension leader in Wilson County, was appointed district supervisor in 1979. Arnett served in this role until his retirement in June 1989. After Arnett's retirement, Gordon Pafford, extension leader in Sumner County, was appointed district supervisor in August 1989 and is presently serving in this position.

As mentioned previously, Kate M. Wells was the first district home agent. She served from 1916 to 1921. The next district home agent was Hattie F. Wendell, who served for a short time in 1921 and 1922. In 1922, Carrie Watkins Foster was appointed and worked until 1926. Following Foster, Geneva White accepted the position in 1927 and worked until 1929.

It was in 1929 that Cullens began a long and distinguished career as district home agent. She worked in this role until her retirement in 1961.

In 1961, additions were made to the district staff. The third person was added and titles were as follows: district agent, management, district agent of agriculture and district agent, home economics.

As a result of these changes and Cullen's retirement, another highly respected home economists, Margaret Ussery, was appointed district agent. Ussery had formerly served as home agent in Dickson County. Owen E. Hodges, who was county agent in Davidson County, was appointed district agent of agriculture in 1961.

Webster Pendergrass, vice president of the Institute of Agriculture, and Vernon Darter, dean of the Agricultural Extension Service, were instrumental in clearly defining district and county level leadership roles. In October 1970, Dean Darter announced that at the district level there would be an administrative leader, the district supervisor and two program supervisors, called associate district supervisors. At the county level, agents would be extension agents, associate extension agents and assistant extension agents. The administrative leader at the county level would be the extension leader. This organizational structure is still in effect in 1990.

When Hodges retired in 1980, Larry Glasgow, Extension leader in Montgomery County, joined the district team. Glasgow retired in 1989. Herb Lester, Extension leader in Davidson County, was appointed associate district supervisor in April 1990 and is presently serving in this position.

Following Ussery's retirement in 1983, Bonnie Sheeley was appointed associate district supervisor, home economics in 1984. She worked until 1985, when she returned to Knox County as Extension agent, home economics. Following Sheeley's resignation, Patricia M. Ganter was appointed associate district supervisor. She is presently serving in this role.

Ganter, a relative newcomer to Extension by tenure, brought a strong background in education and leadership to District II. Ganter worked with staff and Extension homemakers to implement the family community leadership program in District II as well as statewide.

District II is the home of Ben T. Powell, present state 4-H leader. Powell, a native of Wilson County, attended UT and returned to District II in 1959 to serve as agricultural 4-H agent in Rutherford County until 1969. It was there that he built a 4-H empire, "making the best better," for every 4-H member in

the county. Powell carried that leadership quality to Knoxville. Through his guidance, new programs have been initiated and others improved. The support groups for 4-H have intensified their efforts, individual members have received much personal recognition and programs have shifted to meet the needs of urban and information based programs.

The success of Extension programs in District II is due to the outstanding staff and Extension leaders who have dedicated their lives to improving agricultural families and communities.

Geography and Staffing

Presently there are 22 counties in District II. The western boundary is the Tennessee River, south is to Alabama, north is to Kentucky and the Eastern boundary is a line that includes Sumner, Wilson, Rutherford, Bedford and Lincoln counties.

The number of staff in each county ranges from two professionals in three counties to a high of 10 in Davidson County, which includes four vacancies. In addition to the professional staff, the supporting staff includes secretaries and program assistants.

Programs

The authors, while researching materials for this history, find many similarities and many differences in the early programs and the current ones. For example, in a 1923 report, reference was made to securing volunteer leaders for the 4-H program. Another referred to demonstrations. Certainly these are viable terms in today's Extension programs. An attempt to summarize program emphasis in District II will be made by using years (decades):

1910s -- tomato and canning clubs, producing and preserving food and poultry care;

1920s -- 4-H rallies, pig projects, improved varieties, sewing and food demonstrations, corn clubs, use of lime and HDC groups organized;

1930s -- home preservation of meat, marketing and grading tobacco, mattress making (surplus cotton), community clubs, insect control, new chemicals, terracing and contour farming and 4-H rallies;

1940s -- refinishing furniture, buy War Bonds!, rationing sugar, shoes and gasoline, care of clothing, frozen food lockers, scrap iron collection, bandages and ditty bags, community clubs, cover crops, artificial breeding, tree planting, "Greater yields per acre" and "Keep Tennessee Green."

1950s -- county wide activities (more cars and money), training and using leaders, home grounds and landscaping, fertility programs, community

services (early development of health departments), community award programs, improved varieties of cotton and grading of cotton;

1960s -- home improvements, health in-service and social security, food labels, organized feeder pig sales, organized feeder calf sales, new herbicides, special rural development programs (Elk River tributary programs), 4-H continues strong, project oriented and expanded food and nutrition program;

1970s -- emphasis on nutrition, including weight control, working women, night meetings, budgets, wills and insurance, convenience foods, microwave ovens, new technology, energy crisis, nutrition and food safety, increased use of print and electronic media and 4-H enrollment reaches new high;

1980s -- farm families deal with stress, family community leadership, Extension Homemakers Council and farm management (Tennessee Manage Program).

In the late 1980s, it was noted that emphasis on farm and financial management and family community leadership increased.

During this entire span of years, District II is proud of a strong heritage of outstanding 4-H programs. As this history is being written, notice was received that there were five national winners and four alternates from District II. These winners were from a delegation of 15 representing District II.

Also in the late 1980s, District II, along with the other districts, heard of the "national initiatives," and directed programs to meet these initiatives.

Through the Years

Some Extension Service leaders warrant special recognition. The authors realize the danger in identifying specific individuals, knowing that perhaps some will be omitted that may have contributed just as much as those mentioned. This problem will be compounded due to the limited information on the early leadership.

During Harmon's leadership, swimming changed from the creek that runs through the William P. Ridley 4-H Center to a swimming pool. The original pool has been replaced by a newer one that is presently being used (1990). A plaque from the old pool honoring Harmon is at the present pool. The District II 4-H All-Stars are responsible for the plaque and recognition. A plaque recognizing the contributions of G.L. Harrington, who was a state 4-H leader is erected near the flag pole. Harrington died at 4-H Camp in Columbia.

Jones, who succeeded Harmon as district agent, and Jesse Safley, are recognized for laying the groundwork and originating the 4-H Foundation. Jones was also instrumental in working with UT personnel and legislators in

getting laws passed, which clarified and identified duties of the Agricultural Extension committee. This was followed by meetings with the committee in District II and development of handbooks for committee members.

Cullens was district home agent from 1929 to 1961. She exhibited high expectations for professionalism and quality demonstration teaching for all Extension home economists whom she supervised. This included professional dress. Hats and gloves were expected in the 1940s, 1950s and 1960s for a truly professional Extension home economist representing the UT Extension Service.

Ussery is well known for the caring attitude toward the people she worked with. Her knowledge and wisdom of the Agricultural Extension Service will long be remembered in District II.

Partnership

Although the Extension Service in District II is dependent on other agencies, associations and donor groups, we feel this is a two-way street and Extension has had a positive effect on these same agencies and associations.

Jesse Safley, a former Extension worker, former newspaper writer and a former bank vice president is an example of a loyal supporter with his own giving in addition to the support through other groups. This does not end in District II, but applies statewide.

Other groups and individuals include TVA, USDA agencies, Farmers Club of Nashville, the Tennessee State Fair and Rural Electric cooperatives. A list of individuals and other organizations such as L.C. Jacobs (Ralston-Purina), John Sloan (Cain-Sloan), Ed Hicks (Dobson-Hicks) Newhoff Packing Company, Nashville Union Stockyards and Third National Bank certainly qualify as true partners.

It is through support of groups and individuals such as these that Extension in District II has touched and improved many lives.

Never Ending Cycles

Ever since man first began to till the soil in Middle Tennessee, agriculture has revolved around endless cycles of renewal, growth and harvest. The first pioneers crossing the mountains into the land of the Cherokee learned that they could depend on products they grew and made themselves from the rich land around them. Each season has brought new challenges and each producer has handled them in many different ways.

The men and women of the Agricultural Extension Service have made a tremendous difference in the lives of Middle Tennesseans. Their basic purpose has been, "To aid in diffusing among the people of Middle Tennessee useful and practical information on subjects relating to agriculture

and home economics and to encourage the application of the same." This is why agriculture is a strong part of the Middle Tennessee economy.

The one thing that keeps Extension agents ticking might be best explained by Jonathan Swift: "And he gave it for his opinion...that whoever could make two ears of corn or two blades of grass to grow upon a spot of ground where only one grew before, would deserve better of mankind and do more essential service to his country than the whole race of politicians put together."

One thing that can be counted on is the fact that always where farmers farm, and county agents demonstrate, certain predictable cycles are repeated year after year after year.

In spite of the many hardships farming can impose, a powerful mystique still surrounds rural life. The quiet beauty and spacious solitude of open country, the perennial satisfaction of growing crops and nurturing livestock, the freedom of working for yourself, a place where youngsters can learn the value of honest work, these are all part of what raises farming above the realm of just making a living and makes it, instead, a great way of life.

Modern technology has removed much of the toil from farming. Much of the credit for this goes to the men and women of the Agricultural Extension Service. Through a unified effort, the Agricultural Extension Service acts both as a delivery and a response system, encompassing comprehensive missions in four major areas: agriculture and natural resources, home economics, 4-H and youth development and community resource development. Through the off-campus delivery system of informal education, the Agricultural Extension Service in Middle Tennessee serves as the teaching, communication and facilitation link between educational resources in the previously mentioned four major areas available from the UT, Tennessee State University and the Department of Agriculture.

The inherent nature of life on the farm draws family members close to each other as well as to the land. This is one factor that draws professionals to Agricultural Extension work. Few callings offer a richer variety of triumphs and sorrows to share, or as many opportunities for building dreams together. It is the spice of life that keeps Extension works on the move. Each farm family fashions its own unique heritage and sacred traditions as generations succeed generations in wrestling a living from the land. Helping people to live with change is a never ending cycle.

The future and prosperity of American agriculture depends on an informed public, which is aware of the important contributions agriculture makes to the national economy. Agriculture is our country's most basic industry and the key to America's continued strength. American agriculture and the entire food and fiber industry are truly a production miracle -- perhaps the greatest in world history.

Using this precious resource effectively to meet our needs and those of a hungry world is one of the most important challenges facing this nation. To meet this challenge, it is essential that the American public understands and supports agriculture as a major national priority. Thus, the Agricultural Extension Service faces one of its greatest challenges of all time.

The world hates change, yet it is the one thing that has brought progress. There is a new Tennessee every morning when we wake up. It is upon us, whether we will it or not. The new Tennessee is the sum of many small changes -- a new subdivision here, a new school there, a new industry where there had been swampland -- changes that add up to a broad transformation of our lives. The Extension worker must help guide these changes. Although change is inevitable, change for the better is a full-time job.

The following thought from an unknown source might well be Extension's desire to adjust to a changing society.

Consider Tomorrow Together

*When the pioneer tamed the wilderness land
He did it alone, with muscle and hand.
But our once simple life has been lost on the way
To an expanding world that grows smaller each day.*

*As we increase in number, the closer we grow.
But the more we learn of each other, the more there's to know.
We can track a course through uncharted space
But can't unravel the complicity of the human race.*

*Nature's only constant is a constant state of change.
To keep herself in balance she must continually rearrange.
Earth's simple beauty masks a world quite complex,
Filled with contradictions that leave some of us vexed.*

*We once thought of Nature as Man's natural foe
But from new found understanding, will a partnership grow.
If respected and replenished, Nature will ever provide
For the needs of mankind o'er the earth, far and wide.*

*As our neighborhood stretches beyond the great seas
The challenges will be greater for you and for me.
But as we move toward tomorrow, together carving the way,
We can build on the knowledge being gathered today.*

*As together we grow and together we reason
We will learn how to plan for all tomorrow's seasons.
With God to guide us we won't be alone.
Tomorrow together we'll face the unknown.*

The last decade of the 20th century has been launched. The changing of a decade is a significant time in the lives of all of us and, hopefully, we will take a deeper look at ourselves and the world around us and what we might do to guide change in a positive way.

Look through the kaleidoscope of happenings. When you add together all of the activities Americans do in one day, the numbers can be surprising. For instance, each day: we eat 200 million pounds of fruit and vegetables, we eat 1.2 million bushels of onions, we pour 450 billion gallons of water through homes, factories and farms, one new insect species is discovered, rats and mice damage \$2.5 million worth of property, about 200,000 tons of edible food are wasted, we eat 50 million pounds of sugar, Americans crush 85,000 bushels of cigarette butts, six million tons of manure are produced by farm animals, we make 1.9 million sheets of plywood and aches and pains prompt us to ingest 575 bushels of pain reliever.

We are fortunate we can take these seemingly insignificant things for granted. Unfortunately our food supply cannot be taken for granted. American agriculture has continued to increase its efficiency to the point where one farmer now produces enough food to feed 114 people. As our population expands into the next century, in order to feed our nation, a farmer will need to squeeze even more food out of the same acre of land.

One of the management tools helping farmers increase production of healthy, disease-free food has been pesticides. To help squeeze more healthy food out of the same acre of land in the future we will continue to need pesticides as a management tool.

But wait a minute -- the 1990s is the decade of the environment! Americans are more concerned than ever about the quality of their lives. We've come to expect the highest possible standard of well-being for ourselves and our children and any threat to that well-being, real or imagined, evokes a strong response.

Unfortunately, in our increasingly urbanized nation, consumers often can be misled about the role chemicals play in assuring all of us longer, healthier lives. But it doesn't have to be that way. Persistent dialogue about our food safety protection system can boost public confidence in the quality of our food supply. The facts irrefutably support the view that we're much better off with modern crop production methods using ag chemicals. This technology is vital to our future.

People have the right to believe what they want. It's our job to share accurate information so that everyone can make an individual decision based on a thorough understanding of all sides of the issue. We can't demand trust, nor should we expect it. Through dialogue maybe we can build trust or at least motivate people to really examine the issues.

The following are issues we'll face in the 1990s: food safety, groundwater, alternative agriculture, worker safety, endangered species, posting and notification, air quality and delivery systems. As we enter this decade of the environment, we should all realize we have a couple of choices to make. We can either choose to work towards the solutions together, or we can choose to get out of the business.

We should all be concerned about the future because we will have to spend the rest of our lives there. In the words of Tennyson, "For I dipt into the future, far as human eye could see, saw the vision of the world and all the wonder that would be."

The history of the world is the record of a man in quest of his daily bread and butter. District II agents are prepared to see to it that all people are well fed.

You may find the following excerpts heart touching and entertaining:

The First County Agent

*Clarence of Euphrates was just a simple man
He graduated ag school from Tigress A&M*

*It only took him seven days to garner his degree
But days were longer then, of course, and no one took P.E.*

*His goals were really modest; to help clean up the air
To save the world from ignorance, become a millionaire*

*To always strive for excellence and never be complacent
So Clarence of Euphrates became a county agent*

*His first job was a garden, the year was 2 A.S.
To clarify, that's After Snake, and Eden was a mess!*

*He organized the fair board though his paperwork was slow
And told the state director no more than he should know*

*His achievements in 4-H work were a credit to the kids
On a field trip to Egypt they built the pyramids*

*The local folks would cringe in fear and hide out in the thickets
'Cause everytime that Clarence came, he'd sell'em raffle tickets!*

*In the Eden County Stockmens he was honored by his peers
And served as secretary for seven hundred years*

*He put on endless meetings and countless demonstrations
With faulty slide projectors and drafty ventilations*

*He wrote a million pamphlets, read record books galore
And patted pigs and lambs and kids til his hands and heart were
sore.*

*He always judged the apple pies at Eden County Fair
Although the ancient legends warned of apples, to beware*

*But Clarence ate'm anyway and scoffed at their reaction
But alas, he finally died, of apple pie compaction.*

The Farmer

*The farmer is the salt of the earth;
The backbone of the nation.
He works from sunup til sundown,
And battles with inflation.*

*He knows life and he knows death
For he sees each come and go.
He sees rain fall on fields of grain,
And he feels the winds blow cold.*

*He shares a closeness to the earth,
As he cultivates the sod.
Works many long and tiring hours,
Many miles his footsteps trod.
Sweat forms upon his suntanned cheeks
And dust clings upon his hands.
He's proud of work that is well done
As he plows and hoes the land.*

*He plans and he hopes and he prays
That each day will bring forth new,
Animals, plants and vegetables,
And for skies not always blue.*

*His job is one that is rewarding,
For he shares with God above,
An affinity to earth and birth
As he farms the land he loves.*

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"Celebrating 75 Years -- Personnel Directory, Tennessee Agriculture Extension Service, May 1914-June 1989"; University of Tennessee Agricultural Extension Service, Knoxville, 1989.

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District III

Headquarters: Chattanooga

Sweetwater Valley...Sequatchie Valley...Lookout Mountain...nuclear reactors! District III is a successful blending of the small rural farm, 21st century space technology, the Bible Belt heritage and awesome scenic beauty. Composed of 16 Lower East Tennessee counties, divided by time zones, but bound by love of home and family, District III enjoys a rich Extension history.

Bledsoe
Bradley
Coffee
Franklin
Grundy
Hamilton
Marion
McMinn

Meigs
Monroe
Moore
Polk
Rhea
Sequatchie
Van Buren
Warren

District III

W.M. Hale, President of the Tennessee 4-H Club Foundation, Inc.

Formation, Location and Personnel

District III was first known as the East Tennessee district and extended from "Sequatchie Valley east," according to D.T. Hardin, first district agent. That was in 1915 and the district office was located in Knoxville. A new district, known as the Chattanooga district (District III), was established in late 1918. The district extended "from the Georgia line to Kentucky" and included all of the counties presently in District III, with the exception of Monroe and Moore, plus Roane, White, Putnam, Clay, Pickett, Jackson and Cumberland.

To reach the northern part of the district, supervisors (district agents) would usually go by train from Chattanooga to Nashville or Rockwood and change trains for Cookeville. A rented horse or horse and buggy, or even walking, provided the means for reaching other counties in the area. Supervisors would often spend the night in farm homes. Hardin said that he did not remember ever having to pay for lodging or feed for his horse.

The area now designated as District III was established in 1948 and is composed of the following 16 counties: Bledsoe, Bradley, Coffee, Franklin, Grundy, Hamilton, Marion, McMinn, Meigs, Monroe, Moore, Polk, Rhea, Sequatchie, Van Buren and Warren.

Agricultural supervisors have included Hardin, Evan McLain, Ebb Thomaes, Charles H. Doughty, E.H. Swingle, Paul M. Koger, William Eugene Bryan, Ray C. Stamey, Arnold F. Hunter, Robert Childress and Frank L. Brown.

Home economics supervisors were Elsie M. Dugger, Julia Reagan, Lizzie B. Reagan, Bama Finger, Mary Stanfill, Margaret L. Clem and Mary Frances Hamilton.

Secretaries have been Mary Jo Thompson, Mildred A. Lancaster, Irene Fitzgerald, Rose E. McGee, Leota C. Gibson, Charlotte A. Thompson, Erma G. Baker and Donna E. Paulk.

Before March 1, 1974, the District III office was located on the lower floor of the Federal Building in Chattanooga. It then moved upstairs to Room 213 of the Federal Building. On Sept. 1, 1979, the office was moved to the 6000 Building, East Gate Office Complex, where it is now located.

Although many of the counties in the district had women agents already working prior to 1914, most of the men agents were first employed during the period of 1914 to 1918. Much effort by the early agents was directed towards

promoting the increase of food supplies following the entry of the United States into World War I on April 6, 1917.

Severe economic conditions following the war caused some counties not to continue their appropriations for Extension. However, during the latter half of the decade, most of the counties had restored their appropriations and agents were again at work in the counties. By 1934, at least one agent was employed in all of the counties of the district.

In 1935, assistant agents in soil conservation, employed in cooperation with TVA, were employed in all District III counties except Van Buren and Warren. As program concepts changed in the 1940s, these agents were called test demonstration agents and had multi-county assignments. The title of resource management agents more correctly referred to their responsibilities in the 1980s. The program was terminated in District III on Sept. 30, 1988.

Another significant expansion of personnel occurred in the district in the 1940s with the addition of assistant agents to work primarily with youths in their respective counties. By the end of the decade, approximately 12 of the counties had agricultural agents and eight of the counties had home economics agents working as assistants in 4-H.

Further expansion in personnel came about as a result of the Expanded Food and Nutrition Education Program (EFNEP) being introduced in Coffee and Warren as pilot counties in 1969. Counties which later joined the program included Bledsoe, Grundy, Hamilton, McMinn, Polk and Van Buren. The Special Program in Foods for Youth (SPIFFY) became part of EFNEP in 1970. Some of the EFNEP paraprofessionals were assigned to the program on a full-time basis while others had part-time assignments. EFNEP has been scaled down in recent years. Hamilton, Coffee, McMinn and Polk are the only District III counties still participating in the program.

Currently all counties in the district have a home economics and an agricultural agent, one of whom will have been designated Extension leader. Also, 10 counties have at least two agents working with 4-H, four counties have one 4-H agent and two counties do not have an agent assigned to 4-H.

Programs, Activities and Events

A multitude of administrative responsibilities require much of district personnel time. These include the placement and supervision of personnel and the promotion and development of Extension programs for agriculture, home economics and youth. There exists a pattern of innovative action and successful achievement on the district level, which is worthy of special recognition. Some of those programs, activities and events have recorded that recognition in the reviews which follow.

Community Improvement Program

"Better Homes-Better Farms-Better Communities" served as a slogan on which much of the Extension effort was based beginning in the mid-1940s. Strong community ties had developed as a result of war related activities. Following the war, material goods were scarce and the needs of the public and private sectors were great. Consequently, a feeling seemed to have developed that individual, family and community needs could be most effectively addressed through group action and participation. Organizing and working with community improvement clubs became an important part of all county Extension programs.

As a means of recognizing and rewarding the community organizations for their accomplishments, county contests were held, which were sponsored by local chambers of commerce, civic clubs or other such civic minded groups. The Chattanooga Chamber of Commerce began sponsoring the Tri-state area community improvement program in 1946. The success of this program, which was anchored by Extension, effectively established a strong bond of trust and confidence between urban and rural interest. This bond continues to exist today.

Communities in District III, which were declared winners in the Tri-State Area Community Improvement Program and the county in which they were located are listed as follows: 1946 -- Cedar Grove, Van Buren; 1947 -- Elm Hill, Sequatchie; 1950 -- Michigan Avenue, Bradley; 1953 -- Sweeden's Cove, Marion; 1954 -- Taylor's, Bradley; 1955 -- Apison, Hamilton; 1958 -- Fork Creek, Monroe; 1962 -- Midway, Warren; 1964 -- Centertown, Warren; and 1965 -- Walden's Ridge, Rhea.

Program changes by the Georgia Extension Service and expected changes by Alabama and Tennessee were given as reasons why the Chattanooga Chamber of Commerce discontinued its sponsorship for 1966. However, it is a tribute to note that the Community Improvement Club program continues to be a vital area of Extension promotion in some of the counties of the district.

Junior Livestock Activities

Arranging for the many different kinds of competition, which are an important part of the junior livestock projects, has always been given high priority within the district. Judging team winners have gone on to place very high at the state, area and national levels. Tennessee's 1985 4-H dairy judging team, an all female team from McMinn County, placed second in the national 4-H dairy judging contest held in Madison, Wis.

Fat cattle shows and fat hog shows, held at the stockyards in Chattanooga in the 1940s and 1950s, provided keen competition between individuals and counties for championship awards. The current District III Junior Livestock Exposition is actually two subdistrict shows. The shows are held on the western and eastern sides of the district. The sites of the shows are rotated

among different counties. Livestock expo classes include market steers, market lambs, breeding ewes and beef heifers.

District III takes special pride in the success of its District III junior dairy show which, has been held annually for the past 46 years. The first show was held around the Courthouse Square in Cleveland (Bradley County) in 1944. It was sponsored by the Cleveland Rotary Club and received international coverage in "The Rotarian" magazine.

The show has grown from its small start on the Courthouse Square in Cleveland, with 65 animals entered in competition, to approximately 238 shown in 1988 at the McMinn County Livestock Centers in Athens. The Rotary Club of Cleveland continued its sponsorship until the show outgrew the available facilities. In 1951, the show was moved to Athens under sponsorship of the Athens Lions Club. From 1958 to 1959, the show was sponsored by the Sweetwater Lions Club in Sweetwater. The show was again moved to Athens in 1970 and since that time has been hosted by the McMinn County junior dairy committee. Heifer and cow classes, of the Jersey, Guernsey, Holstein and Brown Swiss breeds, are exhibited.

Transporting dairy animals "across the mountain" for competition in the District III junior dairy show in McMinn County posed quite a problem to junior exhibitors. Consequently, the western counties received authorization in 1956 for a Cumberland Rim junior dairy show. The animals exhibited at the Cumberland Rim would qualify for competition in the state junior dairy show. Early shows were held in either Coffee, Warren, Franklin or Grundy counties. From 1976 to 1987 the show was held in Warren County. The 1988 and 1989 shows were held in Coffee County.

Animals exhibited and junior exhibitors from District III shows have won grand champion and showmanship awards at the all-American junior show in Columbus, Ohio and the Mid-South junior show in Memphis. The positive influence which the junior dairy program has had, and continues to have on the dairy industry throughout the entire district, would indeed be hard to measure.

Home Economics

Through the years, most home economics programs have been county based. However, with the changing times and notably improved transportation, there has been a gradual shift to include certain activities which involve group participation of homemakers from over the district in leadership roles.

One of the first group programs for homemakers was a summer camping program begun in the early 1950s and continuing, with a few lapses, to the present at either Camp Woodlee or the Crossville 4-H Center. In addition to educational and recreational programs conducted by agents, specialists and homemaker members, this event has provided background for leadership development and participation in the National Extension Homemakers Council.

A one-day seminar provides a similar opportunity for those who cannot be away from home overnight.

Other district-wide home economics programs have included dress reviews, television programs and working demonstrations at the Tri-State Fair in Chattanooga. All of these afforded leadership opportunities and provided greater visibility of Extension's educational programs.

Sew-A-Rama

A spectacular first-of-a-kind event for the district was a Sew-A-Rama held at Chattanooga's Eastgate Mall in October 1973. An estimated 45,000 persons were in the mall during the two day event. Educational exhibits planned to appeal to the home seamstress were presented by Extension agents and specialists, as well as home economists with commercial companies.

National Extension Homemakers Council

Interest had been building for a number of years for Tennessee to join the National Extension Homemakers Council (organized in 1936) in order to expand the scope of the organized homemaker clubs. In February 1982, the Tennessee Extension Homemakers Council was chartered. Most counties had already organized county councils and events moved rapidly to form district councils within the framework of the state group. Organization of this state group (with a membership of about 20,000) has been a great stimulus to leadership development. Program of work chairmen, who are former project leaders, assume responsibility for educational programs and coordinate with national areas of emphasis, but still give priority to local needs.

Doris Mason of Coffee County served as the first president of District III EHC and has continued in a leadership role in county, district, and state organizations by serving as the third state president of TEHC. She is currently serving as chairperson of the steering committee for the statewide oral history project.

During Mason's term as state president of TEHC, direction was given by District III to two major projects: an annual scholarship of \$1,000 awarded to a member of TEHC to continue her education and the initiation of an oral history project, "Through the Years Together -- A History of Extension Home Economics Programs in Tennessee." Two grants for \$2,500 and \$20,000 have been received from the Tennessee Humanities Council to aid this project.

Heritage Skills Seminars

District III has sponsored eight three- to five-day seminars in heritage skills at the Crossville 4-H Center. This began with a quilting seminar in 1983 and has expanded to include weaving, basket making, rug braiding, wood carving and lace making. Grants in varying amounts, up to \$5,000, from the Tennessee

Arts Commission have been helpful in keeping tuition cost reasonable and providing instructional supplies.

District III has remodeled a room in the old hospital at the Crossville 4-H Center for a weaving studio, which has been equipped with several types of donated or loaned looms and related weaving equipment. Instruction and work sessions are available at various times for both adult and youth audiences.

Young Family Weekend Conference

In 1989, District III Extension homemakers sponsored a young family weekend conference. Nineteen young couples and their children participated in the first conference of this type. This conference provided opportunities for families to view exhibits and participate in workshops addressing financial responsibility, nutrition for children, strengthening the family and leisure time projects and activities for families.

4-H Club Camps

The first record of any 4-H camp involving more than one county in District III was one reported by W.M. (Billy) Hale, member of the Hixson 4-H Club in Hamilton County. The camp involved 4-H boys from at least Hamilton and Bradley counties and was held for possibly two or three years between 1930 and 1933 at Camp Tsatanugi, a Boy Scout Camp located on North Chickamauga Creek in Hixson.

The camp fee was paid in cash or, more probably, by a specified amount of produce which had been given an assigned value. Older 4-H campers took their turn in helping to prepare the potatoes, beans, apples, chickens and other produce for cooking. Overalls were the designer swim suits worn by the boys while swimming or dabbling in the creek.

The first district-wide 4-H boys camp was probably held at the Sewanee Military Academy at Sewanee, in 1936. Hale also remembers attending this camp. The most exciting thing about the camp was getting to swim in a real indoor swimming pool.

Some available references indicate that a district boys camp was held at Columbia in 1937. Two camps were held at Columbia and Tennessee Military Academy in Sweetwater in 1939. Hale remembers attending camp at both locations and thinks the counties east of the Tennessee River attended the camp at TMI and those west of the river went to Columbia.

Tire, gas and food rationing during the war years seem to have eliminated camping on a district basis. However, there is some evidence that short recreational camps were held in some areas to reward young people for outstanding labor records in support of the war effort.

The coeducational 4-H camping program as we have it today was started at Standing Stone State Park in Livingston (Overton County) in 1946. The camping program, under the direction of Mary Stanfill, district home agent, emphasized learning how to make a variety of quality crafts. Many former campers, both boys and girls, still point with pride at stools with seats woven of Hong Kong grass which they made at Standing Stone and have since used in their homes. The last camp at Standing Stone was held in 1950.

Since the camp at Standing Stone was at a state park located completely outside of the district, an effort was made in the late 1950s to secure a site centrally located within the district which would be suitable for a 4-H camp. After considering a number of possible sites, a committee composed of agents and 4-H supporters, under the leadership of Fred Colby, District III 4-H specialist, selected a very excellent site offered by TVA on Chickamauga Lake in the Birchwood community of Hamilton County. A number of businessmen pledged their financial assistance and support for building the camp. However, when the initial plan for the camp was presented to Extension administration in Knoxville, the decision was against building another 4-H camp.

Meanwhile, the Woodlee family of McMinnville, in cooperation with Colby, county agent Hobart Massey and others, had set aside a block of woodland acreage in Warren County for camping by 4-H and young farmers and homemakers. The University of Tennessee was not able to participate in physical development of the area because of the reversionary clause in the deed. However, counties in the surrounding area began the development on their own. A kitchen and dining hall was built and Warren County built "Swack's shack" of pine slabs. A cabin was built by Bledsoe County and Bradley County dismantled a prefabricated building at the old Prisoner of War Camp near Crossville and transported it to Camp Woodlee, where it became the crafts building. Other cabins were built by counties in succeeding years.

The District III 4-H Camp was moved from Standing Stone to Camp Woodlee in about 1949 or 1950 where it remained until 1960. In keeping with its natural setting, a very innovative camping program was initiated there by Colby and Stanfill. This included living in surplus army tents, studies of mountain lore and cave visits. Today, many of Tennessee's outstanding leaders return to Camp Woodlee on special occasions to reminisce and renew acquaintances made while attending the camp as 4-H'ers.

From the summer of 1961 to the present time, District III has been sharing the facilities at the Clyde M. York 4-H Training Center with District IV. These facilities have been developed on the site of the old Prisoners of War Camp near Crossville, which encompasses an interesting background story within itself.

Ray C. Stamey Building

Ray C. Stamey, associate District III supervisor, was killed in an automobile accident in 1978 while en route to a district in-service training meeting. In memory of Stamey, funds were raised in the district to build a covered outdoor classroom at the Clyde M. York 4-H Training Center in Crossville. The memorial was dedicated in 1984 and has been a very valuable addition to the facilities at the 4-H Training Center.

National 4-H Scholarship Winners

According to a list of national 4-H scholarship winners secured from the National 4-H Council in 1985, District III has produced more scholarship winners than any other district in the state. The 92 national winners from the district, which is an average of 5.75 winners per county, is also highest in the state. Bradley County has had a total of 33 winners, which is unofficially accepted by the National 4-H Council as the highest number received by any county in the United States. Among the other top 10 counties in Tennessee, Franklin is fourth with 15 winners and Hamilton is tied for fifth with 13 winners.

Bradley County was also the first county in the nation to produce three national 4-H scholarship winners in the same year (1951), according to a notice received by Aubrey Scott, 4-H Club specialist, from Gertrude Warren of the national 4-H office. This significant achievement was repeated in 1980. In 1952, the U.S. Department of Agriculture Extension Service 4-H office requested permission to make a study of the 4-H program in Bradley County. The study was expanded to include the entire district when those planning the study realized that an adjoining county, Hamilton, had two national 4-H winners that same year. The study was later given national exposure in 4-H circles.

Hale, one of Tennessee's earliest 4-H scholarship recipients, and his wife, Ruth, established the master 4-H family recognition program in 1984 to give deserved recognition to 4-H families on the county, district and state levels who have shown exceptional participation in all phases of 4-H Club work. An endowment was set up in the Tennessee 4-H Club Foundation to assure full future funding for the annual awards. Hale is a former Hamilton County 4-H member who retired in 1979 after serving 33 years with the Extension Service in Bradley County.

DISTRICT IV

Headquarters: Cookeville

Hills and hollows, free flowing streams, Appalachia! Pioneers loved the land and planted family roots. The 15 Cumberland Plateau counties are rich in rural culture; its people are independent and self-sufficient, neighborly and altruistic. Loyalties run deep and patriotism is alive and well. Farms and homes, nestled in the rugged folds of the Cumberland Mountains, are storehouses of Americana at its best.

Cannon
Clay
Cumberland
DeKalb
Fentress
Jackson
Macon
Morgan

Overton
Pickett
Putnam
Scott
Smith
Trousdale
White

District IV

**Demps Breeding, Area Specialist
Linda Byler, Associate District Supervisor
Rural A. Peace, District Supervisor
Albert Warren, Associate District Supervisor**

A new District has been created! This was the essence of the headline news in the September-October 1948 issue of the "Tennessee Extension Review." District IV of the Tennessee Agricultural Extension Service was officially created on Oct. 1, 1948. The creation of the new district boundaries was an attempt to narrow the supervisory span of control and to address the unique needs of clientele in the rural Upper Cumberland.

The new District IV was created by regrouping counties taken from Districts II, III and the former District IV, which became District V. Counties composing the new district were: Cannon, Dekalb, Macon, Smith and Trousdale, formerly in District II; Clay, Jackson, Overton, Pickett, Putnam and White from District III; and Cumberland, Fentress, Morgan and Scott from the former District IV.

District IV became the smallest district in the state with only 15 counties. The other four districts had a low of 16 counties and some as many as 22. District IV also represented some of the more rural counties in the state.

The new District IV was headquartered in Cookeville. This was the logical location for numerous reasons. It was centrally located and had facilities for group meetings, livestock shows, sales and other Extension events. It was known as the "hub of the Upper Cumberland" with a network of roads reaching out to the 15 counties involved.

Heading the new District IV were district agriculture agent N.B. Morgan and district home agent Margaret Bacon. One of the first challenges facing these new district leaders was to pull the 15 counties from previously separate districts together into a cohesive, productive unit. This was difficult at times since some of the counties were located closer to Nashville and Knoxville and previously had little identity with Cookeville. Van Buren County differed in this respect in that it requested to transfer to District IV, but was denied.

However, a lot of pride has developed over the years among District IV staff and clientele. This may be due in part to the smaller population and more rural environment. This pride served as a motivating force over the years, particularly in 4-H competition. Also, the staff within District IV has developed a closeness, much like a family, that has been noticed by the rest of the state's Extension personnel.

One example of this pride and closeness was exhibited in the fund drives for the Institute of Agriculture in the 1970s and 1980s. District IV was the only

unit in the Institute to have 100 percent of the agents participating in each of the fund drives.

The leadership structure of the district has changed three times since the district was formed. In the beginning, Morgan, better known as Col. Morgan, agent in Smith County, was to become district agriculture agent. Margaret Bacon, agent in Bledsoe County, was appointed district home economics agent. This leadership existed from Oct. 15, 1948, until 1961 with agriculture and home economics programs being supervised on a separate, but equal basis. Morgan was the only district agriculture agent during this period, while there were five district home economics agents. Bacon served from 1948 until 1952, Alta Thomas from 1952 to 1955, Estelle Vines from 1955 to 1959, Margaret Miles from 1959 to 1960 and Mary Neal Alexander became supervisor in 1961.

The change from two to three people in district supervisory personnel occurred in 1961. Morgan was made district supervisor of management. His responsibilities included coordination of district staff and day to day management. Alexander's title was changed to district supervisor of home economics programs. She gave up her management responsibilities to devote full-time responsibility to the youth and adult home economics programs within the district. A.C. Clark, agent in Putnam County at that time, was brought into the district staff as district supervisor of agriculture programs. He was responsible for youth and adult agriculture programs within the district. These three positions carried equal rank with delineated responsibilities.

In 1962, Clark replaced Morgan as district supervisor of management and Tom Langford became district supervisor of agriculture programs. Langford resigned in 1963 and Rural Peace replaced him as district supervisor of agricultural programs. Peace later left to do graduate work, completing his Doctorate in Education at the University of Tennessee. Ruth Geary replaced Alexander in 1972 when she retired. She moved to Donelson where she still resides. This district arrangement lasted until 1971 when another leadership structure change occurred at the district and county levels.

This change centralized the leadership of administrative line from the state director of Extension to the county. The county agriculture agents responsible for adult programs became county Extension leaders in each county. The district supervisor of management became district supervisor and the district supervisors of agriculture and home economics became associate district supervisors. At the same time, the state instituted a ranking system for county Extension agents. This ranking system included three steps: assistant Extension agent, associate Extension agent and Extension agent. This allowed for advancement in rank without changing basic responsibilities.

During the 42 years since the new District IV was created, there have been only three district supervisors. These are N.B. Morgan, 1948 to 1962, A.C. Clark, 1962 to 1985 and Rural Peace, 1985 to present. In 1985, Linda Byler became associate district supervisor of home economics programs and in

1986, Albert Warren, extension leader in DeKalb County, became associate district supervisor of agriculture programs. Replacing Warren as Extension leader in DeKalb County that same year was Steve Officer, the first black county Extension leader in the state.

District IV had another first in 1987 when Eugene Medley became the first county Extension leader with 4-H work as his primary assignment.

At the present time, only Morgan is deceased. All other supervisors, except Miles, are still living in Tennessee. She presently resides in North Little Rock, Ark. Bacon married Steve Hale in 1951 and later resigned due to the fact that married women were not allowed to work for Extension. She recently retired from the Putnam County School System as a counselor at the junior high. She continues to live in Cookeville. Thomas resigned in 1955. After a short stint in India, she returned to become associate supervisor in District V. She retired in 1971 and continues to live in Knoxville. Vines transferred to District I in 1959 and now lives in Jackson.

Tom Langford resigned in 1963 to take a position with Tennessee Livestock Producers. He recently retired from First American Bank and lives in Cookeville. Alexander retired in 1972 and currently lives in Donelson. Clark retired in 1985, and in 1987, became Tennessee Commissioner of Agriculture, serving under Gov. Ned McWherter. He currently lives in Cookeville where he is working with the state Rural Development Department. Geary retired in 1985 and is also living in Cookeville.

Morgan is probably best remembered for his role in acquiring the Prisoner of War Camp property at Crossville for a 4-H camp. It is now one of the best 4-H camps in the state. The colonel's philosophy of supervision was to hire good people and then give them freedom to function.

Clark is probably best remembered in Extension for his ability to understand and manage people while still maintaining their respect. He was known for his tactful manner in reprimanding workers when the need arose. He had the ability to bring out the best in people. Clark took great pride in the quality of the District IV staff and in their independent spirit. He continued to develop and improve the Clyde M. York 4-H Training Center during his tenure as supervisor.

As program supervisor, Peace put great emphasis on increasing the number and quality of result demonstrations and in using the results in a total educational program, including the media, tours, field days and winter meetings. He insisted that each agent be more than an arranger for specialists and encouraged agents to do more group teaching. He worked hard to challenge and provide agents working with youth to reach out and involve more boys and girls in meaningful learning experiences.

Since becoming district supervisor, Peace has emphasized hiring quality county personnel, while allowing county Extension leaders to take the leading

role in building their county team. He has also put great emphasis on leaders training, especially for county Extension leaders.

District IV has grown from 34 professional county personnel in 1948 to 47 county Extension agents, plus three area specialists, in 1990. The three specialists and their area of responsibility are: Demps Breeding, area specialist in community resource development, located in the district office, serving all 15 counties; Alan Galloway, area specialist in farm management, located in the Putnam County office, serving eight counties; Danny Pippin, area specialist in farm management, located in the Cumberland County office, serving seven counties in District IV and one county in District V.

Contact with the former supervisors of District IV yielded the following thoughts on the need for changes in the future: Clark -- "Better public relations and communications with Extension's various clientele"; Alexander -- "Extension personnel need a better understanding of research findings and research in progress"; Geary -- "Agents should be recognized by people in the county as being the authority in agriculture, home economics and related subjects"; Thomas -- "Need to provide special training on leadership to those agents aspiring to become county Extension leaders or district supervisors. In the past, Extension has promoted people to those positions with little or no training. Leadership skills can be learned"; Langford -- "To improve the relationship within the county unit's staff. This relates back to leadership skills of county Extension leaders or district supervisors"; Bacon -- "Extension was made strong by its service to and close personal ties to their clientele. We must continue to use the new electronic equipment for broader communication, but must not lose the personal contact with our clientele."

Another group that has contributed greatly to the District IV success over the years are the district secretaries. The first District IV secretary was Willie Rush Hunter Jewell, who began in 1948 and was succeeded by Betty Langford. Jean T. Judd was employed from May 1963 to December 1976. Present District IV secretaries are Linda J. Tinch, who began working in February 1969, and Patricia D. Grimes, who was employed in June 1978.

Agriculture

District IV Extension's contribution to agriculture production, marketing and natural resources was taken from a variety of sources who have assisted their clientele in making improvements related to their livelihood and living conditions. This information comes from interviews with retired workers and members of our audience, copies of old reports, news clippings and things remembered by those presently employed in District IV. Also, each county submitted a county history with specifics, both good and bad, relating Extension efforts and contributions.

District IV differs considerably from the other state districts in topography, covering an area that includes basin soils, Highland Rim soils and Plateau

soils. In addition, fertility of the soils differ considerably due to characteristics of their parent material.

In relating Extension agricultural history, we will dwell on what was expected of the county agent, teaching methods, time of crisis, crops, livestock and changing with the time. In so doing, it will be appropriate to mention persons who were venturesome, innovative and truly agents of change.

Extension work began in District IV counties with the passage of the 1914 Smith-Lever Act. The history by counties relates many interesting stories, achievements and hardships of early workers. In reading county reports, most agricultural agents encountered similar problems.

Some of the problems reported by early workers included transportation, road conditions, run-down farms, financial conditions on the farms, low prices, resistance to change and lack of financial support by local governing bodies.

Farming was a way of life in the counties that were to become District IV. Fields were farmed year after year with little thought of the future. Crops were grown on the same fields until they no longer produced enough to be worthwhile.

Rivers and creeks that once ran clear now began to run red and brown with topsoil. Many fields were abandoned and new fields were cleared until most of the better land had been in cultivation. This was caused partly from lack of conservation knowledge and lack of funds to carry out good practices. Restoring fertility and getting farmers to develop and carry out good conservation practices would be a challenge for Extension.

In the early days, most agents reported traveling by horse, wagon, buggy, train or foot. Evans Looney, agricultural agent in Scott County in the early 1930s, reported being swept downstream 200 yards as he attempted to cross a low water bridge while returning from a farm meeting on the Big South Fork. All of his fertilizer and lime contracts were lost.

An interesting report from Cumberland County taken from W.G. Osmond's 1917 report shows that he made 329 farm visits, wrote 153 letters, distributed 206 bulletins, traveled eight miles by auto, 638 miles by railroad, 1,329 miles by team, held 12 meetings with 700 in attendance and ordered 1,375 tons of lime.

Extension agents were expected to bring about changes in the use of recommended practices like crop rotation, use of cover crops, pasture and hay improvement, introduction of better breeding stock, use of lime and fertilizer, introduction of enterprises that would bring about a better cash flow, filling out legal documents and performing veterinarian work.

Blackleg and cholera would be a problem. Joe Easter, Clay County emergency demonstration agent, reported vaccinating 4,500 hogs. He also

had 12 corn demonstrations and nine boys in his corn club. This was pretty much the case in all counties.

In addition to growing food for the table, it was necessary that farmers sell sufficient products to tide their needs from one crop to the next. However, in many instances, prices were discouraging. In Pickett County, tobacco was the leading cash crop in 1932 with an income of \$5,000. Scott County reported feeder pigs selling for 65 cents each and top hogs at \$4 per head locally in the early 1930s. Many of the farmers did not produce sufficient corn for their own use and were forced to buy from the river bottom farms and those farms located in high phosphate regions. Some tobacco crops sold so cheaply that floor bills were not covered.

Farmers needed help. During an introduction of Frank Chance, a tall, slender agent in Cumberland County, the following remarks were made: "Some say he's a long chance, some say he's a slim chance and some say he's a poor chance, but I say to you, he's our best chance and we should use this chance to help develop the agricultural and rural life of our county."

Following passage of the Smith-Lever Act of 1914, agents began their task of disseminating useful and practical research-based information to their audience. Many people were leary of the new agents and it was necessary to find a way of winning them over or getting a foothold. This was accomplished by forming corn clubs, canning clubs, pig chains, etc. By working with children, agents gained the confidence of farm families and demonstrated the benefits of using recommended practices at the same time.

White County records show they had a corn club in 1914 and also a pig chain was initiated shortly thereafter using Poland China and Duroc breeds.

Producing and marketing a cash crop was an early concern. Poultry was a big item for most counties during the early years of Extension. Most farms had a poultry flock for home use. Surplus eggs and chickens were sold to country stores and peddlers who traveled a scheduled route. Records tell of Extension workers assisting with packing and shipping eggs to areas where prices were better. Also, they attempted to store eggs in a manner to preserve them until fluctuating prices reached a higher level. Sometimes this amounted to as much as 15 cents per dozen.

In Overton County, W.O. Sewell organized Hen Day. This was held in the spring and enabled farm families to bring surplus hens to town. Some families brought a wagon load of chickens to Hen Day. These were loaded on a railroad car and shipped to Cincinnati. Money from these sales were used to purchase fertilizer for the new crop. Black Joe was the only fertilizer available for a number of years. The analysis was 3-9-6. Everyone in the county came to the depot on Hen Day.

The Extension office during this era was responsible for all farm programs from the government. ASCS, SCS and other agencies had not yet been established.

In Overton County, Lespedza Day was also prominent during this period. Serecia lespedza was available, but much more expensive than common lespedza. Sewell brought in truck loads of seed to the square in Livingston on Lespedza Day and farmers would purchase needed seed.

For many years in the 1930s and 1940s, Irish potatoes were the major cash crop for Cumberland, Morgan, Scott and Fentress counties. Agents were challenged to increase yields, locate markets and find better ways of storage and shipment. Low prices in the 1950s and 1960s forced most farmers out of potato production.

Burley tobacco became a big cash crop in the early 1930s for those counties west of Putnam. Acreage increases came as a result of tobacco becoming an allotment crop. Lower prices were a result of this increase and again agents were looking for alternatives.

Strawberries became a good cash crop for many counties. At least three processing plants were located in District IV in Lafayette, Livingston and Celina.

In the mid 1930s and 1940s, agricultural Extension agents were also busy promoting many things other than productive agriculture. These included: rural electrification, rural telephone coops, farm organizations, soil conservation districts, federal farm programs, AAA, Farmers Home Administration and others. Charlie Vaughn was instrumental as a promoter in this era of Extension.

With the beginning of the 1940s, Extension work was changing. Personal contact continued to be important. However, more teaching methods to reach greater numbers of our audience were being employed. Group meetings were becoming more important, especially for promotional purposes. Radio and news articles were in use.

In 1942, World War II decided the course of action for Extension. Increased food production to feed the military, factory workers and our allies became the issue. Finding a market was no longer the problem. Production, supplies, repairs, ceiling prices and rationing had to be dealt with. These were trying times for all concerned.

This was also the time when increased farm prices enabled farmers to purchase fertilizer in sufficient quantity to see results in increased yields.

With the establishment of District IV in 1948, Extension had already blazed a good trail with the farm sector. Many farmers were adopting recommended practices and making changes for more efficient production. However, we

were just beginning to see the change in agriculture and the contribution of Extension through agricultural agents.

The following statistics from the 1950 "U.S. Census of Agriculture" relates major crops production areas and scope of these in terms of acres or animals in District IV. There were 22,840 farms which had a total of 165,000 dairy animals, 21,264 acres of corn, 2,361 acres of soybeans, 14,290 acres of burley tobacco and 19,988 acres of Irish potatoes. Beef cattle, swine, broilers and strawberries were becoming increasingly important.

Lespedza was of major importance, however, fescue was making its move in terms of acres of seed harvested. In 1949, 66,572 acres of seed lespedza was harvested and 4,384 acres of fescue. By 1954, lespedza had dropped to 39,159 acres and fescue was up to 15,873 acres. Fescue was fast becoming the major forage crop and farmers were increasing their beef herds.

Morgan was supervisor of agricultural programs in the new District IV, and from all reports, was a man of determination who believed in making needed changes happen.

In the 1950s, agricultural agents were continuing to promote production practices proven by research and using more advanced teaching methods. Soil testing was a big item, seed selections, artificial insemination using proven sires, disease control in crops and animals, purchasing better brood stock, producing quality forage and feeding balanced rations were all considered areas of emphasis.

Agents continued to serve as veterinarians in many counties and that ability was a criteria considered when hiring an agent.

Cholera, blackleg and Bangs disease continued to demand attention by agents.

Chemical weed control was arriving. It fascinated farmers and worried agents.

Many farmers had purchased tractors after the war in the late 1940s and early 1950s. The H Farmall was popular. The super C, A and Cub were around. Rubber tires were a must.

Most counties had a local creamery or cheese plant and a high percentage of farms sold manufacturing milk. This was picked up by the milkman and delivered each day. Cooling the milk to prevent souring was a problem. Most farm families did this by placing the milk can in a wash tub and pouring cold water around it. With the coming of electricity, some producers purchased coolers. Occasionally a can was returned with a red tag.

Extension agents worked to encourage increased production through the improvement of quality in dairy animals and feeding a ration of quality feed stuff.

During this era, agents made trips out-of-state to purchase and place better dairy animals on the farms. Many of these became the foundation animals of more productive herds.

Another mark for District IV was the charting of the CBBA. According to Homer Apple, this occurred on March 2, 1952, in Cookeville. This furnished a much needed marketing facility for feeder calves from all counties in District IV and much of District III. It also demonstrated that using recommended beef production practices and marketing large number of calves of similar quality and weight would pay. It also encouraged farmers to take more pride in their animals and to work for heavier weaning weights and quality. Other graded sales have since been organized at Carthage, Woodbury, Sparta, Crossville and Jamestown.

Feeder calf sales grew in size and number. A good number of producers entered their herds in a new performance testing program initiated by the university.

In 1958, Clark was instrumental in organizing the feeder pig sale in Cookeville. This was at first a semi-annual sale held at the Cookeville Fairgrounds. It was so successful that by 1967, a sale was held weekly and grew to be one of the largest in the south.

In the early 1950s, dairy, beef and swine were on the increase and sheep numbers were slipping.

Broiler production was a major thing for many counties during the 1950s and 1960s. This changed overnight for one reason or another and many producers were left with facilities and no place to go. A good use for the abandoned broiler houses was never found.

As we look at who made things happen in the 1950s, several faces surface. Included would be: Clark, Bethel Thomas, Fletcher Luck, H. B. Garrison, Dennis Patton, Ward Copeland, Clyde Webster, Roy Luna, John Beaty, H.H. Huffines and Charlie Jansch. These individuals organized their people and supported each other to make things happen.

In the 1960s, 1970s and until 1985, Clark served as supervisor of administration and Langford served briefly as supervisor of youth and adult agricultural programs before being replaced by Peace. In 1985, Peace became district supervisor and Albert Warren, former county leader in DeKalb County, was appointed associate supervisor.

The 1960s saw many of the manufacturing milk producers go out. This was also true for broiler producers, sheep, strawberry and Irish potato farmers.

Beef cattle, swine, tobacco, corn and soybeans increased during the 1960s. Also, snapbeans were becoming important to the Plateau and some counties of the Highland Rim, such as DeKalb and Putnam. Increased row crops brought on weed problems that put more demands on Extension workers to assist farmers with selection and application of herbicides.

Black shank and root rot continued to be problems for tobacco farmers. Selecting resistant varieties and rotation of tobacco sites were important practices. Soil testing to determine lime and fertilizer needs was stressed.

Corn had problems with the stunt virus and insects. Seed selection, based on virus resistance, became more important as Johnson grass spread. Early planting was advised to get ahead of the insects.

Farmers became interested in the futures market. Some profited and others took heavy losses. Extension agents provided information to help the farmers make the best use of this new marketing method.

The marketing of feeder pigs and feeder cattle through organized demonstration sales grew during this era.

Clayton Glenn, Extension leader in Cannon County, organized a livestock marketing co-op by selling 1,000 memberships at \$10 each. This group applied for and received a loan from FHA to construct a marketing facility, which was called Mid-State Producers. Weekly auctions, feeder pig and feeder calf sales and later dairy heifer sales are conducted at the barn. This serves Cannon and the surrounding counties. The number of pigs sold there weekly surpassed Cookeville at one time. This proved to be a successful endeavor and a true Extension effort.

Corn and soybean acreage continued to increase in the late 1960s and 1970s.

DHIA herds were increasing as more dairies went Grade A and manufacturing producers continued to dwindle. Many of the local milk plants were closed or were in the process of closing.

From the 1960s through the 1980s, Extension was a valuable source as it dealt with major production problems in corn, soybeans, tobacco, swine and dairy animals. Corn stunt and corn blight were handled in fine style. As soybeans increased, so did the cyst nematode. Laboratory diagnoses were available to the farmer and resistant varieties took up the slack on infested soils. It was important to continue keeping tobacco producers aware of black shank, root rot and recommended control measures. Blue mold made its appearance in tobacco fields. Ridomil was a crop saver. Hog cholera control measures resulted in Tennessee being declared a cholera free state and swine rhinitis and pseudorabies are being dealt with. Control measures are continuing in an effort to eradicate brucellosis.

In the late 1970s and early 1980s, farmers were feeling the financial crunch. High production costs brought on by a number of factors, including high interest rates, were taking their toll. Also, lower value for farmland and low prices for corn, beans and other commodities were taking out many row crop farmers.

The following comparison shows the trend away from row crops in District IV. In 1980 we had 54,613 acres of soybeans and by 1987 this had dropped to 16,480 acres. Corn declined from 67,300 acres in 1982 to 25,583 acres in 1987. From 1968 to 1983, District IV averaged 10,241 acres of burley tobacco per year. The 1987 acreage was only 4,541 acres. Yield per acre over a 16 year period was 1,973 pounds per acre. Going back to the 1940s, the yield was approximately 850 pounds per acre.

Cattle are taking up some of the slack of lost row crop acreage. From 1969 to 1984, numbers increased from 253,300 head to 354,600 head.

Extension is continuing to work with farmers concerning alternative crops without much success.

Cannon County has organized a vegetable co-op that should begin operation this summer (1990). This facility was aided by grants from the Tennessee Valley Authority and from the state.

Two farm management area specialists are assigned to District IV to assist farmers with financial planning.

Many good things could be said about the agricultural agents in District IV. They are a close-knit group, stubbornly independent and they believe they can change any thing capable of being changed.

Today's agents will be remembered when our history is rewritten.

Community Resource Development

Extension has always been a rural development agency in District IV. It is a rural area. In our early years, each community had an organized community club. Extension people organized these clubs and attended their meetings. It was not until the mid-1950s that it was first recognized as another unit of Extension.

In 1955, Congress passed the first Rural Development Act. This act called for a pilot program to see what a broad based committee could do for these pilot counties.

Macon County, under the direction of Luck, was chosen as the county in District IV to undertake this challenge.

As Luck stated, "Our challenge was to get a group of people together and study where we have been, where we were and where we are going or should be going." The results of this study revealed that our present situation was one that needed a change in direction.

The change in direction that was taken was to form sub-committees from the overall rural development committee. The committees included agriculture, economics development, recreation and tourism, family living, forestry, etc.

The economics development committee was a joint group represented by people from agriculture, industry, business and civic groups in the county. From this group, the Overall Economics Development Program (OEDP) was developed. A copy of this document is still on file in the Macon County Extension office. The name of this committee was later changed to industrial development committee and is still active in Macon County today. Luck's leadership of the rural development program can be credited for the accomplishments that changed the direction of Macon County.

Listed below are the accomplishments of the rural development committee that were published in the first OEDP from Macon County in 1962.

- 1. Developed an adequate farm credit program. The lack of farm credit was one of the great problems of the county. This condition no longer exists.**
- 2. Initiation of a vocational training program in the high school for boys. Prior to the start of this program, many boys were dropping out of school. After the program began, many of these came back.**
- 3. Carried out a very successful special agricultural conservation program. A special practice was set up to encourage small farmers to establish good pasture and other conservation practices. This program was so successful that it caught the attention and drew praise from state and national authorities.**
- 4. Assisted in the promotion of a modern rest home at Red Boiling Springs. This home will have the facilities to accommodate about 60 people.**
- 5. Encouragement of the wood working industry to use local natural and human resources.**
- 6. Promoted a total industrial program that has employed about 1,800 people since 1955.**
- 7. Initiated a central and sub-station library service.**
- 8. Conducted an intensive crop efficiency program.**
- 9. Prepared a brochure which points out and emphasizes the advantages of the county as a location for industry.**
- 10. Purchased and developed a site for a community park, including such facilities as shelter, swimming pool, ball fields and a golf course.**
- 11. Held numerous sewing and food preservation clinics.**

12. Promoted strawberry production and obtained an adequate market for them.
13. Increased the income from dairying by about \$755,000 per year.
14. Assisted in the organization of the Jennings Creek Watershed Association.
15. Conducted labor surveys to determine the number of people available for local industry.
16. Assisted in locating a radio station in the county.
17. Obtained 100 percent participation in the A.S.C.S. applications program.
18. Completed the Red Boiling Springs Nursing Home (number 4).
19. Doubled the capacity of the Lafayette Rest Home.
20. Assisted in the organization of the Hull, York, Lakeside R.C.D.
21. Assisted in the organization of Line Creek Watershed Association.
22. Reorganized Macon County park committee that now has 104 members.

As a result of this pilot program in Macon County, all District IV counties started a rural development program in the early 1960s. These programs ranged in degrees of success from county to county.

Trousdale County has had the longest active committee in District IV. Clyde Webster organized the Trousdale County committee in the late 1950s or early 1960s and they have been meeting on a regular basis ever since.

By the early 1970s, rural development became dormant in most District IV counties. The development districts had been established and were doing most of the things for our communities that rural development had done in the earlier years, especially in the area of economic development. All of the county OEDP's were being prepared by the development districts.

In 1974, rural development was once again revived, again from federal funds. This time around it was administered on a multi-county basis rather than a single county. Clark, district supervisor for District IV, named Overton, Pickett and Clay counties as the pilot counties for this project. Roger Thackston, who was then the assistant Extension agent in Macon County, was chosen to lead this effort as the rural development agent in those three counties. He was headquartered in Overton County. Thackston served in this capacity for about three years until 1977.

He was instrumental in organizing these three counties, identifying problems that existed and searching for ways to help solve them.

Thackston resigned in 1979 to accept the Extension leader's position in Cumberland County. John R. Berrier replaced him, but only worked for about three weeks before resigning.

Michael J. Tustian then replaced Berrier. Tustian became interested in the use of gasohol, which was emphasized because of an oil shortage caused by an embargo.

Tustian actually built a distillery on wheels, which he used as a demonstration for converting corn into alcohol. He also converted a lawn mower so that it would burn the pure alcohol.

In 1981, Clyde Webster was employed to continue the C.R.D. work in these three counties. Webster's concept of C.R.D. work was that of a "broad based committee," which had been used so successfully in both Macon and Troup counties.

In about a year, Webster and Clark applied rural development to Macon and Troup counties. Headquarters were then moved from Overton County to the district office in Cookeville.

Webster quickly organized these counties and encouraged each group to establish goals and priorities. One priority, spearheaded by the Overton and Clay County group, was to explore vegetables as an alternative cash crop.

Through the leadership of Webster and the assistance of all the agricultural agencies, the Upper Cumberland Development District, UT, Tennessee Tech University and others, a multi-county vegetable growers co-op was formed. The co-op was known as the Highland Rim Growers Association. Over the next few years, several acres of tomatoes, broccoli, cauliflower, corn and other vegetables were grown. However, due to the lack of adequate cooling facilities, marketing became a real problem. Some farmers are still growing these on an individual basis, but not as a co-op member.

When Webster retired in April 1989, he had formed rural development groups in 13 of the 15 counties in District IV. The other two counties, Cumberland and Morgan, had very active groups meeting on a monthly basis.

The following are a few of the more important projects that were started by C.R.D. groups under Webster's leadership: extension of rural water lines in many counties; building a National Guard Armory; building a water filtration plant; building and improving roads; a vegetable growing co-op and building facilities to handle the vegetables; road signs in many counties; and enhancing 911 emergency telephone service.

In late 1989, the title of the C.R.D. area extension agent was changed to area C.R.D. specialist. All 15 counties of District IV were included in this area of responsibility.

In September 1989, Demp's Breeding assumed the position of area C.R.D. specialist. Breeding had been the Extension leader in Macon County before accepting this position.

District IV is the only district in the state where the area C.R.D. specialist meets monthly with each county's C.R.D. committee.

In 1984, an awards program was initiated to choose the outstanding rural development group in Tennessee. The first winner of this award was the Overton County group under the leadership of Garrison. This awards program has been continued and four of the six winners have come from District IV. Other winners have been from Macon County (1986), Cannon County (1988) and Trousdale County (1989).

In the 1970s, Morgan County received the national award for having the most outstanding rural development program in the country. Establishment of a hospital and the subsequent arrival of the first medical doctor in Morgan County was the basis for this award.

Below are some quotes concerning C.R.D. in District IV from Clark, Webster, Jansch and Garrison.

"Resource development is one of the most important things for rural America that we have ever had," said Clark. "I don't know of any group that can do it in the way that Extension could because they are out there every day with the grass roots people. Rural development is a perfect example of how people can help themselves."

"One of the things we always did was to set priorities annually," Webster said. "Call the folks together in January or February, take a look at what was accomplished and set new goals."

"In rural development groups you have all these varied interests," said Garrison. "For example, your city council, county commissioners, chamber of commerce, homemaker groups, farmers and all other groups create a common goal by bringing all these groups together and each of their vested interests evolve into one common cause for the betterment of your community."

"We started C.R.D. in Morgan County in 1948 with nine community clubs which met monthly," explained Jansch. "One of our first projects was to have a community fair in each of these communities. Transportation and roads were not very good in those days to come to a county fair. Rural telephones and rural electrification were the results of rural development groups working together. The county rural development committee was responsible for bringing the first doctor to Morgan County."

Home Economics

Nine of the 15 counties in District IV had home economics programs which began in 1917 and five had programs which began in 1918. Pickett County was one of the last counties in the state to add home economics to the county program in 1957. Although these programs began in 1917, all of the counties, except White, were without a home economics agent from 1918 until 1928. Some counties, including Jackson, were without an agent from 1918 until 1949.

Agents were at times assigned to multiple counties. In 1917, Fentress, Scott and Morgan counties were the responsibility of one agriculture agent and one home economics agent. Scott County records reveal, however, that the home economics agent never came to Scott County because she thought no one in the county met the qualifications for the program. In 1928, Wilma Shubert was employed as a home agent working in Putnam, Jackson and Overton counties. She had an office in each county. A listing of all these agents employed in each county since 1917 can be found in the "Celebrating 75 Years -- Personnel Directory," published in 1989.

In 1917, the economy was very poor. Farm prices had crashed leaving farmers with little cash. Farmers had to depend on modern farming methods to survive. Early Extension work was designed to support the war effort and although emphasis was given to food production, preparation and preserving, women in White County reported that they knitted washcloths for soldiers in World War I.

When canning was introduced, it opened a new door for food preservation. Ten girls, who were members of the 1918 Smith County poultry and/or tomato canning club, raised one acre of tomatoes. They sold over 8,000 cans of tomatoes that summer. While homemakers in Putnam County reported 88,456 quarts of tomatoes and 19,120 other size cans of food were preserved.

The Extension agent in White County reported that homemakers were skeptical when glass jars were later used. Homemakers had thought it was the absence of light that preserved the canned food.

Canning specialists were provided with federal funds as early as 1914 in White County. In 1917, Leah G. Pohill enrolled 200 women in DeKalb and Smith County canning clubs to help with the war effort. Reports also indicate that Cornelia Laughry and Mary E. Doney were canning specialists in Cannon County in 1918 and 1919. Then in 1918 the "ice box" was introduced to this area.

Early agents did not just talk about a program or method of doing something, they gave hands-on demonstrations, especially in the area of foods. For example, over 1,200 people attended special demonstration clinics in Putnam County on canning, making cheese, butter and bread. These early workshops, as we would refer to them today, were called "clinics".

Fentress County citizens celebrated the homecoming of their World War I hero Alvin C. York in 1919. The state had built a home for him and his bride-to-be, when he returned from the war. The original house burned, but was rebuilt near the original site in Pall Mall. His son answers questions today about his famous father at the Old Grist Mill, owned by his father, located across the road from his parent's home. This historical event continues to have an impact on the county and thus Extension.

Homes during this time were not very well constructed and were made of poor quality materials. Garrison, former agent in Overton County, said there were probably only four brick homes outside of Livingston as late as 1952. Sanitation was often a problem, especially in hot weather. Windows and doors without screens were often left open allowing flies and insects to enter. The agents encouraged people to add fly traps and screens to their homes. In 1918, Cumberland County reported 12 meetings during which 16 fly traps were made and one sanitary outdoor toilet was built.

In 1917, Emelia Cope, later to become Mrs. A.J. Albertson, went to Cumberland County as a part-time agent. She assisted in Red Cross work and gave demonstrations on home problems to groups of women. She established nine active home demonstration clubs with an enrollment of 200. One of her accomplishments, reported in the "Crossville Chronicle" in October of that year, was the establishment of a rest room and library in the courthouse. Representatives from the art circle and home demonstration clubs petitioned the county court to have a room in the courthouse to be used as a library, meeting room and rest area. A new water system in the courthouse provided water for the only public toilet, lavatory and sanitary drinking fountain in the city.

Sara Ridgeway, home agent in Putnam County in 1918, also encouraged the use of labor saving devices such as fireless cookers and wheeled trays.

Funding for all Extension was difficult, but especially for home economics programs. Iva Benton Foster, agent in White County from 1928 to 1943, said part of the problem was due to the fact that Extension was not very well accepted. Once employed, the home economics agent, or rather the home agent as she was called, had the task of marketing what skills she had to the clientele in the county she served. She had to convince homemakers that homemaking was a profession, not just a task. Home economics agents did about anything to interest women. Foster remembered clinics on basketry, painting bottles and crocks that were atrocious. She was constantly searching for things that would help her reach the leaders in each community.

Emmy Lou Cox, home agent in Cannon County in 1939 and 1940, needed a certain magistrate to vote for her county salary. She agreed to teach the magistrate's wife to can corn and other vegetables. Then, in the early 1940s in Cannon County, money was not appropriated for one quarter of the home agent's salary by the county court. However, her home demonstration members showed up at the court meeting and agreed to pay the county's part of the agent's salary for the next quarter.

Josie Smith, a member of a Jackson County EHC, recalled an incident that occurred during the 1950s to illustrate this lack of total acceptance. It seems that some of the men in the county were not too happy about their wives being gone to home demonstration clubs, and thus, away from home during lunch time. They decided that the best way to keep their wives at home "where they belonged" was to get rid of the home agent, Hazel Smithson.

Since the home agent received part of her salary from county funds, it was decided to have the county court members vote not to pay her. When word of this got around to the home demonstration members they rallied to save Smithson's job. At the county court meeting, a group of about 20 women showed up to support their home demonstration agent. Some of these women's husbands were court members and needless to say, funds for the home agent's salary remained in the county budget.

Most women were cautious about accepting anything new. Also, most of them had limited time to engage in extra activities. Home demonstration and girls 4-H clubs were organized to help meet the needs of these women and girls. These clubs met in schools or homes in every community. This meant that there were numerous clubs in each county. The agent reported that there were 40 schools in operation in Morgan County as late as 1946. In fact, Chestnut Ridge, a community in Morgan County, had eight schools and each had a different name. Every school had to be within walking distance of the children's homes.

Several family kitchens in Cannon County had their first cabinets constructed out of orange and apple boxes. This idea was learned from demonstrations given by the agent.

Homemakers tried to help with their family farm income in 1918 by growing poultry and selling the fryers and eggs. Twenty-five egg circles were organized by Sara Ridgeway in Putnam County during that year.

Hen Day was held in the spring in Overton County. Farm families brought their flock of hens into town. Some families even brought a whole wagon of chickens. It was so successful that just about everyone in the county came to the railroad depot on that day. The chickens were loaded on a railroad car and were sent to Cincinnati. Money from the sale of their hens went to buy Black Joe fertilizer since that was the only type of fertilizer available for some years.

Knowing that women selling eggs had very little means of keeping eggs cool after gathering, except for unheated rooms in the house, Jean Treanor, home agent in Cannon County in 1938 and 1939, recommended that they be stored with the larger end up in a cool condition. Egg prices varied during this time from eight to 18 cents per dozen.

During the late 1920s and early 1930s, civic clubs in the local towns become supportive of Extension work. Many of the counties had their first agricultural committees appointed by the county courts. Agents encouraged the canning of meats and new vegetables. Sometimes women brought their food to be canned and they worked as a community group. For example, in Scott County it was reported that the women broke beans for two days and then canned them the third day.

Foster, former home economics agent in White County, said poultry was a big project when she went to White County on April 1, 1928. She said she went along with it for about three years, devoting most of her time to the project. During the early spring months, club meetings were devoted to caponizing roosters. She had the only set of caponizing instruments in the county, so on club days, all the members brought their roosters to a meeting place where she would caponize as many as 300 some days. During this time she gained the title of "chicken woman." She reported that, "There were many casualties at the first meetings, including several faintings of the chief surgeon." After a time, someone was trained in each community to do this. She said that during this time, the Extension office was lined with egg crates and baskets every Saturday as eggs were packed to be shipped to the hatcheries.

Cumberland County was one of 102 national New Deal communities in the 1930s with government-sponsored projects providing employment during the Great Depression. A result of this program was the creation of 256 stone houses, known as "Cumberland Homestead," which gave deserving homesteaders a chance for home ownership. Over 200 of these stone houses, a school and a landmark tower still stand today as silent testimony to the perseverance of the independent homesteaders.

In Putnam County, a demonstration house was furnished by local merchants in Cookeville. Demonstrations were given on home management during tours conducted by home demonstration club members. Fifteen hundred people visited the demonstration house during a one-week period. As a result, bathrooms and sinks were added, kitchens improved, pressure canners were purchased and dresses remodeled during Wilma Shubert's tenure from 1928 to 1939.

Marie C. Ervin, who was the home agent in Cumberland County from 1930 to 1932, wrote in her 1930 narrative report, "I have tried to help my people get the vision of the great possibilities for the achievement of American ideals through the advancement of rural standards of living."

Ervin encouraged the growing of gardens that contained a variety of fruits and vegetables in order to supply a more well balanced diet. Her influence was evidenced in the garden of Mrs. Oscar McCampbell. She was named a state winner in the "improved garden contest" sponsored by the Chileas Nitrate Company. Despite the drought that year, she had grown 46 different kinds of vegetables, berries and melons. Campbell had also canned 284 quarts of vegetables. She had pumpkins, potatoes and other root crops, popcorn and dried beans and peas in sufficient quantity to feed her family all winter. Gardening was so important during those years that Ervin stated, "When people begin to grow their living, many of the present economic conditions will be solved."

In 1931, the first day camp for home demonstration club members in Putnam County was offered at Baxter Seminary. Fifty women attended this two day camp. During the camp, canning beans and salad preparation were taught.

Curb markets were established in the early 1930s in several counties. People sold items such as eggs, live chickens, buttermilk, sweet milk, kraut, hominy, cakes, muffins, cookies, strawberries, meats, vegetables and fruits.

There were great economic pressures which affected Extension through history. One such case was found in Fentress County. Due to the onset of the Great Depression, the Extension office was forced to close at the end of 1932. It remained closed until March 6, 1923.

Many housewives were lacking in simple kitchen utensils. For example, in 1938, the agent encouraged store owners in Cannon County to sell paring knives and sifters because housewives did not have these things to make cooking easier.

In the late 1930s, a few households had electricity in the Upper Cumberland, because few homes were located on hard-surfaced roads and the county would not pay for wiring. The rural electrification survey that began in 1940, resulted in 502 families in Morgan County signing up for power. One hundred and twenty miles of rural power lines had to be built in Morgan County if the project was to be approved.

During the mid-1940s, homes with electricity usually had a single bulb hanging from the ceiling. Some lamps were used more for decoration than lighting. Cooperative efforts were made with TVA, even in counties not served by TVA, to plan more effective lighting for homes in the Upper Cumberland. Just one example of Extension's efforts was reflected in the December 1945 plan of work for Macon County. The county plan included objectives for encouraging 600 additional homes to be wired for electricity.

In 1939, emphasis was on improving water supply and disposal of waste water. Running water was added to homes in Putnam County during this period. Macon County's Program of Work sought to add running water to 600 homes and to test water in all county schools.

Lena Brimm, a 92-year-old EHC member in Smith County, still proudly displays one of her first projects -- a hearth broom made from broom corn. It still has the remnants of the original paint. The broom was made in order to keep the hearth swept since most everyone in the 1930s relied on their fireplace for heating and some cooking.

Any farm family in 1939 with an income under \$400 was eligible to receive, at a maximum of 60 cents, enough materials to construct a cotton mattress. The family had to agree to make it with some supervision from Extension. In 1940, thousands of bales of cotton, ticking, twine and needles were obtained from the Federal Surplus Commodity Cooperation. From Oct. 8 to Nov. 30, 1940, 1,300 mattresses were made in Clay County and 200 were reworked.

White County reported that 8,000 mattresses were constructed. There were 1,013 mattresses made in 1940 and 4,500 made the following year in Putnam County.

Cumberland County had centers set up in 50 communities where 885 mattresses were made by approximately 1,932 people. Reports indicated that cotton mattresses were a big improvement over straw mattresses that most homes had. Foster, former agent in White County, recalled that in 1939 and 1940, when White County citizens made over 8,000 mattresses, her title was changed from "chicken woman" to "mattress woman."

Home economics agents were able to get hot food in the schools by 1941. "I have worked with the county nurse and the supervisor of Department of Public Welfare in promoting the school lunch program. Every school in the county is serving one hot dish every day," Lillian Robinson, home agent in Clay County, said in her 1941 report. There are accounts that the agent in Cannon County taught 4-H boys and girls how to cook by letting them fix their breakfast at school 4-H meetings.

In later World War II years, around 1943, home agents worked with the victory committees to promote the state food supply program. Farm families were encouraged to produce 75 percent of the food necessary for home use. Putnam County had over 800 families enrolled in the project. Over 300 of these families turned in records. The motto for clothing families at this time was, "Make the most of what you have."

According to Mary Neal Alexander, home demonstration agent in Cannon County from 1941 to 1942, she and other home agents across the state taught homemakers how to preserve foods grown in their victory gardens. The potentially explosive "anger monster" on the stove made all but the agent vacate the kitchen during a canning demonstration. Pressure canning soon became the popular way to preserve meats, vegetables and fruits for homemakers throughout the Upper Cumberland area. There are some homemakers in the area who are still scared of the method though. Utilization of the pressure cooker for preserving garden-grown produce continues to be encouraged, especially for clientele in EFNEP programs.

According to some Morgan County reports, there was a turning point for Extension around 1941. Program efforts were changed from the personal service approach to a broader educational approach. This new approach would influence a greater number of people in each county. Another change that occurred that year was the procedure for developing the county plan of work. Many agricultural planning committees spent hours helping agents formulate the Plans of Work.

During the mid to late 1940s, classes were offered on family planning, family income, gardening, sewing machines, repairing household equipment, food preservation and meal planning to help assure proper diets. In Overton County, the agent reported that this was a time when agents offered crafts

for the women as a past time during the war. The women requested that these be useful things for their homes.

Cannon County 4-H'ers earned \$50 a visit to the WSM Grand Ole Opry to do folk games during Kathleen Rauscher's tenure as home agent from 1943 to 1950. The money was used to construct a building on the fairgrounds for 4-H activities.

Morgan County's board of directors and Extension agent, Charlie Jansch, purchased some land in 1947 and 1948 for the fair. These 12 people and Jansch signed a personal note at the bank to purchase the land on which the fairgrounds are still located today. Evidence of Extension agriculture and home economics agents being instrumental in securing land for county fairs can be found in the history of many counties. Agents were anxious to have a place to exhibit items made and grown. Early fairs were found at less than adequate places, such as on the courthouse square.

The community clubs, which were begun in the late 1930s, became more active in the late 1940s through the early 1960s. Meeting in local community buildings or schools, these clubs began to have a greater influence on community development. A great interest in these clubs developed. Everyone in the family would come out for the meetings.

The home economics and agriculture agents would alternate giving the programs, although both would try to attend each meeting. This became quite a burden, since many counties had over 15 community clubs, most of which met at night. The home agent had an additional 15 to 20 home demonstration clubs to meet monthly. These community clubs were not only very active, but they became very competitive. They would challenge other clubs in their county or in other counties to do things to improve their community. One challenge was to decorate and fix up mailboxes. They would have someone come and judge the various community projects and there was even a state contest for some of the projects.

During personal interviews with the former supervisors in District IV, agents would pull a gas generator behind their car or truck. This was required when they went into the rural areas and wanted to show a film since electricity resources were limited.

People came from miles around to see the film, "Helpful Henry." All Margaret Hale could remember about the film was a scene where a woman had curlers in her hair. These curlers were then hooked up to a milking machine. One can only speculate how Henry was being helpful. She said the entire family would show up at the community club meeting to see a film, even if they had seen the same film several times. Geary almost laughed when she remembered how they would take tape and Band-Aids to fix the films, because the films were always breaking. Unfortunately, a recent search by the communications department at UT failed to locate this film.

Something happened in the fall of 1948 to change the destiny of all county Extension programs in the Upper Cumberland. A new District IV was formed to address the special needs of rural families living in this area.

Margaret Bacon, home agent from Bledsoe County in District III, was appointed the new district home agent after having been in Extension only five years.

According to an article in the September-October 1948 issue of the "Tennessee Extension Review": "Miss Bacon, a graduate of the UT College of Agriculture and Home Economics in 1943, was appointed home agent in Bledsoe County shortly after her graduation. She has served in Bledsoe since beginning Extension work and her efforts with community home demonstration clubs and Four-H Clubs has attracted wide attention and commendation." When she was appointed, Alta Thomas, agent in Cumberland County, said the reaction was, "We love Miss Bacon, she's so plain."

Bacon helped to organize the first 4-H Demonstration Day in the state. She was also responsible for menus at District 4-H camps and she even had the task of buying the first pots and pans used. Before the Clyde M. York 4-H Camp opened in 1950, 4-H members in the newly created district went to Standing Stone State Park.

Thomas, district agent who followed Hale, could remember only one problem occurring at the Standing Stone Camp. She said that one week of camp the water was not sterilized and several people got sick from drinking the water.

The district home agent in District IV, worked closely with the district agricultural agent to bring about harmony among the staff in the 15 counties composing the newly created district. Hale said that district home economics and agriculture agents were equally interested in Extension providing a program which would develop leadership.

As schools began to consolidate in the 1950s and early 1960s, people seemed to lose interest in local community clubs. Hale said Extension lost an opportunity to develop leadership in the communities because of this. These clubs gradually declined and today there are few community clubs in the Upper Cumberland.

Hale said she remembered taking two young ladies to Morgan County to meet the agriculture committee. As she drove, the roads became very crooked and narrow. She said the two prospects started saying to each other that it would be alright with each of them if the other got the job. However, Pauline Rich was hired that night and the other woman was later hired in another district.

She also remembered one time when a state specialist came to go with her to a hat making clinic. Hale said that this specialist was always dressed to perfection. When they started to get into the truck that Hale had borrowed,

the woman said, "I didn't know you could drive a truck." Hale said she didn't either, but it was necessary to get across the creek to get to the clinic.

Hale said she thought she had "arrived" when her salary reached \$3,000 per year. She and Thomas both expressed concern about women in the early years of Extension getting lower starting salaries and raises than men.

Hale was succeeded by six associate supervisors including Thomas, Vines, Miles, Alexander, Geary and Byler. Byler, present associate supervisor, was the first in District IV to be married and to have a doctorate when she was hired.

Hale, Thomas, Alexander and Geary, all former supervisors, shared how former district home agents spent over 50 percent of their time recruiting new home agents. There was no listing of home economists who were seeking employment. Therefore, they constantly tried to identify prospective agents. This was a real problem since the home agent was required to resign if she married. As a result, Extension was constantly losing home agents.

There are some records of home agents being married as far back as 1936. Apparently they were allowed to work for a limited time after marriage, as was the case with Hale, or if they had a federally funded position. Hale and Thomas said they expressed concern to the administration in Knoxville about home agents being requested to resign when they married. Hale said she told J.H. McLeod, dean, that Extension had become a good training ground for vocational home economics teachers. It was felt by some that a woman would not be able to do a good job in Extension if she had to share her time with a family.

In 1951, Bacon decided that marriage and family were a high priority to her. However, as previously stated, she continued to work for about a year after she married. With her resignation, Extension lost a great lady and a great supervisor. She fulfilled her prediction that Extension was a good training ground for the schools, as she completed her professional career in the Putnam County School System as a junior high counselor.

Thomas said she was in a supervisors meeting in Knoxville in 1958 after she had returned from India and had become the District V home agent. McReynolds, associate director, asked if anyone in the meeting objected to Extension hiring women who were married. The people present were caught off guard and, therefore, did not express any negative comments. Later she said she heard some negative remarks, but the decision had been made. There was no mention of hiring women who had a family. However, she recalled a woman with five children was hired in District V later that year.

The agent hired in District V already had a family before she was hired. This may account for the discrepancy which occurred as late as 1970 in regard to female agents being requested to resign when they started their families.

Carolyn Fox, home economics agent in Jackson County and Berniece Atkinson, home economics agent in Cumberland County, were both requested to resign before their sons were born. Fox was asked to resign twice, before the birth of each of her sons. Atkinson was asked to resign only once. However, they both found themselves in the same situation in 1970. Both agents had two preschool sons, since Atkinson had twins.

Although the administration had some concerns about them being able to fulfill their Extension responsibilities, their clientele and agriculture committees were so supportive that they were both rehired in the spring of 1971.

Presently, Fox and Atkinson have successful programs in the same counties in which they were rehired in 1971. This policy was changed after they were rehired.

Some of the first district home agents remembered a close working relation with the American Dairy Association. They also remembered some very extensive clinics on reupholstery. These clinics were lengthy and involved, not something that could be done in a club meeting today. In fact, Thomas remembered going to a junk yard to get some springs from an old car seat. She said state specialist Inez Lovelace gave them some extensive training. She also mentioned state specialist Maude Guthrie as being quite helpful.

In 1961, the district organization was restructured. The district home agent was relieved of some of her administrative responsibilities and assigned more time to work on programs. She no longer was responsible for seeking out home economics graduates for positions, or meeting with local county agriculture committees. A third person was appointed to take care of administrative details.

Thomas, who was then in District V as the district home agent, said her reaction was, "Now I am demoted." She and Alexander, District IV home agent, said they missed recruiting the home economists. There had been a certain bond when the district home agent made the initial contact with the home economists, took them to the county to be hired and was totally responsible for their performance at the district level.

In 1971, the district organization was to once again be restructured. The district home agent's title was changed to associate supervisor. Also, there were title changes for county level positions reflecting experience and education rather than program area.

All of the county leaders in District IV were agriculture agents until Phylliss Boyce was chosen as county leader in Clay County in 1985. Jackie Donaldson was later chosen leader in Putnam County in 1988.

In 1969, the federal Expanded Food and Nutrition Education Program (EFNEP) was started. Eight of the 15 counties in District IV participated in this

program. Only three EFNEP programs exist in District IV in 1990 and these are much reduced from the original programs established in 1969.

The home economics program had some additional changes in 1982. The name was changed from home demonstration to extension homemakers as Tennessee joined efforts with the national organization. County councils were formed and were strongly encouraged to help the agent in identifying goals for the program. Darlene Brannon from Fentress County has been the state TEHC president in 1989 and 1990. The district currently has 2,822 members. There are 915 leaders trained in adult home economics.

In 1986 numerous projects were completed to celebrate "Homecoming 86." Quilts were made and a needlepoint picture depicting something in each county was joined with other county blocks to compose a map of Tennessee. During this time, every county identified at least one special project to be completed.

In the fall of 1986, two significant changes were made in the District IV home economics program. First was the unified effort of all home economics agents within the district to reduce the number of times they met with the EHC clubs in their county from 12 to six per year beginning in January 1987. It was felt that leaders should be in charge of the programs when the agent was not available to meet them. This not only encouraged leadership development of EHC members, but also provided time for the home economics agent to develop programs for the non-traditional clientele in her county. These programs reflected the shift from crafts back to the basics. Programs are geared more for the consumer than the producer. This has also been evident in the university training provided for home economics majors in Tennessee.

The second change was the development and sharing of home economics programs within the district. Boyce, leader in Clay County, had just returned from a study tour of four other states. She suggested this idea at a district planning meeting and it was enthusiastically received. The six areas of home economics were divided and assigned to the various agents. Each group developed three sets of their program for the next year, complete with script, brochures and visuals. In December 1986, they met as a group to give an overview of the programs they had developed and to distribute copies to agents needing the program in January 1987. Counties were grouped in three clusters of five to exchange different programs during the years. In the fall of 1987, the program was evaluated and a seventh area was developed for home economics 4-H programs.

In 1989, a free-standing display was developed in each area also. These displays were used in fairs, farm schools, libraries or any place where a free-standing exhibit was needed. There are plans to continue this program, revising it annually as needed.

There is evidence of networking documented in the counties as early as the 1940s. Lillian Robinson, an agent in Clay County in 1940 wrote, "Other

organizations and persons in the county that I would like to express appreciation to for their service and fine spirit of cooperation are the Farm Security Administration, AAA committee, adult leaders for girl's 4-H clubs, county school superintendent, home economics and agriculture teachers, county health department and Department of Public Welfare."

Agents in District IV have continued to develop a networking link with other agencies. In Putnam County, homemakers sewed for the Red Cross to assist with the World War II effort. They donated time and money to the Red Cross, raised money for school equipment and did welfare work, according to Mary Ruth Hunt, home economics agent in 1942.

Homemakers participated in Red Cross knitting, U.S.O. meetings and the Rural Electrification Agency gave demonstrations on fruit drying in Cannon County.

EHC members in several counties have organized cooperative craft stores in which they share in profits and the work schedule. Still other people have established "home based businesses" or "bed and breakfasts" in their home to supplement their income.

Becoming a 100 percent member is very important to some EHC members in District IV. In Cumberland County, approximately 50 EHC members achieve this coveted award annually. They must earn a certain number of points for things they have achieved during the year. The annual awards program is limited to only 100 percent members. How proudly they accept their silver goblet each year as a reward! Also, for the past three years EHC members from District IV have recorded more Certified Volunteer Units (CVU's) than EHC members from any district across the state.

Putnam and Cumberland counties have a country store each summer at their county fair to raise money for their EHC program. Each store provides special homemade crafts and food. People come from miles around to get some pinto beans and cornbread at the Cumberland County Store.

Leaders continue to play an integral part in the success of the home economics program. Through the years, several program thrusts have been carried out including those on energy conservation, (Improving Management Practices as Consumers (IMPAC), commodity food use, leadership training, Family Community Leadership (FCL), water quality and MANAGE.

It is predicated that the population in the Upper Cumberland will continue to grow. Cookeville was rated as the most affordable city in the nation in 1989 and Putnam County ranks among the top places chosen by people as a place to retire. Also, the many recreational areas, such as Big South Fork, Frozen Head State Park, Standing Stone and Center Hill Lake, to name only a few, provide many tourist attractions and an opportunity for EHC members to sell their crafts. Agriculture and home economics agents from across District IV have worked cooperatively to set up an Extension information booth

at the large rest stop on the interstate in Smith County.

Extension will probably continue networking with other organizations. More sophisticated communications will include the use of videos, laser discs, computer programs, FAX machines and machines not yet invented. Homemakers will receive much of their information through the mailbox and through area-wide specialist workshops. Clientele will continue to become broader in scope than the traditional female club members. Special interest meetings will likely replace traditional community-based homemaker meetings, at least in part. This trend has already begun in District IV as the number of special interest groups, especially with non-traditional clientele, has greatly increased over the past four years. The trend toward people needing information to become wise consumers, rather than producers, will probably continue.

The county and district offices will experience greater linkage to the total university program through a computer modem. Electronic reporting should help with the time consuming reporting system now used.

Many things have changed since the home economics Extension program was established in District IV in 1917. However, some things have changed very little. This is reflected by the Putnam County annual report of Nell Kendell, agent from 1945 to 1954. She reported driving 13,563 miles, doing 57 radio programs and giving out 11,521 bulletins. The only major change is that travel allocations have been restricted in the past few years, although the need may still exist.

Emelia Albertson's remarks in her 1919 annual report also sound very familiar: "While the women in all my clubs are studying and demonstrating the proper care of clothing methods of laundering different kinds of fabrics, removing stains and drying, I did not have time to get definite reports as the project book was received just three days before leaving my county for this year."

In regard to the report on poultry houses and coops built, Albertson wrote: "To have secured the data on all these points would have necessitated cancelling all meetings for the dairy campaign and making a personal visit to each member, as they would not all, or even the majority, send reports in when requested. I consider it a greater service to my people to carry on the work in dairying. Which was my duty?"

And finally she defined home demonstration work: "It is that field of public service in which you "force your brain and nerve and sinew to serve your turn, long after they are gone. So hold on, till there is nothing in you except the will, which says to them, 'Hold on!' And after this is done, to feel ourselves disgraced before 'the powers that be' because of late and inadequate reports."

District IV will probably experience a big change in the home economics personnel in next 12 to 15 years, due to the fact that almost half of the 22

home economists will be eligible for retirement. Only time will tell what influence this could have on the home economics program in early 2000.

Based on the history of having strong agents and programs in both home economics and agriculture, Extension should continue to be effective in District IV and across the State of Tennessee.

There also exists, and hopefully will continue to exist, the philosophy that Extension requires a team effort. To continue to be effective, cooperation will be required among all persons involved in home economics and agriculture programs.

4-H Programs

The first account of District IV 4-H work in was in 1911 in Cumberland County. J.E. Converse organized a potato club. 4-H work began in Putnam and Smith counties in 1912, White County in 1914 and Morgan County records go back to 1915. Several other counties started in 1917 and 1918. DeKalb County's earliest 4-H records are in 1935. The last county to start 4-H work was Jackson County in 1944. 4-H Club work has been a very important part of District IV Extension history from the beginning.

Cumberland County boasts of having the first multi-county 4-H camp in the Southeast, which started in 1927 on Daddy's Creek, located three miles west of Crab Orchard. Cumberland County 4-H'ers set another state and national record in 1952 by having six 4-H'ers winning trips to national 4-H Congress.

According to Alta Thomas, former district home economics supervisor, District IV had the first district demonstration day in the early 1950s. From the beginning of 4-H work, District IV has had its share of state and national winners, leaders on state 4-H council, state 4-H Congress and state 4-H all-stars. A record of these winners and leaders is included in the 4-H history from the District IV counties.

Thanks to the foresight of some former District IV supervisors and others, we have one of the state's best 4-H camps, located in Crossville. The following is a brief history of the origin and development of the Clyde M. York 4-H Training Center.

In 1949, Morgan, District IV supervisor and Tim Gowder, Agricultural Extension engineer and an ex-military officer, contacted the Department of Military Affairs regarding their plans for the POW Camp near Crossville. This was the beginning of a series of events which led to the government giving UT a quitclaim deed to the 194.40-acre POW Camp and all facilities on said land. This quitclaim deed was dated May 19, 1948. There is a stipulation in the deed that states, "In a national emergency the camp could be taken over for use by military forces." There was enough housing for 1,700 prisoners and 600 U.S. military personnel.

Morgan began inventory of all facilities in 1949. He found enough unneeded buildings, electrical equipment, water supplies etc. to trade to the City of Crossville, electrical suppliers and private individuals for labor and money to repair the section of the camp where U.S. military personnel were housed. This section was to become the 4-H Camp. Without the untiring efforts of Morgan, Districts III and IV would not have the training center as we know it today. He asked agents to work in their spare time in the spring of 1950, along with hired labor, to get the camp ready for the summer of 1950. The first 4-H'ers arrived in June 1950 for their first camping experience at the former POW Camp on the Jap Camp Road (no Japanese prisoners were ever kept there, but to the mountain people, all enemies were Japs).

Four hundred and fifty boys and girls attended the first summer in a four-week period. The charge was \$8 for agents and campers alike. Morgan's psychology was that everyone had to eat somewhere and his cost was not any higher than it would have been at home. In 1989, approximately 3,000 boys and girls from District III & IV attended camp in a 10-week period.

In those early years, campers went to classes of their choice in the day and learned square dances and folk games at night. They also took time to explore the old POW compound and, as 4-H'ers do now, told ghost stories about the former prisoners of war.

One of the highlights of a trip to the 4-H Camp for participants parents and leaders was the murals in the recreation hall which had been painted by POW's. It was a sad day when the decision was made, under protest, to tear down the recreation hall and replace it with a new one. Many current parents, who were 4-H'ers then, are disappointed today when they ask about the old recreation hall and the German murals.

Camp programs in the 1950s involved three to five counties which brought 4-H'ers from grades five through senior high all at one time. Junior leaders were happy to attend and offer assistance to the agents.

The 1960s brought about integration and later separation of boys and girls camps. This period also brought about a gradual replacement of the old military buildings with new ones. All old buildings are now gone except the hospital, shop buildings and caretaker's cottage.

In 1962, Clark became District IV supervisor after Morgan retired and he assumed responsibility for operating and managing the camp. His favorite spot was the rifle range where he did demonstrations as an expert marksman. He always stressed gun safety. He assisted in planning the lake, wildlife plots and other educational instruction each camp season offered participants until his retirement in May 1985.

Thomas E. Waltman, a former U.S. Military guard from Lancaster, Pa., married a Crossville girl and was made camp caretaker and manager in the

early 1950s. He stayed until his retirement on Nov. 30, 1971. Waltman was a great asset to the camp. He led tours, made talks about the POW days and had a great knowledge of all the camp facilities.

The UT Agricultural Experiment Station was assigned all the crop land to use in pasture and crops. The forestry department at UT made plans for the camp to be set in pines. The POW compound area was set in pines in the 1950s. A seven-acre lake and catfish pond were built in the late 1960s and early 1970s.

In 1988, District IV attempted another first in the state -- to completely endow the District IV 4-H programs. On Sunday, Nov. 13, 1988, the "Herald Citizen" headlines read, "Regional 4-H Fund Backed by McWherter -- \$100,000 raised in \$250,000 drive." The story by Tammy Stanford continues, "The Clark, Huddleston and York endowment fund, a campaign aimed at collecting money for use in District IV 4-H programs, received support Friday evening from Gov. Ned Ray McWherter, a self-proclaimed 'lifetime member' of 4-H. "McWherter, speaking at a meeting in Tennessee Tech's Multi-Purpose Room, told the crowd of about 400, "I'm proud of 4-H. I grew up in Weakley County. I remember the 4-H Club. It taught me leadership, discipline and respect. It taught me caring. It's the best instruction any young man or woman can receive. I know it made a difference in my life."

The fund drive was named for three men from the upper Cumberland who have played major roles in the 4-H and UT Extension programs in the area -
- A.C. Clark, Willis J. Huddleston and Clyde M. York.

"Our aim is to endow and enhance the programs in District IV through fund-raising on a district level," Ray Gannon, an organizer of the endowment fund, told the crowd.

According to Rural Peace, District IV Supervisor, Ray Gannon, regional manager of Tennessee Farmers Insurance Company, Tennessee Farm Bureau, should be given much of the credit for the success of this project. "His help in formulating the idea, his enthusiasm and untiring work on this project has kept everyone focused on the goal," said Peace. "Thanks to Ray and the other multitude of volunteer workers and donors this goal will be reached and 4-H work will continue to have the private funding needed to help improve the attitude, knowledge and life skills of many young people in the Upper Cumberland."

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District V

Headquarters: Knoxville

The Tennessee Valley, sheltered to the west by the Cumberland Mountains and blocked to the east by the Great Smoky Mountains, is home to the 21 counties of District V. The atomic city of Oak Ridge is neighbor to the 18th century living Museum of Appalachia, cattle graze along the shores of TVA lakes, tobacco patches weave a quilt pattern across the landscape and big industries anchor the economy for a hardworking rural population.

Anderson
Blount
Campbell
Carter
Claiborne
Cocke
Grainger
Greene
Hamblen
Hancock
Hawkins

Jefferson
Johnson
Knox
Loudon
Roane
Sevier
Sullivan
Unicoi
Union
Washington

District V

Jesse E. Francis, District Supervisor

To provide for a more comprehensive Extension program to the people of Tennessee, Extension districts were formed in the early days to insure adequate supervision of "field agents" and to provide support to the staff. Eventually, five districts were formed in Tennessee. This section of the UT Agricultural Extension history covers activity in District V with headquarters in Knoxville.

Formerly District IV, District V was formed in 1948. Prior to 1948, the district contained all of the present 21 counties, plus Monroe in District III, and Cumberland, Morgan, Scott and Fentress in District IV. Earlier, most of these counties were a part of the East Tennessee District that included counties in the area from Sequatchie Valley north and east to the Kentucky, Virginia and North Carolina borders.

Agricultural agents were employed in Anderson, Blount, Campbell, Knox, Loudon and Unicoi counties as early as 1912. Although records do not show that agents were employed at an earlier date, farm and home demonstrations were conducted throughout the East Tennessee area prior to 1912.

Early leaders providing supervision to District V (1914-1921) included Ebb Tomae, Frank Chance, T. Hardin, Annie Whittle Eblen and Margaret Ambröse. Ambröse served as home agent in Knox County, district agent and assistant director in charge of home demonstration work from 1919 until her death in 1942.

Two supervisors, Benton M. Elrod and Oma Worley, provided leadership to the District V staff for 35 years. Both began work in the early 1920s. Crosby Murray joined the district team in 1942 as an assistant district agent. Murray was appointed district agent in 1957 and served in that capacity until 1965. These three supervisors provided the basis for the present Extension programs in the district and were instrumental in building the Clyde Austin 4-H Center, which opened in the summer of 1949 and has subsequently provided camping experience for approximately 100,000 4-H members and leaders. Prior to 1949, district camps were held at the Greeneville Tobacco Experiment Station and Lincoln Memorial University.

Some significant events and activities that were influenced by early supervisors and agents in District V include the East Tennessee farmers convention, East Tennessee finished cattle show and sale, Tennessee Valley Agricultural and Industrial Fair, Appalachian District Fair and Norris Land Use Association.

Possibly the most outstanding Extension work during this period was the development of the East Tennessee Community Improvement Program, which served as a basis for leadership development to the adults and 4-H'ers of East Tennessee. Major 4-H Club projects included basic agriculture and home economics subjects such as corn, tobacco, beef, swine, sewing and canning. The District V 4-H All-Stars were organized in 1950 and have continued to serve as the primary leadership for senior 4-H members.

During the late 1940s and early 1950s, several counties in District V had assistant county agents assigned to full-time leadership for 4-H Club work. As a result, 4-H membership increased, project activities were enlarged and volunteer leaders were recruited until the program in District V was serving more than 49,000 boys and girls.

In 1949, Washington County 4-H'er Don Bowman was elected the first Gov. of 4-H Congress in Tennessee. From that date, District V 4-H members have received their share of state awards, honors, offices and trips and have provided outstanding leadership to many activities.

Alta F. Thomas replaced Oma Worley in 1958 as the District home agent. Thomas had previously served as district home agent in the new District IV prior to accepting a leave of absence for two years to engage in Extension work in India. Following a reorganization in the early 1960s, John B. Brower Jr., joined the team of Murray and Thomas as District V supervisors. Brower became the supervisor for agricultural programs and Thomas became supervisor for home economics programs.

Jesse E. Francis replaced Murray as district supervisor in 1965 and presently serves in that position. Upon Thomas retirement, Mildred F. Clarke became the associate supervisor for home economics programs. When Clarke was named associate dean, she was replaced by Nazza Noble. Following the retirement of Brower in 1983, Luther Whitaker was named associate supervisor for agricultural programs.

Extension Work in District V as Remembered by Extension Pioneers

Jesse E. Francis (JEF), who has been assistant county agent and specialist since 1949, and District V supervisor since 1965 with the UT Agricultural Extension Service, conducted a group interview (discussion) with five Extension pioneers who worked in District V. All made an impact on Extension educational programs in the 21 county area.

The participants were: Crosby Murray (**CM**), 1935 to 1965, county agricultural agent, specialist, district agent and district supervisor; Alta Thomas (**AT**), 1944 to 1972, county home demonstration agent, district agent and associate district supervisor; Frank DeFriese (**FD**), 1935 to 1973, agricultural economics specialist; Ruth Leggett DeFriese (**RD**), 1935 to 1937, county home demonstration agent and wife of Frank DeFriese; Hugh Felts (**HF**), 1935 to 1946, county agricultural agent, assistant district agent and superintendent of the UT Tobacco Experiment Station, Greeneville.

The group met at the Clyde Austin 4-H Center, Greeneville, on Friday, Oct. 20, 1989, in the new Staff and Conference Building (completed in May 1989). The interview began at 10 a.m. and was concluded at 3 p.m. The entire discussion was video taped. Comments from the tapes have been transcribed, edited, and printed. Most of the discussion comments have been used in this History of District V.

JEF: Officially, I wanted to restate why we are all here. As I mentioned to you earlier in our discussion, the University of Tennessee is in the process of preparing a history of the last 200 years and each of the divisions and departments within the university has been asked to pull together some information relating to their work with the university during that period of time. Those of us here today primarily represent work that has been done in the Agricultural Extension Service, District V area, which at one time embraced some of the counties which presently are not in District IV, such as Monroe, Cumberland, Morgan, Scott, Fentress and others. We'll comment about some of those a bit later. To help prepare some of the early things that took place in the history of the Extension Service, I felt that this group, who will be discussing some things in District V, have as much background and information to do this as any other group of people in the state.

This is going to be a very informal discussion and there are no errors or mistakes that we can make. If we need to wait a little bit to think about what we're going to say, that's fine. This is not going to be on the evening news with Walter Cronkite. I would like for each of you to take just a moment and tell us about your years of service, where you did your work. Crosby, let's start with you. You were in Claiborne County, starting in 1936, so review the jobs that you had with the university.

CM: When, back in 1936?

JEF: Yes, starting with 1936 and coming on down until the time you retired.

CM: My first contact was brought about by the building of Norris Dam on the Clinch River. Prior to building Norris Dam, TVA requested administrators of the Extension Service to take a survey of the area to see who would be affected and who wouldn't. Pat Kerr from Campbell County was the survey leader and he had a group in there doing some survey work. Since I was with Lincoln Memorial University at that time, Pat asked me to assist with

conducting this survey. I accepted his invitation and helped conduct the survey in the Norris area.

JEF: OK, and then you were county agent in Claiborne County from '36 to '42.

CM: After the dam was completed, I became a full-time staff member with the Extension Service assisting mostly with work related to relocation of families from the watershed areas.

JEF: OK, then you left Claiborne County and became assistant district agent in District V.

CM: Yes, I was assisting with similar type work as other dams in Grainger, Carter and Jefferson counties were built and I moved to Knoxville from Claiborne County.

JEF: And you were in the district office until the early '50s. Around '53, you were named community specialist for the state for about three years.

CM: That's right.

JEF: And then named the district agent for District V and served in that capacity until you retired in 1965.

CM: I think that's right.

JEF: Alta Thomas worked with Mr. Murray in the District V office as a district agent for several years. Alta, your first involvement with the Extension Service as an agent was in 1945 in Johnson County. Tell us about the period of time there and the other counties and other jobs that you had before you retired.

AT: Actually when I came to Johnson County (1944), they didn't have an appropriation for a home demonstration agent, so I came in as a special agent to work with a group of migrant laborers brought in during World War II. They were bringing in those fellows and their wives from islands off of Florida and they were coming here and making a camp and working in this county. It was my job to work with them, and so when I got over to the county, they seemed to have it worked out without my having to work directly with them. So I started working as a home agent on that special appointment. After I was there about a year, the county made an appropriation of \$100 a year and the university hired me on a full-time basis. It didn't get much higher for a long time, but at least we did have a county appropriation. I stayed here five years and then moved to Cumberland County, which was in District V at that time.

JEF: You were headquartered in Crossville and you remained there until you were named district agent in District IV, which had been formed in the late '40s from several Middle Tennessee counties and others from our area.

AT: Yes, but previous to being appointed district agent, Mr. J. H. McLeod, director, suggested I get my master's degree, which I did at Cornell University, and then returned and started working as district agent with offices in Cookeville.

JEF: Later, I recall, you joined our international programs in India where you developed Extension-type programs in home economics.

AT: Yes, I was there for two years and a half. I returned to Knoxville in December 1957 and was appointed district supervisor, District V, in January 1958 and remained in this position until I retired in 1972.

JEF: Ruth Legett DeFriese was one of the early home demonstration agents in District V, located in Washington County. Ruth, tell us about the period of time you were an agent.

RD: Do you want to start with Dec. 1, 1935, when I went to Washington County?

JEF: That would be fine.

RD: On December 1, UT asked me to go to Washington County as a special agent with Miss Oma Worley as my district agent, but they failed to tell me that Mr. Raymond Rosson, county agent, was opposed to "women's work." I went into a wonderful county where I had already worked as a rehabilitation agent. I knew that there were 18 districts, 43 squires and numerous schools, but our plan of action was to organize 4-H clubs with Hugh Felts and Vernon Sims, assistant Extension agent, backing me up. In every district, we had a home demonstration club to show and exhibit what could be done in the area of 4-H and home demonstration work. Church groups and PTAs that we called on were already organized and they just fell in line. It was no time until we were organized and doing very well. When the men began coming in telling Mr. Rosson how wonderful it was to have 4-H and women's group with something to do, he immediately said this was all his idea. I went before all the Kiwanis, all the Rotarians and it was great. I was glad that I didn't even let him know that he didn't think that "women's work" would go over. He became one of my biggest supporters.

JEF: You stayed there for three years until you were married to Frank.

RD: Right. Mr. Rosson called him the weekend specialist because Frank would come on weekends to see me and we have been married 52 years this October.

JEF: At that time, the policy was that if you married, you could not be an Extension agent.

RD: That's right and I had to promise them that I would not get married for at least two years. So I filled all of their contract.

JEF: Hugh Felts, you were in Washington County in 1935 as an agent and later in Claiborne, Grainger and Greene counties. Now, how about starting with your first job in Extension and then we'll come back and talk about a lot of the other things that you were involved with during your Extension career.

HF: In the first meeting of county agents in upper East Tennessee, after I started work, the only thing they wanted was that I would get a 4-H Club camp (boy's camp) somewhere in the district. We started working on it, thinking about it, trying to find a location for a camp. We went throughout the whole upper East Tennessee area trying to see if we could locate a school building where we could have a camp and I got nowhere on that. Finally, we wound up with Perry Davidson's help. Perry was county agent in Greene County and with his help, we got the first boy's camp that was ever held in East Tennessee. The camp was held in the tobacco barn at the Experiment Station and we slept on hay. While we were there, Mr. Chance suggested that we try to get Mr. Austin to come out there. So he came out and had supper with us one night. His comment was, "If boys can have that much fun under these circumstances, somebody ought to make or give them something decent to make the camp a real thing." So that was the beginning of this camp (Clyde Austin 4-H Center).

JEF: Now that was Frank Chance, who at that time was superintendent of the Tobacco Experiment Station, and Mr. Austin was Clyde Austin with Austin Tobacco Company.

HF: He was the head man.

JEF: The other counties that you worked in included Washington County and then you spent some time in Claiborne County. Was that with the TVA related program in relocation?

HF: No, it was just an open place, vacancy. I reckon I just had a big suitcase and they thought I'd be good to go, so I made the rounds.

CM: Let me butt in for just a minute. One of the reasons that Hugh made the rounds, here and there, was the fact that Mr. B. M. Elrod, who was district supervisor at that time, thought Hugh Felts could do anything there was to do as far as Extension was concerned.

JEF: Now that's a pretty good recommendation, isn't it?

RD: Hugh thought so too.

JEF: After leaving Claiborne County, you spent some time in Grainger County.

HF: I went over to Grainger County and found out that they needed a agent and I was over there about three years.

JEF: I notice at one time you had a title of assistant district agent in charge of emergency farm labor from 1943 to 1944. Do you remember that?

HF: Yeah, that was when we were having the problems in Mountain City with migrant labor during World War II.

JEF: Now this was part of what Miss Thomas was talking about a moment ago when she went to Johnson County to work with people brought in from Florida to harvest the bean crop.

HF: Yeah. We were up there for beans and then I was sent to Idaho with laborers from Tennessee to pick up potatoes and I was to recruit my workers. I recruited somewhere around 35 or 40 of them. Crosby, I believe you and Mr. Elrod and myself were there the night we put them on the train and sent them out there. None of them were carrying any diseases that we know about. But when they got out there and got off the train, the health department in Idaho was hunting for people to shoot. And they lined them up.

. .

JEF: You're not talking about shooting with a gun but with needles.

HF: I'm talking about needles. They just didn't have enough people in Idaho to fill their quota for shooting and they had everyone of our people shot for typhoid and I believe small pox. When I walked in my office on Monday after they left Saturday night, I met Mr. Brehm (C. E. Brehm, Extension director in Tennessee), and he said, "I thought you went to Idaho." I said, "Nobody ever said anything about me going to Idaho." He said, "Get on the quickest transportation you can find." He tried to get me a plane reservation, but he couldn't get that, and I called Ann, my wife, and told her to start packing me some clothes and I'd be home to get them. I went back home and got my clothes and that night we got on the train and took off to Idaho.

JEF: Now that was part of our work that we were doing, I guess, in conjunction with the Department of Labor or whoever. Down through the years, those of us in Extension, almost every year, have had some kind of a program that has been related to other agencies, where they were wanting assistance or help and we wound up getting involved to some degree or another with them. So this was during World War II and it was a program, certainly, that was very helpful.

HF: Well, when I got out there and all of them had been vaccinated for typhoid and small pox I think it was, and they all had kernels under their arms and they were not actually able to work. They were going to shoot them again that night. I told them that they wouldn't shoot a damn one of them again and they said that they sure would. They got the head of the health department in the state of Idaho to come down there and talk to me. I told him, I said, "If you even suggest or show any signs of shooting a one of them, I'll put every damn one of them on the train and take them back to Tennessee." They didn't shoot them.

JEF: They wanted somebody to harvest potatoes, didn't they?

HF: They wanted somebody real bad. So that was that story.

JEF: And then, Hugh, you were also county agent here in Greene County for a period of time before you became superintendent of the Tobacco Experiment Station. Now Frank DeFriese, the last person that is with our group today. You served, I guess, all of your time as an Extension specialist in one capacity or another with Extension, didn't you Frank?

FD: Except for about the first five months, I was listed as a cotton adjustment man. I started working Meigs, Rhea and Roane counties in the Cotton Triple-A Program and they said that I did an excellent job because I closed out all the cotton that was growing in those three counties. Then I came into headquarters in September of 1935.

JEF: Then you, they had you classified as ag. economist test demonstrator, a farm management specialist and a soil conservationist and a few other things. Whatever it was, you were working as a specialist in a backup capacity to help support the field staff in Extension in the subject areas for which you were giving leadership.

FD: Yes, that was the area and I guess the first contact I had with any of the folks out of Knoxville really was when Uncle Penn Worden and Miss Annie Eblen came down to Meigs County to work with some of the families who had moved out of Norris Dam. That was where I begun to learn something about this relocation program. Then later, I had detailed work with it when I came to Knoxville.

JEF: And then you retired from the Extension agricultural economics section in 1973?

FD: Right.

JEF: So collectively, we've got over 150 years of Extension Service represented around this room today. Let's take a moment now and give us your impressions of some of the early things that you were involved with as an Extension agent. Each of you have already mentioned some of them. Frank helped close out the cotton industry in East Tennessee and Ruth was involved in helping get some interest in youth and adult home economics work up in Washington County. Alta did the same thing in Johnson County.

4-H Camp

JEF: Why don't we take a moment since we are at the camp (Clyde Austin 4-H Center, Greeneville) today and discuss camping before we get back to discussing some of the other Extension things. I remember reading reports in the late '30s, Hugh, when it was during the time you were talking about a moment ago, where we had boy's camps at the Experiment Station. A

youngster could bring a dozen eggs, three potatoes, maybe four or five tomatoes and that would almost take care of the camp fee. That's somewhat different than it is now. But Mr. Murray, you were in the District office at the time and you are familiar with those camps that were held. I know you went to Lincoln Memorial University with a camp one summer in the late 40s.

CM: Yes, that's right. I believe it was for boys and girls or could have been for girls.

JEF: I know my wife who grew up in Grainger County said that she went as a leader with the home agent to 4-H Camp at LMU around 1947. Mr. Murray, will you and Hugh give us your impressions of the things that took place in getting this camp facility located where it is now and the people that were involved? I know there was a committee. You were on it, Hugh was on it, Mr. B.M. Elrod was on it, Clyde Austin was on it. I think Raymond Rosson was on that committee as I recall. The county agent here in Greene County was a member.

CM: Yes, what was the guys name? Big guy.

FD: Perry Davidson? I'm not sure.

JEF: OK, give us your impressions of the Austins, the Extension Service, the county agents, all of the people that assisted in helping to build the Clyde Austin 4-H camp.

CM: Well, I think Hugh sometime earlier today told of Mr. Austin's interest, how you get involved in something such as contact with the 4-H Club program and all of a sudden, he was interested in doing something to help. I'm not quite sure where the idea of a camp originated. I don't know who first thought that we needed a camp. Of course, we camped on the campus of LMU at one time and some other places, but we didn't have any place to go regularly and there was no plans for a camp site. We were talking about the need for a camp, Mr. Elrod and Mr. Austin, and which one of them thought this was the right place, I am not sure. But the decision was made to centralize the activities on camping for boys and girls in one place and that Greeneville was pretty well centrally located as far as the district was concerned. Lot of reasons from that standpoint, and another was that there was interest here, which led to Mr. Austin saying, "I'll buy the land if you'll build a camp." I think as I see it, that's how the thing got started.

HF: I think that's right. Mr. Austin came to the camp when we were at the barn on the Station. We had these boys up there sleeping in some straw and he came up and had supper with us at the camp. When he got through, he said, "Hugh if boys can have this much fun under these conditions, they ought to have a decent place to camp." That was how we started. There were some army barracks that they had built on the Plateau some place down in Middle Tennessee.

JEF: Down in Coffee County?

Ann Felts (Hugh's wife): No, in Cumberland County at the old Prisoner of War Camp.

JEF: Crossville. The two barracks and some other buildings were brought from the Prisoner of War Camp to this site and rebuilt.

HF: Mr. Austin was taking tobacco to Nashville or somewhere with his truck and he hauled all that material -- after getting somebody to take the buildings down -- back up there at Greeneville. Most of it come in on Saturday evening about 5 o'clock and I had to go help unload the trucks.

JEF: Now this would have been in 1948, late '47, with the first camp in the summer of '49. What was the method used for financing the rest of the camp, Mr. Murray? I remember reading and seeing some of the involvement of counties. Each county was asked to meet a quota or give whatever they could get together -- chickens, eggs, money, etc.

CM: Yeah, that was the program that tried to get the money. That was really the objective. We needed the money to transfer that stuff from Crossville up here and to put it up here and to get it ready to begin the building the camp.

We had to build what we called a dining hall. That was the central building and these two -- well I guess there was more than two of those barracks that they brought up here -- were used to complete the camp facilities. There were some other small buildings built, a little crafts house, a first aid building and staff housing. Anyway, that's where the original camp started. It was largely a transfer of units from the Prisoner of War Camp to here.

JEF: OK. At that time, we could camp -- if we had the camp full -- about 400 boys and girls, if we utilized every bit of space that we had. Some of our counties joined together and had camps with 400 4-H'ers here. Any comments, Alta? You were down in Cumberland County.

AT: In District IV, which really was part of our present District V?

JEF: Our District IV at that time, but you had an opportunity to contribute to the camp. Give us your reflection.

AT: We collected chickens, vegetables, fruit and just anything at all in the line of foods that might be sold. All of that was sold and put into the camp fund. That seems to be the major thing we did to help finance the camp.

JEF: Frank, as a specialist, you remember some of these things -- you were not actively involved, but more than likely did have some input.

FD: Well, I think we all contributed. Somehow in the back of my mind I have an idea they were asking counties to contribute enough to make it 50 cents or \$1 per youngster that might be enrolled in the 4-H Club program.

CM: I think that's right.

FD: That was the goal they had set to get the money needed to finance the camp. Each county was allocated a figure, something -- 50 or \$1 -- which was big money at that particular time. But it did get the job done and the specialists, particularly the engineering group, were very much involved in the location, the sight and construction and getting things in order for camp to go.

JEF: Any comments Ruth that you have? You were not with us in Extension at the time, but were familiar with what's going on. Give your impression of early camps.

RD: Well, some of the groundwork maybe. In 1937, our girls heard about the boy's camp in Washington County that Hugh was talking about. I was always taught, "Don't never say can't," so I went to Dr. C. C. Sherrod at East Tennessee State College. He said, "You can have the administration building and the classrooms if they want to make pallets." So my 4-H leaders -- we all brought in food to be prepared -- and for three days we camped in the administration building of East Tennessee State College on the floor. Four-H'ers brought their younger and older sisters. There were 500 of us.

JEF: All of these were from Washington County or some other counties?

RD: Yes-sir-ee. Washington County and that was the first camp. When the girls heard the boys could camp, they begged me till I tried to figure out somewhere. So I went to church with Dr. Sherrod and I said, "Do you have any space over there on campus that I could camp 4-H girls?" He said, "Sure, you can have the administration building and the kitchen and the dining area if you'll prepare your own food and clean up after yourselves."

JEF: Hugh, because of your location here in Greeneville at the Experiment Station in 1948, I'm sure that you got called upon, as you said, at the last minute, to help unload materials, but you were involved a lot in seeing that all the activities during that period of time were coordinated weren't you?

HF: Yes, but it was a problem to get the material unloaded and put in usable condition. You see, the barracks material that they would bring in here had been dressed down. Nails had to be pulled out of the wood. It was hard to get it off and kept in order for reassembly.

CM: To be sure that you got the right piece next to the right piece for rebuilding.

HF: It was a problem, but we got it done.

JEF: My first camp was here in 1950. I started working in 1949 and the camping season for the first year had just concluded. So I missed the first camp that was held here at the present sight, but have been to all of the rest of the camps in some capacity during the last 40 years.

We did close the camp in the late 1970s. The state made an appropriation of several thousand dollars for the purpose of renovating and building some new facilities. We closed the camp here for at least two summers, maybe three summers, before we were able to come back, at which time, Andrew Seals became the manager. He has been serving as manager of the camp facility since that period.

As superintendent of the Tobacco Experiment Station, Hugh, there was a continuous relationship that you had with our camp because in closing out the camp each year, winterizing it, opening it back up, your crew and your people at the Station were responsible for getting this done. We were only opening the camp during the summer months. Now, we keep the training center open 12 months out of the year. But at that time, we would open the camp in May and close it after the UT civil engineers had their summer camp in late August and early September.

Extension Programs -- General

JEF: Let's go back and talk some more about Washington County. Hugh, you were there about the same three-year period that Ruth was there, so talk about some of the kinds of educational programs that you folk were involved with in the county. Ruth, your daily routine -- you had a plan of work like we have now, you had some things you wanted to do -- so relate some of the kinds of educational activities you had with the people to whom you were giving leadership.

RD: I think some of the most meaningful experiences were that Hugh and I worked so close together with Vernon Sims, another assistant agent, to bring groups together so that we could teach them techniques of doing specific things.

JEF: Such as. . .

RD: Well, Hugh taught them to caponize chickens. I was from Middle Tennessee and knew how to do this, so we taught them exactly how and the reason. We demonstrated making cheese to men, women and children and we had all-day dinner on the ground. It was marvelous getting them all together, thinking about improved ways of doing things. We would put on beef cutting demonstrations. The men would cut and the women would demonstrate canning. There were large numbers in attendance.

In fact, one of the leading groups that we had organized turned into a regular monthly supper meeting at Leesburg Methodist Church. Later on, we got into our community development work. This group in Leesburg became one of the

winning communities in the state. They began getting together and finding out that a whole lot of heads working together and teaching them could accomplish many things, so they went out and taught other people to do things. I think one of the really most important things was they found out they could share. Later, we formed a county council of women that came together and it was all educational.

JEF: One thing we might note at this point is that you were attempting to do what we are attempting to do now. That was to take the latest agriculture and home economics information we had at our disposal out and away from the land grant university itself to the people in the area. In 1936, when you folk were working and starting to work -- that period was a little different than the earlier period (1914-20) when Extension first got started with a lot of agents who did not have the formal college or university training, but had good farm backgrounds and good homemaker skills. But you folk represent the first group of people with degrees from a university and had all this "book learning," plus some practical experience that you could take to the people and develop programs to meet their needs. Hugh, your comments in Washington County were about ag-related things that we were really attempting to get done with the people.

RD: Hugh had a farm background and I was a 4-H'er under Miss Worley before I was old enough to really be one. So with our updated university degrees and farm background, we had a rich resource to draw from in our work.

JEF: OK Alta, let's move back up into Johnson County, about this same time, a little later on -- we're talking about ten years later now -- from when getting started with Ruth in Washington County. You've already touched upon the labor thing and working with people. What were your observations about those early years there in Johnson County and what you were trying to do as an agent?

AT: I guess the thing that impressed me most in the beginning was the response and enthusiasm of the people in the county because I came from Middle Tennessee and I was told that the people might not respond so quickly. We had very active community clubs that worked on not only what the men were interested in, but also the home needs. I was always pleased that the family attended. The men were just as interested in what we had to say about what might help in all areas of life. I was also thinking of the staff and the specialists who helped us. Ruth mentioned the killing of beef, you know, and canning it and I remember Miss Guthrie (Maude Guthrie, Nutrition Specialist, 1924-1954) coming in and she'd help us out as home agents who maybe needed little things at first. Information -- after going to the community and killing a beef -- on how to can it. We didn't always eat any of it either.

But that program went on a little farther. We'd sometimes go into the community, another community, all on our own and do the same thing. As far as housing, Miss Inez Lovelace (Housing Specialist, 1943-1968), you know,

used to come in quite often and we'd have workshops where the people would bring in their couches, or the chairs -- upholster them, or maybe sometimes just upholstered a stool in order to show them how.

Certainly we did a lot in the area of foods and canning food and that sort of thing, such as making kraut. I remember this during the war. We had a lot of milk, which the farmers couldn't sell. So that's when we got into cheese making in the home. It seemed that our programs went along with the problems at the time. Of course, we did have 4-H work too. But that was done through community clubs, through the home demonstration clubs and I'm sure it happened in every county to some extent.

Extension Demonstrations with Tennessee Valley Authority (TVA)

JEF: Crosby, you have some additional comments about some of your earlier work. Go ahead.

CM: This demonstration thing that I was talking about was going from one county to another. You'd hear about it and then somebody would go up there and see how it worked and then come home and put it into practice. There is a thing right here which helped to tie the women and men together. At this time, TVA was providing some fertilizer for sod crops that would control erosion and stop fast runoff from these steep hills. They worked this thing out to where a community group could make their plans for their community -- how they were gonna grow so much pastures and maybe some alfalfa and red clover and whatever. This tied right in and helped to pull the men and women together. What got the men all cranked up about it was the fact they could get that fertilizer for freight and handling charges. That's all it cost them. The fertilizer didn't cost a penny. It just cost the freight and handling charges.

JEF: Was this available to any farmer that would use it?

CM: It was available -- no, it was to the farmers in the watershed areas. It was available in the watershed and you might have a dozen farmers in the community or you might have just two or three, depending on the lay of the land and things like that.

JEF: Well, later on, they expanded the program with fertilizer and demonstrations a little broader than that I guess. . .

CM: Well, the demonstration farms was before the community program. The demonstration farms was -- oh, three, maybe 10 -- in the county that TVA provided us fertilizer for the agents and particularly the assistant agent to use in setting up demonstrations. This was the time we began to get assistant agents in a lot of these counties because of the expansion and development of the program. There is no question in my mind but what the fertilizer was the incentive to pull a bunch of these tight mountaineers into a program because they were getting something free.

JEF: Yes. Now there were a lot of dams built here in this Upper East Tennessee area as a part of TVA's program. A lot of people were uprooted and had to be relocated.

CM: That's right.

JEF: What was Extension's involvement in that program?

CM: Well, they provided assistance to those families in finding new farms, new homes and after they got into new homes, whatever they needed after they relocated. They worked through the county agent in that county to bring those folk up-to-date on what programs were available in that area.

HF: Whatever was available, they were standing for handouts and anything that you could give them would make them think they were getting something free or getting something worthwhile, they would take.

JEF: They thought they were beating the system.

HF: No, they were East Tennesseans. They were willing to be a part of the system and you don't grow them anywhere else like that.

CM: Let me tell you a little story I think illustrates this. About the boy and his grandfather who were going down the road on a cold, frosty morning and there lying on the side of the road was a sow and her pigs. The boy said, "Look, Grandpa, look at those pigs over there all piled up." He said, "Yeah, but did you ever stop to think if a pig got in a pile because there was a pile, or he got in there because he needed something to warm him." That's the way this thing worked. Find a place that warmed them and stay with it.

HF: Like when I was at Idaho when I sent a bunch of laborers out there to harvest the potatoes. I had no idea of going and I met Mr. C. E. Brehm in the hall on Monday after they left on Saturday, and he said, "Hugh, I thought you was in Idaho." I said, "Nobody ever suggested that I go out there." He said, "Well, I'm telling you to go. I'll call and see if I can get you on a plane. We'll fly you out there." He couldn't do that, but he put me on a train that night to go to Idaho and when I got out there, the director of Extension was there and we were having breakfast together and he said, "Well, how does our state compare with yours?" I said, "Well, you worry about getting the water up the hill to irrigate and we worry about getting it down without making gullies." He thought that was something.

JEF: We have had a longtime relationship with certain TVA-related cooperative programs. Many of our agents that were employed, as I look at the past, were in relocation or other kinds work that you were talking about a few moments ago. As these early programs phased out, the agents became permanent extension agents in those counties and continued with what we call the routine and regular kind of Extension work that we have now.

Extension and Development of Community Work

JEF: Let's pick up with a little more of the discussion on the community program. Started, as has already been stated, for a variety of reasons, but then out of the demonstrational work, came a group of folk, actively involved together that had a big impact upon the people in this area for several years. One time, as I recall, Crosby and Alta, Tennessee was looked to as the key place to get some information on how to do community work. Any observations about the East Tennessee community improvement contest and related programs. Any contribution that you want to make as you remember some of these things?

CM: Well, the East Tennessee community program developed into a statewide program into other areas of the state and other districts. There was a contest tied to it. You visited these communities in the fall of the year and they presented you with what their program had been and what they had developed that they wanted to do that year. Then, along with that, how much of it they got done, what had been done and what improvement had been made. Now that spread out of Tennessee I guess largely through visits of Extension people to see the TVA program. TVA offices were in Knoxville, the dam was out at Norris and anybody trying to find out what TVA was doing, would come in there to do it. As Extension people in the other states saw the use that was being made of materials that TVA provided, like fertilizer and other things, the idea grew, and we had not only in this state, a community improvement program, but they had them in a lot of other states in the Tennessee valley.

At one time, for a two-or-three-year period, they had contests that was competitive across state lines. Community improvement winners in Tennessee and winners from the community improvement programs in Alabama, Georgia, Virginia, Kentucky and other states were in competition. In the fall of the year, they would be visited by a judging team to find out the outstanding community improvement program in the valley. This had an influence on the people in the valley states.

HF: Brumfield was very popular at that time and he came to Washington County and stayed, oh, I think about four or five days. I know we took him to different farms. I've got two or three pictures that was made when he was interested in the area and for some reason, he came down here and heard something about the community improvement program. He wanted to get out and see it first hand.

CM: I don't remember too much about him, but didn't he come up with some ideas that the business community and the farm community ought to be combined in getting some things done?

HF: Yeah.

JEF: What Brumfield is this, do you remember?

CM/FD: Lewis Brumfield.

JEF: Lewis Brumfield, with. . .

FD: I don't know whether he was with U.S. Department of Agriculture or not.

HF: No, I don't think he was connected with USDA.

FD: He was a writer.

JEF: Ruth, you have a comment?

RD: I think the real importance of this community development was that individual families -- they'd be one or two in a community that kept up their property -- this was a way to teach the others and the contest was something that's always challenging people. But you see, most of the homes had no electricity, no bathrooms, knew very little about doing a home garden, how to preserve and eat right. So it was a total wholeness that brought a community together. But what happened in the individual homes and their children and education and seeing possibilities of them continuing their education -- that's the real impact of the community improvement. What it did to people that didn't feel like they could do a home like maybe the nicest home -- they found out they could do things by working together.

JEF: And developed a sense of community pride.

RD: Yes, so what happened in each home that a unit of this community development was more important than the total prize or whatever come out of it. Because it changed the way of so many peoples lives, their homes.

JEF: I remember years ago reading somewhere that we could tell the boundaries of a community by going out to where you see all the wagon tracks, and the buggy tracks, at some point turning and going toward a focal point. There'd be tracks this direction and tracks in the opposite way. This point became the real boundaries of the community. People who went into this area knew they were in a definite community. Now, we've lost clear boundary lines with all of the growth and development. Some community work is still being done as we used to think about it in those definable groups, but not too many.

I remember when I first started working in Claiborne County in 1949. I think we had about 20 community clubs that met at night. I remember that we had 55 or 60 4-H Clubs. You were either going to 4-H Clubs or community clubs practically all the time. The contest itself did, as Ruth pointed out, become a tool whereby some other things were done. We had a lot of businesspeople involved in this program and the old East Tennessee Community Improvement Program had to be recognized as having a real impact upon some things in East Tennessee.

CM: And that influence spread out to other states, too.

JEF: Right.

RD: That's right.

JEF: As we said earlier, Mr. Murray, before he came back into the district office as district agent in 1957, spent some three years as community specialist working across the state. He had a chance to see the total program and to be involved with the folk who made the program work.

FD: Jesse, I think if we look at this picture, we go back, I know in my home community down near Chattanooga, we had a community fair just of agricultural products -- maybe some activities in home economics. Then we set up a booth at the Chattanooga fair and that sort of thing had its influence on getting started.

As was mentioned in Washington County, the Leesburg folks got together there in the community and had a display with the cattle tied to the fence because they had no facility for showing them. From that, it developed into this thing. It's bigger than just bringing some cattle there, some hogs in and some chickens and the canning and sewing projects. Sociologists got into the picture. They said you can't exactly define the community because you might say Greeneville is a community, but from that, you have Mohawk and Mosheim and Lick Creek and all those other places right here in Greene County that are communities themselves. They may be neighborhoods as far as sociologists are concerned, but they are a community because they have a common focal point that pulls them together.

I guess I've judged communities pretty well in this district as far as the district and winners were concerned across the state. Leesburg, Shady Valley, Powell Valley and Roan Mountain -- you can just begin naming them as you go through those that were active. You soon learn in which one of those communities that you were careful about you plate when they were feeding you, as to how much you put on it, because you knew where that extra good food was and you carefully layered it on your plate so that you would get a full supply before the day was over.

JEF: Speaking of eating, did you have covered dish suppers in Johnson County, Alta, when you were meeting those homemaker clubs?

AT: Not so much with the homemakers clubs, but we sure had them in the community clubs and we had quite a large number of communities in Johnson County for this size of county. About once a year, we, the home demonstration clubs, would get together, maybe just two or three of the closest clubs, and maybe all of us, and have some kind of real big celebration and programs, and of course, good food to eat. That's one time if you were a good cook, you'd show it off, you know.

You know, I was thinking, things of that sort and also these things that we did have in our community clubs attracted attention. I think it did one other thing, that we may not have mentioned. I think it brought the city and county together. It made each one realize that they depended on the other. It didn't use to be like that, I don't think. But it helped them to understand that they depend on each other. You know the community club group that was sponsored by businesses got a lot of publicity and I think it brought us all a little closer together.

JEF: Later on, we used to have and continue to have, farm city week observances. Luther Whitaker, associate district supervisor in District V, is not on the film here, but is helping to tape this interview. Luther was Extension leader in Claiborne County before coming to the District V office. Luther, you folk had several excellent farm city week days with all those people, rural and urban -- 200 or more persons coming out to the evening program and participating in tours. As you say, all of a sudden, it brought us to the point that a bunch of local yokels out in the boondocks are just like those of us here in the big city. So they developed an appreciation for each other.

RD: Well, Raymond Rosson and us had the county and city come together at the old John Sevier Hotel in Johnson City for luncheons, so we depended on Johnson City a lot.

Extension Personnel and Development of Programs Through Test Demonstration

JEF: Speaking of Raymond Rosson again as county agent in Washington County, we've mentioned his name a few times. Mr. Rosson was up there in that county for a long, long time. I've forgotten exactly how long, but seemed to me like he must have been there 30-something years plus, maybe longer than that. Anyway, when I started working -- whether it was a reputation that Mr. Rosson was due or not -- but when I first started working in 1949, I would hear people talk about pasture, 4-H, grassland and Raymond Rosson and the folk in Washington County and that area up there were the ultimate, you know, in this. Was Raymond Rosson that big an individual from the standpoint of getting that done or was he just a good PR man. Some reflections on whatever positive manner you want to make with regard to his program?

FD: Raymond was a terrific PR man.

RD: Yes-sir-ee.

FD: He did not at any time miss an opportunity to tell something about the work that was going on, even at the Methodist Church. He'd get that involved every once in a while. But I think a classic example is one of the farms that we've all heard about and that is the Iven Range story. This was a small farmer there in Boones Creek community.

JEF: This is in the '30s?

RD: It was about '37 or '38.

JEF: OK.

FD: Somewhere about that time. Years slip at about that point. At any rate, he had a small farm there with a herd of beef cattle. He had a few bales of hay that he'd been able to harvest during the summer and was gonna have to buy hay to get his cattle through the winter. Rosson says, "Look, don't buy hay. Get this TVA fertilizer and lime and put that on your farm and we think that'll take care of your needs for the winter." That was a big gamble so far as he was concerned and for those of us in the education field. But what actually happened was that he was able to take his herd of cattle through the winter and had some of the hay left over when spring came around. His cattle came through the winter in good shape and this was on one of those little hill farms. That story has been spread all over the country.

Raymond didn't miss an opportunity in telling about that and taking folk to see it. I don't know how many hundreds of people have been to see the Iven Range farm. I don't know where it is now. I believe he sold it as I recall the story on it. At any rate, that was one of the early examples of the demonstrational farms that we refer to. It was written up in "Progressive Farmer." I wish I had the exact figures as to what it would -- well, it would have taken primarily the cost of his herd to have bought enough hay to get them through the winter. They debated should he sell the herd and start over, buy hay or would he gamble with using this fertilizer and lime on his land as recommended by Mr. Rosson.

RD: He believed Mr. Rosson. He was very effective in that they followed him.

JEF: Well, that then brings us back to what's always been the key with regard to successful Extension work. If you have credibility with the people for whom you are working, for whatever reason, you will be successful. I've said for many, many years that people will support you if they think you are doing a good job. Now there will come a time if you are not doing one, it will catch up with you, but it doesn't really make that much difference if people think that what you are doing is right. They'll support you and we have a lot of people supporting 4-H Club work today who know nothing whatsoever about the program. They think it's a good thing and so, therefore, they want to support it.

RD: Absolutely.

JEF: Crosby, you had a comment?

CM: I wanted to say I don't believe there is anybody in the test demonstration program with TVA that got as much favorable publicity as Iven Range. People all the way across this state and others knew about Iven Range. Anywhere

you'd start discussing use of fertilizer to control erosion and produce pastures and hay and things of this kind, Iven Range was used as an example. He was well known in the valley states.

FD: He was one of the key men in helping other farmers adopt the practice of using lime and fertilizer. We were not familiar, our farmers were not familiar, with this new high analysis fertilizer.

JEF: Another thing that went along with this was what some of our younger agents today hesitate to do -- an agent had to be willing to take a risk, Frank, and put themselves on the firing line, with the understanding that it may blow up in my face. But to get it done, they had to make the move.

FD: Well, we ran into this situation with some of the new fertilizer materials produced by TVA. They did not understand how to cure it properly so that it could be spread. I imagine there may still be some 50-pound monuments out here on some of these farms with one of their types of fertilizer that's set up harder than rock. They tried to run it through rock crushers and ruined many a rock crusher.

CM: The one person that had as much to do with the spread of this program as any other one person was Penn Worden -- Uncle Penn.

JEF: Tell us about Uncle Penn for a minute.

FD: Can't do it in a minute.

CM: No, I can't.

RD: No way. Everybody liked Uncle Penn.

AT: He was such a likable person.

HF: He was county agent in a county next to where I was raised.

FD: He was county agent in Cheatham County when he came over to Knoxville.

HF: I got to know him very well.

JEF: He was county agent in Cheatham County -- this would have been in the early '30s?

FD: Yeah, '29.

JEF: Well go ahead. Here is a man, short of stature, but everybody knew him. As I said one time in writing a little poem for Margaret Clem, District III supervisor, when she retired, "She did her thing and she did it well." Uncle Penn apparently did his thing pretty well, didn't he?

CM: Yes he did. He had a lot of people working toward the programs that we have been talking about.

FD: He believed in what he was trying to do and he convinced other folk of the same thing. He not only instilled that in the farm people with which he worked, but his co-workers also.

CM: That's right.

FD: All the way up and down the line. As I pointed out earlier, the first time I ever saw him was when he was working with Miss Eblen relocating some families who had to be moved out of Norris Reservoir.

JEF: Now who was Miss Eblen?

FD: Miss Annie Eblen was an early Extension home agent. She came in to work with relocating families out of Norris Reservoir. I don't know the background, what other county in which she may have been. I don't know if she worked in Knox County or not as a home agent, but that's the early history.

JEF: I don't think that she was in Knox County, but I cannot remember for sure.

FD: But Mr. Worden, Uncle Penn, as he was affectionately known, had this East Tennessee territory that he worked in supervising the agents who were handling this test demonstration program. He was always working to get just a little bit more for his agents than Mr. McNeil or Mr. Morgan could get. (Alex McNeil and N. B. Morgan were supervisors in the Extension soil conservation work). It was a very competitive situation -- friendly, they were top people, all three of them -- but he was always pushing just a little bit harder for Upper East Tennessee and he felt like the other fellows wouldn't be able to catch up with him.

County Extension Appropriations and Personnel

JEF: Talking about Uncle Penn working so hard for all his agents, we've already mentioned the fact that we had Extension work going on with farmers with some work directed toward the women. Several of our early agents were assigned to work in home economics with the women on a trial basis as special agents, with the idea, Ruth, as we've already mentioned, trusting that they would do a good job and the people, seeing the merit of the work, would appropriate some money for their positions in the several District V counties.

RD: Right, that's the bottom line.

JEF: There was a period in the '20s when we didn't have as many agents in the state. But with the depression, which brought about stress and strain on the people, there was a revived interest in having Extension agents. So in the early '30s, we saw an increase in the number of agents employed and have

continued to see additional staff employed to meet specific needs of our people. No two counties ever appropriated the same amount of money to hire agents, Crosby.

CM: It would be an accident if they did. The county court selected a county Agricultural Extension Committee. This committee represented the county. The district agent or supervisor represented the university, and in visiting with the committee, worked out the plans for the budget -- the amount the county would pay, the amount the state would pay and any other money that might be available from other sources. This was really an interesting deal, but you never knew what you were getting into until you met with the committees. Sometimes you came out with a better deal than you expected and sometimes you came away in worse condition.

HF: Sometimes, it was good to have someone sitting in the County Court that you could put your finger on.

CM: That's right.

JEF: Were those usually primed ahead of time?

HF: In Washington County, they said when I was up there that, "That loudmouth wouldn't stay a week. They'd fire him, send him home." I had a man come to see me that was in the county court and said that if I needed something to "just let me know and I'll get it for you." We had that arrangement and it worked great.

RD: I have a list of all my county court members and the committee, with a plus and minus whether they needed to be worked on a little bit more. We kept our minds on the job and Mr. Rosson was super at getting support from his committee.

JEF: Well, you can look at some of the earlier appropriations that counties made versus some of those that did not make a large appropriation. You get the feeling that the agents who had a good relationship with those people, who had good public relations, who constantly told those people about what was going on, whether it was right or wrong, and the county courts usually came through with adequate to good appropriation.

RD: Right.

JEF: I remember one time when I was involved as a new supervisor with a county court in trying to get money appropriated for a new home economics agent position. That was up in Hancock County back in the mid- '60s. We'd had, Crosby and Alta, agents up there as you know, on a trial basis in some capacity or other and the county still was not putting up the money, or maybe they put it up a little while, but would stop. I remember going up to Sneedville one Saturday and meeting with the county court. Commissioners, or squires as we called them then, were scattered in chairs throughout the whole

courtroom, some leaning against the wall. They weren't in an orderly group out in front of the courtroom like they are now.

I remember this one fellow who was a little antagonistic toward the Extension program, but subsequently became a member of the agricultural committee and was a good supporter in Hancock County. I remember him saying to me, "Francis, if you send one of them home agents up here, is she going to try to teach my woman how to make cornbread and mess it all up?" I remember saying, "Well, I really don't know if your wife is going to wind up in some of the meetings that the new agent might hold and/or if she may find some other ways of making bread. She may make some new bread, but whether or not she interferes with the way she makes cornbread and the way you like it or not, I don't know." I named three, four, five different kinds of cornbread that I thought he could relate to, you know. So he said, "I just want you to know that if we appropriate this \$1,000, I don't want anybody up here messing with my wife's cooking." I don't know how much of that was in fun and how much of it was otherwise. I don't think much of it was in fun at all. Yes, Alta?

AF: I was just thinking, I don't know if it is worth telling or not, but anyway, it's worth remembering. Even the county agents sometimes got appropriations. In Cumberland County, we didn't have an appropriation for an assistant home agent. We had one for an assistant county agent, but not for a home agent. I talked with the county agent and he said, "Why don't we ask for an appropriation? You go ahead, you just go ahead."

JEF: He was a lot of help, wasn't he?

AT: I knew the judge and he was our friend. I knew that. So I talked to him about it and he told me to come to court one day and they would start at 8:30 in the morning and would get through about 5 in the afternoon and ask for the appropriations. Well, I went at 8:30 and I sat there in that smoke-filled room till 5 o'clock. I had a splitting headache. We also had it planned for one of the Ag. committee members to ask for it, but the judge said, "Miss Thomas, come up here. You've got something to tell us about." So I got up there and I was so scared that I just said right off, "I want an appropriation, and told him how much, for an assistant home agent to work with 4-H."

There was a man on the court that couldn't hear, so he was sitting up close to the judge. I was talking so loud because of fear, I guess you could have heard me outside. He jumped up -- he was the father of a friend of mine -- he jumped up and said, "She's the first person that's ever asked for anything that I could hear." He made the motion for the appropriation. Another member, who ran a store where I held demonstrations, stood up and seconded the motion and everybody voted yes, except one person. I got over my headache, I think pretty soon.

Extension and Burley Tobacco, Specialty Crops and Activities

JEF: I want to talk a little, Hugh, about the impact of burley tobacco in East Tennessee -- our research and how it related to what Extension agents were trying to do. So let's turn back to your years as Station superintendent as it relates to our work in Extension. We have said for many, many years that Extension is attempting to use the best research-based information that we have to use with our farmers to improve their cultural practices, production, and so on. Make whatever observations you want to make about the impact of burley tobacco on life in East Tennessee and the role of Extension people and Experiment Station people in trying to get that subject going.

HF: Well, I've got a pretty good story to tell about these kids (Club members) that I saw. There was a boy up there in 4-H, and he was over at the camp and he come on over to the Station. At that time, I was taking two wagons and going over to the camp to get the kids on the wagon and take them back over to the Station and I'd take them around on the Station to show them what we were doing. Well, this one boy that I was talking to, he had been on a trip, and he was from Knox County. His daddy was living in Knoxville. I was showing the boys -- no girls -- I was showing them black shank (a destructive tobacco disease). I had my plant with black shank and I showed them how to identify it. When this boy got home and was with his daddy, somebody brought a stalk of tobacco in to his dad and asked him what it was. He said, "I don't know." The boy looked over his shoulder and said, "Daddy, that's black shank." Well, he started to throw it down and he said, "Don't do that," said, "You throw it down there and it will wash down, get in the creek and black shank will be everywhere. Take it and burn it". So he took it down the road and burned it.

There was a girl who was at camp on Friday, and she lived in Greeneville, and when she got home, her granddaddy just couldn't wait until he'd get over there and talk to her about what she had found at camp. She said, "Granddaddy, did you know that there's something they got you can put on tobacco that would keep suckers of it?" He said, "No, where'd you get that?" She said, "They showed me that down at the Experiment Station." He said, "What was it?" She told him what it was. He called me the next day to talk about it.

One thing that I feel good about was that there was a family over in Cocke County and they bought a farm with a good tobacco barn on it and all. They found out that the tobacco they grew on that farm had black shank on it and all the fields was infected with Black Shank. They had bought the farm and was in debt for paying for it and no way to pay for it because they were to lose the tobacco crop with black shank. They come over to the Station and I gave them some seed of a variety that was resistant to the black shank. They went back, put the tobacco out, had a good crop and sold it. The next year, the wife was with a group of women that was over at the camp that come over to visit the Station. That was the biggest hug I ever got! She said, "You saved our farm."

JEF: Well, that's very interesting. I figured at one time that 75 percent or more of the small farms throughout East Tennessee most likely had those original notes all paid for by production of burley tobacco -- interest on them, as well as indebtedness -- and most of them were bought with those tobacco checks. Crosby, Frank, any comments you want to make about this crop and its impact upon Extension and what we've been discussing here?

FD: Jesse, let me pitch in one farm that I recall. I don't have figures to give you dollars and cents on it, but Henry Burris, up in Campbell County, was a little hill farmer. I've used his illustration as being one of those farmers that started early in doing farm management or farm planning. Mr. J. H. McLeod, who was at that time, our associate director, talked about it too.

JEF: Is that Arthur Burris?

FD: I mean Arthur Burris. He had that little farm up there and probably had about six-tenths of an acre of tobacco. He used that tobacco income to pay his taxes. He had about an acre of Irish potatoes and he used the potatoes to make a payment on the farm. Then he took maybe a calf or two -- he had a few cows, calves to sell -- and he had those for other uses and income.

But the big thing about it, most all of those folks that were growing tobacco, our little East Tennessee farmers, had probably six, well from four to six, eight-tenths of an acre of tobacco. If they had it converted to the present time, that would mean they had somewhere around an 800 to 1,000 pound allotment. That was how they used to be sure that they got taxes paid, or if they owed something on the farm, that would make the payment on the farm. Just such fellows as Arthur Burris and those little farmers of his size upon one of those steep hills in Campbell County, tobacco meant an awful lot to them. They had their own labor. They didn't worry about labor at that time. It was family labor that was used or they swapped labor with their neighbor. At the present time, when labor is like it is, burley tobacco production has changed very greatly.

JEF: Crosby, I remember in the late '40s, the Minton brothers down below New Tazewell were growing 3,000 to 3,800 pounds without too much difficulty. Any observations that you want to make about the interaction between county agents, Experiment Station and Extension?

CM: Well, I tell ya, groups that came to your county was interested or they would not come -- I mean, as far as tobacco education or any other education is concerned. There was always half a dozen or dozen people that were out in front with new practices and these are the ones that passed the information on. Other folks saw it and knew this and went to these good farmers and asked them, "How do we do this? When do I plant the seed? What variety do I grow? When do I set? How do I handle it, top it, or not?" A lot of that started with this work at the Experiment Station, through the Extension agents out in the counties.

JEF: Alta, did you see any of the tobacco money used in improving family life in any of the homes in Johnson County when they got through growing a crop of tobacco?

AT: Yes, very much so, because certainly the tobacco money -- that's cash you know. When we'd go into the homes, we'd -- I'm thinking now of a couple that built a new house and I worked very closely with her, with them. Miss Inez Lovelace, specialist, came in and helped us with working out the house plan, the arrangements and so forth. Then of course, there was quite a lot of things done in the homes there -- remodeling the old homes into good homes, adding electricity or whatever, you know. Maybe they didn't have closets, or maybe they didn't have light -- good lighting system -- that sort of thing.

Yes, we worked a lot in the homes. Probably did more than anything else in working with the women and with a part of the community development program. So I'm guessing that a lot of it came from the tobacco money. Of course, a lot of it came from beans and these other things they sold. You know about that fresh vegetable market they had in the summertime? When I first got to Johnson County, being a new person in a smaller town, it got around that they had a new bean woman. Thought I would be working with that program where they sold so many vegetables and things and they sold more beans than anything else. I was the new bean woman.

JEF: Frank, what was the impact upon beans in Johnson County? Johnson County went through a period of time when it was one of the larger bean producing counties in the state of Tennessee.

FD: That's right. They had beans up there. Everyone looked forward to getting that particular crop and it was good cash crop for the people.

JEF: What time are we talking about?

FD: Well, you're talking about 1934, 1935, up to around 1940. They were trying to get labor in there during the war, in the early '40s. That was one of the problems then -- getting the beans harvested, taking care of them -- because if they were growing pole beans, and they did grow some of those. . . I've heard the farmers make comment that we've got \$300 an acre tied up in this before we pick our first bean. The high cash cost of production helped put the beans out of that particular county. Then it was a different type of land in Johnson County, because over in Cumberland County, they were growing beans and the topography there was such that they could go into mechanical operations as far as beans were concerned. They couldn't do that in Johnson County like they could over at Crossville, so beans shifted out of Johnson County. But they had beans and cabbage. They would be harvesting cabbage, the late crop, and some Irish potatoes.

AT: Strawberries, yes, lots of strawberries.

FD: That's all shifted quite a bit now from that particular area to other parts. Well, Cumberland County was a big potato county. Mr. Clark, F.O. Clark, and one of the other agents there was growing -- working with them on the potato production. One of the big potato growers in Morgan County, which at that time was in this particular district, was Pete Felt's grandfather. Pete, I believe, was a basketball player at UT that rode the unicycle around some and his grandfather was one of the big potato growers in that particular county.

JEF: F.O. Clark, and H.E. Slack and A.A. Johnson were early agents helping with this program.

FD: Yes, in Cumberland County during the late '30s and early '40s. One of those early agents working with truck crops -- but now the labor situation has changed all that -- difficulty of getting labor to do that particular job.

JEF: Frank, you said earlier that you cut out the growing of cotton in East Tennessee and we also mentioned that during the depression when folk really needed more help, maybe than they did at any other time, our agents held a lot of specialty meetings. I mentioned that down in Cannon County, I remember as a youngster going to our grade school where they made cotton mattresses. Were any of you folk involved in this type of thing with your county people?

HF: I've made dozens of them.

JEF: This cotton was from surplus made available by the government.

HF: You would pick up your cotton in one spot, get your ticking at another place, and get some

JEF: String.

HF: Yes, and then pack the cotton into the ticking. Many families had mattresses to replace the straw ticks which they used under the feather beds.

AT: I was working for Farm Security Administration right at that time and then come into Extension.

JEF: Were you involved in some of those sessions?

AT: Oh, I should say I was! I remember getting lost one Saturday afternoon. We agents went out in the county taking some of this cotton and everything that they needed, and of course, we had to walk about a mile. Somebody gave me directions. "Now, you take the first turn to the left." I took the first turn to the left. I went up this road full of rocks and just like that, all of a sudden, I came out into an open field. I just stood there looking at it and actually thinking about the days the Indians must have lived there. Then, all of a sudden, I saw this man, over where I hadn't seen before, mowing. He

said, "How in the world did you get up here?" I told him and he said, "We haven't traveled that road in a long time."

Well, we came back down and the man that gave me the wrong directions met me, walking up in my direction with a long gun in his hand. Naturally, I was a little bit excited, but he turned out, of course, to be a very nice person and was one of the county officials. His mother had sent him up to find me, after giving me the wrong directions.

Well, he put the cotton on his back and I took up the other things and we walked about a mile after dark to get this into the home where I was planning to help the family make a mattress. I came back later and showed them how to do their mattress. Then I worked quite a bit in a negro community in making mattresses. There I didn't have to work. They wouldn't let me work. I'd show them and then they would just go ahead and do it.

JEF: During the early '30s, I can remember families in wagons, all up and down the road, coming into a little school building and spending days upon days making mattresses. You know if you have been raised to sleep on a feather bed and filling up with straw ticks every year after wheat threshing time, it was a big, big improvement having those cotton mattresses. Ruth, any comments that you have about those type of things or any other type of workshop that you might have had? We've already talked about slaughtering and canning. While we were talking about canning and slaughtering earlier, I remembered that our home community had a beef club. Ten to 14 families would join together and every week, two families would furnish a beef heifer or steer. We would slaughter it and divide it on a rotational basis so that during the summer everybody would get an equal share of meat.

RD: I just remember how cooperative men and brothers and all were. It was really a family cooperative thing. Whether it was cheese making or beef, it was a community thing. They all entered in, which was great. The women couldn't do some of the work unless the men were completely sold on it.

FD: Jesse, your beef club project like that for fresh beef, that was a requirement, because we had no refrigeration to speak of at that time. The only way you had beef then was for the group to divide it up so they could use it in a very short period of time.

JEF: And it worked very effectively?

FD: Worked very effectively.

RD: Well they shared hog killing.

JEF: I remember the people that were involved with the club that we were in. Very few of them particularly cared for liver. We all liked beef liver. So every week whenever they slaughtered one, in addition to the regular allocation of meat, we always had plenty of liver. And it was good!

Extension Pioneer's 4-H Experiences and Related Activities

JEF: I was a 4-H member in Cannon County during the mid-'30s. O.R. Holley was the county agent. He come by my elementary school at Readyville two to three times a year. I remember his poultry culling and grapevine pruning demonstrations. We lived some 50 miles from Nashville and my first trip to Nashville was with a 4-H group. Hugh, what kind of a 4-H Club background did you have as a youngster in Middle Tennessee and how did you happen to meet Ann, your wife of 54 years.

HF: I had some cattle, calves and tobacco was my biggest crop. I made a mistake selling my tobacco in the barn. The day that we had the 4-H tobacco show, the oldest tobacco man, and the most important tobacco man in Springfield, told me, he said, "If I could just get that other fellow who had bought my tobacco off of this and let me buy it, I would give you three times what he paid for it. I've always wanted to have enough of that tobacco, which you have, to make me one whole barrel of that kind of tobacco and to see what it looked like." I'd already sold my tobacco. I did good in 4-H and I got a trip to the Horace A. Moses Leaders Training School in Springfield, Massachusetts.

JEF: And that is where you and Ann met?

HF: Yes, I got there on Saturday. No, I got there on Sunday and Monday morning at breakfast, I was up early and ate Breakfast and as I walked out of the dining room, I saw a couple girls sitting across the room. I waited outside, because they had already told us they were going to have a campfire program that night. So when Ann got to the door, I propositioned her on going to the campfire with me and she agreed. That's how we met.

JEF: So it was in Massachusetts in 1930 that you two met. And Ann, Mr. Felts wife, has not previously been in this discussion, but you were there as a 4-H Club member.

Ann: Yes, from New Jersey.

JEF: From New Jersey and what kind of 4-H Club project had you been involved with?

Ann: Mine were largely dairy.

JEF: Well, as a wife of an Extension agent, and the wife of a Station superintendent with the university, you did a lot of teaching in more ways than one, more than likely.

Ann: Yes, I served as a 4-H Club leader in Greene County for many years until 1946 when my children had finished high school and were out of 4-H.

JEF: All these years.

Ann: Yes.

JEF: Well, I can remember when your youngsters (your three children) were all very active 4-H Club members and you were an active 4-H Club leader for many, many years. Were the rest of you 4-H Club members at some time? Alta?

AT: I wasn't. I never had attended a club meeting or knew anything about home demonstration work before I started working. We just didn't have any back then.

RD: Miss Oma Worley was assigned to Marshall County in 1919. Now Extension was five-years-old . . .

JEF: Officially.

RD: She had a horse and buggy. She made the rounds, and my father couldn't wait to sign all of us up. I was too young, but he got me a flock of the most beautiful Buff Orpington chickens and made a pen for me. Then I had a registered Jersey cow that I showed in Nashville and Memphis. Yes, that was the highlight of my 4-H.

JEF: How much did that influence what happened to you later?

RD: You know, I can't really remember because I was just brought up in it and everyone says, "How did you get from Lewisburg, Marshall County, on a farm to UT" because it took all day. The Ingram girls were my friends. Their parents loaded us in a car. The car broke down 20 miles out of Knoxville and the two Ingram girls and myself entered in the College of Home Economics. I wondered too. Miss Oma Worley, who had been my Extension leader, lived right back of the university cafeteria where I worked four years. So I didn't apply, I was just born into it. When I got ready to work, Miss Worley was ready to have me go to Washington County.

JEF: Well good. Crosby, were you a 4-H member?

CM: No sir.

JEF: You were born in Greene County.

CM: Yeah, way down in the lower end of the county, a lot closer to Coker County and Hamblen County than to Greeneville. But I was not a 4-H Club member. About the time I got through high school and left there, 4-H Club work got started. Right now I couldn't tell you who the agent was there when I was a kid.

JEF: What year would that be?

CM: About 1910.

JEF: Frank, were you a 4-H Club member? Seems like you went off to some national event or something more than once.

FD: W.J. Forbess was the 4-H leader down there at that particular time and I had two major projects. I have the material somewhere at the house as to my project, as it was written up. I had brood sows and I sold a sow and 10 pigs for \$100. That was big money along about 1930 and '31.

JEF: What were they recommending for pigs in 4-H at that time?

RD: Oh, you had them good and fat.

FD: You wanted a good fat hog.

AT: Lard.

FD: That's right, because we had to make lard then to take care of cooking needs. In my poultry project, I had White (Plymouth) Rock chickens. Showed them at the local fair and at the Chattanooga fair, made the poultry judging team. Did pretty well until we ran up against the Safley clan. Jess, Baxter and Marcus Safley.

JEF: The Safley brothers from Safley Hollow in Warren County.

FD: We went to Memphis to the Mid-South Fair in poultry judging. Our team from Hamilton County didn't do too well down there. We got into some stiff competition. But then, as I mentioned earlier, I went to Washington to the national camp in 1931 and that's where we lived in the tents in front of Washington Monument. We went down to eat at Childs Restaurant. We walked downtown and it was no problem to walk then. We could do some walking. But there were two of us from the same community. There was a Diamond Talley that went from Hamilton County and a Gene Kerr from, I believe, Monroe County. I don't remember the girl from Montgomery County. We were the four delegates that went to Washington. Mr. Forbess went with us. I thought I could play a trumpet. Of course I couldn't read music. I wasn't too good playing by ear, but I tried, and I think maybe I performed for maybe one number up there at the capitol.

Then we had vocational agriculture in the high school and I took vocational agriculture for two years. All of that put together directed me to UT and into agriculture. I thought I wanted to be an engineer, but the most fortunate thing that ever happened to me was that I didn't take engineering. I took agriculture and finished my degree, and believe it or not, in 1935, I had three job opportunities. That was a most unusual situation because there was a big backlog of agricultural graduates looking for work. They were just beginning to get placed and I had three opportunities. When I asked Mr. Nichols about how permanent the job would be, he was the state agent at that time and he says, "Son, I don't rightfully know. You know when I took this job, I asked them if it would be permanent. Say that was 25 years ago."

CM: That sounds like him.

JEF: You worked how many years with Extension? Forty-four?

FD: No, right at 40. I missed a day or two making 40 years on that, I think.

HF: I had quite an experience several years ago. They sent me to Washington, D.C. during the Festival of American Folklore. They had different states coming up there and putting on a show. I was up there working in tobacco, grading tobacco. I stayed up there two weeks and I would start work about 10 o'clock in the morning and quit about 5 o'clock in the evening. I would stand there and talk about tobacco. One doctor came by and said, "Yeah, you're killing all of them." I said, "You damn doctors are killing most of them."

FD: Jesse, I came up in a section of the state when we didn't have any tobacco and very little cotton either. But as an agriculture specialist at UT, you got all kinds of assignments and one of them was to judge county fairs. Well, I was over in Sevier County one time to judge the fair with Dave Hendrix, the county agent. We came to tobacco. I said, "Dave, I'm not going to judge it." He said, "Oh, yes, you've got to." I said, "I know nothing about it and I'll ruin you in the county if I judge this tobacco." He said, "You've got to judge it." I said, "I'll tell you what I'll do. If you'll go through there and look at that tobacco." Dave was really an authority on tobacco and knew what to do with it, how to judge it. I said, "I want you to lay it out so that I can see it, and when you lay it down, I want you to have on the left hand side the blue ribbon and move right on down the placings. When I come along, I'm gonna pick it up and look at it just as intelligent as I know how and I'm gonna lay the ribbons down on it just like you left it. If there is any complaining about the judging, you're gonna have to take the rap." Well, that was my experience.

JEF: We're giving away our trade secrets.

RD: Now, that's what I'm thinking too. Talking too much.

JEF: Were you from the 96th county that no longer exists? Were you born in James County?

FD: I was born in James County.

JEF: Not only did you do away with the cotton, you did away with the county.

RD: We had most of Hamilton County, but we let them keep the name.

JEF: Were you one of the first 4-H members to go off to a national event from your county and/or the area?

FD: No, we had a number to go. The year before, Mrs. E.B. Boles in Knoxville and Mary Davis went.

JEF: Crosby, you mentioned earlier that you were at LMU working over there when Pat Kerr got you involved in doing some surveys for TVA. You used to tell a story about your baseball coaching days at LMU. Do you remember the story to help warm us up a little bit for the next discussion?

CM: Well, I can tell you this, I guess.

JEF: About the guy who was pitching, coaching. . .

CM: Yeah. We had a pretty good ball club and had two pitchers -- right-handers. We'd played about half the season out and played most of the schools once and maybe they'd come to our place and we'd go to theirs and double up. So, we were playing Maryville College and we were playing them up at Harrogate at LMU. When we'd been to Maryville and played, they had just beat these two pitchers I had to death. They'd just run them. One just got to where they were not in the ball game. They'd just beat us right and left. But they were coming up to play with us and we had a boy from Virginia -- no Kentucky I guess it was -- big, tall gangling boy. We called him -- his name was Loudenback -- and we all called him "Lousy". We couldn't remember Loudenback.

I decided that since he was a big left-hander and wild as a March hair, that I was gonna let him do the pitching. The boy that was catching was from down in Anderson County and that was at Lake City. I told him -- his name was Slover, called him "Bearslover," -- "Now Bear, don't let this guy get behind too far." I said, "Give him a target to shoot at and let him get the ball in there because if he gets two balls on them before he gets a strike, he'll walk everybody on the ball club." I said, "Give him something to shoot at -- fast ball, that's about all he's got. Fast and faster," and he said, "Well, I'll do the best I can."

So when they come to bat in the first inning, Bear gave him his target. Here he came in there with the ball and the guy hit it out over the first baseman's head and they had a runner on. The next guy that came in was, I believe, a right-handed hitter, and he gave this target. Here he came in with the ball and he hit out over the shortstop's head. They had two men on -- one on first and one on second -- only two pitches. The next guy came up and Bear gave this target and he come in there with the ball right in the pitching zone, right in the strike zone and the batter hit it right back at the pitcher. Knocked him down and the ball rolled around and somebody finally got hold of the ball. So they had the bases loaded. Had three pitches, three base hits and nobody out and there we were.

I thought by that time, maybe I ought to talk to the pitcher. I got up off the bench, started walking out and I motioned to my catcher. He came out and just before I got to the pitcher, the catcher got there, and I looked at the

catcher and said, "What's the matter with this boy? Hadn't he got anything on the ball?" He said, "How in the hell would I know, I ain't seen it yet."

JEF: Which reminds me that most people who have worked for Extension a long time never had great difficulty talking. I'm not sure we've always said everything that needed to be said. I can remember that the public address people would be out of business if they had depended on Hugh Felts to use them, because the first time I was in a meeting where Hugh was on the program, you didn't have to ask "What did he say?" because you could hear him.

Extension people have always been willing to express themselves and say what they felt needed to be said. Did you have any difficulty getting people to accept some of those early things that you were teaching? I'm thinking now about some of the earlier farmers conventions, area meetings, trying to get farmers to attend. The farmers convention was held in Knoxville for a long, long time, Frank, Crosby. All of you that remember the convention, give us a little background and history on some of our involvement in these kinds of meetings.

CM: Well, agents in most of the area in and round Knoxville would attend and bring in a few folks. I was in the county at the time. The program was out by the college and maybe the Experiment Station.

JEF: But directed toward the farmers that you were trying to bring to the meeting.

CM: That's right. They didn't come up with the right things. A lot of times, I thought those people spoke over our heads. We didn't know what they were talking about.

JEF: More likely, that's true.

FD: But we had an award that they'd give to the county that brought the most people in there.

JEF: Yes.

FD: The largest number of people -- they'd bring school bus loads into the one there that was held in Temple Hall back in the latter days. They may have held it in earlier times in another location, but Temple Hall was the first time I recall anything on that because that would have been probably the summer of '32 when I stayed up there and worked.

CM: I can go farther back than that. They held it in Temple Hall back in the '20s.

FD: Well, Henry Duncan was secretary of that for such a long period of time. He was in the department of animal science and he taught Angus cattle I think primarily.

CM: He was an Angus believer!

JEF: Prof. Duncan talked rather slow. I remember a student saying that he was the only professor they had that could take a nap between words and never miss anything. But he was a pretty sharp fellow!

AT: Jesse, Newt Odom and I were in charge of one of the programs one time in Knoxville. We had planned the program and of course publicized it and had gotten a speaker. We got the same speaker that they had in Middle and West Tennessee and she came from up North. So of course when she got here, I met her, went to the hotel and picked her up. As we were going out to the meeting, she said, "Are you speaking or are you singing?" You know that was a slight Yankee touch to my manner of speech. And I said, "Why, I'm speaking."

When we got to the stage, she was up there ready to make a speech and she looked back at the audience and saw all these nice and intelligent looking women and men sitting back there. She said, "I thought I was coming down here to poor people." She said, "I charged you just half as much as I would have otherwise." I happened to know that one of the ladies sitting in front -- white-black hair, black, oh, she just looked like a picture -- and I said, "You see that lady? She lives in Maryville or out from Maryville on a farm. She and her husband milked several cows. I knew the number at that time, before they came." It took quite a while and I don't think she ever quite understood just how our people could be so well-off, because she really thought she was coming down to speak to poor people -- backward.

FD: I think we made a lot of progress when we shifted that out to the Experiment Station for example. That's particularly true with agricultural phase of it.

AT: Yeah.

FD: Because you've got the people coming in there to see the Experiment Station, to see the things they were particularly interested in.

AT: You had big crowds.

FD: Well, I always enjoy coming up to the Station here. As I said, I grew up where there was no tobacco grown. Didn't know much about it. My first experience with that was working at the Experiment Station in Knoxville with Stanley in the entomology department. We were doing some work on insecticides, and he said, "Now I want you to bring me some good specimens of those horn worms." Well, when you see horn worms, those of us not familiar with it, a worm about the size of your finger and had a horn on the

end of it, you didn't want to have anything to do with it. But, I was to pick those off and put them in my pocket until I got to the end of the row where we put them in a box for him.

JEF: Frank, as a specialist, and those of you who were agents at the time, did you have a feeling during this early period that you were working that there was a pretty close union between the field staff, the county agents and the specialists staff -- that they were kinda in the same ball game?

FD: Very definitely. Just as an example, when Mr. Nichols was the state agent, Mr. C. E. Brehm, head of Extension, and other administrators and specialists -- you could start naming them off there -- John Robinson, Kirk Powell, Chadwell and Mr. Hutton, Colebank and Mr. Harrington and others. There was a time when we would get together, the fourth of July, for a picnic -- all of the families of the agents in the field and the specialists.

Mr. Nichols was trying to play baseball and he was having trouble with his back. He went to see Dr. Ed Clayton after the picnic and was telling him about it. Dr. Clayton says, "Well, what were you trying to do?" he says. "Well, I was trying to play baseball up there when I slipped and fell when I struck at that ball and missed it." Dr. Clayton told him, "Now look, you can't play baseball, you can't play football, you can't play basketball and you can't play tennis. Now then, get yourself somewhere and sit down and play some checkers. That will do your back some good."

That was the thing though. They came in there -- the families did, they brought picnic baskets. You talk about your buffets they have now at these fancy places. They sat a smorgasbord that would (be a) credit to any of them at the present time. It was a family unit. The kids were there. Something for the kids to do. There was something for the agents and their wives and the specialists and their wives. You really didn't feel like it was specialists and agents. It was a big Extension family.

JEF: We have more division of responsibilities than we had then when a lot of our people filled both kinds of roles, especially those on specialists staff. Today, many of our specialists come from out-of-state and to do a job to which they have been assigned. However, if you look at the early listing of people that were working with us, many of them were in county jobs who later became specialists. A lot of them went on and got additional training and degrees. You know they had a knowledge of each other that we don't have now.

FD: That's right.

Extension Personnel - Selection Process

JEF: Alta and Crosby, you and I have been involved in hiring and selecting Extension personnel to work in the county jobs. Make whatever observations you would like to make on some of the problems you had, some of the good feelings you had about selecting staff, anything that you would like to say.

CM: Alta, go ahead.

JEF: Alta was district agent at that time, responsible for budgets, personnel, all the things for home economics and Crosby was responsible for all those things relating to agriculture. Alta.

AT: I can tell you a wonderful story of cooperation.

JEF: OK.

AT: When I came here as district agent, there were six vacancies and some of them had been vacant over a year and a half. Back in those days -- I'm not blaming anybody because it was very hard to find people that we could employ as home demonstration agents. I had those vacancies filled in six months and I got three of them because Ruth and Frank knew about them and knew how good they were as trainees. You know Ruth was training the students at that time and they'd come in and tell me she will make you a good agent and I'd go and talk to them. I got three of them that way. You really had to hunt for them during this time and it was just good luck to be working with people that would cooperate, you know. Otherwise, it probably would have taken me many more months to have filled these places. It was Ruth -- they knew them real well, knew they would make good agents. They'd been their students, two of them at least. I'd forgotten about the third one. So that's the way we found good people.

JEF: Those folk who lost them got excited I guess, didn't they?

AT: Well, these were just out of college. Of course, in the others we got a few good, very good ones who were working as teachers. I don't know whether I did right or wrong, but I didn't fail to contact them just because they had a job. I just felt like, well, OK, if I have a job they want, they have a right to it. But the thing of it is we didn't just go out at random. We had to find our own employees at that time. Crosby, we didn't have anybody hired to find them for us. We would learn about them before we'd go to talk with them. Then we felt free to say, this is a job if you want it, and so and so.

JEF: What all did you have to do to finalize that employment?

AT: Well, when I got the application, we passed on it in the district office. Then I sent it to the state office and they approved it. Now that's assuming that we already had money from the county, an appropriation already for them and a county that wants the agents, you see. Then, we'd take them to the county office and they had to be approved by the Agricultural Committee and the county agents in the county office. Well, of course, we did that before we'd send in all of our applications to our people.

JEF: But more than likely, if you really had everything in order, you could hire a person in a couple weeks, couldn't you?

AT: Well, if you could find them.

JEF: That's what I mean, if you had an applicant.

AT: There was not much delay about it once you found them.

JEF: Crosby.

CM: One of the ways that I found folks was in talking to the people who were already working in the county. I'd be in the county visiting, talking about something or seeing them someplace else. You'd say, "We are going to have a vacancy or we've got a vacancy." Tell them in the county and point up some of the better programs that were going on in those counties and some of the weaknesses, maybe. I'd say, "If you know of somebody that might be interested in this, that you think can do the job, let me know and I'll try to contact them." You found a lot of people this way. I found, and I know some of the folks in positions like I had shied away from it, but I got some good help from the vocational agriculture people who had teachers in vocational agriculture who would like to get into Extension. We picked up a few real good people this way and did it with the friendship of Louis Carpenter (district or area vocational agriculture supervisor) and the people who were responsible to them.

AT: It was an ongoing thing to go over to the College of Home Economics at UT and TPI and Carson-Newman. It was an ongoing thing that I keep up with the graduates over there. At UT, it got to the place, you know, after a year or two, you'd know which professors were going to push them toward you and which ones would not. So we'd go to the university and find them too.

JEF: B.M. Elrod was the agricultural district agent and Oma Worley was the home economics district agent in about 1920. He stayed there until his retirement in 1957. Miss Worley became district agent in 1922 and she was there until about 1957 also. That's a long period of service for two people. It's a shame we don't have from them, Frank, you know, a lot of those things that took place during their days. Crosby, you worked with Mr. Elrod in the district office. Alta worked as an agent under Miss Worley. Hugh, you had a pretty good working relationship with Mr. Elrod. Any comments that you would want to make about his style of operating in the district, some of the things that he was attempting to do, anything that you would like to share with us there. Then we'll do the same thing about Miss Worley.

CM: Hugh, you've got the floor.

HF: Well, Mr. Elrod was very easy to work with. In other words, when he gave you the job and he left, he was through because he wanted you to take over and get the job done. That kinda indicated that he personally thought you could do the job and wasn't any need for him wasting his time telling you how. I worked with him that way. I worked in Middle Tennessee with Mr. Harmon and he didn't work that way. In other words, Harmon would tell you something and turn right around and tell somebody else. It didn't take me

long to get enough of that. Say I'd know more about those two than I do anybody else.

JEF: Crosby?

CM: Mr. Elrod knew the people in the counties well. I mean the agents and the people working in the counties, secretaries and so on. He would take that into consideration when he was looking for somebody to go into that county and work with them. In many cases, he would take this prospect to the county and spend half a day with the agent and the secretary, talking, maybe not even tell him that he was considering him for that county at the time. Then after an hour or two of discussion, why he'd manage to get the prospect somewhere else and he'd go to these folk and say, "Now do you think this guy can do the job? You think this is what you need?" If you did, he'd go right along then and do it because he had pretty well analyzed him before he'd brought him. If the folks in the county liked him, he'd do alright. He looked pretty close into your training and background experience before he employed you. At least, I thought he did, Hugh.

HF: Yeah. If he could find anybody that knew anything about you, he'd find that out.

CM: Yeah, that's right.

HF: Before he'd go to you.

JEF: Frank, you observed and worked with him.

FD: The thing that I recall so much about Mr. Elrod -- true enough, he knew his field staff quite well, but he also knew those key persons in every one of those counties who would direct you to and then work with the specialist -- although sometimes he'd give you the impression that he was downgrading or competing with specialists, this was not so. He knew where that agent could get the help and how to get that done. Coordination between the field staff and specialists would lead to harmonious relations.

JEF: Well, I was employed, as you know, when he was district agent. I remember most of us when we got out of school wanted a job immediately. We didn't want to wait two days, five days or whatever was necessary. I thought I wanted to go with the Soil Conservation Service (SCS) and map soils, so I took the Civil Service exam when I graduated in 1949. SCS had a waiting list in Tennessee and in a few other places. The only openings they had were down in Mississippi and Louisiana and I didn't want to go down there because I had just gotten out of the Navy and had come through Louisiana on the train. I didn't like the looks of the place.

Anyway, after I waited for almost a month, or something like that, I remember coming back to Knoxville on the bus and going into the district office up on the third floor of Morgan Hall at the agriculture campus. Selma Ruth was

secretary for Mr. Elrod. All of you know how congenial Selma is and how she could make you feel at home, especially a young applicant who was trying to get in to see Mr. Elrod to find out about job openings. I told her I'd like to see Mr. Elrod. She said, "Mr. Elrod is out in one of the counties. I don't know exactly where, but he is due back at the office this afternoon, so if you'll sit down there and make yourself at home for a little while, he'll be in and visit with you." About half hour before quitting time, Miss Ruth says, "I don't know where Mr. Elrod is. He should be back. Maybe he'll get in. If not, come back in the morning and he should be in the office." Well, I returned the next morning and went through the same thing on up through noon and Mr. Elrod still hadn't come back from wherever he was in the district.

I guess he had gotten in one of the counties with a problem and most of us who have been out in the counties working know what kind of things can happen to hold you up. Well, about 2:30 p.m. I guess, he came in and visited with me about an opening that I might be interested in considering. He said, "You go up to Claiborne County and visit with Tom Carney, county agent." I didn't know where Claiborne County was located. I had caught the bus to Knoxville so I went over to the bus station and caught a bus on to Tazewell. I got up there after dark and stayed in that old hotel across from the Courthouse, Crosby. I've forgotten the name of it.

CM: Russell.

JEF: The next morning at 8 a.m., I visited with Tom Carney. Mr. Elrod had told me after visiting with Carney to come back and see him in Knoxville. So I visited with Carney and then caught the bus sometime before noon and headed back into Knoxville. By the time I got to the district office, Mr. Elrod said, "Son, would you like to go to Claiborne County and work?" and I said, "Yes, I believe I would." He said, "Well, we've just decided that we're going to let you go up there and meet the committee. He didn't go to the committee with me. Crosby came and met the committee with me the following week. The point I'm making is that in about a week's time, you could get hired into the Tennessee Extension Service. Now, if you can get employed in three months, you're flying because of all the guidelines and regulations, affirmative action plans and contacts that you have to make. There may be some merit in the old system folk, in terms of effective employment procedures.

Extension's Involvement in Fairs

JEF: Let's take a minute and talk about fairs, especially the Knoxville Tennessee Valley Fair, Mr. Murray. Also, let's talk about exhibitors, some of the early folk involved in the fair and the impact that those kinds of institutions have had on our program and what we've had to offer to them.

CM: Well, the fair in Knoxville can be, if you look closely, traced all the way back to the First Appalachian Exposition of 1910. That was the big national exposition that was held there in 1910 and in 1911. I don't think they did much in 1912 or 1913, but they had another fair. Then they organized the

First East Tennessee Division Fair (1916) and that ran on until World War I if I'm thinking straight. I'm not sure. But they had some cancellations about 1917 or 1918. Am I right, Jesse?

JEF: Pretty close to it.

CM: Well, I'm not sure of the dates, but anyway, there was a period between the Exposition and the East Tennessee Division Fair and then there was a period of time between the Division Fair and the TVA&I Fair (1933), which is going on now. The Tennessee Valley Fair was organized in 1910 with the First Exposition. Some buildings were built out there. Some of the buildings were carried over from the Exposition, but they began to expand over there, do some work on the grounds and then come up with the Tennessee Valley Agricultural and Industrial Fair.

The businesspeople in Knoxville were real active in getting the fair started again. A lot of people like Carter Myers, who was involved with the fertilizer people and potato farm over in Cumberland County, was real active. Lay Packing Company's organizer and founder was active in it. East Tennessee Packing Company was active and a lot of the industries and businesspeople in the Knoxville area, which were related and tied to agriculture, were involved in getting it started. They thought it would be a good way to promote the Extension Service, Experiment Station and other educational activities and get it before the public so that the people in town could see what the people in the country were doing or vice versa. The people in the country could meet and talk to and see the townspeople. I think it's worked to that extent pretty well on down through the years. I don't know where to go from there, Jesse.

JEF: Well, that's a good place to wrap that part up. You earlier talked about Pat Kerr. Mr. Kerr must have had a lot of other talents. He came in as secretary-manager (1944-58) and I guess had a big impact on most everything at the Fair, didn't he?

CM: Yes, he did. There were other secretary-managers of the fair before Mr. Kerr. Right now, I don't remember their names. That's what happens when you get over 100.

JEF: Hugh D. Foust was secretary-manager from 1918 to 1938 and Charles A. Brakebill from 1938 to 1943.

CM: Leonard Rogers was there after Mr. Kerr (1958-64).

RD: Yeah, that's what I say, after Mr. Kerr.

JEF: I remember you folk saying that during this period you made some expansion and adjustments in the kinds of programs that the fair was trying to offer that related to our Extension and vocational work.

CM: Well, they set up a 4-H Club department and a future farmers and homemakers department, and of course, the home economics people in the area had a big influence in developing the fair, especially Mrs. McTeer, who was one of the early Fair pioneers. (Minnie McTeer, community leader, Greenback).

JEF: Emphasis was on the youth judging activities, shows and exhibits.

CM: Yeah.

JEF: The fairs across the state, I guess, have had their ups and downs. We still have several strong fairs. The Knoxville Tennessee Valley Fair and the Appalachian Fair both have been, during my period of service, very supportive of our Extension and vocational educational programs and have gone out of their way to involve us in helping to strengthen these programs. About anything, I guess, that we've asked for down through the years, they've tried to make that happen. Crosby, I guess you have had an impact on a lot of those developments.

CM: Well, I feel this way, and I felt this way when I was with the Extension Service and I felt this way when I was with the Fair, and still do...that the Fair is an opportunity for the Extension program to be presented to the public. The things that are shown at the Fair are things that Extension and vocational agriculture are working on back on the farms and in the communities. The fair is just the place to show how well they are doing -- whether we're doing anything wrong or not.

Extension Cooperators -- Lay People Involvement

JEF: Think about some individuals across the district -- lay people, farmers, homemakers -- that you remember that were very effective leaders in Extension related activities. Can you remember any of those? Frank mentioned earlier Arthur Burris in Campbell County and some of the work that he did up there that had an impact on people. So just think of a few of those early folk that you've known, that you've seen, that made a contribution to our work in East Tennessee.

FD: Mr. Overton in Anderson County.

JEF: What Overton was that? Oh, yes, W.S. Overton.

FD: That's Simp Overton. I can't tell you what his name is. That's just all I remember about him. The interesting thing is that he was one of those fellows that started out using some of the high analysis test demonstration program fertilizers. I never will forget a meeting at the university where there was some discussion about conflict between the fertilizer industry and our work with high analysis fertilizer. He was the only man in the room with experience that could say something and he said it and said it very effectively.

That was back when we were having fertilizer like 0-10-2, 10-2-2 or some such thing and one of the low-grade fertilizers was the proper thing to use. Mr. Overton was talking about using high analysis fertilizers and what it meant. Well, Mr. Overton was a great supporter of our Extension programs and after his death, I believe he gave Tennessee Wesleyan College (or Hiwassee) and the University of Tennessee a rather sizeable amount of money to be used for scholarships and works of that kind. That gift could be traced back to the early contacts with our Extension people in working with him in Anderson County. You could find people (who) liked him in most every county. Well, there was Bob Hanabass up in Washington County. I mentioned Arthur Burris over in Campbell County and Henry Clark in Grainger County. Folk that I remember looking over their farm records when we worked with them in Extension Service through the county staff. They played a very important role in our educational work.

JEF: Well, who are some of the individuals that you can think of that had a big impact in some of these counties that you remember working with, Crosby.

CM: Well, you know when you get a good forgetter like I've got, it's hard to recall the names of these people now.

FD: Roy Bell in Sullivan County.

CM: Yeah, Roy Bell was a good man in Sullivan County and I was thinking about that boy Ivan. What is his name?

JEF: Ivan Range.

CM: Ivan Range. Of course he wasn't married for a long time and finally, well I'm pretty sure he's gone now.

FD: "Double-A" Deacon.

JEF: Go ahead with some names that you recall, Ruth.

RD: I can see them plain as if it were today. Hanabass, we wouldn't have had a club without the Hanabass' at Leesburg and the Deacons.

JEF: What are their first names? Remember their first names?

JEF: Argill?

FD: Argill "Double-A."

JEF: Argill "Double-A" Deacon.

RD: Yeah, I call him "Double-A" Deacon. Dr. and Mrs. McCreary were in Fall Branch, Mrs. Kefauver was in Boones Creek, the Devines in Boones Creek,

the Keys in Sulphur Springs and that was where the Deacons were. These persons made up the membership of the county council. They came to almost every meeting. There were many covered-dish suppers. We all cried when Frank and I married because I had to quit my job.

The Deacons held a reception for us. They had this huge house with a stairway and they gave Frank and me my best china. Vernon Sims took care of all the arrangements and the whole county was there for a covered-dish meal. Vernon brought my china in a huge box down the stairway. He got to the second step and stumbled and all these dishes crashed. Everybody except me just had a ball. The box had old dishes that they'd put in to play a trick on us. They had a wonderful sense of humor and concern for their neighbor. They would fight to get me to come and spend weekends with them, to go to their church. So that's why you didn't talk politics or religion.

JEF: Alta, who are some of the folk that you might recall?

AT: You know, I'm kinda like Crosby, I can see their faces and things they are doing and I can't remember names that I'd like to remember. But I'd like to tell about this one person who has on my home economics council. She lived one mile from the highway so when it rained, the only way you could get out would be to walk out. So I remember her on this particular day when we had lots of rain, she walked out in the mud to the highway and my friend who was coming to the meeting, picked her up. She was a Seventh Day Adventist.

JEF: Yes.

AT: They do their worshipping on Saturday instead of Sunday. So when we'd have our 4-H Club Fair, she had very active children in the 4-H. They would bring all their entries ahead of time and then she would tell me, "Now Saturday, we won't be here, but you just take everything out and take it home with you." She was just about as faithful a worker as I think you could find anywhere with a lot of odds against them. I wish I could remember names of others, but I don't remember the names.

Extension's United States Department of Agriculture (USDA) Programs

JEF: One thing that we did not discuss when we mentioned it was our involvement with a lot of the new federal programs that came through the first administration of President Franklin Roosevelt in the early '30s. I believe we were handling a lot of the things that the ASCS office people are handling now such as allotments, crop quotas, etc. Frank, make whatever comment you would like to make about this period and our separation from these programs because of program conflict. We had to maintain an educational program versus programs that had acreage controls attached to them and that type of thing.

FD: Well, as I mentioned, the work I started with in March '35 was one of the control programs as far as cotton was concerned working Meigs, Rhea and Roane counties. I was stationed in the county agents office -- Bill Shadow's office -- when I went to Roane County. Later when I went to Greene County, I saw H.E. Hendrix, county agent, who was my contact.

All of this special work was done in the county agents office. Our people were responsible for the programs, but we did have difficulty maintaining educational programs separate from programs of quota controls. As a result, the decision was made that Extension could continue with our educational programs and not have conflict with our people because of the control programs. We phased out the control part of the program and continued in our educational role. I think the best example of what happened when the program areas were separated in our county offices was up in Claiborne County. This was true in other counties also where the equipment, the desk and the chairs and those kinds of things were supplied by the federal program because they had money, which those of us in the Extension Service didn't have.

When it came to the separation of the program areas, the county agent was left sitting on a nail keg as far as his office supplies were concerned. So we had to rework all of the county offices because of this action. At the state level, Mr. C.E. Brehm, dean of Agricultural Extension, was more or less the administrator of the program out of the state office and Fred Colby, later 4-H specialist, was involved in the state program.

As I have said, it got to the place that we were involved too much in setting up these allotments, the conflicts that come with that and the controversies that came up. Our administration in Washington and at the state level felt it's best that Extension Service devote its time to its educational work. We still talked about these various programs, how the farmers could use it and so forth.

JEF: We have continued to be the educational arm of USDA, even to this day.

FD: Yes, Extension was an educational arm when we left the adjustment administration, AAA, or whatever they called it at that time. Its name has changed many times, but is called ASCS now. The AAA became administrator of a particular federal program that called for making decisions, making allotments and allocating to the various growers the benefits of the program. This action really put us back in the educational business. I think that was a very important area for us to get in. We've been involved in various programs, cooperative programs of one kind or another, such as talking about how farmers could qualify for Social Security and working with them on records.

I wish I had the name of the farmer in Hancock County. He had the best idea I know of. I wish I could do it. I was talking to him about keeping his farm

records for income tax purposes. He says, "You know what I wish?" I said, "What's that?" We were there in a meeting and he says, "I just wish they'd let me send them \$50 and forget about all this."

HF: I wish the same thing.

JEF: OK, Ruth.

RD: Talking about federal programs and all -- you know every school today has a lunch program, but during the '30s, we had no lunch programs in any of the schools. But my home demonstration women in the communities were involved. We'd planned soup menus. I have a list of menus and recipes for soup which we used. Those home demonstration women would go at lunch and fix potato soup or vegetable and that really was a forerunner of federal lunch programs. That was one of the services that the home demonstration clubs decided that they could do in the wintertime especially. So I have recipes for soup where these women, the home demonstration women, went in and the 4-H girls would help them serve it and wash up after it was over. Now that's blown into a full-time operation.

Extension and Farmer Cooperatives (Co-ops)

JEF: We mentioned co-ops a moment ago. The Extension Service was involved in the cooperative movement with farmers in the East Tennessee area, including marketing, such as milk and wool, and farmers co-ops with supplies and services that we now know as Tennessee Farmers Cooperative. Crosby, make whatever observations you want to make about our involvement in helping to do those things necessary for these groups to organize.

CM: Well, I suppose most of these things grew out of a need, which the farmers recognized. In some counties, the Extension people were real active in getting their groups together and getting the thing set up and working properly. In other counties, Extension people were completely on the outside and didn't know anything about it and didn't want to. So I don't know, I think the co-op sorta grew out of a need for that kind of service to farm people.

JEF: Frank, what were you going to say?

FD: I think that's one of the things that happened there when we talked about test demonstration work in cooperation with TVA. They were involved in handling quite a little bit of money when they paid the freight and handling charges on that fertilizer. Who's gonna do it? So they had an informal organization to start with, but when they saw the need -- we'd better get this incorporated, so that there would be some protection there for the folks involved in it.

Al Jerden was very instrumental in getting that co-op set up and incorporating those organizations. They were handling money and who was gonna be responsible? From that, a good part of this Tennessee Farmers Cooperative,

grew out of those in the local counties. One of the things they said about the program that Al Jerden outlined on the way to setting up that state organization, was that it proved to be a successful one. In some of the other states, where they were not following the pattern that Al outlined, they ran into a number of difficulties. Tennessee Farmers Cooperative -- I don't know if the folks involved in it now know the history of Al Jerden, but those in just before the present administration at least would say that Al Jerden, the Extension marketing specialist, was primarily responsible for them having a successful organization.

CM: That's right and getting it set up to where it would work and still be a safe operation.

FD: That's right. Mr. Tom Hitch with Farm Bureau and Al Jerden were two of the big individuals in getting the co-ops going and getting it started on a safe basis.

JEF: One of the factors that did as much as anything, in my opinion, in getting the movement to the next level where it was stabilized, and then became a statewide co-op from these county units, was when the people at the local co-op level realized that they could not always take one of their own and let that person serve as a manager because they did not have the experience, knowledge and expertise. So many of the co-ops literally were going down the drain if you will remember in the late '40s, early '50s, until they began to put some folk in the manager's position that had more professional knowledge of what they were trying to do with the co-operative system. From that point on, they began to grow and prosper. I remember the one in Claiborne County when I started to work up there had been a large operation. They had lost business until they operated out of one little building in New Tazewell, and later, one little room. The same thing happened in Hamblen County.

Extension's Strengths During the First 75 Years

JEF: Well, I am sure there are a lot of other things that we could talk about, but let me ask you one other question. We're finishing our 75th year in Extension, still attempting to provide off-campus information to the people, trying to get them involved in youth work and things that will improve their family life and economic well-being. I'm gonna ask this of each of you. Why do you think, Alta Thomas, that we're still operating after 75 years, knowing what you know and what's taking place. Why do you think Extension is still alive?

AT: Well, it's something like a family. You've just got something that you can't get somewhere else that's helping people in their homes making a better life. That's just generally speaking. You'd have to go into a lot of detail to really prove it, but you can prove that there's no other place to get all of the different kind of valuable help that you can get from Extension Service. And I think, in spite of politics, people in the counties realize that.

JEF: Ruth?

RD: I think the people that envisioned this kind of service tried to recruit people that addressed very down-to-earth, grassroots needs in an unselfish manner. I've called them the greatest home missionaries because they thought first of practical down-to-earth service that we give without thinking one thing about how much is coming back to us. We have never entered the service to get rich but only as a service and educational organization. Now to me, there's a philosophy about Extension people and they're special.

JEF: We have a difficult time helping our new agents obtain that vision today because they just have not experienced some of these things that would make them have the same commitment as the early agents. Frank, why do you think we're still in business?

FD: I think it's that Extension people have a concern and their concern -- yes, one of the major objectives is working with farm people, farm men and women -- but right along with it, we also recognize that we must help the people in town. Being in Knoxville, you think of it more than you would out in the county where you have a smaller town. But they are also interested in what's going on out there in the field of agriculture or some of the problems they have confronting them.

We were selling apples at the Ramsey House Market the other day, and one of the ladies asked me, say, "Now are these clear of that spray material they are not supposed to be using?" They had heard something about that and they need education in that particular area also. I said, "Yes, we're trying to put a product out here for you to use that's safe and so far as I know, none of that has been used." In fact, I don't believe the Tennessee apple producers have used any of it at all in the past, as far as I know. That's the type of questions they are asking and the Extension Service is going to have to be where they can continue to answer these type questions and I think they are interested in doing it.

JEF: Crosby, we've about covered the situation.

CM: To me there are problems and questions that rural people have that we in Extension Service should know about, and most of us do. We're the channel between the authority where it's found and Experiment Station and other places to get that information to the public. I think in most counties, if you go out into the rural areas and talk to people out there and say, "Where would you find this information?" and they'll all tell you to go by the county agents office.

HF: We've sold the Extension Service to the many people that are using it and need it. All are going to where the people are and we're doing a pretty good job.

CM: That's right.

RD: Have a great respect, most people do, for Extension people. I think we've lived up to the goals that were set in the beginning. You all that are coming along have maintained something for us all to be proud of.

Extension Pioneers Concluding Comments

JEF: Would either of you in the closing moments, have an amusing something that happened to you that hasn't been said as an Extension agent, specialist, or whatever -- maybe funny, humorous, embarrassing -- anything you would like to relate.

RD: The most trying thing I ever had was the time I lost a senior with a carbuckle on her neck and her mother would not let anyone do the funeral service but me, her 4-H leader. It was in a church and they had put the casket in front of the pulpit. When I got there, Hugh Felts and the preacher had to get behind the flowers and lift me up three feet to get me on to the podium. So that was probably the most unusual thing I ever did as an Extension person.

FD: Jess, you know all these reports that Extension people have to make. I don't know whether they're making more now than they used to, but I remember one of those reports when I started to work with Mr. Bill Shadow. He said, "Don't you go out anywhere without coming back in and filing this report where you've been." So he came in the office the next day. I'd been out all afternoon before and he came and he says, "Good buddy, where did you go yesterday afternoon?" I told him and he says, "Where is your report?" I says, "Oh, I hadn't got that made yet." He says, "Well, suppose you had died last night, where would I have known to go to look for you to get that report?"

JEF: I think you ought to close out by telling us your story of enthusiasm for the job and how folk can recognize when we are enthusiastic and sometimes when we don't really mean it. About the church service here in the Greene County community where you were raised and about the ole gentleman who had a problem with drinking and how he'd get saved every time they had a revival. Can you tell us that one?

CM: No I can't. Go ahead and tell it, you know it better than I did.

JEF: He'd get religion every time a revival was held in your community and he'd say, "Fill me Lord, fill me full of the Spirit, just fill me Lord, fill me with the Spirit, fill me till I run over." This dear sister in the church got up and said, "Yes, Lord, fill Uncle Zeke, fill him full cause he leaks."

CM: I remember that now.

JEF: Well, we sure do thank you for all of your kindness in joining us today and we appreciate it very much. The university, before they will let me use quotes from all of you, collectively or otherwise, has instructed me to get you

to sign a release that you don't mind me using the material or else they won't let me use it.

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4-H CLUB WORK

Tradition, if not fact, indicated that Mertie Hardin was the first 4-H Club member in the state of Tennessee. The year was 1911. Mertie was a student at Chalk Level School in Benton County and became the first girl to join the newly formed Tomato Canning Club, a forerunner of 4-H Club work.

But not a single person or event can really be pinpointed as the origin of the now widely known and respected youth program. It evolved through hard work, dedication, need and enthusiasm in a special era of our states history. Credit must be given to those early Extension agents, community volunteer leaders, parents who wanted more for their children than they has as youth and the boys and girls themselves who took to the idea like a chicken on a june bug!

As the Extension Service celebrates its 75th anniversary, Tennessee has an enrollment of over 167,000 4-H Club members and 20,000 volunteer leaders. It leads the nation in national project winners and is considered the standard bearer for excellence in project literature, innovative teaching and international exchange programs.

Special tribute must go to the many 4-H Club agricultural and home economics agents whose training and expertise in subject matter, organizational skills and belief in the goodness of young people have produced members who possess strong character, good citizenship and the ability to function in the 21st century.

For a full accounting of 4-H Club work in Tennessee, the reader is encouraged to read "4-H. . .A Tennessee Tradition, published by the state 4-H Club staff in 1986 as part of the Bicentennial of the state of Tennessee.

4-H Club

Ben T. Powell, Professor and 4-H Leader

Overview

Many Tennessee 4-H'ers have come to believe that Mertie Hardin was the first 4-H Club member in the state. She did raise her hand when Virginia Moore asked, "Who will become the first member of the girls Tomato Canning Club in Tennessee?" However, there is no exact documentation of the meeting at Chalk Level School where Mertie raised her hand.

No single person or event can be credited with the origin of Tennessee's 4-H Club program. The hard work and dedication of many 4-H members, leaders and agents stand as guideposts to the development of 4-H in Tennessee.

As early as 1902, agricultural clubs for farm youth were originated in the Northern states. But even as demonstration work for adults spread to the South, teachers formed boys and girls clubs. The clubs helped to bridge the gap between reading, writing and arithmetic and the realities of rural life. Schools and their superintendents appreciated the clubs as a means of getting parents and teachers together.

4-H Club work can be traced to the Farmers Cooperative Demonstration movement in Texas. Demonstrations had been a productive means for teaching farm methods. In November 1906, W.C. Stallings of Smith County, Texas, became the first county agent in the United States. Boys assisted him with the men's farming demonstrations. Stallings soon realized that the boys learned a great deal by working with the adults and they would benefit from their own organization.

Supplementing the usual schoolwork of rural youth, boys' corn clubs were first organized in Mississippi in 1907 and in Tennessee three years later W.W. Campbell was sent to Jackson to supervise the demonstration work. By the end of 1910, 12 counties had formed boys' clubs through the cooperation of county school superintendents. Thomas W. Early was appointed as state leader of Boys' Corn Club work. Nearly 1,700 members were enrolled in McNairy, Madison, Tipton, Gibson, Fayette, Dyer, Weakley, Crockett, Lauderdale, Shelby and Bedford counties.

County agents were hired in six of those counties in late 1910 and early 1911. They worked three days a week for nine months each year. The remainder of their time was spent on their own farms. One of the popular

remainder of their time was spent on their own farms. One of the popular educational activities for farmers in the early 1900s was attending fairs. In order to include boys, a Boys' Encampment was held at the 1912 State Fair in Nashville. Seventy boys attended the week-long event.

At the time boys' corn clubs were being organized in Tennessee, a school teacher in South Carolina organized the girls' tomato clubs. In that same year, the USDA sent Virginia Moore to Tennessee. With offices in Nashville, she supervised women's demonstration clubs, girls' tomato clubs and agents. The first agents were employed in the canning season of 1911. The state Board of Education and the Rockefeller General Education Board, in cooperation with the county boards of education, funded their work for that season.

The year after Virginia Moore came to Tennessee, she held meetings for girls who were interested in girls' tomato clubs. On one legendary day at Chalk Level School in Benton County, Mertie Hardin raised her hand and became one of Tennessee's first 4-H'ers. Obviously, Boys' Corn Club members had been enrolled prior to that meeting.

Virginia Moore, state leader for girls' tomato clubs compiled "Canning Club Work in Tennessee" in 1913. The manual included directions for preparing a tomato bed, growing prize tomatoes and canning. It also gave a summary of contests from the State Fair in Nashville. The early years were filled with contests, which were devoted more to promotion of agriculture and homemaking than to demonstration of better methods. Six counties participated in the state canning contest at the fair. Hamilton County canned 81 three-pound cans of tomatoes to place first in the main event; Benton County placed second. Metie Hardin won several individual awards: best illustrated booklet, best club exhibit, best collection of recipes and best drawing of her one-acre plot.

Club meetings were described in 1916 by a member of the Huntington Club: "We had club meetings every two weeks in the fore part of the summer, but since canning began, we haven't had any. At these meetings we carried out the regular program and then there were always some refreshments served. Our club yell is as follows: Zippedy Zip Zippedy Zee; Auch du lever; Who are we? Rack Caddie Zack Zick Halabalou. We are the Huntingdon Club. Who are you?"

"On May 20 we had an all day rally at the courthouse in Huntingdon. In the fore noon we had some good speeches; at noon we canning club girls served dinner on the lawn. In the afternoon the club girls and boys went to different rooms. At our meeting we learned how to make a fireless cooker. Miss Kinsey, our district agent, gave us a talk on our record books. The word record stands for many things."

During World War I, club work in Tennessee and the nation expanded to two new audiences, non-farm and black youth. Everyone was interested in food production for the war. Two black women and three black men were hired as agents in 1916. Black clubs were established when agents realized the best way to reach adults was through their children. The black club work was similar to that of the whites and was supported largely by volunteer leaders.

As enrollment grew in the boys and girls clubs, the cloverleaf was established as the emblem of young people's work in agriculture and home economics. However, a cloverleaf was only part of the design; boys' emblems had included a grain of corn. Some of the designs used three-leaf clovers; others used four-leaf clovers. O.H. Benson, a county school superintendent in Iowa, used a three-leaf clover and H's to represent head, hand and heart. The suggestion to add a fourth leaf to the clover and an "H" for hustle was made at the USDA. Another suggestion from USDA was to use the motto, "To Make the Best Better."

While many different emblems were used, the Girls' Club needed a simple design to use in labeling their canned products. O.O. Martin from USDA made a decision to add a "4" in front of an "H" for the emblem. This new design was used on badges, pennants, banners and uniforms. To coincide with the emblem and the motto, clubs changed their names to "4-H." An official emblem and pledge were adopted in 1927 at the first National 4-H Camp. The phrase "and my world" has since been added.

As the membership grew, it relied upon the expertise of its leaders. Most of the demonstration agents were practically trained individuals. Some may have attended Tennessee's land-grant universities, the University of Tennessee or Tennessee Agricultural and Industrial College.

Land-grant universities had been established under the Morrill Act of 1862. The act gave Tennessee 300,000 acres of land to build a university. In 1872 Blount College became The University of Tennessee in accordance with the act. The second Morrill Act of 1890 created land-grant universities for blacks; thus, Tennessee Agricultural and Industrial was established in 1909. In 1968, it was renamed Tennessee State University.

In an attempt to base agricultural teaching on more scientific research, the Hatch Act of 1887 created experiment stations. Experiment stations were not only a research base, but also an educational link to farmers who could not leave the farm to attend a university.

Based upon the philosophy of the land-grant universities and the experiment stations, the Smith-Lever Act of 1914 created a nationwide system for transmitting knowledge directly from the researchers to the people. In Tennessee, this organization was UT's Division of Extension Service. The

Farmers' Cooperative Demonstration work and Boys' and Girls' Club work, which had been associated with county boards of education, were merged with the Division.

The Agricultural Extension Service continues to serve as a foundation for 4-H work in Tennessee. With its guidance, Tennessee's 4-H program has grown and adapted to meet the needs of the members.

State History

When 4-H'ers think about their early club work, they remember projects completed and camps and events attended. The Tennessee 4-H program developed in much the same way. Camping began in Tennessee before 4-H was the organization's name. The summer of 1927 was the first widespread camping program; 35 counties from all areas of the state had camps. That year the camps were scheduled from the middle of June until late in September. Plans were made for the first State 4-H Camp two years later. That camp was to become known as State 4-H Roundup.

Just as a young member's experiences expand, the counties needed to expand their camping programs to the district level. In 1925, the "Tennessee Extension Review" said that, "the district camps for boys and girls in agricultural and home demonstration clubs, which were held during the month of July, set a new record for the state in point of attendance with over 800. The largest camp in 1925 was the district camp held at the experiment station near Jackson. Military companies in Jackson loaned tents for the campers."

At the time district camps were established, a national camp was also planned for 1925. National 4-H Club Camp served as a recognition for members with ability and leadership. It also helped to give rural youth an opportunity to become better acquainted with the work and facilities of the USDA, to study their government and to confer with representatives from other states. During the 1950s the name was changed to National 4-H Club Conference and the delegates role was changed from recognition to advisory. National 4-H Club Congress served the purpose of recognition. While continuing to learn about government, the delegates also began giving direction to the national 4-H program.

Tennessee sent its first delegation to National 4-H Camp in 1927. Delegates were selected on their records of achievement, participation and leadership abilities, as well as essays and physical fitness. As the camp changed its focus and became a conference, Tennessee changed its method of selecting delegates. It was decided that delegates who were in state leadership positions would benefit most from attending the conference and would be able to give more input to the national program. Today, Tennessee's delegation is made up of State 4-H Council representatives.

The 4-H Club programs established during the 1920s were geared toward rural youth. The events and projects make this evident. Fairs and expositions were the sites of the popular judging competitions. One of the first cattle shows for 4-H Club members was held in 1928. Boys' work expanded from corn clubs into potato clubs, calf clubs and pig clubs. Girls enjoyed bread baking contests and food preparation, clothing and nutrition judging events. But girls also participated in the agricultural events.

By the end of the decade, 29,000 rural boys and girls were enrolled in 4-H and actively involved in their projects. Because of their excellent 4-H Club work, many members received college scholarships from private donors.

By the mid-1930s, enrollment in Tennessee 4-H Clubs had grown to 55,000. Because Tennessee members were proving to be so successful in activities, achievement programs became popular. Fifty counties held achievement programs on Nov. 6, 1937. That day 40 trips to National 4-H Club Congress and other events were awarded.

The achievement days eventually grew into achievement weeks in the 1940s. Radio broadcasts and a "Report to the Nation" were included in the week's activities. On one occasion Tennessee previewed its color movie, "4-H Looks Forward." The film included scenes of Tennessee and the national camp's theme of "4-H in a Changing World." After many years of success in bringing 4-H into the country's mind, the annual event became National 4-H Week.

During World War II, Tennessee 4-H Club members were involved in buying war bonds and stamps, collecting salvage materials, providing extra farm labor, producing feed for livestock and producing food for the servicemen. More than 1,500,000 pounds of "food for victory" were produced by 15,000 4-H Club members. Vegetable gardens, fattened calves and pullets grown by members were given to the war effort.

Because Tennessee 4-H Club members made such a great contribution to the war effort, the U.S. Maritime Commission granted them the honor of naming a ship. They chose to remember Charles A. Keffer, former state Extension director, who was known throughout the state for his 35 years of service. Extension personnel and two Tennessee 4-H Club members, Evelyn Inez Mikel and Carl Holmes, were included in the christening ceremonies. At the time of the ceremonies in 1944 in Savannah, Ga., over 85,000 4-H Club members back in Tennessee cheered with excitement for their efforts.

The first State 4-H Council was elected at State 4-H Short Course in 1944. In the next five years, the short course was renamed 4-H Club Roundup and took on a special significance as the place where Tennessee's highest 4-H recognition, Vol State, was presented.

The first Vol State award in 1947 was presented posthumously to G.L. Herrington. Herrington had died earlier in the summer. Much of the growth and excellence of Tennessee's 4-H Club program was credited to Herrington's 27 years as state 4-H club specialist. An agricultural scholarship bearing his name was later established.

One of the legacies Herrington left was the State 4-H Conservation Camp, which led to a system of subject-related conferences. The first State Conservation Camp was held in 1938 for older boys and leaders. At that time it was widely believed that camping provided an ideal educational situation for developing an understanding of the necessity for natural resources. In 1940, the camp was held at Montgomery Bell Park. Each day of the camp was filled with demonstrations of natural studies and game and fish management.

Until 1966, there were two separate conservation camps -- one for blacks and one for whites. That ended with desegregation. By the early 1970s, conservation camp was updating its image. The camp became a "conference" and the program expanded to include gun safety, water safety, forestry, soil conservation and entomology.

Another natural resource-related conference began in 1954. Two delegates from each of the Tennessee Valley Authority counties attend Fontana 4-H Club Resource Development Conference. Other TVA states are included in the annual conference. To prepare for the conference, delegates write an essay on natural resources in their area. The workshops continue to feature study-group discussions of opportunities for developing human and natural resources. Highlights of the week include a trip to Fontana Dam and nightly square dancing.

To recognize county winners, the Tennessee Wildlife Resources Agency started sponsoring the 4-H Junior High Wildlife Conference in 1973. Classes have been somewhat similar to those at conservation conference, including wildlife ecology, hunting safety, fish management and amphibians and reptiles. Delegates to the conference have the opportunity for hands-on experience. In a contest similar to the "TV College Bowl," the delegates demonstrate their knowledge of wildlife. Those attending the conference have also had the opportunity to hunt snakes, eat wildlife mystery stew and join the snake-bite club. All of the activities are designed to teach younger 4-H'ers the significance of wildlife management and develop leadership and self-confidence.

In 1974, the 4-H Sheep Conference was begun to help 4-H members and parents learn more about the 4-H lamb project. Bringing in live animals helps to teach judging and grooming techniques. The conference is held on a weekend in order to include parents. In the past decade, the conference has grown and exceeded the dairy and beef conference.

The late 1940s brought many new plans and revised programs for Tennessee 4-H. Project work was divided into junior high and senior club work. The first program handbook was prepared. State 4-H Congress with all its regalia was begun in May 1948. Several of the support and recognition groups were created at this time. Vol State, All-Stars and Honor Club were also established, but were not associated in those days. Many of the programs were ideas of Paul Rose, state 4-H leader in 1947 and 1948. When Rose left the position, Lonnie Safley became state leader and continued the programs.

During this same period, sponsorship for black 4-H Club members grew. State winners were recognized in about 15 project areas at their own state short course held at Tennessee Agricultural and Industrial College. Beginning in 1948, Tennessee sent eight delegates to the Regional 4-H Club Camp. One of the highlights of the camp was the awarding of four \$300 scholarships to members who had an outstanding record in 4-H Club work.

While Lonnie Safley was state 4-H club leader, securing volunteer leadership and sponsorship was emphasized. Safley also worked with the Young Farmers and Homemakers. The Extension Service became a co-sponsor of the group, which included many former 4-H'ers. The State Volunteer Leaders Organization and the 4-H Foundation both grew. But the need for leaders on the county level was great.

In 1959, the 4-H leader training in depth program was started as a pilot project in Dyer, Washington and Wilson counties. To begin the program, each county agent estimated the county's needs for leadership. Then the counties set up seven training sessions to meet those needs. For several years the program helped to build Tennessee's volunteer leadership.

When George S. Foster took over leadership of the state programs in 1956, Tennessee programs and projects were growing. Interstate exchanges became popular in counties; a brochure to help counties locate exchange partners was compiled by the National Council. 4-H'ers learned about their peers in different states through the exchanges. Counties continue to participate in the exchange.

Another program that Tennessee 4-H'ers became active in during the 1960s was National 4-H Citizenship Short Course in Washington, D.C. Members spent a week at the National 4-H Center while increasing their citizenship awareness and leadership abilities. Two international exchanges that Tennesseans have participated in are the International Farm Youth Exchange and the Canadian National 4-H Club Conference in Toronto.

During Foster's tenure as state 4-H leader, Tennessee 4-H celebrated some of its finest moments. By 1971, Tennessee held several first-place national rankings for project enrollment. Those projects were dairy, horse, field crops,

tractor, electric, foods-nutrition, clothing, arts and crafts, entomology, poultry, public speaking and photography. The total membership was 134,000. Five years later that number grew to 192,334, an all-time enrollment high. That increase was mainly due to extra agents in urban counties who were able to bring in new audiences and the Special Program in Food for Youth, SPIFFY. As enrollment in clubs was growing, new 4-H groups were being organized. Collegiate 4-H, TAE4-HW and 4-H Alumni were organized to meet the needs of those interested in the Tennessee 4-H program.

As the 1980s approached, Tennessee 4-H excellence was a focus for the nation as thousands of dollars were awarded to Tennessee's national winners. In 1979, Tennessee set the national record for the largest number of national winners with 28. Tennessee has continued to lead the nation in 4-H project winners since that time. Members from Tennessee have received extra trips to National 4-H Congress due to the success of their fellow members.

In 1981, Ben T. Powell became state 4-H leader. Through his guidance, new programs have been initiated and others improved. The support groups for 4-H have intensified their efforts, individual members have received much personal recognition and programs have shifted to meet the needs of urban and information-based programs. For example, the Union County 4-H computer project group was established to help members learn basic programming. Members are then able to use their home computers with their other 4-H projects.

The Tennessee 4-H Foundation has greatly aided sponsorship. Through sales of "Good Cooking," both county and state programs have gained recognition, as well as money.

Two programs that show the new emphasis for the Tennessee 4-H program are the statewide DART (Dramatic Action Report Team Workshop) and the Tennessee/LABO exchange program. Since 1982, the Tennessee/LABO exchange program has affected the lives of 4-H'ers, their families and their communities in more than 50 counties. This unique exchange allows 4-H'ers to host Japanese LABO members in their homes and to travel to Japan to visit those families. By sharing their lives with a host brother or sister of about the same age, the members discover a new lifestyle, set of customs and values.

In July 1984, 4-H'ers had their first opportunity to attend DART. Designed for junior high and senior members, the workshop helped members recognize their expressive abilities, become skilled at sharing those abilities and learn to appreciate and use a variety of art forms. The week includes intensive training in music, dance, drama, costumes and makeup.

In all of their endeavors, 4-H members have a way to express their talents. Three 4-H members who have received personal recognition for their efforts in 4-H projects are: Tracy Owens of Henry County, Carl Gleghorn of Lincoln County and Jane Prince of Hickman County. In 1973, Tracy had her poster selected for the national theme. Carl's poster theme, "4-H Building on Experience," was chosen in 1983. Jane, 1983 state poultry winner, was selected in a worldwide essay contest to attend the World Poultry Conference in Helsinki, Finland.

While many programs are still based on agricultural and home economics topics, all of the activities are a sign of the modern outlook of Tennessee 4-H programs. It is possible the effects of these activities will not be seen for another decade. However, programs are constantly focused on the future of the Tennessee 4-H and its members.

Projects

Demonstrating methods of agriculture and home economics was the early objective of 4-H Club work. Contests were important and they were rooted in project work. Several projects that are sponsored nationally today -- food preservation, clothing, swine, garden, field crops and beef -- may be traced back to early club work.

Other projects have evolved as 4-H prepared for the future. For example, rural electrification was a popular project that began in the 1930s; today, there is an electric project.

Some projects that had been popular were dropped. The cherry pie contest was a highly-celebrated 4-H project. Today, it is a part of the foods and nutrition project but is no longer a separate contest.

Each project has helped its members grow. Learning the subject, keeping records, leading others and demonstrating are the basis of project work. However, there is also potential for 4-H members to base careers on their projects. It seems that projects are the key to making the best better.

Automotive

As the country turned the corner from the 1950s to the 1960s, 4-H officials realized that youth training in the safe operation and proper care of motor vehicles offered a fertile area to develop responsible attitudes.

In the mid-1960s, Albert Swearington gave leadership to early program development in Tennessee. Emphasis was placed on safety, care and maintenance.

From the beginning, the Firestone Tire and Rubber Company provided financial support for awards and travel expenses to meetings.

Program responsibilities were transferred to H.O. Vaigneur in the early 1970s. At that time, the driving event was added. Those events were held at the county, district and state levels to select a boy and girl winner to participate at the regional level.

The first regional events were held at Rock Eagle, Ga. Karen Palmer from Whitehouse won first place in the 12-state region in 1972. Since 1975, these activities have been in Richmond, Va., as part of the Eastern U.S. 4-H engineering event.

Beef

December 1917 marked the first Fat Stock Exposition held at the Nashville Union Stockyards. The show was held for both juniors and adults. Sen. A.L. Todd of Murfreesboro exhibited the grand champion steer.

In 1924, the show was moved from the stockyards to the state fairgrounds, where it was held until 1930. That year the show was moved back to the Nashville Union Stockyards and held at that same site until 1971 when the stockyards closed.

The closing of the Nashville Union Stockyards forced the steer show site to be re-evaluated. A junior beef heifer show that started in the early 1950s was being held each July at the Ellington Agricultural Center; it had outgrown the facilities by 1971. In 1972, the junior beef heifer show and the junior market steer show were combined into one extravaganza called the Tennessee Junior Livestock Exposition. It was held at the state fairgrounds in July.

The Tennessee Junior Livestock Exposition has grown into the largest junior livestock event of its kind in the South. The 1985 event saw 1,000 4-H and FFA boys and girls from 79 counties exhibit 2,164 animals.

Beekeeping

The 4-H beekeeping project was initiated in Tennessee in 1971. A limited number of states have either full- or part-time Extension agriculture specialists in the area and there is not a national sponsor for the project. The Tennessee State Beekeepers Association has been a state sponsor since 1976.

Melissa Hart, the 1982 state winner, was crowned American Honey Queen in 1983 and represented the American Beekeeping Federation.

Approximately 1,850 boys and girls have enrolled in the project each year. Project literature has been developed. Beekeeping exhibits, classes and demonstrations have been conducted for project members attending the 4-H camps.

Bicycle

When Pierre and Ernest Michaux designed the velocipede in 1855 in Paris, little did they know that more than 16,000 Tennessee 4-H'ers would be riding velocipedes of their own in 1986. However, the Tennesseans call their velocipedes bicycles.

Bicycles were popular in the 1950s and 1960s as a primary mode of transportation for youngsters. By the 1970s and 1980s, bicycles had become more of a recreational and fitness vehicle. The 4-H bicycle project began in 1968 and was sponsored by the Tennessee Department of Agriculture.

Al Swearington was the first state specialist to guide the project. The first state winner in bicycle project was Betsy Talley in 1982.

Bicycle project materials teach members about ownership responsibilities, care and maintenance, repairs and safety. Special emphasis is given to traffic laws that apply to bicycles and automobiles traveling the same roads.

Bread

One of the earliest accounts of bread baking contests in Tennessee as reported by the "Tennessee Extension Review" in September 1921, was held at the Middle Tennessee Farmers' Convention. More than a half dozen counties had representatives in the contest. Flour for the demonstration and the winner's prize was given by the Ford Flour Company of Nashville.

Grace Whitesell, age 14, and a member of the Girls' Club of Berlin, won an all-expense paid trip to the International Livestock Show. That event was known as the world's greatest event of its kind and was held in Chicago.

In November 1921, the winner from District IV won an all-expense paid trip to the International Club Convention to be held in Chicago during the same week as the livestock show. The prize was given by J. Allen Smith Company of Knoxville.

There have been six national winners in the bread project since 1975.

Citizenship

Enrollment data for the 4-H citizenship project can first be found in the 1958 Tennessee 4-H enrollment report. At that time, 4,942 members were recorded. Whether or not this was the beginning of citizenship as a project in Tennessee is not clear.

However, the very nature of the 4-H program encouraged boys and girls to acquire life skills that would be essential for individuals to become responsible, active citizens. It would be safe to say that citizenship activities were conducted since the beginning of the 4-H program.

Enrollment in the citizenship project has fluctuated through the years. There were 7,253 members enrolled in citizenship in 1985. Tennessee's first national winner in citizenship was Sara Traughber of Robertson County in 1954. There have been 11 since that time.

4-H members are given the opportunity to share and develop skills through activities on the county, district, state and national levels. These activities are designed to help the members demonstrate social responsibility, gain insights into the principles and processes of democracy, contribute to community development and learn how issues affect the people of the world.

Some of the activities include 4-H Citizenship Washington Focus in Washington, D.C., State 4-H Congress in Nashville, 4-H community pride activities, 4-H All-Star activities and 4-H exchange trips.

Clothing

The clothing project had its beginnings in the late 1920s. Through the years, it has progressed from emphasis on aprons, which were made to use along with the tomato canning project, to clothing suitable for school, sports, best wear and special occasions. Enrollment reached its peak in the late 1960s when more than 37,000 Tennessee 4-H'ers made garments.

The first 4-H clothing manual, "Adventures in Sewing," was developed by Mary Jane Bell, clothing specialist in the early 1950s. The clothing project has been sponsored by Rich's and Miller's department stores for 25 years.

In 1984, the basis for selecting the state winner was changed from demonstrations to interviews. Since 1959 when the first state winner was selected, three clothing winners have chosen to become Extension home economists. Mariana Mayfield, the 1982 state winner, was also a national winner.

Community Pride

First undertaken by the state 4-H All-Stars in 1974, the 4-H community pride program has developed into a statewide activity. 4-H'ers of all ages may participate. Groups of 4-H members learn to analyze their communities, identify problems and design and carry out projects to solve those problems.

Currently sponsored by the Tennessee Farm Bureau Federation, community pride offers unlimited citizenship and leadership opportunities for individual 4-H'ers.

Project reports are submitted and evaluated at the end of the year. The outstanding county from each district is selected; a state winner is chosen from the district winners. District and state-winning counties are recognized at State 4-H Congress each year. 4-H community pride utilizes many volunteer adult leaders, teacher-leaders, outside resource people and other civic and educational groups to carry out successful projects.

Nearly all Tennessee counties have participated in the program through the years. Projects generally fall into four broad categories: people development, community organizations and facilities, environmental improvement and economic development.

Conservation

The conservation project has been active in Tennessee for many years. Until recently, the conservation project primarily comprised educational programs and materials in the subject matter area of soil and water conservation. However, in 1981, the conservation project was updated and expanded to eight units.

These units included rocks and minerals, water and air, soil, forestry, wildlife and fish, energy, human resource and citizenship responsibilities and career opportunities.

Approximately 1,500 4-H youth participate in the conservation project each year. The John Deere Company is the national sponsor and the Tennessee Department of Agriculture is the state sponsor of the project.

Dairy

The 4-H dairy program has been of real value in educating Tennesseans about dairying and working with people for many years. Clyde Chappell, retired Extension dairyman, was on the Maury County 4-H judging team that placed second at the national contest in 1934. Other members of the team were Wilson Jones and James McMeen.

It is interesting to note that the McMinn County team placed second at nationals in 1985. Members of that team were Nan Riley, Sarah Prince, Suzy Armstrong and Jean Marie Powell.

The Tennessee junior dairy show has been a popular event through the years. In 1941, Lewis Robinson of Giles County owned the grand champion Jersey. William Edmondson of Davidson County had the grand champion Guernsey in 1946.

Madeline Miller of Shelby County had the Holstein champion in 1952. In 1962, Guy Pitts of Lincoln County owned the Brown Swiss champion and the Ayrshire champion was owned by Mabel and Ophelia Hicks of Davidson County in 1964.

In 1982, a state showmanship contest started with Brenda Noland of Williamson County winning in the senior division, John Bayless of Lincoln County winning in the junior high division and Terri Jo Todd of Marshall County winning in the junior division.

Dog Care and Training

Maybe because young people love pets, the dog care and training project has always attracted large numbers of 4-H members. In 1985, that number reached 19,015 in Tennessee. Five project manuals have been written by Ralph F. Hall, Extension specialist in veterinary medicine who has given leadership since 1973.

In 1985, Rea McLeroy of Lincoln County was state winner and one of six national winners and continued a long succession of national winners in this project.

Economics

The 4-H economics project, originally for senior members only, was started in 10 pilot counties in 1971 with one unit on credit. Sponsorship by the Tennessee Federal Land Bank Associations and the Federal Land Bank of Louisville was instrumental in getting the project started.

Ray Humberd developed the pilot project and the first literature for members. Today, about 3,000 junior high and senior 4-H'ers are enrolled. They use six units of project literature. This literature is supplemented by a leader guide and slide set.

The state winners participate in National 4-H Congress and the commodity marketing symposium at the Chicago Board of Trade. The project emphasizes

decision-making, budgeting, managing, marketing and understanding the role of economics in our lives.

Electric

The rapid electrification of the rural area and small towns of Tennessee following World War II stimulated intense interest in the subject of electricity. In 1948, representatives of Tennessee Extension Service and the newly formed Rural Electric Cooperatives joined hands in the initiation of a 4-H electric project in Extension.

One of the early focal points of 4-H electric activities was the 4-H electric demonstration days at the local, county and district levels, an activity that was the forerunner of a Tennessee tradition in 4-H.

Electric cooperatives have provided strong support for the project at the local and state levels. The project has maintained a hands-on approach to the application of electricity for improvement of the quality of life for Tennesseans. The project has contributed to making electricity the "second greatest thing" in the lives of rural people during the past 45 years.

Entomology

The 4-H entomology project was initiated in 1950 by R.P. Mullett, the first Extension entomologist and plant pathologist with UT.

There are approximately 3,500 boys and girls enrolled annually in the project. State project winners representing Tennessee at National 4-H Congress have been named national winners seven or eight times since 1950. Penny Thompson, the 1985 state winner, was the recipient of the Howard Brewer award for Outstanding Young Entomologist in Tennessee and The National 4-H Entomology award.

During the years since 1950, Hercules Incorporated, Mobay Corporation, Ciba-Giegy Corporation, the Tennessee Farmers Cooperative and Hill-Smith Pest Control Company have sponsored the project on a national and state level.

Fashion Revue

The fashion revue began as part of the clothing achievement project with competition on the county and district levels. Sears, Roebuck and Co. became an early state sponsor.

The site of the state competition rotated between Memphis, Knoxville and Chattanooga. The local store hosted the event in each town. The state Department of Agriculture picked up the sponsorship in 1972.

The fashion revue has been good training ground for future Extension workers. Since 1942, four state winners have become employees of the Tennessee Agricultural Extension Service; three as Extension agents and one as a clothing specialist. Fashion Revue has enabled participants to develop poise, improve personal appearance and promote wardrobe planning.

Field Crops

The field crops project has been active for many years. When boys' corn clubs began, field crops were a part of the program. By 1930, field crops were included in the boys' 4-H record.

Through the years, most of the members grew either cotton, corn, tobacco or soybeans for their project. 4-H'ers competed at both district and state levels.

Today, the state winner receives a trip to National 4-H Congress in Chicago sponsored by the Tennessee Department of Agriculture. Ten scholarships to State 4-H Roundup are sponsored by Tennessee Seedmen's Association.

Approximately 8,000 members enroll in field crops each year. As a part of their project work, members learn about and grow specific crops.

Food Preservation

Girls' Canning Clubs were established in 1912. Girls of the gardening and canning clubs featured their work at rallies and fairs.

The October 1932 "Tennessee Extension Review" mentions winners from the Mid-South Fair. Participants from Shelby County won first place in judging canned products over state teams from Arkansas, Mississippi, Louisiana and Kentucky. Tennessee's cooperation with the Mid-South Fair activities continues with District I playing a most important role in this education activity for youth.

There have been 11 national winners in the food preservation project since 1975.

Foods and Nutrition

While cooking was indicated as a youth project in the 1919 history of Extension's youth activities in Tennessee, the nutritive value of foods was

seldom mentioned. Nutrition was surely a by-product of the teaching of proper cooking methods for food.

Tennessee's teams won first place in nutrition judging of breads at the All-South Club Congress in Memphis in 1929.

There have been eight national winners in the foods and nutrition project since 1975.

Forestry

Although there was limited 4-H forestry project work prior to 1952, that year South Central Bell Telephone Company became the state sponsor. At that time, about 350 4-H members were enrolled in forestry. Today, more than 7,000 4-H members have a forestry project.

Tennessee has produced 16 national winners. In 1954, 4-H forestry judging was added to the program with South Central Bell as the only donor until 1976, when Steve Ragland became a supplementary donor. Ragland was a 1957 state forestry project winner.

In 1985, the state championship 4-H forestry judging team from Carter County also won the national invitational contest. The national contest is sponsored by International Paper Company.

Garden

In 1943, "Food, more food and more food" was the worldwide cry as a result of World War II. There was increased interest in vegetable gardening. Every 4-H Club girl was urged to place food production at the top of her priority list.

More than 30,000 4-H members participated in gardening. The 4-H garden project took roots during that time even though crop projects dealing with vegetables existed in the early 1930s.

The early projects encouraged 4-H girls to grow and preserve tomatoes, greens, cabbage, Irish and sweet potatoes, beans, onions, corn, field peas, garden peas, lettuce, lima beans, okra, strawberries and raspberries.

In order to complete the project, the nine specific requirements had to be met. One of those was to make a report in the crop record book.

Each year the 4-H garden project has enrolled between 6,000 and 7,000 members. State winners receive trips to National 4-H Congress in Chicago sponsored by Ortho Products. The state donor is the Department of Agriculture.

For many years, the literature for the garden project consisted of one piece of literature for grades five through 12. In 1981, project literature was expanded to include eight units that provided different literature for each grade level.

Health

In December 1922, a Hamilton County girl won first place in the national health contest at the National 4-H Club Congress and International Livestock Show in Chicago. Tennessee was listed as one of the few states having a health program in the December 1922 issue of the "Tennessee Extension Review."

Physical fitness is not a new concept. It was named as one of the requirements for the selection of two girls from Tennessee to the first National 4-H Club Camp that was held in Washington D.C. in June 1927.

There have been 11 national winners in the health project since 1975.

Home Improvement

In 1934, two Robertson County 4-H'ers were given an attic room to do with as they pleased. Their project included refinishing an old bed with wooden pegs and a marble top dresser. This was an early home improvement activity.

Community work was stressed and 4-H'ers helped in the homes of neighbors and grandparents. Many of these projects included painting, refinishing furniture, upholstery work, drapery construction and educating others to improve home lighting. 4-H'ers were often involved with their entire families in making mattresses.

The first 4-H literature was written by Inez Lovelace. The project is now growing to include housing and home equipment.

Home Grounds

The 4-H home grounds project was initiated in 1962 and continued under that name until 1966. From 1966 to 1969, the title was changed to 4-H community beautification project. Since 1970, the project title has been 4-H home grounds.

With the latter name change came the first books written by D.B. Williams for junior, junior high and senior projects. Literature includes units on the lawn, flower beds, bulbs and ground cover. Members do soil tests and fertilizing as part of their activities.

Horse

Tennessee has a long history with horses, including a breed named after the state: the Tennessee walking horse.

Colt and mule projects in the 1930s and 1940s were originally in the 4-H livestock project. Official enrollment in the 4-H horse project began in 1967. Interest grew statewide with Tennessee annually being a national leader in the 4-H horse project enrollment. Currently, Tennessee is first by about 5,000 members.

A state winner was first announced in 1968 and a state horse judging contest was begun in 1977.

Frederick Harper became first Extension horse specialist in 1978. The state 4-H horse show was initiated in 1984. Currently, emphasis is on county project groups, adult volunteer leaders and educational excellence in programming, literature and activities.

Land Judging

The Tennessee 4-H land judging program was one of the first such programs in the United States. Credit for getting this program started statewide belongs to the Tennessee Council of the Soil Conservation Society of America.

Early on, the council recognized the educational potential of such a program. Officially organized in 1960 as the Tennessee land judging contest, approximately 3,000 4-H and FFA youth participate in the program annually. The location of the state contest rotates among the three grand divisions of the state and the district winning teams participate.

Winning state teams go to the national contest in Oklahoma. Financial support of the awards and other contest expenses has been provided since the beginning by the Tennessee Farmer's Mutual Insurance Company.

Leadership

Junior leadership became a project in 1948 as an outgrowth of recommendations made by a study committee appointed by the director of the UT Agricultural Extension Service to take a look at the Tennessee 4-H program.

The teen leader concept first emerged nationally in 1969 when Emmie Nelson suggested that 16- to 19-year-olds needed more responsibility on an adult level. In a 1969 Tennessee study, Polly Fussell suggested that a two-level

leadership program be adapted to include junior leadership for 13- to 15-year-olds and teen leadership for 16- to 19-year-old 4-H members.

She also made the recommendation that leadership conferences and workshops be provided for teen leaders at the district level on a co-educational basis and that some of the teen leaders should assist with planning and conducting the conferences.

Following these suggestions, the teen leadership program became a part of the Tennessee 4-H program in 1971 with an enrollment of 1,852 teen leaders.

Although leadership is a part of all 4-H projects, many 4-H'ers choose to specialize in the area of leadership development. Members may now enroll in the project as fifth graders. In 1985, a total of 4,829 4-H'ers were enrolled. Tennessee has had 17 national winners in the project since 1960. A Tennessee 4-H'er has won nationally each year since 1977.

Management

Until 1960 the 4-H home management project in Tennessee has been active at the county level only. There was not a state or national sponsor. Then, a series of nine project guides were developed.

In 1963, the Department of Agriculture sponsored the management project at the state level. Carolyn Norton received a trip to National 4-H Congress, but could not compete at the national level because there was not a sponsor.

However, Carolyn and Laverne Farmer did have the opportunity to visit with the members of the National 4-H Council and convince them there was a need for a national sponsor.

In 1966, Tupperware became the first national sponsor. Doris Gibson of Coffee County was the first state winner to compete at the national level. She was also one of the first national winners in the management project. Since that time, Tennessee had 10 winners in the management project.

From 1979 to 1985, eight new project guides dealing with human and material resource management and energy management with a leaders guide were developed.

Meat Science

The 4-H meat science project began in 1975 under the leadership of Sam Winfree. Project manuals for fifth- through eighth- grades were completed and an outdoor meat cookery contest for junior high 4-H'ers was begun.

In 1978, Winfree resigned and the project was without leadership until 1981 when Curtis Melton became state meats specialist.

Project literature for senior 4-H'ers is being developed. Activities have been expanded to include a senior division in outdoor meat cookery contests as well as adding lamb to the beef and pork entries.

In 1985, a district meat judging and identification contest was begun at the junior level and was expanded to include a senior division in 1986.

Personal Development

The 4-H personal development project was started in the 1960s to assist members in developing into a well-balanced person physically, emotionally, mentally and socially. A manual was developed and a donor, the Shainberg Company of Memphis, was found to give an annual award to the boy and girl winner at the state level.

In 1973, the personal development project was placed under the leadership of the Extension family life specialist who began developing new material with a leaders guide called "Six Keys to Personal Development." Each key became a unit for 4-H members to complete from grades seven to 12.

In 1975, the Scottish Rite Masons of Tennessee began sponsorship. The new project material increased enrollment. In 1983, two child development units were developed for the beginning 4-H member. Also, the donor increased sponsorship for an additional award.

4-H members may presently complete eight units in personal development. Each year an outstanding boy and girl will attend National 4-H Congress to represent optimum development of the individual 4-H member. There is no national awards program. At present, 5,650 4-H members are enrolled in the personal development project.

Petroleum Power

Due to the high proportion of families living on farms and working with farm machinery, the 4-H petroleum power project began in 1962 with sponsorship from American Oil Company. Enrollment in the project was nearly 4,000 members in the 1960s.

Tennessee has had 17 national winners since the project began. For several years during the 1960s and 1970s, tractor driving contests were held at county, district and state levels to select a state winner.

Project material covered include tractors, engines, safety, farm machinery, small engine maintenance and repair and application of mechanical machines to eliminate manual labor. Four members manuals on tractors and machinery and two members manuals on small engines are used to aid project members in learning about and using machinery.

Photography

The 4-H photography project began in 1965 with an enrollment of 822 4-H'ers. In 1980, enrollment jumped to 15,334; in 1985, it was 16,666.

Tennessee's first national winner was Larry Benfield of Roane County in 1972. Since then there have been six national photography winners from Tennessee: Steve Barrett, Knox County, 1978; Susan Barrett, Knox County, 1979; Joel Finnell, Bradley County, 1980; Warren Elizer, Crockett County, 1981; Terry Winstead, Grainger County, 1987; and Donna Lovett, Obion County, 1989.

The photography project is designed to improve the photography skills of 4-H'ers. Other related activities such as photo search make it possible to apply these skills in other areas of 4-H work.

Conrad Reinhardt became state specialist in 1966. At that time the project was expanded to include basic and advanced learning skills, such as how to produce a slide set, make movies and use the dark room. Reinhardt also served on the national photography materials committee in 1979. The present photography literature used on a national basis was produced by the 1979 committee.

Plant Science

The plant science project was initiated in the late 1960s. With the purpose of introducing science to the members, genetics, fertilization, growth regulators, climate and other factors enhancing growth were included in the project.

Eight units of literature addressing the aspects of plant growth were included in the project.

In 1986, 4-H members will compete at both the district and state levels with the state winner receiving a trip to National 4-H Congress. The plant science project is jointly sponsored by the Tennessee Agricultural Chemicals Associations and the Tennessee Plant Food Educational Association.

Plant and Seed Identification

The 4-H plant seed identification program was initiated in 1983. Before 1983, 4-H'ers evaluated grains and hay and identified seeds of various crops and weeds. They competed at both the district and state levels.

Approximately 1,200 to 1,500 4-H members train each year. The two winners from each Extension district compete in a state contest. Tennessee Farmers Cooperative is the sponsor of the out-of-state trip for the state winning team.

Poultry

The 4-H poultry project was started in the early 1940s by A.J. Chadwell, Extension poultry specialist. In the program he designed, 50 cockerel chicks were made available to 4-H'ers. At the conclusion of the project, 4-H'ers returned 10 roaster-size birds, which were shipped to the U.S. Army to aid in the war effort.

In 1953, Bill Sewell organized the first 4-H poultry show and sale activity. For the past 32 years, 4-H'ers enrolled in the project have been receiving 25 pullet chicks to grow, exhibit and sell. Approximately 40,000 4-H'ers have been involved in this activity.

Chicken basted with the Tennessee barbecue sauce has delighted the palate of many families whose sons and daughters were practicing for a district, state or national contest. Chicken barbecue contests have long been a favorite activity related to the poultry project.

During the past 15 years, Charlie Goan, Joel Mauldin and Robert Bastien have expanded the 4-H poultry project to include egg cookery and embryology.

Public Speaking

The public speaking project first appeared in Tennessee 4-H awards handbooks in 1952. However, 4-H members had been developing public speaking skills since the beginning of the organization. They gave demonstrations, taught others and shared information.

Participation in the public speaking activity at the local level was 13,000 in 1967 and grew to 30,000 in 1975. Through the years, young people have earned ribbons, medals, scholarships, leadership training courses, silver trays and trips to National 4-H Congress as a result of their speaking ability. Fifteen Tennessee 4-H members have gone on to be national public speaking winners.

In recent years, the public speaking activity has been held during State 4-H Congress with a state winner named in each grade for the 10th-, 11th-and 12th-grades. These three members receive a silver tray. The 4-H public speaking project climaxes at Roundup with a winner being selected through an interview and record book score.

Recreation

In the early days of 4-H Club work, recreation was a major thrust. Early Extension leaders believed that 4-H members having a good time would encourage recruitment of other young people. However, learning citizenship and leadership skills were as important as having fun.

Back in the 1950s, this project was called recreation and rural arts. Share-the-fun was considered an activity in the project. Rural arts was replaced with related arts and crafts. Share-the-fun is considered a separate activity.

During the 1950s, Fred Colby of the state 4-H staff conducted State 4-H Recreation Leadership Camp at Camp Woodlee. Crafts, camp skills, song leading and a variety of other subjects were taught. These camps were one week in length.

Before the separating of arts and crafts, the recreation and rural arts project was a part of the 4-H Roundup awards system. A few state winners were invited to do a working exhibit at National 4-H Congress.

From the activities of senior members to the junior song leaders, recreation has always been important in 4-H Clubs.

Safety

Due to their interest in reducing the number and severity of accidents on Tennessee's farms and in farm homes, Tennessee Farmers Mutual Insurance Company began sponsoring the 4-H Farm and Home safety project in the 1940s. Their sponsorship has continued to the present, but the project is now known simply as the 4-H safety project. Enrollment has been about 5,000 for the last few years. The 4-H shooting sports was organized as an activity under the safety project in 1983. It was first made available statewide in 1986. This activity is reaching a new audience previously missed by 4-H and will increase the project enrollment. Timothy Prather became state specialist in 1983.

Sheep

The first Tennessee junior market lamb show was held at the Union Stockyards in Nashville in the fall of 1934. This show was initiated by the UT Agricultural Extension Service sheep specialist, C.C. Flannery.

The show was held in the fall until 1946 when it was changed from a fall lamb show to a spring lamb show. In 1964, the show was moved from Nashville to the Wilson County Livestock Market in Lebanon; and in 1973, it became a part of the Tennessee Junior Livestock Exposition.

Participation in this project in 1936 included 250 lambs from Wilson, Sumner, Davidson and Montgomery counties. Classes in the early shows were held for individual lambs, as well as pens of three, county groups of 10 and showmanship.

The 1985 junior market lamb show had 1,044 lambs exhibited by 614 4-H and FFA boys and girls from 59 counties.

Shooting Sports

The Tennessee 4-H shooting sports program was begun in 1983 by the Agricultural Extension Service and Tennessee Wildlife Resources Agency after representatives of both organizations attended a regional workshop at Rock Eagle, Ga.

After operating on a pilot basis to determine interests and goals, the program was made available across the state in 1986 as an activity of the safety project.

Safe and responsible use of guns and related sporting equipment is the foremost educational concern. All areas of shooting sports are included in the program -- BB gun, archery, rifle, shotgun and outdoor skills. Each year's activities culminate in a jamboree, allowing participants to demonstrate their accomplishments while engaging in friendly competition.

SPIFFY

SPIFFY, Special Program in Food For Youth, is concerned with improving the diets of low income 4-H-age youth. The program started in January 1970 in the following 20 counties: Gibson, Shelby, Davidson, Robertson, Coffee, Warren, DeKalb, Putnam, Hawkins, Roane, Carroll, Decatur, Houston, Perry, Bledsoe, Grundy, Clay, Pickett, Campbell and Claiborne.

The adult phase of the Expanded Food and Nutrition Education Program started in 1969 in the first 10 counties named above. Three state specialists

were employed in 1970 to lead to the program. They were Ester L. Hatcher, Marion Mariner and Janice Williams.

In 1971, 20 counties were added to the program. Those added were Chester, Dyer, Henry, McNairy, Hickman, Lincoln, Stewart, Wayne, Hamilton, McMinn, Polk, Van Buren, Fentress, Macon, Morgan, Scott, Carter, Cocke, Grainger and Hancock. Later the program was started in White and Wilson counties.

The program has helped 198,256 youth improve their diets, leadership skills and personal development traits through nutrition education.

Swine

The 4-H swine project is one of the older and more basic projects. The senior division, with project books and demonstrations, was established in the late 1950s. David Bowling of Anderson County was the first state winner. Since the senior project was established, the demonstrations have been replaced with interviews that are better for project and member evaluation. Tennessee has done well at the national level; there have been seven winners from the state.

The most progressive change in the 4-H swine project has been in the market hog program. This program has changed from the traditional show where hogs were conditioned, fitted and judged to one related to economical production traits.

Currently, hogs are weighed and tagged 90 days prior to the show. At the show, they are weighed, graded and measured for back fat. Average daily gain is calculated; and the hogs are paint branded on their back. Average daily gain, USDA grade and class placings are used to evaluate each 4-H member's total entries to determine the best overall exhibitor of the show.

All aspects of the 4-H swine project have made a strong impact on developing the longer, leaner, heavier-muscled and sounder hog of today.

Veterinary Science

Improving the health of 4-H project animals, as well as training in leadership and citizenship, have been the goals of this project. Until the early 1980s, the project was known as animal science.

The project has been popular; 10,939 members were enrolled in 1985. The project has been sponsored by the Tennessee Department of Agriculture and nationally by the Upjohn Company. Ralph F. Hall, Extension specialist in veterinary medicine has given leadership to the project since 1982.

Wildlife

The wildlife project was begun in Tennessee in 15 pilot counties in 1971. There were 8,247 4-H'ers who enrolled the first year. In 1972, the project was expanded to all 95 counties in the state. With a 1989 enrollment of 28,560, the wildlife project has the second highest enrollment of all projects in the state; and the highest 4-H wildlife project enrollment of any state in the nation. The project has been sponsored from the beginning by the Tennessee Wildlife Resources Agency.

In addition to core project activities, the project features three satellite activities including State 4-H Wildlife Conference, state 4-H wildlife judging contest and the state 4-H FACE for Wildlife contest.

The wildlife conference, conducted every year since 1973, has trained more than 2,500 young people to be teen leaders in the wildlife project. The wildlife judging contest involves county teamwork in evaluating fish and wildlife habitat and recommending ways it can be improved. Between 1978 and 1985, 685 teams involving more than 1,700 4-H members have participated in state and district contests.

The 4-H FACE for Wildlife contest involves 4-H'ers who receive a free bag of seed from the Tennessee Wildlife Resources agency and plant the seed in a wildlife plot. These plots are judged at the county, district and state levels; winners receive awards. This contest began in 1973; since then, more than 7,000 wildlife plots have been planted.

Wood Science

The Tennessee 4-H wood science project has been popular for both boys and girls since it began in 1973 as the woodworking project. There were no sponsors or awards during the first year. The Tennessee 4-H Foundation awarded a plaque to the state junior high winner in 1975. Weyerhaeuser Company Foundation, the national donor, began providing a trip to National 4-H Congress for the state senior winner in 1976.

During that same year, a \$25 scholarship to Roundup was given to each district senior winner. The scope of the project increased somewhat in 1976 and 1977 as the project name was changed from woodworking to wood science.

That change helped to create an awareness and appreciation for the forest where lumber quality really begins. During the 12-year history of the wood science project, there have been six national winners.

National 4-H Congress

Many of the early boys and girls club events were enthusiastically, yet haphazardly organized. In 1919, tours and entertainment in conjunction with the Chicago International Livestock Exposition were arranged for 40 young men and women. During the exposition, the tour organizers found that 100 other club winners were in Chicago as guests of private donors.

By the next year, 475 club members were at the exposition. Tennessee had members in attendance and became a prominent participant early in the event's history.

As the national committee, which organized early programs was being established, it tried to get good media coverage. The Chicago press was interested in the parades and amusements of the boys and girls on tour.

The 1922 tour featured a contest for the healthiest boy and girl in the nation. Each state selected two participants for the contest; it included a mental test and a physical examination. Rated as 96.5 percent perfect, Marguerite Martin of Tyler, Tenn. was named the healthiest girl. She and the boy winner received a great deal of coverage for club work.

Tennessee's boys club work leader, G.L. Herrington, suggested in a state leaders meeting that the tour should take on a more permanent name; he suggested the name Club Congress. In 1923, 1,600 young men and women crowded Chicago for the event. Cultural, historical and plant tours were part of the serious Congress activities. But competition was also part of the program. The Club Congress became extremely popular with sponsors; so many winners attended Congress that each state was given a 50-delegate quota.

Despite the Depression, interested business firms offered 17 Tennessee 4-H Club members trips to National 4-H Club Congress in 1933. Some delegates were sponsored for general outstanding 4-H Club achievements, other delegates were state champions in specific projects. The best 4-H Club record and the champion Corn Club member were among the state winners. State champions in 4-H clothing and the livestock judging team competed nationally.

By the end of the Depression decade, several other project areas had sponsors for delegates to National Congress. Boys participated in rural electrification, workstock, best record, best livestock judging team and best crop judging team activities.

From the beginning of National 4-H Congress, exhibits had been part of the learning experience. Tennessee had many individual exhibit winners.

Despite the nation's entrance into World War II, National 4-H Club Congress proceeded with 20 Tennessee 4-H'ers in attendance. Age requirements were stipulated for the first time in 1943; delegates had to be between the ages of 16 and 18. Scholarships for national project winners were \$200 to the school of the winner's choice. In the coming decades these scholarships rose to \$1,000 and some to \$1,500. Tennessee continued to bring home top honors in various projects.

In 1947, pride in Tennessee's 4-H program was shown when the National congress delegates stepped out in white sweaters with the Vol state emblem. Those sweaters were to become a landmark of Tennessee's delegations. Everyone knew when Tennessee had arrived.

During the 1950s and 1960s, National Congress delegations sizes fluctuated, as did the number of national winners. But pride in the Tennessee member's "Chicago experience" was growing. In 1965, the Farmers' Club of the Nashville Area Chamber of Commerce gave the delegation a sendoff breakfast on the Saturday morning they left for Chicago. The next year the Farmers' Club sponsored a welcome-home reception at the Nashville airport.

The 1960s saw Tennesseans bring home several impressive awards. Gov. Buford Ellington received a 1962 National 4-H Club alumni recognition award. In 1965, Faye Perry received one of the six Presidential Trays, the highest 4-H honor in the nation. Another Tennessee 4-H'er received that award in 1971; Leland Jordan received his tray from President Richard M. Nixon.

Jordan's award marked the beginning of a decade when Tennessee was to dominate the list of national winners. In 1979, Tennessee achieved an all-time high of 28 national project winners. That year Mary Goodloe received the presidential award. Other presidential award recipients have been Joyce Nichols and Charlotte Youree, 1984; Mark Powell and Darla Byrd, 1987; and Alan Winfree and Ron Mayberry, 1989.

Tennessee 4-H members have received thousands of dollars in college scholarships for achievements in their projects. Because of pride in the Tennessee program, delegates are given a banquet in their honor upon arrival at National 4-H Congress. That event begins their magical week of entertainment and tours of museums and other Chicago sites.

Tennessee's National Congress delegations represent the highest achievers in the state and nation. During their stay in Chicago, they are recognized for years of hard work. But they also have a chance to become like one big family and build memories that will last a lifetime.

Tennessee's National Winners

1924 -- Laurence Colebank, Horse and Mule Production Essay; **1925** -- Louise and Robert Pruett, Junior Corn Club Exhibit; Ethel Scott, Junior Corn Club Exhibit; and Donald Wright, Junior Corn Club Exhibit; **1926** -- Everett Webster, Junior Corn Club Exhibit, Sumner; Minnie Scott, Junior Corn Club Exhibit, Sumner; and Sarah Scott, Junior Corn Club Exhibit, Sumner; **1927** -- Sarah Scott, Junior Corn Club Exhibit, Sumner; **1929** -- Billy Mullins, Sweet Potatoes Exhibit.

1930 -- Harsh Scott, Junior Corn Exhibit, Sumner; Raymond Lewis, 4-H Peanut Show Exhibit, Humphreys; and J. Willard Colebank, 4-H Club Achievement, Shelby; **1931** -- Orville Wilkes, Junior Corn Show, Giles; Oliver Bradley, Junior Corn Show, White; Harold Malone, Junior Corn Show, Giles; James J. Hamilton, Farm Record Keeping, Hawkins; Hershel Taylor, Centennial 4-H Club Scholarship, Fentress; Leonard Rogers, Centennial 4-H Club Scholarship, Shelby; Furman Bowers, Centennial 4-H Club Scholarship, Greene; Eugene Kerr, Centennial 4-H Club Scholarship, Loudon; Henry C. Chappell, Centennial 4-H Club Scholarship, Maury; and Harry Mullins, Centennial 4-H Club Scholarship, Henderson;

1932 -- Katy Bigham, Peanut Show Exhibit, Humphreys; **1935** -- Lewis Elliott, Sweet Potatoes Exhibit, Weakley; Aubrey Clayton, Cotton Exhibit, Shelby; and Henry White, Peanut Exhibit, Humphreys; **1936** -- E.T. Simpson, Peanut Exhibit, Humphreys; David Simpson, Peanut Exhibit, Humphreys; and Billy Hale, Social Progress, Hamilton; **1939** -- Betty Freeman, Food Preparation, Bledsoe;

1941 -- Ruby Humphreys, Dress Revue, Shelby; **1942** -- Mary Jane Bell, Dress Revue, Hamilton; Mary Dunn, Dairy Food Team, Davidson; **1944** -- Alma Zimmerman, Clothing, Franklin; Gene McLean, Dairy Production, Marshall; and Ray H. Crosby, Soil Conservation, Greene; **1945** -- Billie McCoy, Clothing, Marion; Joyce Gary, Girls' Record, Madison; Charles Peal, Better Methods Electric, Dyer; Bill Van Cleave, Dairy Production, Marshall; and Charlotte Holland, Farm Safety, Greene;

1946 -- Evelene Bedwell, Clothing, Bledsoe; Thomas Henry White Jr., Dairy Production, Rutherford; Clarence Dyer, Farm Safety, Greene; and Angeline Oakley, Food Preparation, Coffee; **1947** -- Annette Glover, Farm Safety, Washington; Mildred Parks, Food Preparation, McMinn; Winnie Lee Snead, Frozen Foods, Carroll; Paul Henry Johnson, Garden, Obion; and Betty S. Johnson, Home Improvement, Putnam;

1948 -- Virginia Cheatham, Canning, Crockett; Ellen McReynolds, Clothing, Bradley; Mable Ann Maxwell, Home Improvement, Putnam; Bill Varnell, Poultry, Bradley; Bill Shaw, Recreation and Rural Arts, Greene; and Jane

Dora Scarbro, Knitting-Crocheting, Campbell; **1949** -- Nancy Boyd, Clothing, Hamilton; June Dyer, Farm Safety, Greene; Eldon Burgess, Field Crops, Smith; Frances Cathey, Frozen Foods, Madison; Johnny Lovell, Health, Bradley; and Don Bowman, Leadership, Washington;

1950 -- Juanita Dowdy, Clothing, Hamilton; Eddie Shrader, Garden, Bradley; and Robert Buck, Soil and Water Conservation, Montgomery; **1951** -- Patricia Ann Crites, Clothing, Hamilton; Jo Ann Bratton, Dairy Foods Demonstration, Franklin; Doris A. DeSha, Farm and Home Safety, Hamilton; Jeany Kelley, Food Preparation, Bradley; Mourine Bennett, Home Improvement, Bradley; Louis B. Rymer, Poultry, Bradley; and Corky Brian, Recreation and Rural Arts, Lawrence;

1952 -- June Hill, Farm and Home Safety, Bradley; Mike V. Kennedy, Meat Animal, Franklin; John Henry Gilbert, Tractor Maintenance, McMinn; and Sarah F. Harris, Better Grooming, Hamilton; **1953** -- Eugenia Ellis, Achievement, Dyer; Joyce Ann Baxter, Canning, Davidson; Avalene Ellis, Clothing, Davidson; Sara Louise Grant, Frozen Foods, Hamilton; Faye Harris, Health Improvement, Putnam; Sue Traughber, Home Improvement, Robertson; David Alden Woodall, Meat Animal, Franklin; Billy Sam Moore, Public Speaking, Lincoln; and June Hill, Recreation and Rural Arts, Bradley.

1954 -- Mary Jo Ellis, Canning, McMinn; Sara Traughber, Citizenship, Robertson; Billy Teuton, Community Relations, Madison; Howard Moore, Dairy, Bradley; and Everett Woodall Jr., Meat Animal, Franklin; **1955** -- Virginia Woodall, Beautification of Home Grounds, Franklin; Daniel Davis, Boys Agricultural, Bradley; Peggy Lamb, Dairy Foods Demonstration, Shelby; June Moore, Food Preparation, Putnam; Melvin Humphreys, Recreation and Rural Arts, Henry; Joe Thomas McFerrin, Soil and Water Conservation, Lincoln; and Jimmy Key, Community Relations, Henry;

1956 -- Daniel Davis, Achievement, Bradley; Billy O'Brien, Citizenship, Greene; Mildred Carmichael, Dairy Foods Demonstration, McMinn; Rebecca Passmore, Recreation, Polk; Fred Brown, Soil and Water Conservation, Putnam; and Alice Ruth Joyce, Public Speaking, Franklin.

1957 -- John Baxter, Achievement, Greene; Austin Rose, Agricultural, Cumberland; Ethel Wyatt, Canning, Cumberland; Jo Ann Wooden, Food Preparation, Hamilton; H.L. Butler, Tractor, Dyer; Terry W. Holder, Meat Animal, Franklin; Nancy Joyce, Home Economics Scholarship, Franklin; and Billy O'Brien, Agronomy Scholarship, Greene;

1958 -- Nancy Joyce, Achievement, Franklin; Jimmie Martin, Achievement, White; David Wattenbarger, Boys Agricultural, Bradley; Jane Waller, Frozen Foods, Loudon; and Joyce Finnell, Girls' Home Economics, Bradley; **1959** -- Phillip Burns, Beef, Bledsoe; Linda Eason, Clothing, Haywood; Rose Allen

Duncan, Entomology, Trousdale; Judy Ownbey, Girls Home Economics, Bradley; Gerald Caldwell, Forestry, Obion; Charlotte Sivert, Health, Hawkins; and Joe T. Carpenter, Soil and Water Conservation, Fayette;

1960 -- Joyce Finnell, Achievement, Bradley; Richard Hatler, Safety, Cumberland; and Jessee Lovell, Forestry Scholarship, Bradley; **1961** -- Janet Crumley, Canning, Carter; Wanda Louise Rust, Clothing, Crockett; Kitty Lee Roberts, Food-Nutrition, Hamblen; Nettie Ann Farris, Home Improvement, Rutherford; Jim Hite, Leadership, Washington; Robert Boyce, Recreation, Cumberland; and Elmer J.D. Atkinson Jr., Forestry Scholarship, Fentress;

1962 -- Anthony Martin, Field Crops, Bradley; Sondra Tipps, Poultry, Franklin; Gayle Gillen, Safety, White; George Merritt, Tractor, Franklin; and Linda Eason, Home Economics Scholarship, Crockett; **1963** -- James Beavers, Automotive, Rutherford; Mary Ann Blankenship, Beef, Rutherford; Jan Wallace, Foods-Nutrition, Sumner; Alice Fern Parrish, Home Improvement, Lauderdale; and Brenda Bennett, Safety, Bradley;

1964 -- Bobby Netherland, Forestry, Hawkins; Bruce Wilson, Garden, Giles; Susan Burns, Safety, Bledsoe; and Charlene Lewis, Swine, Shelby; **1965** -- Charles Lee Curtis, Agricultural, Putnam; Faye Perry, Citizenship, Robertson; Dana Wallace, Clothing, Anderson; Connie Dunavant, Dairy Foods, Giles; Mark Dady, Electric, Dickson; James Ben Stockton, Forestry Scholarship, Fentress; David Humberd, Health, Bradley; Ellis S. Bacon, Leadership, Hamilton; Anita Durham, Public Speaking, Robertson; and David Doan, Tractor, Sullivan;

1966 -- Joe Elliott, Beef, Robertson; Alida Johnson, Citizenship, Madison; Mary Major, Clothing, Williamson; Jennifer Snow, Dairy Foods, Van Buren; Gene Cannon, Entomology, Obion; Gail Barber, Home Improvement, Roane; Doris Gibson, Home Management, Coffee; Martin Robbins, Leadership, Henry; William E. Stephenson, Poultry, Anderson; and David Elliott, Public Speaking, Unicoi;

1967 -- Tommy Mariner, Community Beautification, Roane; Becky Beets, Dairy Foods, Hamblen; Bob Frankland, Leadership, Madison; Ted R. Tate, Safety, Sullivan; and Sam Hale, Tractor, Hamblen; **1968** -- Shawnee Dippel, Health, Campbell; Evelyn Wagner, Home Management, Sullivan; Brenda Tipps, Poultry, Franklin; and Patty Clark, Safety, Putnam; **1969** -- Jennifer Daniel, Bread, Bedford; David Harmon, Public Speaking, Greene; Roger Talley, Safety, Hawkins; and Stephen Sutton, Swine, Cocke;

1970 -- Norval Chris Dippel Jr., Automotive, Campbell; Marsha Moore, Dog Care and Training, Crockett; Gerald Partin, Electric, Franklin; Steven Waynick, Entomology, Madison; Mike Gilbert, Petroleum Power, Hamblen; Leland Jordan, Public Speaking, Bedford; and Doris Boyd, Safety, Blount; **1971** --

Diane Talley, Consumer Education-Home Economics, Hawkins; Steven Waynick, Crop Protection-Crop Production, Madison; Leland Jordan, Leadership, Bedford; Bill McDonald, Public Speaking, Hickman; Demetra Cloar, Safety, Weakley; and David Armstrong, Veterinary Science, Hawkins;

1972 -- Jana Sutton, Bread, Cocke; Pat Freeman, Field Crops, Trousdale; Edgar Chambers IV, Foods-Nutrition, Bradley; Johnny Tarpley, Forestry Scholarship, Rutherford; Keith Franklin, Home Environment, Humphreys; Mary Elaine Jernigan, Knitting-Crocheting, Rutherford; Susan Webb, Leadership, Cumberland; Roosevelt Williamson, Petroleum Power, Madison; Larry Benfield, Photography, Roane; John Swaim, Public Speaking, Madison; James Palmer, Swine, Sumner; and Sue Smith, Veterinary Science, Madison;

1973 -- Bill Reed, Agribusiness Careers Scholarship, Anderson; Stephen Officer, Animal Science Scholarship, White; Kent Krisle, Beef, Robertson; Michael P. Greene, Bicycle, Sumner; James Hicks, Citizenship, Madison; John C. Horner, Conservation of Natural Resources, Hawkins; Vicki Wisecarver, Consumer Education, Hamblen; Gracie Yarborough, Dairy Foods, Madison; Volena Gipson, Leadership, Anderson; David Stockard, Poultry, Wayne; Teresa Goddard, Safety, Loudon; and Kathy Montgomery, Veterinary Science, Carter;

1974 -- Burton Lee, Beef, Monroe; Carolyn Harris, Consumer Education, Hawkins; Rebecca A. Collins, Dairy Foods, Sumner; and Gary L. Chamberlain, Veterinary Science, Blount; **1975** -- Susan Broyles, Dress Revue, White; Joseph W. Martin, Entomology, Hardeman; Kris Hyberger, Health, Bradley; and Jean A. Haston, Veterinary Science, Cumberland;

1976 -- Danny Beasley, Beef, Lincoln; Janet Bruhin, Citizenship, Knox; Terry Adkins, Citizenship, Robertson; Julie Graham, Dairy, Cocke; Chris Dodds, Dog Care, Sumner; Ruth Haston, Gardening, White; Jeff Carlton, Petroleum Power, Coffee; Diane Kitchen, Sheep, Loudon; Barry Campbell, Veterinary Science, Montgomery;

1977 -- Joe Bales, Beef, Hamblen; Leigh Ann Maner, Bread, Blount; Glenda Lee, Clothing, Dickson; Beth White, Consumer Education, Overton; Robin Collins, Dairy Foods, Sumner; Brian Peters, Entomology, Sullivan; Cathy Martin, Food-Nutrition, Rutherford; Carol Strasser, Food Preservation, Davidson; Boyd Creasman, Forestry, Polk; Nan Pearl, Home Environment, Davidson; DeVault Clevenger, Health, Cocke; Tim Hicks, Leadership, Decatur; Mark Chaffin, Public Speaking, Putnam; Grace Elizer, Public Speaking, Crockett; Roger Broach, Petroleum Power, Henry; Janet Bryan, Sheep, Knox; Danny Rochelle, Swine, Hickman;

1978 -- Paul Gentry, Agricultural, Putnam; Ginger Richardson, Dairy, McMinn; Larry Swabe, Dog Care and Training, Monroe; Robert Davis, Entomology,

White; Tammy Sutley, Food-Nutrition, Sumner; Euginia Knisley, Food Preservation, Hamilton; Clarence Smith, Forestry, Wilson; Phyllis Harris, Home Management, Hawkins; Bill Broyles, Leadership, White; Steve Barrett, Photography, Knox; Jim Crosslin, Safety, White; Jimmy Bell, Sheep, Knox; and Dewayne Bingham, Wood Science, Sumner;

1979 -- Mary Goodloe, Achievement, Sumner; Joel Howell, Achievement, Giles; David Gleaves, Ag. Careers, Cheatham; James M. Mayfield, Beef, Giles; Melissa Baker, Bread, Sullivan; Robert K. Edwards, Conservation, Davidson; Tim Clark, Consumer Education, Jackson; Shelly J. Anderson, Dairy Foods, Coffee; Gregory Bailey, Dog Care, Knox; Beth Lambert, Entomology, Sullivan; Sara Brown, Food Conservation and Safety, Overton; Teresa Woodard, Food-Nutrition, Sumner; Brenda Sanders, Food Preservation, Bedford; Glenn Beasley, Forestry, Lincoln; Denise Harper, Gardening, Sumner; Diane Thompson, Health, Davidson; Bennett Cox, Health, Knox; Melanie Pafford, Home Management, Sumner; Alesia McCloud, Leadership, Johnson; Dennis Talley, Leadership, Davidson; Susan Barrett, Photography, Knox; Lee Eads, Petroleum Power, Bradley; Ramona Sanders, Public Speaking, Dickson; Danny Price, Sheep, White; J. Randall Kimes, Swine, Putnam; Terree McElroy, Veterinary Science, Rutherford; and Trent Woods, Wood Science, Davidson;

1980 -- Paige Johnson, Achievement, Hawkins; Jeff Welch, Agricultural, Lincoln; Darla Moore, Bread, Bradley; Tamara Chaffin, Citizenship, Putnam; Mike Glover, Conservation, Carter; Sarah Moore, Dairy, Bradley; Aimee Wall, Dairy Foods, Sullivan; Kevin Beard, Dog Care, Blount; Lynne Adcock, Food Conservation and Safety, Rutherford; Andrea Anderson, Food Preservation, Cumberland; Bill Beasley, Forestry, Lincoln; Billie Kay James, Health, Robertson; Deborah Jackson, Home Management, Henry; Cynthia Youree, Leadership, Rutherford; Ray Barham, Petroleum Power, Blount; Joel Finnell, Photography, Bradley; Sara Rutherford, Safety, Sullivan; Dwight Burnette, Veterinary Science, Monroe; Susan Gamble, Wildlife, Lawrence; and Grant Owens, Wood Science, Henry;

1981 -- Steve Rickman, Ag. Careers, Hardin; Joe Adcock, Agricultural, DeKalb; David Lipscomb, Automotive, Giles; Kent Pafford, Bicycle, Sumner; Eric Sutley, Citizenship, Davidson; Alisa Day, Consumer Education, Washington; Rissa Greene, Dairy, Campbell; Robbi McLeroy, Dog Care and Training, Lincoln; Karen O'Donoghue, Electric, Hamblen; Susan Walter, Food Preservation, Sumner; Donald Oliver, Forestry, Henry; Deena Tate, Health, Hickman; Laura Sims, Home Environment, Washington; Marcia James, Home Management, Robertson; Te Read, Horse, Giles; Doug Kitzmiller, Leadership, Washington; Tim Adcock, Petroleum Power, DeKalb; Warren Elizer, Photography, Crockett; Keith Wheeler, Safety, Monroe; Harry Bryan Jr., Sheep, Knox; Danny Gleaves, Swine, Cheatham; and Drew Buhler, Wildlife, Montgomery;

1982 -- Reuben Buck, Achievement, Robertson; Betsy Talley, Bicycle, Davidson; Mariana Mayfield, Clothing, Giles; Missy Flanigan, Consumer Education, McMinn; Monica Dodson, Dairy Foods, Davidson; Stephen Henry, Dog Care, Knox; Carol Bearden, Electric, Montgomery; Glen Liford, Entomology, Union; Terri Sparks, Food-Nutrition, Monroe; Mary Ellen Bond, Food Preservation, Hamblen; John Thompson, Gardening, Bradley; Teresa Apple, Home Management, Sumner; Todd Stone, Leadership, Washington; Jim Strasser, Petroleum Power, Davidson; Djuana Whaley, Sheep, Bradley; Matt Beller, Wildlife, Davidson; Jerry Truett, Wildlife Leader, Blount; and Charles Hurst, Wood Science, Union;

1983 -- John Donaldson, Agricultural Careers, Clay; Lisa Pendergrass, Beef, Sullivan; Paul Wagner, Bicycle, Henry; Glen Bell, Conservation, Weakley; Glenn Calfee, Dairy, Bradley; Laura Stevenson, Dairy Foods, Coffee; Karen Warren, Dog Care, DeKalb; Kay Pressler, Entomology, Montgomery; Shellie Young, Food-Nutrition, Sumner; Janese Roder, Food Preservation, Hickman; Trygve Thayer, Forestry, Washington; Clint Cooke, Garden, Union; Reba Sanders, Health, Dickson; Christi Ivens, Home Management, Monroe; Doug Ferguson, Horse, Obion; Tish Klotwog, Leadership, Davidson; Terry Young, Petroleum Power, Cannon; Buddy Bell, Plant Science, Weakley; Dorinda Roberts, Safety, McMinn; and Kim Buhler, Wildlife, Montgomery;

1984 -- Thomas Powell, Achievement, Knox; Ginger Caffey, Agricultural, Rutherford; John Pope, Automotive, Loudon; Jeanie Sorrells, Beef, Bedford; Freeda Smith, Bicycle, Clay; Christie Snipes, Bread, Davidson; Joyce Nichols, Citizenship, Grainger; Teresa Young, Consumer Education, Sumner; Karla Beard, Dairy Foods, Blount; Gloria Kirkpatrick, Dog, Overton; Kerri James, Food-Nutrition, Robertson; Jan Taubert, Food Preservation, Fentress; Shannon Loveday, Forestry, Union; Patrick Walker, Gardening, Hickman; Rebecca Meadow, Health, Houston; Kathy King, Home Management, Hardeman; Charlotte Youree, Leadership, Rutherford; Steve Sneed, Petroleum Power, Trousdale; Karen Coleman, Public Speaking, Henderson; Christie Peace, Sheep, Putnam; Steve Richardson, Veterinary Science, Union; Anna Lee Gordon, Wildlife, Davidson; Mark Mansfield, Wood Science, Weakley; Joyce Nichols, Who's Who Career Scholarship, Grainger; and Patricia Martin, Wildlife Leader, Bedford;

1985 -- Katrina Warfield, Achievement, Anderson; Chris Martin, Ag. Careers, Hickman; Sonja Gwin, Automotive, Tipton; Buddy Coleman, Bicycle, Henderson; Anita King, Bread, Sullivan; Dawn Welker, Consumer Education, Montgomery; Rea McLeroy, Dog Care and Training, Lincoln; Penny Thompson, Entomology, Davidson; Kelle Crouch, Food-Nutrition, Coffee; Ruth Mick, Food Preservation, Carter; Debbie Lyon, Forestry, Lincoln; Kim Rickman, Home Environment, Hardin; Rebecca Stevenson, Home Management, Coffee; Elizabeth Basinger, Home Management, Cannon; Karen Oldham, Leadership, Trousdale; Tony Ward, Petroleum Power, Sullivan;

Danny Jones, Plant Science, Warren; Lisa Swallows, Public Speaking, Putnam; Jerome England, Safety, White; Karla Gordon, Sheep, Bedford; Phylis Welch, Veterinary Science, Lincoln; Kyle Edwards, Wildlife, Davidson; David Bowling, Wildlife, Anderson; Phillips Neil, Wildlife Leader, Clay; and Anthony Shanklin, Career Awareness Scholarship, Montgomery;

1986 -- Paul Martin, Achievement, Bedford; Lori Mann, Bicycle, Lincoln; Lisa Halliburton, Bread, Macon; Rachel Huff, Citizenship, Loudon; Alan Messler, Dairy, Loudon; Jama Myers, Dairy Foods, Sullivan; Terry Turner, Electric, Tipton; Laura Thayer, Forestry, Washington; Roger Lyon, Forestry, Lincoln; Dena Rich, Health, Shelby; Hank Delvin, Garden, Davidson; Donna Ingram, Home Management, Unicoi; Lisa Taylor, Home Management, DeKalb; B.J. Moore, Plant Science, Bradley; Terrie McElroy, Public Speaking, Rutherford; Angela Roberts, Safety, Shelby; Dianna Zeh, Safety, Cannon; Marla Gordon, Sheep, Bedford; Carla Carver, Veterinary Science, Washington; Kim Parker, Wildlife, Hawkins; Tim Hodges, Ag. Career Scholarship, Hawkins; Vicki Hopper, Career Scholarship, Henderson; Patrick Walker, Rabbit Scholarship, Hickman; Melanie Jackson, Ag. Career Awareness Scholarship, Tipton; Ted Harris, Ag. Career Awareness Scholarship, Tipton; Titus Jackson, Ag. Career Awareness Scholarship, Tipton; and Robert Edwards, Wildlife Leader, Davidson;

1987 -- Shannon Shivers, Bread, Sumner; Darla Byrd, Citizenship, Grainger; JoDee Truett, Conservation, Blount; Kelly Mayfield, Electric, Tipton; Vanessa Polley, Entomology, Hamblen; Stephanie Shadden, Food Preservation; Abby Gregory, Health, Trousdale; Tammy Wampler, Home Environment, Loudon; Rebecca Nichols, Home Management, Knox; Julie Bracey, Horse, Sumner; Robin Hewitt, Leadership, Putnam; Marshall Fennel, Petroleum Power, Obion; Terry Winstead, Photography, Grainger; Byron Booker, Public Speaking, Washington; DeAnne Wagner, Safety, Sullivan; Jim Floyd, Wildlife, Loudon; Rob Holland, Wood Science, Giles; Darla Byrd, Presidential Award, Grainger; Tyrone Whitson, Ag Career Awareness, Tipton; Brooks Fox, Food Careers, Jackson; and Ladre Fayne, Ag Career Awareness, Tipton;

1988 -- Chuck Redden, Achievement, Dickson; Alyson Amonette, Citizenship, Sumner; Kristi Johnson, Citizenship, Hawkins; Ben Marks, Dairy, Montgomery; Rachel Tuttle, Dairy Foods, Sumner; Roger Reedy, Entomology, Giles; Nicole Taylor, Health, Henderson; Teresa Clouse, Health, Overton; Amy Yarber, Horse, Anderson; Eric Delvin, Leadership, Davidson; Tommy Williams, Petroleum Power, Sumner; Mark Owen, Petroleum Power, Cannon; Cindy Sorrells, Public Speaking, Bedford; Michael Roberts, Safety, McMinn; Julie Mills, Safety, Putnam; Jason DeBusk, Sheep, Union; Kevin Ragland, Swine, Macon; Matthew Bowling, Wildlife, Anderson; Kate Bell, Ag Careers Scholarship, Dyer; Stephanie Bonds, Ag Careers Scholarship, Shelby; Darlene

Pasley, Ag Careers Scholarship, Tipton; Christy Duke, Food Careers Scholarship, Coffee; Robin Hewitt, Food Careers Scholarship, Putnam; and Rachel Huff, Food Careers Scholarship, Loudon;

1989 -- Suzanne Oliver, Consumer Education, Trousdale; Ron Mayberry, Citizenship, Hickman; Kelly Carmack, Dairy Foods, Lauderdale; Shane Hinton, Entomology, Sumner; Susan Harr, Food Conservation, Sullivan; Laney Hewitt, Food-Nutrition, Putnam; Andrea Tucker, Garden, Knox; Andrew Amonette, Health, Sumner; Ginger Law, Horse, Sumner; Donna Lovett, Photography, Obion; Alan Winfree, Sheep, Putnam; Trina Goins, Safety, Cannon; and Bethanie Nickerson, Wildlife, Humphreys.

State 4-H Congress

After World War II and the recession that followed it, State 4-H Congress became a 4-H event in Tennessee. Bringing the best part of National Congress to the state was its vision. The purposes of Congress as they were listed in "The 4-H Club Leader" were: to further develop those leadership qualities that are essential to a progressive and wholesome rural life; to provide additional opportunities for outstanding 4-H members to learn how to exercise their citizenship responsibilities more effectively; to have 4-H members enter the planning of the state 4-H program; and to provide statewide recognition for those 4-H boys and girls who have, by their leadership achievements, attained prominence in 4-H Club work in their respective communities and counties.

While the purposes have expanded to include urban members, the basic goals have remained the same for over three decades. State 4-H Congress delegates go away with a greater understanding of state government and a greater appreciation for their voice in it.

In May 1948, 4-H members, leaders and agents met for three days in Nashville. A 4-H Cabinet composed of one adult volunteer leader from each of the 95 counties, the members of the Tennessee Citizen's Committee, the state Extension Workers Committee and Extension personnel at Congress evaluated the Congress program and made suggestions for the next year's Congress.

Four-H members acted as senators and representatives. One boy and one girl over 14-years-old represented each county as senators. A boy and a girl over 13 were representatives. Later, county delegations were made up of two senators and a quota-based number of representatives.

In those first years, State 4-H Congress delegates were housed at various downtown Nashville hotels. Those were the Noel, the Maxwell House, the James Robertson, the Sam Davis and the Andrew Jackson. The Andrew

Jackson Hotel was the congress headquarters for many years. Not until 1975 were the congress headquarters and all delegates housed in one location, the Sheraton-Downtown.

There have been only slight changes in the congress program since 1948. The number of boys and girls representing each county is no longer specified, but they do have to be at least 10th-graders. A 4-H'er may attend Congress only one time unless he or she returns in a leadership role. The 4-H Cabinet no longer exists because the group was too large to completely accomplish its original tasks. The State 4-H Congress governor, speaker of the senate and speaker of the house work with the state 4-H staff to plan and evaluate congress.

The 4-H all-wool felt cap, white 4-H all-wool sweater with the emblem, arm band with "Senator" or "Member of Congress" written on it and 4-H nameplate worn at the first congress have been scaled down. Delegates continue to proudly wear their 4-H sweaters.

The congress program has always been educational in nature. Historical tours and inspirational speeches have long been highlights. The governor of Tennessee usually speaks before an assembly; other state officials are included as banquet speakers.

In recent years, a tour of the governor's Mansion has helped to increase delegate's awareness of our state executive. Other tours in the Nashville area have been of Fort Nashborough, the Hermitage and the Parthenon. Visiting the Tennessee Capitol as a learning experience fascinated delegates at the first Congress.

Not until 1963 did the senators and representatives actually meet in the legislative chambers. This meeting evolved into a law-making session complete with debating and voting on bills. Through the "know your government" experience, delegates have learned more about their state government.

Another facet of State 4-H Congress has been competition. At the 1948 Congress, 26 National Congress trip winners were named, four National 4-H Camp delegates were selected and the Friend of 4-H Award was presented. After State Roundup became the home of most competitions, only citizenship and public speaking winners were selected at congress. Friend of 4-H awards have continued to be presented at congress.

By the 1950s, an essay contest based on the congress theme was added. The 4-H History Bowl began in the 1960s. In this competition, two 4-H'ers from each district answer Tennessee history and 4-H questions. Senators and representatives watch the competitors and try to remember answers

themselves. In 1971, the state leadership interviews were moved to congress.

The election of the state congress governor, speaker of the senate and speaker of the house has been both a learning experience and competition for many delegates. Those who have run for office had to be organized, but they enjoyed meeting many people. All delegates have worked to get their district's candidates elected. Many 4-H'ers use electronic voting machines for the first time at congress; they then feel more prepared for the responsibility of becoming a registered voter.

While congress has included the same types of programs throughout its existence, there have been a few especially memorable activities. The concert by Tennessee School for the Blind students was one such occasion in 1968. In 1970, each county's delegation carried a soil sample from their county. At congress the samples were mixed and sent to help nourish a tree at the National 4-H Center. Impressive citizenship pageants about the history of Tennessee and 4-H have served as focal points for many years.

State 4-H Congress meets its original goal of increasing citizenship activities among 4-H members. Congress delegates have noted their increased knowledge of state government, their greater sense of citizenship responsibilities and the many new friendships made at State 4-H Congress.

Friends of 4-H Recipients

1948 -- W.P. Ridley, Columbia; Clyde B. Austin, Greeneville; **1949** -- J. Frank Porter, Columbia;

1950 -- W.H. Dilatush, Memphis; **1951** -- Joel B. Fort Jr., Nashville; **1952** -- Mrs. D.W. Bond, Jackson; **1953** -- Jim McCord, Lewisburg; **1954** -- F. Dwight McDonald, Knoxville; **1955** -- L.C. Jacobs, Nashville; **1956** -- Edward Hicks, Nashville; **1957** -- Mouzon Peters, Chattanooga; **1958** -- Tom J. Hitch, Columbia; and **1959** -- W.F. Moss, Nashville;

1960 -- Buford Ellington, Nashville; **1961** -- Clyde York, Columbia; **1962** -- John Hembree, Memphis; **1963** -- Jesse Safley, Nashville; **1964** -- Leonard Rogers, Knoxville; **1965** -- Tommy Lynn, Cookeville; **1966** -- Walter Jones, Nashville; **1967** -- Ross Buckley, Chattanooga; **1968** -- Lonnie Safley, Columbia; and **1969** -- Mrs. R.H. Lee, Martin;

1970 -- Don Spencer, Nashville; **1971** -- Crosby Murray, Knoxville; **1972** -- Murray Miles, Columbia; **1973** -- Alice Jarman, Nashville; **1974** -- Bob Battle, Nashville; **1975** -- Arch E. McClanahan, Nashville; **1976** -- Robert W. Basse, Nashville; Webster Pendergrass, Knoxville; **1977** -- Bill Bennett, Nashville; **1978** -- J.C. Hunley, Nashville; and **1979** -- James S. Putman, Columbia;

1980 -- K.C. Dodson, Columbia; 1981 -- Robert W. Gilliam, Nashville; 1982 --

George S. Foster, Knoxville; J. Franklin Nix, LaVergne; 1983 -- Ted Vaughan, Nashville; 1984 -- Bill Walker, Brownsville; 1985 -- Robert Primm, Cincinnati, Ohio; 1986 -- Howard Simmons, Knoxville; Harold J. Smith, Martin; 1987 -- Roy Palk, Carthage; W.W. Armistead, Knoxville; 1988 -- Frank Perkins, Nashville; and 1989 -- Linda Thompson Carman, Nashville.

State 4-H Congress Governors

1949 -- Don Bowman, Washington;

1950 -- Newburn Hayes, Cannon; 1951 -- Fred Mathis, Hamilton; 1952 -- Jimmy Farrar, Bedford; 1953 -- Charles Latting, Shelby; 1954 -- Dean Butler, Cannon; 1955 -- Sammy Hale, Warren; 1956 -- Melvin Humphrey, Henry; 1957 -- Clark Tidwell, Hickman; 1958 -- George Bolling, Sullivan; and 1959 -- Rebecca Passmore, Polk;

1960 -- Baxter Graves, Davidson; 1961 -- Steve Parks, Coffee; 1962 -- Nelson Larkin, Franklin; 1963 -- John Swafford, Bledsoe; 1964 -- Sam Williams, Obion; 1965 -- Eddie Lovin, Cocke; 1966 -- Bob Fugate, Claiborne; 1967 -- Tommy Lane, Rutherford; 1968 -- Bob Frankland, Madison; and 1969 -- Wayne Holt, Trousdale;

1970 -- Doyle E. Moore, Montgomery; 1971 -- Bill McDonald, Hickman; 1972 - - Thomas Haralson Jr., Wilson; 1973 -- James Palmer, Sumner; 1974 -- Anthony Rowell, Rutherford; 1975 -- Mike Ivens, Washington; 1976 -- Terry Adkins, Robertson; 1977 -- Danny Beasley, Lincoln; 1978 -- Robb Harvey, Humphreys; and 1979 -- Stan Simpson, Jackson;

1980 -- Tommy Savage, Crockett; 1981 -- Clienton White, Hardeman; 1982 -- Joe Huffine, Washington; 1983 -- Jeff Adcock, Rutherford; 1984 -- Harold Pigue, Crockett; 1985 -- Mary Ann Bales, Hamblen; 1986 -- Mark Darnell, Macon; 1987 -- Julie Mills, Putnam; 1988 -- Byron Booker, Washington; and 1989 -- Jill Hayes, Henry.

1990 -- Andrew Amonette, Sumner.

Speakers of the Senate

1949 -- Billy Webb Douglas, Warren;

1950 -- Frank Stewart, Warren; 1951 -- Barrie Moffatt, Shelby; 1952 -- Bill Warren, Moore; 1953 -- Virginia Warren, Sullivan; 1954 -- Sara Traughber, Robertson; 1955 -- Faye Parris, Putnam; 1956 -- Mary Katherine Newberry,

Hamilton; 1957 -- Martha Mooneyham, Gibson; 1958 -- Helen Gayle Turrentine, Davidson; and 1959 -- Nancy Milligan, Gibson; 1960 -- Emily Gilmore, Bedford; 1961 -- Mary Lee Washburn, Lawrence; 1962 -- David White, Monroe; 1963 -- Jim Smith, DeKalb; 1964 -- Steve Hamblen, Sullivan; 1965 -- Sarah Smith, Smith; 1966 -- Bob Miller, Obion; 1967 -- Tommy Bailey, Knox; 1968 -- Ted Tate, Sullivan; and 1969 -- Patsi Barnes, Sullivan;

1970 -- Marilyn Ledbetter, Bedford; 1971 -- William Elliott, Robertson; 1972 -- Joe Williams, Dyer; 1973 -- Betty Jo Robertson, Henry; 1974 - Keith McAllister, Bradley; 1975 -- James White, Clay; 1976 -- Ricky Buford, Clay; 1977 -- David Bradley, Anderson; 1978 -- Jay Graham, Cocke; and 1979 -- Renee McGiboney, Warren;

1980 -- John Pat Fergusson, Trousdale; 1981 -- Joel Howell, Giles; 1982 -- Bill Pendergrass, Sullivan; 1983 -- George Garrell, Hawkins; 1984 -- Danny Ray Smith, Bledsoe; 1985 -- Kim Buhler, Montgomery; 1986 -- Clair Griffin, Blount; 1987 -- Marsha McBride, Decatur; 1988 -- Leah Carden, Washington; and 1989 -- David Thayer, Washington;

1990 -- Stephanie Murphey, Robertson.

Speakers of the House

1949 -- Peggy Davis, Warren;

1950 -- Sue Nottingham, Sullivan; 1951 -- Mary Ann Conant, Hawkins; 1952 - - Sam Rose, Knox; 1953 -- Rebecca Johnson, Hardin; 1954 -- Gerald Stavely, Gibson; 1955 -- Giffin Scarlett, Jefferson; 1956 -- Buddy Francis, Rutherford; 1957 -- Gail Williams, Obion; 1958 -- Alice Johnson, Hawkins; and 1959 -- William Watson, Shelby;

1960 -- Frank Buck, Wilson; 1961 -- Sarah Lynn Hale, Warren; 1962 -- Jerry Warren, Wilson; 1963 -- Bobby Grissom, Decatur; 1964 -- Ben Mehr, Crockett; 1965 -- Lynn Draper, Bedford; 1966 -- Judy Brown, Cannon; 1967 -- Joe Elliott, Robertson; 1968 -- Ronnie Burns, Rutherford; and 1969 -- Cindy Williams, Dyer;

1970 -- Susan Moss, Wilson; 1971 -- Frederick Funte, Williamson; 1972 -- Volena Gibson, Anderson; 1973 -- Kent Stark Krisle, Robertson; 1974 -- Sheree Todd, Rutherford; 1975 -- Henry Horton Jr., Knox; 1976 -- William R. Hutson, White; 1977 -- Keith Richardson, Rutherford; 1978 -- Bobby Hibbitt, Wilson; and 1979 -- Madge Caffey, Rutherford;

1980 -- Sandye Myrick, Weakley; 1981 -- Teresa McCloud, Johnson; 1982 -- Ken Harr, Sullivan; 1983 -- Lisa Pendergrass, Sullivan; 1984 -- Marty Phillips,

Henderson; 1985 -- April Branche, Sevier; 1986 -- Vicki Hopper, Henderson; 1987 -- Joe Whitmer, Tipton; 1988 -- Kim Ford, Trousdale; and 1989 -- Betsy Goins, Davidson;

1990 -- Grey Wood, Hardeman.

State 4-H Roundup

The first statewide 4-H event in Tennessee took place in July 1923. Billed as a fine vacation for rural boys and girls, the camp's objective was to inspire the youth to do better work. That camp, which was held at UT, grew for over half a century.

Nearly 196 regular and former club members represented 16 counties at the Monday-through-Saturday event. "They came in automobiles, by train and on street cars; many of them were loaded with baskets full of eats," ("Tennessee Extension Review"). As the group gathered at UT on Monday evening, they spread a huge dinner on the ground.

Each morning the campers exercised and attended classes on the different project areas. After lunch, everyone attended a brief chapel service and then played games and sports. Area merchants provided moving pictures and snacks for the campers evening entertainment. Evenings were also devoted to stunts, campfires and club song contests. By the third state camp, county agents were selecting the delegates from their county. Delegations came from 22 counties; Shelby County had the largest attendance with 47. In 1929, L&N Railroad sponsored winners from 38 counties. Their ages ranged from 12 to 20, but most were in high school. After being introduced to the university, most delegates said they planned to enter UT.

The first contests were held at the State 4-H Camp in 1929. Each of the districts presented a lecture demonstration. District I demonstrated dish washing. District II demonstrated vegetable cooking; District III showed insect control; and District IV showed proper table setting. District III won the competition.

Another District III entry was victorious that year. The Safley brothers, Jesse, Lawson and Marcus, won over the other districts to become Tennessee's poultry judging representatives in the International Livestock Show in Chicago. In another event, girls displayed camp dresses; two dressed were selected as the uniform for the next summer.

During the Depression years, the State 4-H Camp was discontinued. The camp was re-instituted in 1939 as the Tennessee 4-H Club Short Course and included new opportunities. Trips to Norris Dam, Big Ridge Park and the

Great Smoky Mountains National Park were taken. Other activities, including folk dances, added to the camper's enjoyment. For two years, short course was not held because the university had been turned into a training base for the Army Air Corps. There was no room in the campus dormitories for the 4-H'ers. The 1944 short course was a special training session in food production, conservation, leadership and wartime activities. Because 4-H Club members had been actively involved in producing food for the war effort, each county tried to send at least one member to short course.

When the war was over, the short course had several new aspects. The ages of delegates were stipulated; they had to be at least 16-years-old. At the 1944 short course, officers were elected to help bring greater organization to the proceedings and the statewide membership.

In 1949, the name of the event was changed to State 4-H Club Roundup. During the 1950s, less emphasis was on discussion of methods and more emphasis was on competitive demonstration of methods. Neatly uniformed members began demonstrating in approximately 20 projects, including canning, clothing, electric, entomology, bread, cherry pie, strawberries, food preparation, forestry, frozen foods, garden, health, home improvement, junior leadership, meat animal, poultry, recreation, safety, soil conservation and tractor.

Except for the competition, Roundup remained an opportunity for club members to learn about the university and have civic and social experiences on the state level. Some other new activities added during that time were the impressive opening ceremony, a Vol State ceremony at Neyland Stadium, a talent show by the All-Stars (evolved into Share-the-Fun), a career awareness day and a banquet to announce state champions.

In 1966, Roundup was shortened to five days. This was only one year after the first integrated Roundup. Prior to that, black members participated in short course at Tennessee Agricultural and Industrial College.

While many of the nation's youth in the 1960s seemed to be against politics, 4-H'ers, by contrast, participated more actively in electing their president. Each district held political rallies and campaigned for its candidate. The state officers had evolved into a council with officers and representatives from each district. Roundup themes voiced youth expectations. The 1970 theme was "This is the Dawning of the Age."

The 1970s brought more changes in some parts of the Roundup program. By this time, uniforms were being phased out. The council, which was clad in uniforms, presented a 4-H pageant at the opening ceremony. The country and western night dinners were a get-acquainted time on the Presidential Plaza.

A 4-H band and chorus, which was made up of delegates, was developed to entertain the group. In some years, delegates were given a choice as to which area tour to attend. In 1982, delegates enjoyed the once-in-a-lifetime experience of the World's Fair in Knoxville.

All of those changes were merely in the schedule. However, the 1979 Roundup was moved to The UT-Martin. Delegates were given the same opportunities, but they were in a different setting. Instead of visiting the mountains, everyone went to Reelfoot Lake.

In order to better take advantage of all the university's facilities, the move to Martin every three years became another tradition of State 4-H Roundup.

Perhaps the most exciting aspect of Roundup for its participants is not the location, the field trips or the setting, but the announcement of state 4-H project winners. For many years, winners were named in each project based upon the members record work and demonstration scores. In 1979, the demonstration aspect was changed to interview. That year Tennessee had its largest number of national winners.

With Tennessee's increasing success in national awards, those state projects bearing trips to National 4-H Congress became even more important. To underscore their special meaning, Mrs. R.H. Lee gave a gift to the Tennessee 4-H Foundation for a special medallion. The state project winners in 1981 were the first to receive the leula Lee Medallion, which may be seen in photos of National 4-H Congress delegations.

In 1983, State 4-H All-Star Conference was held in conjunction with Roundup. By including All-Stars at Roundup, a few younger 4-H'ers became eligible to attend the event. Seeing what Roundup was all about was intended to motivate the younger 4-H'ers to compete for state awards.

Making 4-H members more eager was a goal of the first state camp. Roundup continues to instill a great sense of accomplishment in the members. Old and new traditions run deep in the activities. Roundup has become the stairstep to Chicago and a show place for Tennessee's excellent 4-H program.

Tennessee 4-H Honor Club

As part of a revised recognition program, the Tennessee 4-H Honor Club was established in 1947. Honor Club was one of three new recognition programs which were started about that time. However, Vol State and All-Stars were not connected to Honor Club in the early days. Other state's Honor Club

applications, ceremonies and keys were studied in preparing for the organization in Tennessee.

The logo for the Honor Club key is a 4-H emblem with an H for honor embossed in the center.

All Tennessee counties were urged to build Honor Clubs. Recognized achievers in the counties came together to increase their leadership skills and to render greater service. Those members also had opportunity for recreation and social growth.

To be considered for acceptance into Honor Club, 4-H members have always completed an application. After endorsement by a local leader, the applications are forwarded to the state 4-H office for final approval. Upon approval a member is eligible to receive the Honor Club certificate and key.

Until club work was separated into explorer, junior, junior high and senior high levels, members had to be a least 14-years-old and a 4-H member for at least three years to be considered for Honor Club. Honor Club then opened to junior high 4-H members.

During the period when Honor Club members were required to be 14-years-old, many of them were also simultaneously becoming All-Star members and Vol State recipients. In the early 1970s, the three programs became linked. Honor Club membership became a prerequisite for membership into All-Stars and Vol State at the state level. The three recognitions took on a stairstep effect. Membership in Honor Club has also become a requirement to run for a state council position.

Opportunities for citizenship and service activities and leadership and project development are key in Honor Club work. Most counties have active groups. In the past few years, approximately 600 4-H'ers have been initiated into the club each year. Upon initiation a 4-H'er becomes a member of the county club and the Tennessee 4-H Honor Club.

Honor Clubs play different roles in the counties. But in each county, Honor Club helps to develop the best achievers into even better ones.

All-Stars

The 4-H All-Star movement began in 1920 from the Luke 2:52 ideal that "Jesus increased in wisdom and stature and in favor with God and man." In 1948, Don Bowman from Washington County and Peggy Davis from Dyer County were initiated into All-Stars at another state's conference. They then brought the All-Star program to Tennessee.

In the next year, more 4-H'ers were initiated into All-Stars and a state conference convened August 20, 1949, on The UT-Knoxville campus. The conference was held just prior to the State 4-H Short Course. A state constitution complete with the motto "service" was adopted. The purpose of All-Stars as stated in that first constitution was "to encourage service through both individual and cooperative efforts." No state officers were selected that day because not all districts were organized. Plans for the state conference were made by district big chiefs.

For several years, the All-Star program was continually re-organized on the state level. However, many counties were organized into chapters. Extension agents nominated active club members who were at least 15-years- old and had completed at least four years of club work. All-Star officers were patterned after Indian names: big chief, lesser chief, scribe, eagle scout and medicine man.

A firm basis for electing state officers was not established until 1956. That year Ernest Bacon was elected big chief. Other state officers were not elected until the next year. All-Stars were formally accepted as a part of the 4-H program when the state big chief became a part of the State 4-H Council in 1957.

With state officers, All-Stars began making definite plans for its future. Tennessee sponsored Interstate All-Star Conference for the first time in 1958. It was held the two days before the state conference. Tennessee was one of only eight states with an All-Star organization.

From 1957 to 1961, the state big chief was assisted by members of the State 4-H Council in planning state All-Star programs. At the winter State 4-H Council meeting in 1961, the executive committee met; they made concrete plans for an All-Star service project, which was safety promotion. More planning was put into the state conference.

The 1961 State All-Star Conference began on Friday prior to Roundup. Recreation was held that evening. Saturday started with a business session and ended with a trip to Big Ridge State Park. While at the park, a campfire with district challenges was held. Sunday afternoon a business session of committee and district reports completed the conference.

In 1963, State All-Star Conference was moved to the William P. Ridley 4-H Training Center in Columbia. The meeting was moved to early summer so members would not have a conflict between All-Star Conference and Roundup.

The coming decades brought several changes in time of year and setting for the conference, but the basic activities remained the same. In some years,

education programs and theatrical productions were included in the conference. Even when All-Star conference was combined with Roundup, the campfire and officer tapping continued.

Throughout the years, All-Stars continued individual and collective service projects on the county and district levels. The All-Stars have sponsored the state Share-the-Fun activity and provide plaques for the district winners. In 1969, the community pride award was established for county All-Star groups. A rotating trophy was presented to the county with the best service project.

In the late 1970s, Indian folklore was increasingly included in All-Star activities. An Indian costume contest was part of the campfire in 1978. Tribes, rather than districts, were used in the Indian olympics that year. The events were tomahawk relay, spear throw, eagle egg race, Indian shuffle and tug-of-war.

Although State All-Star Conference was taken out of the more rustic camp setting, it continues to have Indian aspects. District officers are brought together at the high council meeting in the winter; they have an opportunity to learn from other districts and plan conferences. Election of state All-Star officers was moved to the high council meeting in 1986. High council works to strengthen and bring greater unity to the state All-Star organization.

State All-Star Big Chiefs

1956 -- Ernest Bacon, Hamilton; **1957** -- Sam Scarlett, Jefferson; **1958** -- Frank Brooks, Shelby; and **1959** -- Jimmy Martin, White;

1960 -- Jim Hite, Sullivan; **1961** -- Ronald Roberson, Cocke; **1962** -- Steve Parks, Coffee; **1963** -- Don Ammons, Lauderdale; **1964** -- Danny Chattin, Rhea; **1965** -- Sam Williams, Obion; **1966** -- Ellis Bacon, Hamilton; **1967** -- John Allen, Putnam; **1968** -- Gerald Maynard, Overton; and **1969** -- Gretchen L. Roberson, Putnam;

1970 -- Bill Mangrum, Williamson; **1971** -- Pam Lytle, Bradley; **1972** -- Bobby Beets, Hamblen; **1973** -- Demetra Cloar, Weakley; **1974** -- Larry Benfield, Roane; **1975** -- Susan Scheurman, White; **1976** -- Fletcher Armstrong, Hawkins; **1977** -- Brent Willis, Coffee; **1978** -- Mark Merryman, Trousdale; and **1979** -- Cynthia Massey, Meigs;

1980 -- Paul Gentry, Putnam; **1981** -- Hughy Billingsley, Putnam; **1982** -- Paige Johnson, Hawkins; **1983** -- Donnie Oliver, Henry; **1984** -- Brian Skelton, Crockett; **1985** -- Cozette West, Smith; **1986** -- Karla Gordon, Bedford; **1987** - - Jama Myers, Sullivan; **1988** -- Joel Cox, Bradley; and **1989** -- Tonya Long, Jackson;

1990 -- Jim Floyd, Loudon.

Vol State

Since 1947, Tennessee's outstanding 4-H achievers have received Vol State recognition. Thirty-five 4-H members from across the state were honored at the State 4-H Short Course that year. The first award was presented posthumously in honor of G.L. Herrington's work. Other honorary Vol State recipients have been recognized.

When Vol State was linked with Honor Club and All-Stars, it became the highest level of recognition. Honor Club and All-Star membership were prerequisites for Vol State consideration. Extension agents recommend members who will attend Roundup for the honor.

Traditionally, Vol State ceremonies have been memorable occasions on the last evening of Roundup. Recipients are tapped during the ceremony. Each one's name is called as he or she is pinned and lights a candle. (Today, pin lights are used.) With lights shining, the recipients join to form the shape of the state. Vol State pins are in the shape of Tennessee.

The Vol State emblem is a symbol of Tennessee's highest 4-H recognition.

State 4-H Council

To bring greater organization to the State 4-H Short Course proceedings and the overall state 4-H organization, a state council and officers were elected at the 1944 Short Course. The council was made up of one boy and one girl from each district. The officers who were elected that year were Lynell Styke, president; Jack Rudolph, vice-president; Rowena Beck, secretary; and Jane Ann Huey, assistant secretary.

By 1947, the State 4-H Council officers included a first, second and third vice-president. A reporter was substituted for the assistant secretary. In 1949, the council included a fourth vice-president, the congress governor and the president of the volunteer leaders. Members from other 4-H organizations were included to bring in other facets of the Tennessee 4-H program.

The council planned Roundup at its two meetings each year. In 1956, the council tried to amend its constitution. However, the constitution had no provision for amendments. At Roundup that year, the rules were suspended. The president was elected by secret ballot, rather than by the rising vote that had been used. Another problem with the constitution regarded who a voting delegate to Roundup was. Finally, it was decided that each county could have one voting delegate for each 200 enrolled 4-H'ers in the county.

In 1957, chairmen of several state 4-H organizations were added to the council. Those chairmen were from the 4-H Club Committee of Extension

Agents, 4-H Club Citizen's Committee, 4-H Club Foundation and 4-H Club All-Star Council. This same year the council took on a greater advisory role for the state 4-H staff. In the next two years, the council began breaking down into event groups for brainstorming and evaluating programs. During that meeting, they discussed keeping junior high members involved, selecting national conference delegates and updating 4-H.

As the 1960s began, the council was evolving. Members were added, including the state All-Star big chief. After several years of having State 4-H Council representatives discuss congress and All-Star Conference, the speaker of the senate, the speaker of the house, the lesser chief and the scribe were added to the State 4-H Council.

Another amendment to the constitution removed the chairman of the citizen's committee from the council because the group had dissolved. A later amendment stipulated that no one person could hold two offices on the council. It seems the state All-Star big chief was also elected council president. Taking care of both offices was almost impossible.

During the 1970s, the Tennessee Association of Extension 4-H Workers president and the alumni president were added to the council. In 1975, an amendment made senior membership mandatory for 4-H'ers to hold an office on the council. This kept recent high school graduates from running for office. Also the presidential nominees, if not elected, would become representatives if they had not been representatives the year before.

At the 1977 Roundup, an amendment changed the election of the officers. Rather than four vice-presidents, one vice-president was elected. The three other positions were for representatives.

The State 4-H Council took on a greater advisory role in the late 1970s. In order to make the council more effective, an amendment was brought before the 1980 Roundup for a vote. That amendment was for each district to be represented by one senior representative and one junior representative for each 1,000 4-H'ers enrolled in the district. The amendment failed because smaller districts were opposed to the larger districts dominating the council. Finally, the amendment passed in 1981 after much controversy.

As a result of the 1981 amendment, the junior representatives now have the opportunity to be elected as senior representatives. The staggered council has experience and continuity because of those serving a second year. The council's activities have also increased. Several changes in the 4-H program have come about in a short time span partially because of the council's input.

The first year of the staggered council, the 1983 Roundup and All-Star Conference were combined into one event. All-Stars, who would otherwise have not been at Roundup, were allowed to attend the event.

All past State 4-H Council members have helped to shape the Tennessee 4-H program. A popular phrase with candidates for president has been, "I want to give back some of what 4-H has given me." That is the spirit of State 4-H Council.

State Council Presidents

1944 -- Lynell Styke, Greene; **1948** -- Don Bowman, Washington; and **1949** -- Murray Miles Jr., Rutherford;

1950 -- Donald Farris, Davidson; **1951** -- J.C. Cate, Roane; **1952** -- Barrie D. Moffatt, Shelby; **1953** -- John Wallace Darden, Robertson; **1954** -- Mike Kennedy, Franklin; **1955** -- John Allen Chalk, Henderson; **1956** -- Ernest Bacon, Hamilton; **1957** -- Joe McFerrin, Lincoln; **1958** -- Jimmy Felts, Greene; and **1959** -- Larry Barber, Weakley;

1960 -- Jimmy Hite, Sullivan; **1961** -- Phillip Burns, Bledsoe; **1962** -- David Stroud, Wilson; **1963** -- Jerry Warren, Wilson; **1964** -- Bobby Grissom, Decatur; **1965** -- Roger Montgomery, Hawkins; **1966** -- Steve Hamblen, Sullivan; **1967** -- William "Bear" Stephenson, Anderson; **1968** -- Dexter Martin, Coffee; and **1969** -- Banks Highers Jr., Smith;

1970 -- Hank Kemmer, Cumberland; **1971** -- Leland Jordan, Bedford; **1972** -- Rodney Barnes, Claiborne; **1973** -- Franklin Pope, Gibson; **1974** -- Cindy Porter, Macon; **1975** -- Tammy Lake, Hardeman; **1976** -- Lynn Daniels, Marshall; **1977** -- Joe Martin, Hardeman; **1978** -- Rick Patterson, Humphreys; and **1979** -- Glenn Beasley, Lincoln;

1980 -- Bennett Cox, Knox; **1981** -- Jerome Melson, Monroe; **1982** -- Greg Upchurch, Cumberland; **1983** -- Reuben Buck, Robertson; **1984** -- Thomas Powell, Knox; **1985** -- Troy Hopkins, Crockett; **1986** -- Buddy Coleman, Henderson; **1987** -- Joe Thompson, Davidson; **1988** -- Angie Roberts, Shelby; and **1989** -- Eric Delvin, Davidson;

1990 -- Kevin Ragland, Macon.

COMMUNICATIONS

Through the journalistic talents of the communication staff, the public has been kept informed about the activities, accomplishments, problems and success stories of the Extension Service.

Mass media -- the radio, television, news release service, publications, special editions, photographs -- all have been used to tell the Extension story. From a very small group of grass roots journalists, working with crude communications tools, to today's computers, advance electronic telegraphic equipment, visual aides devices, and super-speed reproduction presses, the communications staff is equipped to keep educational information flowing to the public.

Working hand in hand with specialists and county agricultural and home economics agents, vast numbers of publications on a wide variety of homemaking and farming subjects are created, produced and distributed free of charge to all people needing or requesting information. The production of visuals for demonstrations, workshops, special interest groups, 4-H Club projects, leadership training sessions and winner circle news continues to add to the educational efforts of a unified staff of professionals.

And the pace will continue. Video technology, teleconferencing, paperless offices -- all are here or on the 21st century horizon. Extension will be there at the forefront, but it will always be the staff who make technology work.

Communications

Nancy A. Cann, Assistant Professor

The purpose of the Smith-Lever Act of 1914 was to enable state agricultural colleges, aided by the federal government, to carry useful and practical information relating to agriculture and home economics to rural people on their farms and in their homes by means of itinerant teachers -- demonstration agents -- now known as county agricultural and home demonstration agents.

The theory of the act was that eventually every agricultural county in the country would have at least one trained itinerant teacher or demonstrator and that through these workers, by instruction, field demonstrations, publications and otherwise, the accumulated knowledge of agriculture -- results of research and experimentation and experience of successful farmers -- would be placed at the disposal of all farmers.

Thus, the Extension Service was authorized by Congress in 1914 to take research-based information to the people. The name of the organization associated with the land-grant university in Tennessee was the Division of Extension until 1923, when it was reorganized and renamed the Agricultural Extension Service.

Almost from the beginning, the communications section, originally called the editorial department, played a vital role in delivering new information. Although on-farm demonstrations were primary methods of teaching, radio, newspapers and publications were central to getting knowledge to the farm families.

Harry B. Potter was the first communications specialist to join the Extension communications section in 1918. In Potter's first annual report Dec. 31, 1918, he wrote: "The policy of the Farm News Department is best stated by saying that special consideration has been given the country weeklies of Tennessee, altho daily papers have been supplied with stories of the kind they desire. Another point of policy is that no story is sent out thru the Farm News Department which does not carry real news. It is the aim of this department to calculate accurately the needs of the paper being reached, or the group of papers, and the desires of the editors concerned."

Potter left the Extension Service in 1919, but during his short term with the Extension Service, 70 publications were printed and distributed. His goal in editing them was to make them easy to read and understand and "to convince the reader and to induce action on his part to the suggestions made in the publication."

J.L. Caton and Eva Malone were briefly with the section, joining in 1919 and leaving in 1919 and 1921, respectively. In 1920, however, A.J. Sims began his 38-year-career as editor and leader of the section. He continued the weekly agricultural news service that was started in 1918, distributing it to every weekly and daily paper in the state.

In 1920, he said: "That the papers of the State appreciate this service is shown by the fact that 175 weeklies and 11 dailies carried 19,200 columns of agricultural news sent out by the department during the year. The material printed consisted of more than 500 different articles and news stories making a total of over 100,000 insertions and close to 1,000,000 printed impressions. It is significant that practically 100 weekly and 6 daily papers featured this service each week, running it under a two column head in full in a prominent place. A number of these papers occasionally called attention to the service on their editorial pages and it was not uncommon for them to use it in full on their front pages under large headings."

The Experiment Station and the Extension Service were together in the first years. Apparently Sims singlehandedly managed the communications section until 1935, when Francis H. Stanley, Joe Elliott and Sam Carson joined.

Beginning of Radio

In January 1933, the university division of agricultural Extension, in cooperation with the national department of agriculture, began daily radio programs through seven Tennessee stations. WSM, Nashville; WSIX, Springfield; WDOD, Chattanooga; WNOX, Knoxville; WOPI, Bristol; and WOBT, Union City, began broadcasting the 10-minute programs. About five minutes of news were from Washington and five minutes were devoted to local news and other items for Tennessee farmers and homemakers. County agents, home agents and other agricultural workers assisted with the programs.

Elliott was in charge of the news service and radio programs in Knoxville. Carson worked out of Nashville doing radio, special events and was a liaison between the Extension Service and daily newspapers. Carson worked with Extension for 26 years; Elliott worked for 10 years. Fletcher Sweet, who directed the news service for Extension in 1943 and again from 1946 to 1974, said of the radio programs:

"We hadn't been doing much in radio. For years the weekly news service was the only news going out. One or two years before I came, Joe Elliott started doing some radio in the late 30s. Sam Carson was assistant in Nashville, working with newspapers and radio. He started radio programs for Helen Cullins and established a relationship with WSM. WSM wanted a program directly from the UT campus. Joe Elliott would go to the UT main campus. Joe would go on with his guests."

Consolidation

The editorial, library and mailing room services of the College of Agriculture, the Agricultural Extension Service and the Experiment Station were consolidated into a department of agricultural information in 1943. The purpose of the consolidation was to coordinate and facilitate the varied informational services of the college to farmers and farm homemakers in the state. Fletcher Sweet said of the arrangement:

"The Experiment Station had been issuing bulletins. Sims started calling them "publications." F.H. Broome was editor for the Experiment Station. He got out one bulletin per year and an annual report. A.J. Sims became editor for the Experiment Station and Extension Service."

The Extension Service went through two world wars that would dictate the programs offered to the farm families.

Activities of the department in 1944 were centered around preparation and distribution of informational materials that would keep rural people informed on the various war emergency programs and aid them in making maximum contribution to winning the war. News and information on war-time farming and homemaking problems was prepared by the department for weekly papers and daily papers in the state. Likewise, material on wartime farming programs was supplied regularly to 10 radio stations.

In 1944, 727 news and informational stories were sent to the daily and weekly newspapers, press associations, farm page dailies and farm journals. A series of 37 weekly victory garden articles was prepared by the horticultural department and sent to 60 newspapers requesting them as a special service during the gardening season. These articles were made into radio programs for county farm and home agents and station announcers.

Also during the war, production of publications was scrutinized and only information that would contribute to winning the war was printed. According to a UT Extension annual report in 1944, "Our printing jobs were carefully appraised to see that they met the following requirements laid down on WPB chairman Donald M. Nelson in a "Victory Bulletin" of May 19: "No material should be printed, duplicated or mimeographed unless it will make a direct contribution to the war..."

An example of new publications and leaflets issued in 1944 were "A 1944 War Program for Tennessee Farms," "Victory Garden Plant Frames," "Women's Land Army In Tennessee," "Home Tasks for 4-H Girls," and "The Family Plans Together."

Elliott left in 1945 and Sweet took over the news service. He did columns, newsletters and direct mail and trained agents, encouraging them to use the information through every available channel.

The importance of photographs and slides to enhance agricultural, home economics and 4-H programs became increasingly evident by the end of the 1940s. Ralph McDade joined the Extension Service in 1948 as visual aid specialist.

"When I came to Knoxville in 1948 to join the Extension staff, I had been away from TVA for several years, because during the war years, the situation had become so bad that we were no longer able to carry on some of the work I had been doing because of the lack of travel and facilities and the urgency of the war," McDade said.

"I had taken a job as business manager at Hiwassee College, where I spent most of the time between 1943 and 1948. I did not come as a stranger because I knew many of the people in the headquarters office. I knew all of the people in the information office having worked with many of them at some time or other in my previous experiences and having worked with many, many county Extension agents and assistant county agents across the state.

"As you can see, my experience with the Extension Service and with all the Extension Services in the seven valley states was extensive. During that period of 11 years when I was with the TVA, we did a number of joint publications with Extension Services."

After the war, production of publications was slow to increase, McDade said.

"At that time, there was a very minimal publications budget, which meant that we did not get out too many publications. Every year there were several publications and as soon as I got on the staff I was expected to provide photographs for the publications. We did do considerable work in photography, although we did not have a dark room or anything of that kind. We had to take our pictures and have them produced professionally downtown."

McDade also worked closely with 4-H Club programs and attended State Congress for 17 years.

"One of the first real jobs that I worked on after going to work on the first of April was to attend the first 4-H Club Congress held in Nashville during that year. This became one of my all-time jobs and as long as I was in the office of information, I worked with the 4-H office and spent a lot of time in helping them plan and carry out the programs and stage the programs and other activities during the 4-H Congress. This is something I am very proud of because I had a part in the first 4-H Congress that was held in the spring of 1948.

"Other 4-H activities included attending many of the summer camps for 4-H. I taught photography at the various summer camps. It was along in the late 50s that we introduced the 4-H photography into the 4-H Club activities and made it one of the activities that 4-H members participate.

McDade also reproduced slides for slide sets, but the equipment was limited.

"The little 300-watt projectors that were in existence in the early days just weren't satisfactory. Even the 1,000-watt projectors didn't do too good of a job, but they were much, much better. But still they would take just two slides at a time and you would slide them across and take one out and put another one in."

Sweet said not much had been done to train agents until he came in 1946. In 1956, the national project in agricultural communications, funded by Kellogg under the auspices of the American Association of Agricultural College Editors, was initiated to train agents.

"We had training and emphasized training of all Extension personnel in communications," Sweet said. "At Rock Eagle in Georgia we had intensive communications training. The first year Ralph McDade, Vernon Darter and I went. The next year Fred Berggren, Rosslyn Wilson and Fletcher Sweet went. We used points learned in NPAC to train agents."

Rosslyn Wilson, now married to Aubrey Smith, who was Georgia's specialist in visual education, who now lives in Athens, Ga., wrote of her training with NPAC:

"This was a series of 'train the trainer' workshops, where communications experts who had brought together the latest research on communications, presented it in an effective form that we could adapt to our own training sessions. Following these NPAC workshops, with Sweet in charge, we organized workshops for all the agents in each district to help them understand better the basics of communication, and methods of effective writing."

Although the Extension and Experiment Station offices were in the same location with one department head, the staff was paid with separate budgets. For example, Berggren was paid by the Experiment Station. He was in the department from July 1, 1957, to April 30, 1981, editing publications and taking pictures. "I wrote some research reports for weekly papers, but mostly I did publications," Berggren said.

Fletcher Sweet said, "I was paid partly by the Station and partly by Extension. I edited Station bulletins and Extension Service bulletins and managed the news service and publicized field days. We didn't have any conflicts."

McDade also was paid by Extension and Experiment Station. From 1951 to 1958 Rosslyn Wilson Smith was on the Experiment Station payroll half-time and the Extension Service payroll half-time. She remained full-time Extension until she resigned in 1963 to return to the University of Wisconsin to earn a Ph.D.

"The primary assignment given me was to be responsible for a new publication -- the quarterly "Tennessee Farm and Home Science," said Smith. "This had been conceived and planned by A.J. Sims, head of the department, together with Fletcher Sweet, associate editor, Frank Chance, Experiment Station Director, and John Ewing, Assistant Experiment Station Director. The new publication was to put into lay language information on Experiment Station research for the benefit of extension workers, state officials, farm and home leaders, business and commercial groups, the media, and others interested in agricultural research and its findings.

"In addition to this assignment, I was also to write news and feature articles, and occasionally edit other publications as needed. All of us in the Agricultural Information Department were expected to be available to do or help with any specific job that needed whatever expertise we had. When a particular Extension project developed or was lined out by the administrators, those who had the knowledge and ability to help it succeed all pitched in to help.

"Some of those projects during the years I was with the department involved community development, test-demonstration farm work, rural development, and a number of campaigns emphasizing agronomy, farm and home management, dairy and livestock improvement, and the like. We were all involved in promoting 4-H Club work and contests, and special events such as the annual 4-H Club Congress at Nashville, Field Days at the various Experiment stations, fair exhibits, etc."

When Sims retired in 1960, Ralph Hamilton was employed as head of the department. Hamilton left in 1973. Sweet briefly was head before Dutch Cavender was hired.

During Hamilton's leadership, Cordell Hatch (1955-56, 1958-60), Larry Krug (1961-65), Abner Lemert (1962-67), Judith Procknow (1963-65), Al Blake (1964-68, 1970-84) and Nancy Russell (1965-67) were in the communications section. Conrad Reinhardt joined the section in 1966 as visual aids specialist replacing McDade, who chose to move to the area of community resource development. George Mays also joined the section that year as the radio specialist. He later became the electronic media specialist.

Blake produced the weekly news packet, covered 4-H Club activities and other special events. He also wrote articles for magazines such as the "Tennessee Farmer" and the "Federal Extension Review." He promoted Experiment Station field days.

Blake took a two-year communications advisory assignment in India beginning in 1968. When he returned he was re-hired by Extension. Blake said that: "Ed Bible was a graduate assistant in journalism who had been working in the information department during most of my absence. He had been working mostly as a news writer and also in publications. He had recently gotten his master's and had been appointed full-time. Dr. Ralph Hamilton gave me my

choice of assignment -- news or publications. For personal reasons, I opted for publications, although my best ability was in writing."

George Mays said Hamilton was a professor of agricultural communications and headed a department serving the agricultural Extension science, Agricultural Experiment Station and College of Agriculture.

"He taught classes and advised graduate students in the newly organized College of Communications," Mays said. "He was also in charge of the print shop, mailing room, bulletin and supply distribution center serving the three divisions of the Institute of Agriculture. (The College of Veterinary Medicine had not been organized at that time.)"

Blake said one of Hamilton's duties as department head was to improve the quality of agricultural and home economics publications.

"Hamilton was authorized to bring in Abner Lemert from Oklahoma State in 1962 as full-time publications editor," explained Blake. "Lemert was a capable and efficient editor and Extension specialists began to write.

"With the 'green light' to get things done, Lemert found it fairly simple to produce a publication, give graphic arts hard copy, do the proofing and the job was done. It was first class work on quality paper and many of these publications won blue ribbons in the ACE contests. By the time Lemert left in 1967, most of the new 4-H publications were in print and the flow of new ag. and home ec. pubs had tapered off.

"After Lemert left, publications production reverted back to the old way -- whoever had the time. Hamilton and Sweet probably handled most of them, with some help from Bible later. Although I was on the staff at that time, I had nothing at all to do with publications."

The print shop was in the basement of Morgan Hall. The mail and supply room and publications storage and distribution center were in the back room of the communications office in 104 Morgan Hall. Both were administered by Ralph Hamilton. Melvin Daugherty supervised the print shop, Eddie Hepler the mail room and Juanita Lusk the supply room. Later the print shop became the administrative responsibility of Fletcher Luck. The print shop was moved to another location. The space in the back room was converted into a production work area when the new office of communications Institute of Agriculture came into being under Cavender's leadership.

In the 1960s, the Institute of Agriculture began producing television programs that were sent across the state. The weekly 30-minute program, "Ag Science in Action" was shown on Channels 2 and 10 in Knoxville and in Jackson, Memphis, Nashville, Chattanooga and Johnson City.

"The program was produced in conjunction with UT TV Services," said Reinhardt. "George Mays and I served as co-hosts of the program. Extension specialists and research scientists and the ag teaching staff appeared as

guests on the program. Each of the hosts were responsible for working with different departments. I worked with ag. engineering, OHL, forestry, entomology and poultry. George worked with plant science, food tech, animal science, ag economics and 4-H. Both worked with home economics. By the time Mr. Cavender retired in 1981, interest in the show had dwindled to two or three stations and was discontinued."

Elaine Wiedemann (1975-1979) co-hosted the show with Mays and Reinhardt. Before the show was cancelled, Reinhardt said that Connie Williams (1979-1984) and Robert D. (Bud) Grimes (1979-1986) replaced him as host.

Blake said Bible left in 1973 to become public relations director with the American Shorthorn Breeders Association, where he is now vice president. Hamilton left Tennessee to become head of information and public relations at Oklahoma State University. Sweet was appointed acting head, but decided to retire in 1974. G.W.F. "Dutch" Cavendar, former assistant administrator with the Farmers Home Administration in Washington, D.C., was brought in to head the offices in March 1975.

"It was explained to us that we would no longer be an Extension Service section, but an "office of communications" with a "head" who reported directly to the vice president. All communications personnel, now and in the future, regardless of the division they worked for, would be in this office. Each division -- Extension, Experiment Station, the colleges -- would be billed via transfer voucher for services performed. They would provide guidance and direction for their personnel, but top administrative control was in the office of the vice president."

The vice president of agriculture during Cavender's leadership was Webster Pendergrass. Reinhardt explained that, "The director of the office of communications reported to the vice president and not to the dean of the Extension Service or Experiment Station. Program planning and implementation covered all four divisions and was the sole responsibility of the director who coordinated all communication activities within the Institute and the office of communications."

Pendergrass retired in 1979 and W.W. Armistead became vice president. Cavender retired in 1981 and Bill J. Reed was chosen to head the joint offices. Reed had been public relations director for Riceland Foods in Arkansas. He stayed with the UT Institute of Agriculture for almost two years and returned to Riceland. Blake said that a couple of significant things happened after Reed left.

"No one would be named 'acting head' and the office of communications would be abolished and we would once again be an Extension Section. Troy Hinton, associate dean, was acting head and we would check with him for administrative guidance. The other significant thing (for me) was that I decided to retire. I gave them three months notice and retired at the end of January 1984 and have never regretted it."

Reinhardt became leader for the Extension communications section. Today, the Extension and Experiment Station communications offices continue to operate separately. Mays, Reinhardt and Gary Dagnan, graphic artist who began as a student worker in 1976, are the veteran Extension communication specialists. Reinhardt selected Charles Walker as print news specialist to replace Connie Williams, Wanda Richart as publications specialist to replace Al Blake and Nancy Cann as features and special events specialist to replace David Hill (1979-1983).

With the changes in lifestyles and media preferences of the clientele, the section is in transition.

"The public demands we become more innovative in providing for its future needs," Reinhardt said. "For example, the use of radio in Extension has changed from agents doing 15-minute to half-hour radio shows to doing five-minute educational spots and announcements providing the opportunity of getting more information to listeners than ever before in a form that is entertaining and informational.

"The use and need for educational video has created new demands for services. With new electronic delivery systems becoming more and more prevalent, we will need to address the question of how can we deliver information more quickly and efficiently to our clientele. Electronic media, both video and computers, as well as teleconferencing, will play major roles in our shaping the future of the Extension communications section."

Despite the changes from 1914 to 1989, Rosslyn Wilson Smith appropriately describes the purpose of the communications section then and now:

"Throughout my work with the department, all of us consciously tried to keep in mind the fact that our primary function was to serve our specialists, researchers and county extension personnel, provide them with needed materials, and enable them as best as we could to get their information out to their people in a way that inspired them to use it effectively in their daily work and lives."

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AGRICULTURAL PROGRAMS

Subject matter specialists, in tandem with county agricultural agents, are the backbone of the Extension delivery system of educational information to farmers. Specialists interpret research findings and keep a finger on the heartbeat of their respective industry. County agricultural agents foster the adoption of recommended practices. Together, they provide the farmer with an unlimited wealth of information that assures the production of abundant crops, health herds and a profitable income to sustain and nurture the farm family.

The agricultural staff is composed of 13 subject-matter sections with a staff of approximately 100 individuals who hold professorial rank. At the county level, a staff of some 224 agricultural agents, most with master's degrees, are highly accreditable.

Program development and delivery to clientele is timely, on the cutting edge of known technology and engineered to meet personal farm circumstances. Agricultural history has been shaped, in part, by the Great Depression, world wars, a constantly changing economic world structure and the migration of youth from the family farm.

Only the tip of the iceberg has been touched in recording our agricultural history. The reader who wishes to learn more about a specific subject or county story is encouraged to contact the appropriate section leader of their local county Extension office.

Agricultural Economics and Resource Development

Charles M. Farmer, Professor
Clark D. Garland, Professor and Leader
Michele C. Hatcher, Assistant in Agricultural Extension
Estel H. Hudson, Professor
David L. Hunter, Associate Professor
Robert P. Jenkins, Professor
Emmit L. Rawls, Professor
George F. Smith, Professor

The agricultural economics and resource development section is and has historically been concerned with educational programs related to improving decision making of individuals and the overall quality of life. A retired state specialist was interviewed to capture the problems, solutions and opportunities available during the section's early years.

Additional chapters were prepared by state specialists currently employed by the section. They reflected over the past years and summarized the most significant events which have occurred during their careers. The majority of these specialists have been involved in educational programs of the Agricultural Extension Service for about 20 years.

Memories of A State Specialist -- Frank DeFriese

In 1935, Frank DeFriese, got a call to come in for a job interview with H.S. Nichols, state director in Agricultural Extension. When the director offered him a position as a state specialist, DeFriese asked, "Just how permanent is this?"

Nichols, who was "kind of a roly-polly individual who dry-smoked a cigar," looked up at DeFriese and said, "Son, I don't rightly know. I came here 25 years ago on a temporary basis...I don't know whether it's going to be permanent or not."

Well, that meeting began a 39-year career as a state specialist for Frank DeFriese, who during his years with the service worked to educate Tennessee farmers on farm management, agricultural policy and income taxes. He earned both his bachelor's degree in agricultural education and his master's in agricultural economics from the University of Tennessee.

Working the state from the Knoxville headquarters was quite a bit different during his early years than today. "There was many a day I've seen agents leave here at 3 in the afternoon and drive to west Tennessee for a meeting the next day. That was an eight to 10 hour trip depending on whether you had to go all the way to Memphis or stop this side of it," said DeFriese.

Roads to Memphis then, consisted of two U.S. highways that were "two-lane, crooked roads" and during the winter months, specialists were given a "pretty heavy road assignment."

"We had work all across the state and if you had Monday meetings, you left on Sunday and tried to get back on Saturday. Weather didn't interfere too much, but a few times I wondered if we had any sense traveling in that snow and ice," he said. "But you just took it as part of the job."

DeFriese, who stayed out in the field all the years he worked, remembered one time in particular. "I went out for a meeting and I had all my teaching materials in the trunk and the trunk lid froze on me. I had to teach without the materials that night. We had over 100 farmers show up that night and no teaching materials, but we had a very good meeting and promised the hand-outs would be left at the agents offices."

Farm meetings were generally held from November through February because "all he (farmer) had to do was take care of his livestock at that time."

"We worked with farmers through our county staff, of course, and discussed various things, but one of these was record keeping. We'd hold record book schools," DeFriese said. "Agricultural Extension played a major role in getting farmers to begin keeping farm records as a means to good farm management and for income tax purposes.

"I never will forget one farmer in Hancock county. We were discussing keeping records for income tax and he said, 'I wish you wouldn't talk about that. Why don't they let me send them \$50 a year and forget about income tax?' I said, 'me too,'" he said laughing.

Sometimes the farmer's problems with bookkeeping for tax records would turn into confused frustrations. "The thing they fussed at us about was we put in there an investment cost - how much you have invested out there and interest on investment. They didn't see the reason for that. They owned the farm, they owned the cattle, they owned the machinery. They didn't see that they could take that money and have it invested somewhere else and bring them in whatever the going rate of interest was at that time. And they didn't like the idea of us saying that was a cost," he said.

"At the end of the year they'd look at that record and say 'We don't have that money,' and I'd say, 'Don't doubt it, you lived off it as it came in.'"

Also, income tax schools were held for the purpose of teaching people to go out into the counties and assist farmers with filing income tax returns. These schools were organized in conjunction with the Internal Revenue Service and Farm Bureau.

"We went into the major things concerning farm tax returns instead of business tax returns. We'd have a representative from the IRS as our main technical advisor and it worked beautifully.

"We used the Farm Bureau record books -- they were making the books available to their members and selling it to other folks. We requested that the book be made available to anyone who wanted it since we were involved in preparing it.

"Eugene Gamble, who was also in the state Extension department, primarily developed the record book and Farm Bureau is still using basically the same record book, "Out on the Farm."

State specialists along with county agents spent time out on farms evaluating what could be done to make the enterprises more efficient and profitable. Each farmer was handled on a more individual basis.

"In a lot of instances, when we'd go on a farm we didn't push too hard for diversification, we looked at specializing operations. We looked at what would be your major enterprise and then anything to supplement it rather than going for a lot of other things."

According to DeFriese, agents then worked more with individuals taking individual problems and complaints and they had to leave a lot of the college courses behind.

"A course for farm management was not designed to do the things we were thinking of in the later years of farm management. You had the textbook approach of selecting the enterprise, but we learned before we got computers that you let your preferences get in. This fellow's not interested in sheep -- that might be a good enterprise -- but, he's not interested in it so why talk to him about it. We had to take it more on a personal interest."

One of the biggest projects that DeFriese was involved with on the farms was the Tennessee Valley Authority fertilizer project. "Fertilization was the thing that started the TVA test demonstration program. Along in the late 1930s and early 1940s, I guess I signed every requisition that came in for fertilizer. Most all of them came across my desk," he said.

TVA became interested in fertilizer and initiated the project after Norris Dam was completed in 1933. TVA administrators had seen the "power company dam" reservoir in the Copper Hill area practically fill up with sediment because of no cover on the land surrounding it. Officials at TVA decided to avoid this occurrence by seeing that the hills were covered with sod to "keep it from washing," DeFriese said.

A TVA act provided for the Muscle Shoals munitions plant in Alabama to be a part of their operation. Chemists and engineers started to work to see if it could be used to produce fertilizer.

Also, according to DeFriese, H.A. Morgan, former UT president and TVA Board Member, was a strong believer in fertilizer. "He said phosphate was one of the main elements needed because they would see the high phosphate areas of Middle Tennessee where they were mining phosphate and in the 'bluegrass' section of Kentucky. All the soil tests there showed high phosphate."

So the first fertilizer that TVA made was a triple super phosphate which the farmers agreed to use in accordance with the agronomy department's recommendation. Farm records were kept so that evaluations could be made.

TVA provided large amounts of fertilizer to the farmers for a minimal cost, but it was not without problems.

"Some (farmers) were pretty resistant to changes and we had some real 'boo boos' with it," DeFriese said. "The calcium meta phosphate that TVA made was high analysis, but their early curing process was not satisfactory. If they (farmers) were a little bit slow in getting it spread, it became a 50- pound monument out there on the farm because they could not do anything with it.

"They weren't happy and TVA wasn't either. This just called for more research on how to get a satisfactory product."

Another problem with fertilizer was learning how to apply ammonium nitrate. "At one point in the explosive manufacturing process this product can go to explosive or into fertilizer. Well, the need for explosives diminished so around the first of April in 1942 or 1943, we were notified that there was going to be a sizeable quantity of ammonium nitrate (33 percent material) available for use."

Fast movement had to be made, so the specialists were taken to the plant and told that the material could be dangerous if not stored properly. "You always had stories about folks that were injured or about explosions with ammonium nitrate after it was moved out," he remembers, "but we never saw any.

"Well, we had to work out plans for dispersing and distributing it. I don't know why some of us who had used nitrate of soda didn't use a little common sense, but we didn't," he said in retrospect.

Someone came up with the idea that on the small farms, take a galvanized bucket, punch holes in the bottom of it and go down the row and shake it out on it.

"It was a wonderful idea except for the fact that in about three to five days time you had a field of corn that was absolutely burned up. The thing about nitrogen is you don't put it on the plant itself.

Another problem was to convince the farmers to incorporate conservation practices even if it meant a drop in income.

"To get the hills in grass and clover, what we did was reduce income for these farmers. They had been growing corn and tobacco up there. Some didn't have lower level land to put it on and we saw that you had to make some adjustments," he said.

Implementing a rotational system or strip cropping system where the farmers could have "a strip of sod then cultivation" in order to reduce erosion on the hillsides worked well. Terracing wasn't too practical in East Tennessee. "Another innovative process was trying to grow more small grain on these hillsides, but it never did take hold very strong, either," DeFriese said.

After the program got under way, a small number of test demonstration farms were established throughout the counties that were representative of the types of farming being conducted in the communities. "If there was going to be a test, it needed to be where it could be seen and they (farmers) agreed to leave a check plot -- one strip where they didn't use fertilizer -- so other farmers could see the difference," DeFriese said.

Then the agents and specialists went to the entire community and ask if they would be interested in forming community organizations where fertilizer would be provided at cost if used throughout each community.

"Well, Claiborne County had the entire county covered with community organizations. They just went in and treated the entire county. That may have been one of the reasons we didn't get as much silting in the Norris Reservoir as they thought we would."

Perhaps one the most significant things to come out of the efforts of the TVA test demonstration program was to get the farmers to start using higher analysis fertilizer. But even that accomplishment hit a snag, though not from the farmers.

"We sat in a meeting once where fertilizer dealers were present and one dealer said, 'I want to know why it is you're trying to put us out of business,'" DeFriese remembered.

"Everybody was looking around the room to see who would answer. Then a farmer spoke up and said, 'I'll tell you why. We're tired of buying all that sand you put in that bag to make 100 pounds. We want higher analysis fertilizers. We're learning how to use it.'"

DeFriese assured that "TVA did not at any time fight fertilizer companies" even though at times it looked as if "we were putting out something they couldn't do at the time." In fact, TVA never had a patent on the material it produced.

According to DeFriese, TVA indirectly helped the companies who now produce the same material and they are selling more fertilizer since the test demonstration program began.

Looking back on the TVA test demonstration and the effect it has had on the state and its farmers, DeFriese feels that "It's been an educational program that I think has been good just like all Agricultural Extension programs have been over the years."

DeFriese emphasized that Agricultural Extension representatives had to be flexible, particularly in farm meetings.

"I never will forget one meeting I had in the middle part of the state -- a farm management meeting -- with farmers. I had me a presentation made, like for a Ph.D., and I started in on my song and dance of management. In less than five minutes they were beginning to go to sleep on me."

Realizing he had to do something quick to get their attention he stopped and began a new, unplanned tactic.

"I stepped around to the front of the table where I was working, plopped down on top, looked at the fellow right in front of me and asked, 'Why are you in here tonight? What's your problem?'

"He looked at me and said, 'I can't grow enough feed for my cows.'" So, DeFriese thought he would ask the rest of them if they were having similar problems. The answer was a unanimous, yes.

"I ask them what kind of feed are you growing and they got started into a conversation and it was a two hour meeting with a 10-minute break. It's just a case of reading your audience and making the adjustments, that's the thing you had to do."

Frank DeFriese learned a lot, gave a lot and saw even more during his years with Agricultural Extension. But what kept him in the service for such a long period?

Quite simply, "It's the people concerned. The Extension Service has always been concerned with people. I liked it. Never considered anything else.

"We worked with people, looked at people with their problems and we took them as individuals," he said.

Due to all the things the staff experienced together, "You had a comradery with that group of specialists and I'm sure they've got it now. That was the thing. We just enjoyed working together."

Price Outlook Teleconferences as an Educational Tool

Farm profitability depends in large part on the level of prices received by farm operators for the crop and livestock commodities they produce. Market prices are still determined by the interaction of supply and demand. Current information relating to present and projected supply and demand and their impact on price levels and patterns are therefore of great interest and concern to Tennessee farm business managers.

Accurate price projections are useful for decision-making. Farmers can use price outlook information to help determine: whether to add a new enterprise; whether to expand, contract or drop an existing enterprise; how to time sales; or whether to forward price production prior to the time for delivery. Producers of the state's major crop and livestock commodities, including soybeans, corn, cotton, wheat, feeder cattle, fed cattle and market hogs, have the opportunity to establish a price up to a year or more prior to the time the commodities are market-ready.

Many methods are used to educate and inform Tennessee farmers with respect to current outlook information and how to develop outlook scenarios as a basis for effective decision making. One cost-effective alternative which allows simultaneous interaction with farmers in several counties is the teleconference. This delivery method uses the telephone for two-way communication with an assembly of farmers. The outlook teleconference began in 1982 with one participating county. There are now 17 counties involved. No more than eight or nine counties are "packaged" together to allow participating farmers better opportunity to ask questions following presentation of outlook information.

The teleconference, which begins at 7 a.m. CST in the participating counties, lasts one hour. The first 20 to 25 minutes are allocated to presentation of crop outlook information. This is followed by a 10-minute question-answer period, which is then followed by livestock outlook presentation and a livestock question-answer period. Brief comments relating to dairy outlook and policy are occasionally presented.

The outlook teleconferences have evolved into quarterly meetings. Average attendance per county is about eight or nine. However, the educational impact in a participating county is greatly multiplied through the dissemination of outlook information to non-attending farmers. Methods of dissemination include outlines with summary comments prepared especially for the teleconferences, word of mouth and news columns prepared by Extension agents and based on material presented at the teleconferences.

The teleconferences obviously lack the personal contact possible through one-on-one consultation and group meetings. However, they are viewed as a cost-effective and successful part of the total farm market outlook educational program. Feedback from participating counties has indicated that information

useful for decision making is being delivered to farmers via teleconference, which they would not otherwise receive.

History of Whole Farm Demonstration Programs

In the early 1960s, the deans of the Extension Service in the seven valley states realized the need for farmers to make adjustments in their operation at a faster rate than was customary. As a result, the Rapid Adjustment (RA) program was initiated in Tennessee in 1963.

The objective of the RA program was to demonstrate on a whole farm basis that proper resource allocation along with following the university's recommendations could lead to an increased net farm income in a relative short time frame.

In the late 1970s, soil erosion came to the forefront, especially in West Tennessee. Many fields in this area had an annual soil loss of 15 to 20 tons and some fields in excess of 100 tons per acre. Soil loss tolerance, which is the amount of soil that can be lost annually and maintain productivity, is five tons or less per acre.

The Resource Management Conservation (RMC) farm program was started in 1979 in West Tennessee. RMC farms are also whole farm demonstrations. The objective of this program is to show that technology is available to reduce soil losses to an acceptable level and still maintain or increase net farm income.

Dairy Marketing Educational Programs

The early 1980s saw a huge surplus of dairy products develop. Government expenditures for butter, cheese and nonfat dry milk at one time exceeded \$2 billion.

To solve this surplus problem, Congress passed the dairy termination program or the whole herd buy out as a part of the 1985 Farm bill. Under this law, dairy farmers were paid by the federal government (partially financed by a check-off from dairy farmers) to go out of the dairy business. In order to receive payment, a dairy farmer had to agree to sell all cows for either slaughter or export and stay out of the dairy business for a period of five years.

The program created much interest among dairy farmers. Extension agents conducted county educational meetings and provided written material to explain the program to dairy farmers. These county meetings were well attended. Usually two or three times the attendance of what one might expect at a dairy meeting. The dairy farmers were very eager to learn the details of the program. Many favorable comments were received by Extension on the quality and amount of information provided.

Establishing a United Association for Fruit and Vegetable Producers

The Tennessee Vegetable and Fruit Growers Association merged with the Tennessee Horticulture Society to form a united association for all fruit and vegetable producers.

Responding to expressed needs from leading producers, political leaders and produce industry spokespeople, it became obvious that a good educational program for all segments of the industry could only succeed if strongly supported by cooperative grower backing. Legislative and executive actions by government, better availability of supplies and buyers, better cooperation among producers and a concentrated educational program could be supported through a united effort.

After soliciting the cooperation of the horticultural production specialist and in joint consultation with him, farsighted producers with influence in the industry were targeted and invited through their county Extension leader to one of three regional meetings where the need and prospects for a grower organization was presented and discussed. A commitment from each producer to participate in a statewide organizational meeting was obtained and 50 leaders met to form the Tennessee Vegetable and Small Fruit Growers Association. The charter attempted to handle the diverse interests of the various participants by providing for vice-presidents with responsibility for each major crop grouping.

County Extension agents helped secure grower program participants and "spread the word" about the first convention. Exhibitors were found to pay the bills and no registration fee was needed. An outstanding group of speakers and panelists spoke on marketing, regulations, production and industry trends. Surprisingly, about 300 persons attended the first convention in spite of snow and ice.

Good support from Extension administration helped make this association "an idea whose time had come." It had been tried before and probably couldn't be done as easily now, partially because of the subsequent rise of many industry support groups, which would make it harder to get unified action and coordination.

Association membership reached about 90 percent of all production by volume.

Among the accomplishments of the group is credit for passage of a strong vegetable plant law, increases in staffing at UT in both research and extension on fruits and vegetables, increased activity in market development by the Tennessee Department of Agriculture, the initiation of a regional farmers market plan for the state and increased attentiveness by policymakers to the needs of the industry.

Recognizing the need for even more unity, the board in 1984 initiated joint conventions with the Tennessee Horticultural Society. This society was traditionally a group of fruit growers. Soon the memberships of both groups saw the advantages of one organization for everyone and voted to merge.

The challenge continues to offer an educational program of benefit to everyone and to keep the organization "relevant" and dynamic. The association still seems like the best way to deliver educational programs in marketing to mass audiences in an economical manner. Incidentally, the organization sponsors a scholarship of \$1,000 annually for a UT student in agriculture, with preference given to the family of an association member.

Video Board Auction Cattle Sales

For many years beef producers sold cattle on the farm after haggling with one or more buyers. Priding themselves on fetching the highest price and paying no commission, producers had the best of both worlds -- high price and low marketing costs. Then one day the buyers seemed reluctant to come look at the cattle, to say nothing of bidding on them.

With the assistance of the UT Agricultural Extension Service, especially Joe Woods, Sevier County Extension leader, the Sevier County Livestock Association organized the first board auction sale in the state. Twelve hundred cattle were sold in that first sale in 1981. The association has continued to have an annual sale each year since with volumes ranging from 600 to 2,600 head. With the advent of video taping technology, Extension demonstrated how this could be used to show cattle to buyers across the country without having to leave their armchair.

As a result of this successful initial effort other sales have been started to help beef producers get competitive bidding on their country cattle. One independent marketing agency, the Wilson Livestock Network, has monthly sales of cattle covering seven states and sales of over 15,000 head in 1989. The Kingsport Livestock Market has had sales each year since 1982. The Lower Middle Tennessee Cattle Association of beef producers started with a single sale of 1,600 head in 1984 and sold 5,500 head at six sales in 1989. That association contracts with the Tennessee Livestock Producers, Inc., a Farm Bureau affiliate company to manage the sales for them. Several other sale locations have used the video sale concept to improve market prices on large groups of country cattle.

The overall effort has involved the Tennessee Department of Agriculture, divisions of animal industries and marketing, grading and market news personnel. County Extension agents have also played a vital role in organizing and educating producers.

Beef producers using the video board sale have indicated that their cattle sell for \$2 to \$4 per hundred weight more than they could get selling them on the farm themselves. The combined improvement in market value of cattle sold

by beef producers and marketing agencies using this new technology was about \$500,000 in 1989.

Resource Development Educational Programs

Title V of the Rural Development Act of 1972 provided funding to the land-grant university system for a pilot rural development program. The program was designed to be a joint Extension/Experiment Station effort. To this end, equal funding was provided to both divisions of the university system.

In Tennessee, a state advisory council composed of representatives from federal and state agencies, local government and the private sector was organized. The council selected five pilot counties: Clay, Overton and Pickett counties in Extension District IV and Claiborne and Hancock counties in District V

The basic philosophy of the program in Tennessee was that development is primarily the responsibility of the people themselves. The Institute's role is to assist them in identifying needs, establishing priorities, investigating alternatives, implementing projects and evaluating results.

Organizationally, an area Extension agent was assigned to each district. Roger Thackston was assigned to Clay, Overton and Pickett counties with headquarters in Overton County. Roger Brooks was hired to work in Claiborne and Hancock counties with headquarters in Claiborne County. Thomas Klindt, previously an assistant professor at Louisiana State University, was employed by the agricultural economics and rural sociology department to provide leadership for the Experiment Station effort in the pilot project. George F. Smith was employed by the Extension Service in the resource development section to provide leadership and specialist support for the Extension portion of the program.

Work started in 1974 with a major survey to identify local needs and opportunities. The procedure and results are reported in Experiment Station Bulletin 558, "The People in Tennessee's Title V Counties: A Summary Report on Characteristics and Attitudes."

Greater job opportunities and increased family incomes were the primary concerns in the five counties. The area agents, working with and through the county rural development committees, initiated a number of projects to supplement local incomes including country ham processing, sorghum molasses production and vegetable production and marketing. Tourism and recreation opportunities were also promoted. In District IV, brochures and a companion slide-tape program were produced. Also, Elrod Falls in Hancock County was developed into a county recreation park.

In April 1977, flooding greater than the predicted 100 year flood in the Clinch-Powell watershed destroyed a number of tobacco barns. A cooperative program with TVA to build barns in Claiborne and Hancock counties replaced

over 30 barns in time for the tobacco harvest. The standard design developed by TVA continues to be used by area farmers.

In an effort to learn more about the functioning of a rural county economy and to develop information for educational programs, an input-output study was conducted in the Title V area. County data was combined into a composite analysis to provide a more generalized perspective on the rural county economy rather than a more exact picture of an individual county. In addition to an Experiment Station bulletin, a slide/tape program describing how a rural economy functions was produced.

Intensified pilot project activities continued through FY1980. Within Extension, the Title V program demonstrated the value and potential of an area resource development agent working with county rural development committees. This experience led to the transfer of Clyde Webster from Extension leader in Trousdale County to a very successful career as an area CRD agent in District IV stationed in the district office. It also provided the justification for requests to the state legislature to fund district CRD agent positions in each Extension district.

Tennessee's MANAGE Program

In April 1986, key leaders in the state legislature, state agricultural leaders and the UT Agricultural Extension Service worked together in establishing the MANAGE Program. The program was authorized to start on July 1, 1986. Additional state funds were provided to employ 12 area farm management specialists and three state specialists in farm management, stress management and family economics. By October 1986, the majority of the staff were in place. MANAGE focuses on how to manage the farm business, farm credit, family finances and stress.

The objective of the Tennessee MANAGE program is to teach farm families to carefully analyze their individual situation and assist them in improving their quality of life. MANAGE provides the assistance necessary for Tennessee farm families to: accurately assess their current financial status; identify and evaluate alternatives available to the family; develop appropriate strategies to improve their financial future; determine farm and family goals and the opportunities for achieving them; and cope with changes affecting family life

MANAGE offers workshops, group meetings and individual farm and home visits. As of September 1989, over 3,200 farm families have been provided intensive farm and financial planning assistance. FINPACK, a computerized farm planning program, was used as a teaching tool in providing this assistance. Area specialists have participated in over 650 group meetings and reached over 13,000 producers with financial information.

In a mail survey of the first 687 MANAGE participants, the majority of them indicated that they received answers to questions, increased their planning capabilities, had a greater understanding of their financial situation and a

greater understanding of alternatives for improving their financial situation. The MANAGE program has received an extremely favorable reaction from farm families. Ninety-six percent of the farm families stated that they would use the program again.

MANAGE is an integral part of our total Extension educational program. In the years ahead, farm and financial planning as taught in the MANAGE program, will be critical for improving profitability and maintaining the competitiveness of agriculture.

Agricultural and Extension Education

Robert W. Burney, Associate Professor

Origins

The agricultural and Extension education department began in 1954 as Extension methods when Vernon W. Darter returned from Harvard to give full attention to both formal and informal phases of training Extension agents. Darter continued in the department until 1957 when he became director of the Tennessee Agricultural Extension Service.

As far as home economics is concerned, teaching in Extension methods began in 1947 when Claire E. Gilbert assumed her position in the College of Home Economics. Previously other home economics Extension specialists had offered some help in Extension methods to undergraduates.

On the agricultural side of the Extension training program, "Prof" Ed Stivers had conducted workshops and other in-service training meetings in Extension methods during the late 1930s and 1940s.

Formal course work in Extension methods was first offered at the University of Tennessee, College of Agriculture, by Darter in the winter quarter of 1957.

The basic mission of the department is to teach staff how to disseminate research-based subject matter to the clientele they serve. Most of the department faculty have a joint appointment with the College of Agriculture and the Tennessee Agricultural Extension Service. A computer applications role was added to the department in 1984. This role involves the development and utilization of microcomputer system applications for the Tennessee Agricultural Extension Service.

The Agricultural Extension education department merged with the department of agricultural education in 1986 to form the present agricultural and Extension education department.

What's in a name? The department has had many names during its tenure including the following: Extension methods; Extension training and studies; Agricultural Extension; Agricultural Extension education; and agricultural and Extension education.

For a time the word education was avoided. The final name was after the merger with agricultural education.

Later Development

Extension Winter School

A strength of the department is its graduate program. A unique program is offered during the winter months whereby Extension agents and others work toward a master's degree. Since 1959, approximately 900 students (average 30 per year) have participated in this unique winter school opportunity. The school was developed as a result of a need on the part of agents to receive updates on subject matter and Extension methods. Agents were permitted to attend the six-week session while maintaining their jobs in the county.

Prior to the Extension winter school, selected Extension agents would attend regional workshops offered at Arkansas. Later courses were taught for graduate credit at various locations around the state for agents desiring additional training in subject matter and Extension methods. Often older agents would attend these off-campus offerings and discover the possibilities of graduate work.

Over 35 different courses from 11 different agriculture departments have been offered during the winter school. In the College of Human Ecology, over 21 courses have been offered from seven departments. Approximately 250 agents have completed the master's degree while 40 others are in various stages of completion.

The students in the department have primarily been Extension agents, however, a few full-time students have also completed the program. For a period of years the department also had a number of foreign students particularly from India.

International Program

As a result of the contract between UT and the U.S. Agency for International Development (AID), the department had a number of students from India. During this contract several university faculty served a period of time in India. The first student from India came to the department in 1958, and from 1960 to 1968, the department had a steady flow of Indian students. The AID contract was completed in 1972 and the last students finished by 1975. Later the department had students from the Philippines, the Middle East, Southeast Asia and other areas.

Summer Interns

The summer intern program, known as Extension field training, was first offered by the department during the summer quarter in 1959. The summer intern works in a county Extension office under the supervision of the county Extension leader and participates in all phases of the Extension program. They receive a small stipend and college credit along with the experience. Since 1968, approximately 200 students (10 per year) have completed an

internship and slightly more than one half were employed as Extension agents in Tennessee. Previously a field training program was offered through the College of Home Economics as a part of the home demonstration methods program.

New Worker Orientation

The department has responsibility for coordinating new worker orientation. In the 1960s, new worker orientation (also called induction training) was held each fall. Agents hired during the preceding year would attend a week-long conference in Knoxville designed to familiarize them with the Extension Service, its philosophy and objectives and the responsibilities of staff members.

Today new worker training is scheduled every two months with much of the same procedure still being followed. During a three day period, new workers receive a broad view of the Agricultural Extension Service, get acquainted with administrators and specialists and learn firsthand the services of the various departments.

The department has been fortunate to have scholarships for students attending Extension winter school and funds for summer field training from industry, staff development funds and private donors.

The department has had a direct role in the process of identifying Extension clientele needs, interests and expectations. Staff members have assisted other sections in designing surveys, conducting the survey and analyzing the results. This information is useful for administrative decisions on statewide program emphasis as well as aiding county staff in planning programs to meet clientele needs.

Until about three years ago, the survey data was punched on cards and fed into the computer. Cards are no longer used, but the programs are still run on the mainframe. As personal computers become more powerful, some analysis may be run on them. The data provided by these surveys has also been used for many graduate theses.

Former Staff

Claire Erin Gilbert taught courses in Extension methods in the College of Home Economics from 1947 to 1955. She was a member of a team from UT that taught home economics in India for two years from 1955 to 1957. After returning from India, Gilbert spent a year at Cornell University, completing her doctorate in 1958.

She returned to the department in 1958 and continued until her retirement in 1969. Under Gilbert's direction, the College of Home Economics offered a major in home demonstration methods, a program designed to prepare students to work in Extension. Many of the students participated in Extension

field training. Gilbert later taught courses in Agricultural Extension and also advised master's students.

Vernon Webster Darter started the Extension training and studies department in 1954 upon his return to Extension from graduate work at Harvard University. The role of the department was to provide training for Extension agents to become more effective in serving the needs of clientele and performing their Extension duties.

Darter left the department in 1957 to become director of the Tennessee Agricultural Extension Service. However, he had laid the groundwork for the department's mission and continued to provide support in his new role.

Lewis H. Dickson joined the Extension methods department in 1957 and served as head until 1967. Under his guidance, the winter school or winter session was started in 1959. Dickson was responsible for developing courses and curricula leading to the master's degree with either majors or minors in Extension methods. (The department was later named Agricultural Extension and then Agricultural Extension education.)

Dickson left the department in 1967 to give leadership to the international program and later rejoined the department in 1977 as professor in Agricultural Extension Education. He provided leadership to Extension field training and new worker orientation. Dickson retired in 1988.

Robert S. Dotson joined the department as an assistant methods specialist in 1959. Dotson had received his Ph.D. from Penn State University. He became department head in 1967 and served until his death in 1985. Dotson brought to the department a dedication and tenacity, which carried the department through growth of the winter school and many other programs.

Ben Cockrill and Ann Lee served in the department for a brief period in the mid-1950s. Dolores Pillow, TSU family living specialist, was also assigned to this department from 1984 to 1986.

Current Staff

Cecil E. Carter Jr. joined the staff in 1967 as assistant training and studies specialist. Carter teaches courses on evaluation and history, philosophy and objectives of Extension. Carter has advised numerous graduate students. He has responsibility for conducting and analyzing Extension surveys which help to determine clientele needs.

Roy R. Lessly joined the department in 1986 as associate professor and head of agricultural and Extension education. Lessly teaches courses on Extension teaching methods and program planning and has advised numerous graduate students. He has responsibility for program planning for Extension.

Robert W. Burney joined the department in 1986 as assistant professor for computer applications. He has responsibility for statewide computer applications in Extension including acquisition, installation, training and support.

Steven J. Burns accepted a new position in the department in 1989 as assistant professor for computer applications located in Jackson. Burns is a statewide specialist, however, he concentrates his efforts in the western part of the state.

Randol G. Waters joined the department in 1989 as assistant professor. Waters teaches a research methodology course and also advises graduate students. He will also have responsibility for the summer intern program and new worker orientation.

Computer Applications

In July 1984, Joan W. Kines was hired as computer applications specialist, a new position in the department. Prior to Kines joining the staff, limited computer activities were conducted by the agricultural economics and resource development section.

She was primarily involved with training and led the early stages of adopting computers in Extension. The organization changed from Radio Shack computers to IBM and had several counties and sections using computers. Kines left Extension in June 1986 to accept a position with the College of Human Ecology.

Burney replaced Kines in July 1986. During the next three years, Burney guided the computer effort from 50 computers to over 250 with at least one in every county, district and specialist section. In October 1989, Burns joined the staff to support computer efforts in the western part of the state. He is housed at the District I office in Jackson.

While much has been accomplished in the computer area, much remains to be done to fully adopt this technology.

Department Merger

The department was merged with Agricultural education on Jan. 1, 1986. The new department was named agricultural and Extension education. John D. Todd became a member of the department at that time. Prior to the merger, the department of agricultural education was administered through the department of technological and adult education in the College of Education, while the Agricultural Extension education department was administered in the College of Agriculture. The merger was designed to provide strength and support to both departments by combining the efforts into a single mission.

The department was involved with the rest of the university in the change from quarters to semesters. The change took place in the fall of 1988. Prior to the change, courses were evaluated as to hours of credit, course numbers and content.

Current Status

The Extension responsibility of the department includes: training in computer applications, hardware and software; orientation for all new Extension faculty; conducting and analyzing surveys of Extension clientele needs; developing guidelines and training staff in all areas of program development; and providing training to Extension staff in the areas of program planning, program evaluation and teaching methods. The department also assists with the preparation of state reports to Washington.

The college's mission to prepare students to be effective educators in the areas of vocational agriculture or Agricultural Extension. The curriculum also provides training for those who wish to enter farming, governmental service or other agricultural occupations.

Conclusions

Over its 35 year history, the department has seen many changes. The staff has expanded, new courses have been offered and computers have been installed throughout the state. It still serves an important function.

The department has continued to receive excellent cooperation and support from Extension and university administrators. The department has also been fortunate to have a dedicated staff who have devoted the time necessary to get the job done. We have been flexible to meet the needs of agents and other clientele.

A weakness or problem has been a lack of faculty (student/teacher ratio). We have operated with .81 FTE attempting to advise 80 to 90 graduate students. Increases in funding for equipment and other needs have been minimal.

Where will the department be in the next 25 years? It's difficult to predict where the department will be in five years much less 25 years. Much will depend on the status of the Cooperative Extension Service. It will be 100-years-old in 25 years. Several states have already seen significant changes in Extension staffing, the role of the county agent and methods of delivery. Extension must continue to change to meet the needs of clientele.

Much will also depend on the status of the College of Agriculture. We have seen declining numbers of students and funding cuts. Will we continue to get the support we have enjoyed in the past from Institute of Agriculture and university administrators?

Who will be our students? Some 44 percent of Extension agents currently have master's degrees. Will we reach a point where all of the agents interested in a master's degree have been through the program? Will we again have a number of international students? There may be new methods of gathering information. Possibly some analysis may be done on personal computers in the county.

As mentioned earlier, the department is understaffed. Hopefully there will be additions to provide additional teaching and advising as well as performing Extension responsibilities. Most of the current staff will be retired in 25 years. I see a further blending of the functions in agricultural education and Agricultural Extension. Will there be additional office space, classrooms, labs or equipment?

The department may be involved in working with the College of Education to develop a doctoral program for Extension staff wishing to pursue such a course of action.

The computer area will continue to grow. The whole area of electronic technology, computer networks, satellites and video is expanding. The computer staff will either expand or much more will be done using outside help for consulting, programming, maintenance, and support. Will we have our own training labs? Will training be done via satellite and video? Will software be so user-friendly that people will train themselves?

Some states have a separate computer services department with trainers, programmers, maintenance and support people. Perhaps the role of our computer applications specialists will be more of a coordinator. Perhaps more expertise will reside at the section level. Some states currently have area computer people. Will we have a terminal on every desk? Will we all have portable computers that are a part of our daily routines?

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Agriculture Engineering

Houston Luttrell, Professor and Head

According to the June 8, 1967, edition of the Knoxville News-Sentinel, Tom H. Troxel, a Scott County surveyor, scholar and five-eighth Indian, spent four years at the University of Tennessee studying Agricultural Engineering before World War I. However, university announcements, which listed names of all students in those years, did not include that name.

In the early days it was known as rural engineering because it was associated with farm mechanics, land surveying, woodworking, forging, water uses and, in general, the application of engineering to rural life.

Records only indicate that James Arentson worked in rural engineering Extension beginning in 1918. He was replaced by H.B. Bliss in 1919 and he worked until 1925.

G.E. Martin began working in Extension rural engineering activities in 1935, but nothing is available on the years between 1925 and 1935. Mel Johns and M.T. Gowder were employed in 1936.

James C. (Jake) Hundley, along with Bob Woodruff, was in the first graduating group from the department known as agricultural engineering. Andy Hendrix was head of the department then, and it was under the College of Engineering at the time. Dean Ferris was dean of the College of Engineering.

Mechanical engineering was basic for designs of machinery. Civil engineering was basic for surveying, terracing and irrigation design. Architectural engineering was basic for structures and electrical engineering was basic for rural electrification.

The mid-1930s were the beginning period of the development of the Tennessee Valley Authority. Ira Cox recruited Hundley to be a division agricultural engineer in the Nashville division of Tennessee Electric Power Company (TEPCO). He was assigned to work with the Agricultural Extension county agent's office on a wide variety of farm projects related to the use of electricity. This included youth programs in 4-H as well as adult programs. At that time, he was to plan lines to unserved customers to block TVA and find suitable farm sites for electric powered experimental irrigation systems along with the UT agricultural engineers.

TVA was victorious and bought out TEPCO. Hundley was offered a job in the UT agricultural engineering Extension department to work along with

Gowder and Johns. Johns and Hundley were tied most closely to rural electrification. Other work during this period related to maintenance of farm equipment, terracing, drainage and farm structures.

World War II brought a big need for maintenance of equipment. Farmers needed help with engineering related problems.

After the war, Hundley returned to the department and he and Lonnie Safley planned to set up the 4-H electrification project. The electric cooperatives helped make this program successful.

The agricultural engineering department was located in the old dairy barn in 1937. This barn was constructed in 1899. The Extension Service was located at 1515 West Cumberland in these early days.

When Martin retired in 1949, Gowder was leader of the Extension agricultural engineers. He continued to work on terracing and machinery maintenance and employed Harold Jones in 1946 to work in West Tennessee on cotton ginning problems. Jones worked until 1951.

Edward B. Hale was employed in 1950 as assistant agricultural engineer in rural electrification. Hundley left in 1951 to be executive manager of the Tennessee Electric Cooperative Association. Hale lived in Knoxville four months and was transferred to the Nashville district office at 2321 West End Avenue.

Delbert Schwab was also employed in 1950 to help in the farm machinery area. He worked closely with the 4-H tractor program during this time and left in 1954.

Max Falkner joined the department in 1951. Prior to this he was working with TVA to help farmers who were dislocated during the dam construction. He helped with housing design and remodeling. He was used on many UT agricultural projects at the experiment stations and development of the 4-H camps.

William T. Robinson graduated from the agricultural engineering department in 1951 and was employed to help Max for a period of one year. Clyde Petty was also employed in 1952 for a year to assist Gowder. Gowder became ill in 1954 and Schwab left, which was a big blow to the department staff.

Houston Luttrell was employed in March 1954 and Hale was moved from Nashville back to Knoxville. Gowder recovered some and was able to work until 1956. One of the things Gowder did was organize the Tennessee Farm Contractors Association. It was made up of heavy equipment operators who built ponds, terraces and the like.

There was a drought in the early and mid-1950s. Hale and Luttrell spent much time helping with the design of irrigation systems. Their other work was

focused on the 4-H programs in the electric and tractor projects. They also set up some farm machinery field days in West Tennessee on the Jackson Experiment Station for the next few years.

James A. (Kayo) Mullins was employed in 1956 to work on cotton mechanization in Jackson. He moved a cotton gin from South Carolina to the Ames plantation to help with his ginning efforts. Mullins also worked extensively with the use of field sprayers for insect and weed control in cotton. Later he planned and constructed a cut-down gin at Jackson and helped get the agricultural engineering shop built at Jackson.

John M. Johnson was employed as leader in agricultural engineering Extension in 1958. He was basically electric power and processing oriented, but worked in all areas.

Luttrell transferred to the Experiment Station in 1959 and Hale left for VPI in 1960. Lewis Larsen was employed in 1959 to replace Luttrell, but stayed only one year. Kenneth DeBusk was employed in 1960 to replace Hale in rural electrification.

Albert Swearingen was employed in 1961 to replace Larsen in the farm machinery area. Swearingen came from the Oliver Corporation so he was able to develop a strong adult program in machinery, which helped many Tennessee farmers. Big changes took place while Swearingen was working and he made major contributions toward informing producers about their machinery needs as well as the operation and care of this equipment.

Mullins and Luttrell took leaves of absence and pursued their Ph.D. degrees from 1960 to 1963 at Iowa State University. H.O. Vaigneur joined them at Iowa State and later joined the Extension faculty in 1970 after working two years in India with the US-AID program there.

Following graduate work, Mullins came back to Jackson, picking up where he left off in Extension when he left.

Luttrell rejoined the Extension faculty as section leader in 1968 after Jack Johnson went to India on the US-AID program. Johnson died in India. Luttrell continued Johnson's efforts in machinery, safety and irrigation. He coordinated the efforts of the Extension agricultural engineering department until 1973. During this time, he too spent a three-month period in India on the US-AID program in 1970.

Vaigneur finished his two-year India assignment in 1970 and came to Jackson to work in the area of soil and water conservation. He also spent time working with cotton mechanization when Mullins was away working in industry.

George Grandle joined the Extension specialist ranks in 1972 to replace Falkner in the area of farm structures. Grandle worked on his Ph.D. while on the faculty and completed it in 1985.

Luttrell was made head of the department for teaching, research and Extension in 1973 when John J. McDow was made dean of admissions for the UT-Knoxville.

In 1977 Vaigneur transferred to Knoxville to become the associate head of the agricultural engineering department. During this period, he was involved in an Extension energy program during the energy crunch. He was jointly appointed to Extension, teaching, and research activities while in this assignment. He later moved back to Jackson to full-time Extension work in 1979.

James B. Wills replaced Swearingen when he retired in 1977. Wills worked in the farm machinery area. He resigned to work for the Tennessee Farmers Mutual Insurance Company for a year and returned in 1983.

Tim Prather joined the faculty as a safety specialist in 1983. He worked to promote farm safety throughout the state in both adult and youth programs. The 4-H Shooting Sports program began through his efforts.

Water quality concerns created a new position which was filled by Timothy Burcham in 1989. Burcham's work was directed toward developing, along with other departments, a water quality program to preserve and improve water supplies throughout the state.

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Monday, Wanda. Secretary.

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Animal Science: Beef-Sheep-Horse

James B. Neel, Professor and Leader

The Extension animal science-beef, sheep and horse section can trace its origin back to the establishment of the Agricultural Extension Service at the University of Tennessee. The first Extension specialist appointed in 1914 was R.M. Murphy, an animal husbandryman. This was the beginning of the Extension educational program in livestock production by the Agricultural Extension Service and the eventual establishment of the Extension animal science-beef, sheep and horse section.

Murphy was a UT graduate who served until 1920 when he resigned to accept a position with the American Shorthorn Association. He returned to the Extension Service in 1930 as a county agent in Knox County and served there until 1956.

Carl G. Filler, Ray Priest and R.P. Hite were employed during 1918 and served for one to two years. Most of these early specialists were not formally trained, but were recognized as outstanding livestock producers. For example, Hite was an outstanding sheep producer and was hired at the urging of the Tennessee sheep producers. He worked out of an office in Nashville.

Most of the early efforts were "on the farm demonstrations." The early specialists were individuals capable of demonstrating improved livestock production practices. In addition to efforts to improve livestock production, there was a close working relationship with marketing specialists to develop improved marketing programs. Several of the specialists in both divisions were at one time a member of the other division. This shows that, then as now, improved marketing and producing of livestock complement each other.

Problems in livestock marketing that these early specialists had to overcome included small volume of production per farm, no standardization to determine differences in value, variation in quality and inadequacies in communications.

One of the most notable projects in cooperative marketing was the marketing of wool. A wool and lamb sale was first carried out in 1913 at Goodlettsville and the principles of cooperative marketing demonstrated at this sale were the same ones that were followed in establishment of succeeding pools. The state wool pool was started in 1918 by specialists in the animal husbandry and marketing divisions. In 1938, more than 3,600 producers from 60 Tennessee counties sold over 500,000 pounds of wool through 40 cooperative pools.

Early educational programs by animal husbandry specialists included: teaching and demonstrating improved livestock production practices and methods;

implementing cooperative marketing of livestock and livestock products; and teaching the value of keeping account farm records.

The appointment of L.A. Richardson in 1919 as an animal husbandryman resulted in an era of intensive educational effort to improve the genetics of the Tennessee livestock industry. Richardson worked hard to encourage the use of "papered" bulls and boars. He is also credited with the beginning of emphasis on the 4-H livestock program in Tennessee. Richardson served as head of the animal husbandry department until his death from a heart attack in 1947.

In 1920, C.C. Flanery joined the animal husbandry department as a sheep specialist and served until 1938 from the Nashville office. This was the time that lamb production and marketing through "lamb pools" and establishment of wool pools grew rapidly in Tennessee.

J.H. McLeod served as a swine specialist from 1920 to 1934. McLeod later become director of the UT Agricultural Extension Service in 1948.

John S. Robinson was named to the animal husbandry staff in 1937 after working several years as an Extension agent in East Tennessee and as a marketing specialist. Robinson was hired by Richardson to develop the 4-H market hog program in the state and to improve swine production. Robinson's efforts resulted in the establishment of district market hog shows. He was named head of the animal husbandry department in 1947, following the death of Richardson. He served until 1963.

Hite, a UT graduate, was hired as a sheep specialist in 1939 and served until 1953. Hite was the son of R.P. Hite, the first sheep specialist. He worked out of the Nashville office. Hite was instrumental in carrying out educational programs in wool and lamb pools and improved sheep production methods.

Livestock production practices changed throughout the years. The Agricultural Extension Service, led by the educational programs of the animal husbandry department, was instrumental in teaching procedures on breeding and feeding programs. According to Alton J. Sims (1939), "The last 25 years have seen a marked improvement in the quality of beef cattle, horses, swine and sheep on Tennessee farms. The 'razor back' hog is gone and the 'yellow hammer calf' is on its way."

Following World War II, soldiers discharged from the armed services returned to their family farms. The returning veterans were eager to improve and expand livestock production. This need resulted in a challenge to the Extension Service to update and quickly make available research based recommendations. This was the time, late 1940s and early 1950s, that livestock production rapidly expanded in both Tennessee and the Southeast.

The following will cover the "post-war years" to 1972, at which time the Animal Husbandry Department was reorganized to form the Extension animal

science-beef, sheep and horse section and the Extension animal science-swine section.

The following will include staff appointments, development and expansion of cooperative marketing programs, genetic improvement of livestock, improved production practices and expansion of 4-H livestock programs.

Staff Appointments

L.A. Richardson was the head of the Extension animal husbandry department at the beginning of this period. People who remember Richardson recall him to be a large man with handsome features. He was an excellent speaker, a gentleman and a religious man. He was respected by both his staff and the livestock producers. Richardson was also recognized as one of the top animal husbandry specialists in the Southeast. He died of a heart attack in September 1947.

John S. Robinson served as head of the department from 1947 to 1963 and provided leadership to staff development and educational programs during a large portion of this era. Robinson intensified the educational programs in swine production, especially in the control of external and internal parasites. Several demonstrations were conducted across the state to illustrate to the benefits of parasite control. Other educational programs included protein supplementation of swine rations and improved production practices.

In 1946, William P. Tyrrell joined the staff. Tyrrell was a native of Indiana and a graduate of Purdue University. Tyrrell was hired by Richardson and his primary responsibility was in the 4-H livestock program. One of the first things Tyrrell did was to develop the state 4-H livestock judging contest. Contests were being conducted at the major fairs in the three "grand divisions" of the state, but there was no competition to select a state winner to represent Tennessee on the national level. Tyrrell organized the state contest and secured financial support for the team to travel to the national contest.

Tyrrell developed the Tennessee junior beef heifer show which was, and still is, recognized as one of the premier youth breeding shows in the country. Additional discussion of youth activities will be presented later in this discussion.

Tyrrell was named head of the animal husbandry department in 1963 and also served as leader of the Extension animal science-beef, sheep and horse section until his retirement in 1973.

Tyrrell and other staff members were instrumental in organizing the Tennessee Livestock Association in 1953. This association played an important role in providing an organized voice in state and national livestock issues. Livestock associations were also organized in individual counties, which has proven to be instrumental in carrying out educational programs that would benefit the livestock industry.

Tyrrell was well-respected throughout the state by the livestock industry and was recognized as one of the top livestock specialists in the Southeast. He served as chairman of the Southern Regional Livestock Specialists and on numerous committees of the Southern region. Tyrrell is an excellent speaker and has often been requested to speak at local livestock association meetings, purebred cattle association meetings and other related activities.

Tyrrell retired in July 1973 and went into marketing of livestock equipment. Tyrrell and his wife, Ruth, live in West Knoxville and they are both active in the Retired Extension Workers Association, other university activities and the Tennessee Cattlemen's Association. He was the first recipient of the Tennessee Cattlemen's Association Distinguished Service Award.

Joseph (Joe) W. Houston, a native of North Carolina and a graduate of Texas A & M University joined the staff in 1949. Houston provided leadership in livestock marketing and assisting with educational programs in swine production. He worked with local livestock associations in the development of cooperative marketing programs in feeder cattle and feeder pigs. Houston resigned in 1964 and is currently involved in livestock marketing with his son in Sweetwater.

Fred C. Powell, a native of Dyer County and a UT graduate was appointed sheep specialist 1953 following the retirement of Paul Hite. Powell, like the sheep specialists who preceded him, served the state from the Nashville office. He continued the work in cooperative lamb and wool marketing. However, with the decline in sheep population, Powell also worked in the areas of feeder calf and feeder pig marketing. In later years when most of the marketing work was carried out by the Livestock Marketing Specialists of the agricultural economics department, Powell had more time to develop educational programs in the areas of cattle feeding and stockering of feeder calves.

Powell believed in the value of demonstrations as a teaching tool and also conducted numerous producer tours to various sections of the country to study livestock production and evaluate performance of feeder cattle and pigs on Midwest farms and Western feedlots.

Powell was widely respected by the Tennessee livestock industry and was recognized by the Tennessee Livestock Association for his work. He always presented "straight forward" talks and based his recommendations on sound research.

Powell retired in 1979 and lives with his wife Juanita in Nashville.

Probably one of the most welcomed addition to the staff was that of Tom Langford. Langford was the first livestock specialist located in Jackson. With the addition of a specialist in Jackson, the amount of travel done by the other staff members was reduced.

West Tennessee is a long way from Knoxville and travel for specialists was not as convenient as today. Vehicles were not provided by the university until later years and then travel was often difficult on the two-lane roadways.

Most specialists only had one car per family so the preferred mode of transportation was to take the "night train to Memphis" on Sunday afternoons and ride a bus from Memphis out to the county late Sunday night or early Monday morning. The trip back started on Friday afternoon and ended in Knoxville on Saturday morning in time to return to the office that was open until noon.

Langford served as a livestock specialist until 1961 when he was named an agricultural supervisor in District IV at Cookeville.

William G. "Bill" Brown succeeded Langford as Livestock Specialist at Jackson and served until 1970 when he resigned to go to graduate school at the University of Arkansas. Brown is now a swine specialist with the Cooperative Extension Service of Clemson University in South Carolina.

Neils W. (Robbie) Robinson joined the animal husbandry specialist staff in 1963. Robinson was the first specialist of the animal husbandry department to have a Ph.D. He was a Connecticut native and a graduate of Oklahoma State who was hired primarily to work in beef cattle production. Robinson retired in 1965 to accept a position with the Rockefeller Foundation in South America. He returned to UT-Martin and is currently a professor of animal science.

James G. O'Neal, a former Extension agent in Anderson and Sevier counties, became a member of the animal husbandry department in 1964. O'Neal's primary responsibility was swine production and the 4-H swine program. He was a member of the staff until 1972 when he became leader of the newly formed Extension animal science section. O'Neal retired in 1985 and lives with his wife Barbara in Alcoa. He is still active in swine activities in the area.

Haley M. Jamison, a native Virginian, was appointed to the animal husbandry staff when he completed his graduate work at UT. Jamison was formerly a sheep specialist with the Cooperative Extension Service of Clemson University. He assumed responsibility of the Tennessee Beef Cattle Improvement Program, the "on the farm performance tested bull program" and educational programs in beef cattle breeding. Jamison also worked closely with the feeder calf sale program. He had appointments with the Experiment Station and the College of Agriculture. Jamison worked with the purebred beef cattle herd at Ames Plantation for the Experiment Station. With an appointment in the College of Agriculture, Jamison served as major professor for numerous county Extension agents as they earned their master's degrees.

John Williams received his Ph.D. from the UT and immediately became a member of the animal husbandry staff in 1966. Williams worked primarily in beef cattle nutrition and production until 1968 when he resigned to accept a

position as project leader of the Extension animal science of Clemson University. Williams has retired and currently lives in South Carolina.

Frank David Kirkpatrick joined the department in 1971 to work primarily with the 4-H livestock program. Kirkpatrick was a native of Oklahoma and received his graduate degrees from New Mexico State and UT. He served in the animal husbandry department until late 1972 when the department was reorganized into the beef, sheep and horse section and the swine section. He was transferred to the newly organized Extension food technology department where he served as a meats specialist.

James R. McFall succeeded Brown as livestock specialist in Jackson in 1971. McFall was a UT graduate and served as county agent in Weakley County where he carried out an outstanding livestock program. He was the only specialist to serve simultaneously in both the beef, sheep and horse section and swine section. McFall was fatally injured in an automobile accident in 1972.

In an administrative move, the animal husbandry department was reorganized in 1972 to form the Extension animal science-beef, sheep and horse section and the Extension animal science-swine section.

Tyrrell was named leader of the Extension animal science-beef, sheep and horse section and O'Neal was named leader of the Extension animal science-swine section.

Following the reorganization, Tyrrell, Jamison and Powell composed the specialist staff of the Extension-beef, sheep and horse section. McFall served as 50 percent (full-time equivalent) of the section. He was fatally injured shortly after formation of the section.

Due to the size and educational needs of the state's beef cattle industry, two additional beef cattle specialists were hired. James B. Neel and Clyde D. Lane Jr. were named to the section in March and April of 1973. Neel was assigned to the office in Cookeville and Lane to Jackson. Both of these specialists are native Tennesseans and UT graduates.

Lane filled the position on the staff left vacant by the death of McFall. He developed educational programs in the area of beef cattle management and nutrition that impacted both West Tennessee and the state. Lane has conducted several "result" and method demonstrations in beef cattle management. He has been instrumental in presenting demonstrations and information on improved management at "sale barns" throughout West and Middle Tennessee.

Lane has also assisted in the organization of several feeder calf sales in both West and Middle Tennessee. Probably one of the most effective demonstrations conducted by Lane was the "cow per acre" demonstration carried out in Fayette County in cooperation with the Extension leader, Jamie

Jenkins, and Joe Burns of the Extension plant and soil science section. This program resulted in the utilization of one acre of land in the production of the annual nutritional needs of the cow-calf unit. In addition, both weaning weight and calf crop percentage of the herd involved improvement.

From the mid-1980s to 1988, Lane was responsible for the statewide leadership of the CATCH FOUR program. This was an educational program to improve cattle handling facilities and application of cattle management practices in Tennessee.

Neel was the first Extension specialist assigned to the District IV office in Cookeville. He worked primarily in the Upper Cumberland area in cow-calf production and also in feeder calf marketing. Neel carried out numerous demonstrations in external and internal parasite control and growth stimulating implants of feeder cattle. He was also involved in intensive cow-calf management demonstrations in cooperation with specialists from the Extension agricultural economics, plant and soil science, veterinary medicine sections and the Tennessee Valley Authority. Neel also stressed the backgrounding of feeder calves and carried out several backgrounding demonstrations in the Upper Cumberland area.

Neel was instrumental in organizing and developing tours of producers to the Midwest feedlot states to promote Tennessee feeder cattle and provide educational opportunities for area beef cattle producers.

Following the retirement of Powell in 1979, Neel was relocated to Nashville. In June 1983, Neel was named leader of the section and he relocated to Knoxville.

Tyrrell resigned from the section in July 1973 and Jamison succeeded him as leader.

Jamison served as leader of the section until February 1983 when he resigned. During Jamison's tenure, educational programs emphasized were "back to the basics," "reproductive efficiency is happiness," "guidelines for backgrounding," "alternatives after backgrounding," the "Tennessee beef cattle improvement program," "on the farm performance tested bull program," the Central Bull Test Station and the 4-H livestock program.

With Jamison's leadership and encouragement, numerous "on the farm" demonstrations were conducted to support the above programs. Numerous external and internal parasite control demonstrations were carried out on Tennessee farms. Tennessee was a leader in growth stimulating implant demonstrations. It has been estimated that this one practice increased income to the state's beef industry by approximately \$6 million.

Whole farm demonstrations were carried out to demonstrate the value of application of recommended management practices on both cattle and forage production. These demonstrations were carried out in cooperation with

specialists in the plant and soil science, agricultural economics and agricultural engineering sections and TVA.

Jamison also developed educational programs for agri-business organizations and personnel, which resulted in improved relationships and expansion of educational efforts and support for Extension programs.

Perhaps the strongest area of Extension programs by the section was in the 4-H program. During Jamison's tenure, the Tennessee Junior Livestock Exposition grew and developed to become recognized as the largest youth event of its kind in the nation.

Jamison was recognized by both the American Angus Association and the American Polled Hereford Association for his work in the youth beef program.

Jamison worked with many graduate and undergraduate students. These students are now employed in land grant universities, agri-business and farm organizations throughout the nation.

Jamison was a very positive speaker and was in demand by county, state as well as regional and national associations and organizations. He frequently wrote articles on beef cattle and livestock production that were published in state, regional and national publications.

He was recognized as one of the top livestock specialists in the Southern Region. He served for several years on numerous animal science committees of the Southern section of the American Society of Animal Science. He served as secretary, vice chairman and chairman of the Extension group.

Jamison was instrumental in development of the original "Southern Regional Beef Cow-Calf Handbook". He was a member of the committee to plan and develop the handbook and also served as secretary of the committee.

For his work and contribution to the Tennessee livestock industry, Jamison received the distinguished service award from the Tennessee Livestock Association in 1981.

Jamison retired in 1983 and now lives in Friendsville with his wife Chris.

In late 1973, Kirkpatrick rejoined the Extension-beef, sheep and horse staff. Kirkpatrick continued to be instrumental in 4-H livestock and beef cattle breeding and management. His educational programs in crossbreeding were quickly adopted by the beef producers in the state. From 197 to 1976, 25 percent of the calves marketed through Tennessee Feeder calf sales were crossbred, whereas, in the fall of 1988, 62 percent of the feeder calves were crossbred. Kirkpatrick has also provided leadership to the Central Bull Test Station from the early 1980s to the present. During that period, the bull test station program has increased in both consignors, bulls and breeds. The facilities were remodeled and expanded in 1985.

Frederick Harper joined the section in January of 1978 as an Extension horse specialist. Harper had previously served as an Extension horse specialist with the Cooperative Extension Service of Rutgers University in New Jersey. Harper is a native of Arkansas and a graduate of Iowa State University. He earned a master's degree from Oklahoma State University and his Ph.D. from Rutgers University. Harper was hired to place increased educational emphasis on both the 4-H and adult horse Extension programs. A statewide 4-H horse show was established in 1984 and the first show was conducted at the "celebration" in Shelbyville.

Following the retirement of Powell, Douglas Hixon, a native of Illinois and a graduate of the University of Illinois, joined the staff. Hixon resigned in 1982 to accept a job as a beef cattle specialist with the University of Wyoming.

William W. Gill, III joined the Extension animal science section in June 1985 and is located in Nashville. Gill was hired to develop educational programs in the areas of calf backgrounding and to assume responsibility for the sheep program. Gill is a native Tennessean and received bachelor's and master's degrees from UT and the Ph.D. degree from the University of Kentucky. He was employed as a livestock specialist with the University's of Kentucky's Cooperative Extension Service prior to coming to Tennessee.

During August of 1989, Doyle G. Meadows joined the section as an Extension Horse Specialist. Meadows, a native of Texas, earned his graduate degrees from Texas A & M University, served as a county Extension agent in Texas and Extension horse specialist with the Cooperative Extension Service at Oklahoma State University. Meadows is currently involved in both 4-H and adult Extension horse programs.

The following discussion will consist of a brief review of the "impact programs" carried out by the animal husbandry department and the Extension animal science-beef, sheep and horse section.

Impact Educational Programs

Wool and Lamb Pools

The state wool and lamb pools got underway in 1918. The wool pool is the oldest cooperative marketing program in Tennessee agriculture and one of the earliest started by the Agricultural Extension Service in the country. The wool pool is still conducted by the Extension animal science section in cooperation with the Tennessee Sheep Producers Association, the Tennessee Department of Agriculture and the Extension agricultural economics section. Wool has been conducted in Tennessee for 73 years, making it the oldest pool in the United States.

The number of pools have declined along with sheep numbers in the state. In 1938 there were 40 pools conducted across Tennessee that brought in over

500,000 pounds of wool. In 1989, three pools were conducted in which 425 producers consigned 108,000 pounds of wool to the pool.

Changes in the wool pool have included electronic marketing, transfer of data to buyers and use of computers in consignment, summarization, payment and communication to producers.

Organizational Feeder Calf Sales

Feeder calf sales have been conducted for several years in Tennessee. Records indicate that the first effort in cooperative marketing of feeder cattle was in 1935 with a sale being held at Shouns in Johnson County. This sale was developed by Vernon Darter and John Ewing, Extension agents in Carter and Johnson counties. Both of these innovative young men later served as directors of the agricultural Extension service and the UT Agricultural Experiment Station. This sale at Shouns was later moved to Bristol. It has been relocated to Kingsport where it is still being conducted.

The organized feeder calf program sale did not really grow until the early 1950s. Additional sales were set up in Cookeville, Brownsville, Morristown and Crossville. In the fall of 1953, 2,000 calves were sold through five sales. This type of marketing became popular with Tennessee producers and 36 years later, in the fall of 1988, 58,7000 calves were marketed at 20 locations statewide. In the Southeast, only Virginia sells more calves in feeder calf sales than Tennessee.

Several years of comparing market prices received at feeder calf sales to that of local weekly livestock auctions indicated that marketing feeder cattle via cooperative marketing generally resulted in an extra \$2 to \$4 increase per cwt for feeder calves.

Continued educational programs, especially utilization of electronic technology during the marketing process, should result in an increase in the number of feeder cattle marketed via cooperative efforts.

Although the organized feeder cattle educational program has been successful, it was difficult to get started. Many producers did not like the idea of their cattle being graded, especially if they received a lower grade than that anticipated. Also, the co-mingling by ownership of the calves was not too well received. One producer might think that his calves were "better" than the others in the pen and should have sold for a higher price. The market operators were at first opposed to the organized sale concept. Other vocal opponents included the "country buyers" who traveled the back roads and purchased calves from farmers who were not aware of the market price.

The feeder calf sales served a dual purpose. They demonstrated a better way of marketing and the program also demonstrated to beef producers the type of cattle they should be producing. This resulted in the development of

educational programs in improved cow-calf management and beef cattle breeding.

Cow-Calf Management

Educational programs on recommended practices that grew out of the feeder calf sales included setting a definite breeding and calving season, improved nutrition (especially in the forage area), parasite control methods, castrating and dehorning calves at a young age, selection and development of replacement heifers and the development of cattle handling facilities. Probably the most difficult practices for the producers to accept was crossbreeding and the culling of low-producing and open cows.

Numerous educational programs have been carried out by the specialists in the area of cow-calf management. These include demonstrations, county and area producer meetings, articles prepared for release to the county Extension agents, trade magazines and radio.

"Beef Cattle Time," a quarterly newsletter, was started in July 1974 for Extension agents to mail to producers and others interested in beef cattle management. This newsletter is currently circulated to more than 30,000 Tennesseans.

The "Tennessee Beef Cow-Calf Handbook" was made available to producers in the mid-1970s. This handbook contains approximately 100 fact sheets on various management topics. Approximately 3,000 handbooks have been sold to Tennessee cattle producers.

The Tennessee Beef Cattle Improvement Program

The Tennessee Beef Cattle Improvement Program (TBCIP) got underway in 1956. Eleven herds were enrolled in the program the first year. The purpose of this program was to identify the top producers in cow herds and use this information in developing breeding programs.

When the producers and breeders received the data and recommendations as a result of the program, culling the low producing cows was a problem for most producers.

Tennessee was one of the first states to offer producers a performance testing program. For a number of years, it was not well accepted by the breeders. One leading breeder in the 1950s stated that he had no need for the program. "Look at all the ribbons, trays, trophies and plaques my cattle have won. They are performance tested in the show ring."

The TBCIP led to the next step in performance testing of beef cattle in Tennessee, which was the on the farm performance testing of bulls.

On The Farm Performance Testing of Bulls.

The on the farm performance testing of bulls got underway in Tennessee in the late 1950s. The specialist staff worked with Experiment Station personnel and purebred cattle associations to get this program developed. This was the first attempt to measure gain of potential herd sires and make this information available to the commercial producer to improve the quality and weight of Tennessee feeder calves.

Performance tested bull sales were held for several years at Brownsville, Nashville, Cookeville and Knoxville. This was done in an effort to spread the genetics across the state. In recent years, the sale has been held at Ellington Agriculture Center in Nashville the first Wednesday in December and has been a successful program.

The Tennessee on the farm performance testing bull program has played an important role in genetic improvement of the state's cattle. Jamison, former section leader, stated that "I don't believe any other state has an on the farm testing program that has made as great of contribution to the overall beef industry as our program here in Tennessee."

In a few years, both purebred breeders and commercial producers began to question how the genetic performance of the bulls could adequately be compared in that they were raised under different environments and the difference in gain may be due to feeding and managing ability of the breeder. This resulted in establishment of the Central Bull Testing Station in Tennessee.

Central Bull Testing Station

As the result of the request by both breeders and producers for a "centralized environment" to test the performance of potential herd sires, the Central Bull Test Station was established in 1971. The first two or three tests were conducted on Dixieland Charolais Farm, owned by Charles Anderson in Brentwood. The state legislature appropriated \$75,000 to construct the facility at Middle Tennessee Experiment Station.

As with any new endeavor, the Bull Test Station was the object of criticism. "You get the bulls too fat." "Feeding them like you do ruins them." "I can take better care of my bulls at home." Of course, after years of hard work, the Central Bull Test Station began to "catch on" with Tennessee breeders and the demand exceeded the physical facilities.

In 1985, the Bull Test Station was remodeled and facilities doubled. During 1988, 188 bulls from 82 consignors were tested at the facility. In 1988, the test station was one of three in the United States and Canada to set up test for bulls that would sire "easy calving calves." This part of the program is expected to expand as previous purchasers of bulls have indicated that

potential ease of calving is the number one item they considered in purchasing a bull.

Bull Leasing Programs

As the result of the demonstrated value of the use of performance tested bulls, many banks in Tennessee started a program whereby they would purchase top performing bulls and lease them to producers in their county. Producers were charged an annual lease of approximately 20 percent of the original purchase price of the bull. The First National Bank of Pulaski was the pioneer in this program. First National Bank not only leased the bulls, but required those leasing bulls to enroll in the TBCIP. This information was to be used by producers in developing breeding programs, cow culling and selection of replacement heifers.

This proved to be an effective program and was soon put into effect by several banks throughout Tennessee.

Specialists of the section assisted both bank officials and county Extension agents in developing this program.

CATCH FOUR Program

The CATCH FOUR educational program was designed to improve the cattle handling situation on Tennessee beef cattle farms. Results of the 1981 Agricultural Extension Service Beef Cattle Survey revealed that only 25 percent of the commercial beef producers had adequate cattle handling facilities. Handling facilities are essential for application of economically important management practice. The program got underway in 1985 and was designed to increase the number of cattle handling facilities. The objective of the program was to increase the number of cattle handling facilities from 17,125 (25 percent) to 19,975 (29 percent) over a 3-year period. This amounted to 30 per county or 10 per county per year.

An impact survey was conducted in 1988 which revealed that 1,767 new facilities were constructed, 2,109 existing facilities were remodeled and 3,644 headgates were purchased by Tennessee beef producers.

As a result of the CATCH FOUR program, application of the economically important management practices has increased, as well as the profitability of Tennessee beef cattle producers.

Backgrounding of Feeder Calves

Tennessee has been a leading feeder calf producing state for a number of years. The Agricultural Extension Service has played a large role in this development. However, it has been recognized by the specialist staff since 1965 that there was the opportunity for many beef producers to "background" or grow calves on forages to heavier weight prior to marketing. An

educational program, "Guidelines For Backgrounding" was developed and carried out during the mid-1970s.

Approximately 30 demonstrations were performed in all of the five Agricultural Extension Service districts in the state. This program was executed with the cooperation of the Tennessee Production Credit Association (PCA), Tennessee Farmers Cooperative, local veterinarians and specialist personnel from the Extension plant and soil science, Extension agricultural economics and Extension veterinary medicine and personnel from the Agricultural Experiment Station. This program met with limited success and backgrounding of calves increased in Tennessee.

The backgrounding effort was revived in 1988 and is now recognized as the "ADD 300" program. This program is more of an interdisciplinary approach than the earlier endeavors. It has been well received by the cattle industry.

Horse Management

Educational programs in the horse area have been directed toward improving the nutritional, management, health and reproductive status of the state's horse industry. The greatest percentage of horse's in Tennessee are owned for pleasure. Educational activities have included county, area and state meetings, articles prepared for release to county Extension agents, trade magazines and radio.

"Tennessee Horse Express," a quarterly newsletter, was started in July 1982 for Extension agents to mail to horse owners and others interested in horse production. This newsletter is currently circulated to approximately 11,000 readers.

4-H Programs

The section has historically been one of the leaders in the 4-H program. Approximately 25 percent of the staff's time is involved in providing leadership to 4-H programs in the 4-H beef, sheep and horse area. The following is a discussion of the staff's activities in the 4-H area.

A Brief History of the Tennessee Junior Livestock Exposition

The Tennessee Junior Livestock Exposition is one of the largest and most successful events of its kind in the nation. It has had a dramatic impact on thousands of people including not only the 4-H and FFA members, but also their families and many others. Expo and activities connected with the program provide Tennessee youth with opportunities to compete and receive recognition for their efforts and to gain knowledge and skills in selecting, feeding, training, showing, marketing and eventually breeding livestock.

Sometimes those of us connected with the livestock business talk about the quality and number of animals exhibited. However, Expo is not a livestock

show. It is really a youth show where cattle and sheep are used as props to get the boys and girls into the show ring. Activities such as Expo helps to develop youngsters into honest, wholesome citizens with a lasting love and appreciation for our American agricultural heritage.

The first Tennessee Junior Livestock Exposition was conducted at the Tennessee State Fairgrounds in Nashville in July of 1972.

The event evolved after combining three other statewide activities, which were the junior beef heifer show, the state steer show and the market lamb show. The breeding ewe show was added to round out the event.

In 1971, the Beef Heifer Show had grown until the facilities of Ellington Agricultural Center could not adequately accommodate it. Also, during this same time, it was rumored that the Nashville Union Stockyards, the home of the State Steer Show, would close. With these two situations, the idea was conceived that perhaps the combining of these two events into one large activity would be the thing to do. All concerned thought it was a great idea. Therefore, the Tennessee Junior Livestock Exposition was born.

The first Expo involved youth from 50 counties in Tennessee. In 1973, the market lamb show became a part of Expo. Fifty counties were also represented in the 1973 event. The breeding ewe show became a part of Expo in 1979. By this time, youth from 70 counties exhibited livestock. In 1988, the event involved 1,100 4-H and FFA members from 79 counties who exhibited 2,336 beef cattle and sheep.

Today, Expo includes seven shows and two market animal sales. A brief background of these shows is in order.

The steer show has been the oldest continuous activity connected with Expo. It got underway in December 1917 and was held at the Nashville Union Stockyards. The early steer show was known as the Nashville Fat Stock Exposition. This is an indication of how times have changed. You wouldn't dare refer to steer show as a fat stock exposition today. The first show also involved both youth and adults.

In 1924, the Nashville Fat Stock Exposition was moved to the Tennessee State Fairgrounds and continued there until 1930. Steers were exhibited in "carloads" of eight. Up to 1,800 head were exhibited in both adult and junior divisions. The steers were sold and had to be loaded on railroad cars near the fairgrounds to be shipped. This took nearly all night. Many steers got away and had to be chased all over the neighborhood. A good price for fat steers that year was 7 to 8 cents per pound.

The steers getting away during loading prompted the move back to the Nashville Union Stockyards in 1930. Adults and youth continued to participate but in separate divisions. In 1938, the show basically became a 4-H and FFA

activity. The steer show remained at the Nashville Union Stockyards until it became a part of the Tennessee Junior Livestock Exposition in 1972.

The first junior beef heifer show was conducted in 1954 on the Eagle Hereford Farm in Eagleville. This event was tagged a "junior cattlemen's field day." Forty-eight registered beef heifers were exhibited and demonstrations were conducted on "calf roping" and other practices. For the next several years, the beef heifer show was held at Springfield, Fayetteville, Columbia, Winchester and Cookeville until it moved to the fairgrounds in Nashville in 1961. The show later moved to Ellington Agricultural Center.

From the exhibition of 48 heifers of three different breeds in 1954, to 433 heifers made up of 15 breeds shown by 213 different boys and girls from 57 counties in 1989, the beef heifer show has been the backbone and premier show of Expo.

The market lamb show became a part of Expo in 1973 with the Exhibition of 211 lambs by 89 exhibitors from 18 counties. Since that time, it has been a very popular animal project for younger boys and girls and youth that have limited land resources.

The first Tennessee junior market lamb show was conducted in Nashville at the Union Stockyards in either the fall of 1934 or 1935. Four-H'ers from Wilson, Sumner, Davidson and Montgomery counties exhibited 250 lambs, which were sold for approximately 12 cents per pound. The champions would bring approximately 25 cents per pound.

In 1946, the show was changed from a fed lamb show to a spring lamb show. The show was relocated to the Wilson County Livestock Market in Lebanon in 1964 where it was conducted until 1972.

Since becoming a part of the Expo, in 1973, the lamb show has become a statewide event with entries from Memphis in the West to Mountain City in the East in the 1986 show. During 1989, 1,285 lambs were exhibited by 748 boys and girls from 66 Tennessee counties.

The breeding ewe show is a "newcomer" on the scene. The first statewide show for 4-H members was conducted at the Cumberland County Fair in Crossville in 1976. In 1979, the breeding ewe show became part of Expo and has continued to grow. Three hundred eighty-seven ewes were shown by 54 youth from 50 Tennessee counties in 1989.

Much of the success of Expo can be attributed to the support and cooperation of many organizations and individuals. Leadership for the program is provided by the UT Agricultural Extension Service. Money is provided through the Tennessee Department of Agriculture. This support has been provided for at least 50 years.

In addition, agri-business concerns serving the livestock industry have been both gracious financial supporters and sponsors of awards for winners in the various classes. The loyal support of Kroger Stores, H.G. Hill Stores, Red Food Stores and local businesses in the purchase of the market animals has been great. The Tennessee State Fairgrounds has graciously provided facilities and personnel to help conduct Expo for 19 years and many years prior to 1972. Interest and enthusiasm from parents, breed associations and many individuals also have contributed to Expo. In addition, many of the past exhibitors now are leaders in the livestock industry and support Expo.

As a judge at one of the Expo shows a few years ago said, "It must be a good program or it would not have lasted this long."

4-H Sheep Conference

The 4-H Sheep Conference has been credited with contributing to the popularity and recent growth of the 4-H market lamb and breeding ewe project. The 4-H sheep conference got underway in 1974 at the Clyde M. York 4-H Training Center and has been conducted there each year to date.

The 4-H Sheep Conference has probably introduced more 4-H'ers to sheep than any other activity. The purpose of the activity is to provide 4-H members and their parents the opportunity to interact with both experienced 4-H members and parents and leaders and gain skills in selecting, managing, feeding, grooming and showing lambs.

The conference was preceded by a 4-H sheep field day which was first held on the Robert Powell farm in Wilson County. In later years, the field day was conducted at various sites in the Middle Tennessee area.

The Knoxville Finished Cattle Show

The first Knoxville finished cattle show was conducted in 1936 and every year thereafter. This event has been one of the premier youth livestock events in East Tennessee.

Many people and organizations have played a vital role in the Knoxville finished cattle show. However, probably no one organization has contributed as much to this show as has White Stores. Dwight McDonald of White Stores was probably the most important individual to impact the show and sale. Records indicated that White Stores purchased the first grand champion steer and almost every one thereafter. In addition, White Stores purchased numerous steers from youth throughout East Tennessee.

East Tennessee Packing and Lay Packing companies were also strong supporters of the show up until the time they stopped slaughtering cattle.

In recent years, Kroger, Red Food, Ingles supermarkets and numerous local businesses in East Tennessee counties have become actively involved in

support of the program. White Stores has continued to be one of the strongest supporters through the 1980s.

The 1990 show will be the 55th consecutive show.

Tennessee 4-H Horse Show

The first Tennessee 4-H Horse Show was held in 1984 at the Tennessee Walking Horse Celebration in Shelbyville. Ninety-eight 4-H members from 33 counties exhibited 134 horses in the show. The 1989 show had 188 4-H members from 40 counties who exhibited 254 horses.

Many horse associations, such as the Tennessee Walking Horse Breeders' and Exhibitors' Association, Tennessee Walking Horse Celebration, Tennessee Quarter Horse Association, as well as numerous agri-business organizations, have supported the event.

The 4-H Horse Show is a "new" 4-H program compared to other livestock events. However, it is expected to continue to grow due to the interest in horses by Tennessee 4-H members.

In carrying out the above programs and other educational activities, the section specialists have interacted with several other sections and departments. The following is a brief discussion of those sections and departments.

Relation with Other University Units

Extension Livestock Marketing and Agricultural Economics

During the early years of the Agricultural Extension Service in Tennessee, some of the animal husbandry department personnel and livestock marketing personnel were members of both departments. These specialists worked closely together to develop cooperative marketing programs.

Extension Plant and Soil Science

Specialists from the section have interacted with specialists from the plant and soil science section in forage improvement programs, pasture renovation, backgrounding of beef calves and forage testing. Section specialists were active in the Intensified Forage Production and Utilization Program (IFPUP) that was spearheaded by the plant and soil science department. During the 1960s, staff of both sections also cooperated in organizing the Tennessee Forage and Grassland Council and developing and implementing the "Change 3 Million Program," and the "Add 300 Program."

4-H Section

Approximately 25 percent of the Extension-beef, sheep and horse section specialist time is spent in working with 4-H events. It is natural that the two staffs would cooperate in such projects as judging contests, livestock shows and 4-H conference.

Other sections that the Extension animal science-beef, sheep and horse section have cooperated with include food technology and science, agricultural engineering, entomology and plant pathology, Extension veterinary medicine, Extension education and Extension communications.

The Agricultural Extension Service has historically worked with and aided in the organization of several producers organizations and agri-business throughout its existence

Cooperation With Agencies Outside the University System

Producer's organizations and related agencies have played an important role in the development and execution of educational programs. The following is a discussion of several of these groups.

Tennessee Livestock Association (TLA) was organized in 1953 with the leadership provided by the specialists of the animal husbandry department. This association played a dominant role in development of the feeder calf and feeder pig sales as well as the Tennessee beef cattle improvement program and the Central Bull Test Station. The TLA functioned until 1985 when it was reorganized to form the Tennessee Cattlemen's Association and Tennessee Pork Producers Association.

Tennessee Sheep Producers Association (TSPA) has assisted with the 4-H sheep program, wool pool and other educational events.

Tennessee Cattlemen's Association (TCA) was organized in 1985 with the aid and assistance of the section specialists. This association has 5,000 members and has cooperated with the section in educational programs in marketing and beef production and has been very supportive of the Agricultural Extension Service's programs.

Tennessee Beef Cattle Improvement Association (TBCIA) was organized in 1985 as a result of the need for a statewide association to promote the genetic improvement of Tennessee beef cattle. Section specialists provided the stimulus and assistance in organizing the association. This association assists the Extension Service in developing beef cattle breeding educational programs.

Tennessee Beef Industry Council (TBIC) was developed in 1986 with assistance and leadership provided by the specialist of the section in

cooperation with six other statewide associations. This organization is involved in programs that involve increasing the demand for beef products.

Tennessee Farm Bureau Federation (TFBF) has always been a strong supporter of the Agricultural Extension Service. Specialists from the section have served on the livestock commodity advisory board for a number of years, assisted the Tennessee Livestock Producers, Incorporated in development of marketing programs, as well as assisted with developing and executing the livestock commodity session at the animal convention. In turn, TFBF has assisted the section in 4-H and adult agricultural programs.

Tennessee Horse Council (THC) was organized in January 1989. Specialists from the section worked with several statewide horse organizations and state agencies in developing this council. The council will be of great benefit in developing and executing educational programs that will impact the horse industry.

Tennessee Farmers Cooperative (TFC) has a retail outlet in almost every county seat in Tennessee. Specialists from the staff have assisted personnel in educational endeavors and have provided subject matter information and training to personnel. The Co-op has also been one of the strongest supporters of both adult educational programs and 4-H activities of the section. The Co-op was one of the leading cooperators in the "CATCH FOUR" and "ADD 300" programs.

Tennessee Department of Agriculture is probably the state agency that the section cooperates with more frequently within adult educational programs, 4-H livestock programs and livestock marketing programs. This relationship has spanned approximately 37 years.

Tennessee Department of Vocational Education is the state organization with responsible for the FFA program. Staff personnel interact with this group in developing and executing youth livestock shows and other educational programs.

Tennessee Forage and Grassland Council specialists from the Extension-beef, sheep and horse section have assisted with many events and activities of this council in improving pasture, hay and silage production and utilization programs.

In addition to the above, there are 15 different purebred cattle associations, numerous horse organizations and agri-business firms that the section interacts within its educational programs.

Conclusion

The Extension animal science-beef, sheep and horse section has played an important role the past 76 years in Tennessee agriculture. Educational programs developed by the specialists in the department have had a positive

effects on both the type of livestock and livestock production practices. There has been a tremendous improvement in beef cattle, horse and swine production practices that have contributed to a "better life" for Tennesseans.

Some of the "impact educational programs" have included improvement in marketing, genetic improvement in both quality and performance, production and management and health practices of livestock. In addition, the 4-H animal science programs have touched thousands of Tennessee youth and has also served as a teaching tool or demonstration with adult agriculture.

Extension educational programs in livestock production will continue to be needed and the specialists of the Extension animal science group will be providing leadership for them. Future livestock producers will need more technical information faster or sooner than in the past. Farms will continue to reduce in numbers but gain in acreage. Producers will become more specialized and operations will increase in size.

Future educational programs will be dealing with impact of the global economy on livestock production, application of rapidly developing technology, dealing with consumer needs and society perceptions of livestock production and agriculture. A closer working relationship will be developed with Agricultural Experiment Station and agri-business research concerns in the development of educational programs.

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Animal Science: Dairy

Monty J. Montgomery, Professor and Leader

Early History

Early records of the dairy Extension section indicate that C.A. Hutton, a graduate of the College of Agriculture at the University of Tennessee was appointed as the first dairy Extension specialist on Nov. 1, 1914, just four months after the beginning of Agricultural Extension in Tennessee. He was active in the organization of cooperative creameries, cream routes, planning dairy barns and promoting the development of state dairy interests.

Success stories during the early part of this century include assistance in the establishment of the first cooperative creamery in Winchester in 1910. In the early years, Tennessee was known as the leading state in the nation in numbers of Jersey cows and it was ranked near the top among dairy states in the United States.

Recent History

There have been many changes in the dairy industry in the past 40 years that have been a direct result of the dedicated work of employees of the dairy Extension staff. As the industry has changed, so have the department programs offered to its dairymen. During this time, cow numbers have dropped by approximately two-thirds from roughly 600,000 cows to around 200,000. However, milk production per cow has tripled (thus increasing efficiency) such that total milk produced in the state has remained at a relatively constant level.

This significant increase in production per cow was the result of three major factors: improved genetics, better nutrition and feeding and improved management practices. Dairy Extension has been closely tied to all of these changes and has been one of the driving forces that has developed programs to bring about the needed changes in production practices.

Improved Genetics

Artificial Insemination

Members of the staff worked closely with producers in the early 1950s to establish three AI cooperatives in the three grand divisions of the state. Later developments led to the formation of what is currently known as select sires. Many staff hours were expended to make sure that dairymen were represented fairly in the formation of these cooperatives.

Importing Foundation Stock

Extension specialists worked very hard to increase the genetic base of Tennessee dairy cattle by importing superior genetic animals into the state. Many selection trips were made to all sections of this country and Canada to locate outstanding breeding stock. In April 1948, a train load of registered Jersey heifers from Canada were auctioned to 4-H members as project animals to assist in improving herds. A total of some 500 head were auctioned during 1948 and 1949. Similar trips were made on behalf of the Holstein breed during the same time, however, most of the animals were purchased as foundation stock for the registered breeders of the state.

In the early 1950s, an effort was made to increase the number of Guernsey animals in the state. For approximately 20 years, 50 to 60 Guernsey heifers were purchased each year with money borrowed from a Middle Tennessee bank and auctioned on a "cost-basis" to Tennessee 4-Hers as beginning project animals. These purchases lead to the development of the Guernsey breed in the state as it now exists.

Estimates by former extension specialists indicate that approximately 2,600 to 2,700 total animals were imported into Tennessee under the leadership of the dairy Extension staff.

Improved Nutrition

Numerous feeding schools have been conducted throughout the state to assist dairy farmers in feeding the dairy herd at a higher plane of nutrition.

Dairy Extension specialists were involved in planning and implementing a state forage testing facility in Nashville. This lab has provided data for dairy farmers to make wiser use of both homegrown and purchased feeds.

During the past 10 years dairy farmers have had the benefit of assistance in formulation of "maximum profit rations" using the latest in computer technology. Many success stories from dairymen using this program have been documented by Extension leaders in many of the major dairy counties in the state.

Numerous in-service training programs were developed to assist adult and 4-H agents in doing a better job of serving their clientele throughout the state.

In cooperation with plant and soil science, the dairy Extension specialists have assisted in conducting silage schools to promote increased use of stored feeds and emphasizing the need to store excellent quality forage for the dairy cow.

Improved Management Practices

Dairy Herd Improvement Association (DHIA)

Special emphasis has been put on enrolling herds on performance testing programs to be utilized in general herd management. The number of herds enrolled has tripled while production per cow has doubled during the past 40 years. In 1976, a central laboratory was developed to test milk for fat and somatic cells. In 1984, the program went to central accounting through the Dairy Records Processing Center in Raleigh, N.C. Continuing efforts are being made to promote the program based on the success of many dairymen, who have made significant improvements in milk production.

Housing and Waste Management

During the mid-1950s significant effort was expended to assist Tennessee dairymen with housing plans and information to handle waste from the ever increasing herd numbers. Extension specialists in agricultural engineering were called in to assist the Dairy staff more effectively serve the dairy farmer.

Junior Dairy Project

Tennessee has had one of the most outstanding junior dairy projects in the nation. Enrollment and participation at county, district, regional and national shows, judging contests and National 4-H Club Congress has been exceptional due to the dedicated service of many former Extension specialists in the department. As recently as 1985, the McMinn County team placed second in the national 4-H dairy judging contest at Madison, Wis. Tennessee has gained national recognition for the junior dairy program through the leadership of L.O. Colebank, Clyde K. Chappell, William M. Miller and T. Ray Spann.

These individuals have been active on a national level in judging major national shows or participation in the National 4-H Dairy Conference at Madison, Wis. Tennessee has had many national winners at 4-H Club Congress in dairy achievement. There have been at least five in the last 10 years.

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Animal Science: Poultry

H. Charles Goan, Professor and Department Head

Poultry Extension work began shortly after the Division of Extension was organized at the University of Tennessee. According to early records, Leo J. Brosemer was on the extension staff June 30, 1915, and had the responsibility of poultry club organizer. Poultry was important because chickens could be found on practically every Tennessee farm. However, in the Agricultural Extension Service personnel directory published in 1989, Leo Brosemer was not listed as a poultry specialist.

In order to obtain information about early poultry Extension specialists and their programs, W.O. Sewell was interviewed. The first poultry specialist was R.N. Crane, 1918 to 1919. He was followed by Florence Farbes, 1919 to 1920 and Kate M. Wells 1920 to 1925. Nothing is known about these individuals, but their programs should have been aimed at providing information through the county Extension agents to the many thousands of farmers that had chicken on their farms. Most of the farms would have had from 10 to 100 chickens. A large flock had from 250 to 500 chickens.

A.S. Chapin, was on the specialist staff from 1925 to 1927 and left to operate a hatchery in Greeneville. Berley Winton, a native of Overton County, served from 1926 to 1927 before moving to Washington D.C. to become the federal poultry Extension specialist. Winton was in charge of the 1939 World Poultry Congress held in Cleveland, Ohio.

In 1927, A.J. Chadwell and J.C. Snow were hired as poultry specialists. Chadwell stayed until 1961 and Snow served until 1934. These specialists were involved in organizing poultry schools, judging fancy type chickens at county fairs and were very involved in developing out-of-state markets for Tennessee-grown chickens.

During the late 1920s, a program was developed to help boys and girls borrow money to purchase 50 chicks and 100 pounds of feed. The note was repaid by returning the roaster size chicken to a central location so they could be marketed and used as a meat source for the Army. In Overton County, more than 300 youths were involved in the program and received from 12 to 25 cents per pound of chicken sold. The specialist helped organize the accumulation of chickens, turkeys, geese and ducks to a central location so the birds could be shipped live by rail to New York City. At times, Chadwell

accompanied the shipment of chickens to help obtain the highest possible price for them.

After being a county Extension agent in Overton County for 12 years, W.O. Sewell, transferred to the poultry specialist staff. While in Overton County, Sewell assisted over 160 small flock owners who sold fertile eggs to a hatchery in Knoxville. He reported that 25 cents of every dollar farm income in Overton County was from the sale of poultry and eggs. The small poultry flock not only provided meat and eggs, but also provided income to help clothe the children and send them to school. Sewell will best be remembered for the "Tennessee Chicken Barbecue Sauce," and for being the person that organized and worked with the 4-H poultry show and sales programs.

The program started in 1952 in 13 counties and has grown to 74 counties. In this program, 4-Her's receive 25 chicks and then return six pullets for a show and sale when the birds reach 20-weeks-old. It is estimated that more than 36,000 Tennessee 4-Her's have participated in this program. Also, Sewell was instrumental in getting the 4-H poultry and egg judging and 4-H chicken barbecue programs started. The Cocke County 4-H poultry and egg judging team won the 4-H national poultry and egg judging contest in Chicago. Sewell worked primarily with the youth program until his retirement. The commercial poultry industry with larger flock sizes began in the 1950s and early 1960s. With the advent of the commercial and highly technical poultry and egg industry, the first poultry specialist with a Ph.D. was J.B. Ward, 1962 to 1965. He was a nutritionist who provided information to the commercial poultry industry. In 1965, he left Tennessee to be an Extension poultry specialist at North Carolina State University. Carroll C. Douglas, 1966 to 1969, continued working with the commercial poultry industry until he moved to the University of Florida as poultry specialist.

In 1971, the Extension Service established a poultry diagnostic laboratory and hired Robert L. Tugwell as a poultry specialist. Fifty percent of his time was devoted to the animal science staff as a teacher and researcher.

During the 1970s and 1980s, H. Charles Goan 1971 to present, Joseph M. Mauldin, 1977 to 1979, and Robert W. Bastien, 1980 to 1986, were involved in adult and 4-H youth Extension educational programs. In 1979, Mauldin resigned to join the poultry Extension staff at the University of Georgia and Bastien joined the University of Georgia poultry Extension staff in 1986.

During the late 1970s and 1980s, some of the program developments and program successes included: implementation of county management meetings for egg producers and broiler growers; development of a Tennessee egg cooking contest; development of a Tennessee chicken cooking contest; development of educational material for 4-Her's enrolled in the poultry project at each grade level; development of a 4-H embryology project; development of a 4-H rabbit program, including educational material and an area 4-H rabbit show; and assisting the Tennessee Department of Agriculture in getting

Tennessee designated as a Salmonellae Pullorum free state for poultry producers.

The faculty position vacated by Bastion has not been refilled because of budget considerations.

Currently, the poultry and egg industry contribute more than \$115 million dollars to Tennessee farm income. Today, the production of poultry and eggs is highly mechanized and requires a substantial financial investment to develop and operate. Poultry Extension programs must be geared to provide information to this high-tech type of agricultural enterprise.

Four-H poultry programs continue to be an important part of the Extension youth educational program. In 1988 and 1989, more than 4,000 Tennessee 4-H'ers were enrolled in the poultry project, poultry embryology, poultry and egg judging, chicken barbecue and the 4-H rabbit project.

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Animal Science: Swine

Glenn E. Conatser, Professor and Leader

Prior to 1972, the swine Extension program at the University of Tennessee was in the animal husbandry department. There were no full-time swine specialists until 1964 and there was little emphasis on swine production, except the feeder pig sales program. The feeder pig sales were started by the animal husbandry staff. In those days, the swine program was carried out by Bill Tyrrell, Neil W. Robinson, Joe Houston and Fred Powell.

James G. O'Neal started as a swine specialist on July 1, 1964. At that time it still was the animal husbandry department. He was the first person ever hired as a full-time swine specialist. Up to that point, everyone in animal science worked with beef cattle (Tyrrell was department head) and then only a small percentage of time was devoted to swine. Robinson was a nutritionist and he did some swine nutrition work. Tyrrell worked maybe five to 10 percent in swine. Bill Brown was hired in 1962 for West Tennessee and he spent 50 percent of his time with hogs and the rest with beef cattle.

When Houston resigned in 1964, O'Neal came into the department. Houston did some swine work, but most of his efforts were in feeder pig marketing because the section was pretty heavily involved at that time in developing some of the feeder pig sales that started over the state. O'Neal had been county agricultural agent in Sevier County and had gotten his master's degree in March 1964. He then was hired as swine specialist in July 1964. Joe Woods followed O'Neal as county agent in Sevier County. Powell worked with hogs and he did a lot of marketing also.

There had never been much emphasis on swine up until this point. The only swine work being done was the feeder pig sales and, of course, that corresponded to the feeder calf sales. There were many feeder calf sales. The junior 4-H hog shows were in existence at that time, but they would show, sell and condition them without much educational value.

In the early days, everyone did some beef cattle work. Anytime there was a steer show or heifer show everyone had to be there. It was hard for people in animal science to accept someone doing full-time swine work. Hobbs and Tyrrell were strong beef cattlemen. The administration was trained in Agronomy and cows eat grass, so it was a nice combination. The emphasis was along that line and there was only one swine building plan. That was the old sun porch plan. It was the only facility and it was still in a blueprint form developed by Extension agricultural engineers. This plan was completed after O'Neal arrived. A lot of emphasis was placed on it. There were no plans with a controlled environment. A nursery didn't even exist. O'Neal had to ask

himself, "Could I do this alone?" and hope that he would be able to complete it.

There were no production systems, no buildings and no swine program in the state. "More Money From Hogs" was the only publication available. It was written primarily by the college staff and it was like the hog man's Bible in those days.

Buildings were a major consideration and there was still only one full-time swine specialist. There was no in-service training program. O'Neal began to develop some in-service training and the administration was putting more emphasis on hogs.

They began to develop the budgets. Dairy and hogs were the two main things that would show a profit. The swine specialist had to put in the production data and the agricultural economics people put the format together. When the administration changed to economists, that gave the hog people a real boost. They could see profits from hogs. The swine program could never blossom until it was made a separate section. That happened on July 1, 1972.

There were nine packing plants and Extension wasn't reaching the slaughter potential for those plants. Common sense dictated that if Extension didn't keep these plants supplied with hogs, then they weren't going to be around long. Nevertheless, there were a lot of opportunities for hogs in Tennessee.

There was still only one full-time person. James McFall was the specialist in the animal husbandry department in West Tennessee. Brown had left to go to Arkansas to get his doctorate. McFall had been county agent in Weakley County and he was basically a beef cattleman. He was killed in a car accident after working only one year. O'Neal then insisted on hiring a full-time swine specialist and James Tracy was hired as a full-time swine specialist for West Tennessee in 1973. He had been county agent in Hardin County.

The only other person on the swine Extension staff was Frank Masincupp who was 50 percent teaching and research and 50 percent Extension. Masincupp worked in animal husbandry before swine became a separate section. He stayed until 1981 despite having responsibilities in teaching, research and in the test station. Johnson, head of the animal husbandry department at that time, wanted Masincupp as a full-time teacher and researcher. The swine test stations then became the responsibility of the Extension section. At this point another position was made available and Dick Simms was hired.

There were some one- or two-day in-service training sessions before the section was created in combination with other livestock. A three-day in-service training on hogs was held before 1972, which was the first real effort made for a statewide program in swine by Extension. In the mid-1960s, Bill Cole did a lot of carcass work for Extension. He had the barrow shows and the Hog O'Rama, which was discontinued after several

years. The purebred industry wanted to continue the Hog O'Rama, but failed to support it with their participation.

The staff did a tremendous amount of work on converting producers from the lard-type to meat-type hogs. They would pick 10 number three pigs out of the pig sale and 10 number ones, put them on feed and keep track of the feed efficiency and average daily gain and backfat. The hogs were slaughtered and carcass data was collected on them. They would exhibit one carcass from each type.

An attempt was made to educate different segments of the pork industry including agri-business, the veterinarians and lenders like PCAs and FHA. This was the first effort to get together with agri-business people. There was a two-day educational session at Montgomery Bell State Park. Over 100 agri-business people came. Pork chops were cooked. The hog industry, the feeder pig sales, boar test stations -- everything to do with swine production was covered.

Out of this grew the idea of a swine conference or trade show. Georgia had this event and the Tennessee staff thought they ought to be able to have something like that. The first one was at the Spring Hill Experiment Station under tents in October. There were demonstrations on cutting meat and educational seminars on products and equipment. It was later moved to Ellington Agricultural Center. It grew from there and was moved to the coliseum in Jackson because West Tennessee was "the hog end of the state."

The biggest problem all the way through was producer participation. Purebred people were asked to bring samples of their breeding stock so commercial men could get acquainted with them, see the kind of hogs they had and learn what their sale dates were. The swine section was the first section that had an industry conference in Tennessee. It built good relationships. People came to the conference from all over the United States. A good link was developed with agri-business. There were special training sessions with the production credit associations where specialists examined the budgets, buildings and production systems. These meetings involved the Extension agricultural economics department and served the industry well.

O'Neal was section leader from 1972 to 1985. He tried to constantly develop new buildings and fit these into the swine systems in order to meet the needs of pork producers in the state. Tennessee was growing fast in hog numbers. Flush systems were coming into existence, production systems were being developed and that information was used in in-service training.

There wasn't that much money in feeder pigs. The money was in farrow to finish operations. A lot of emphasis was placed on farrow to finish. There were big 100 to 200 head size farrow to finish operations popping up statewide.

Not only did the swine specialists help people plan individual buildings for finishing hogs, but they went into systems where they would build four buildings and have a workable program. The whole enterprise was designed to help the producer predict a monthly income, a good cash flow and reduce his building sizes. The program attracted a lot of support.

Administration thought well enough of what was being accomplished that a two-day tour for every administrator, teacher, researcher, agricultural economist, dean, assistant dean and station superintendents was conducted. The tour was planned to show what the section was putting together for the swine producer. It gave people a different concept of what Extension was doing for the pork industry in Tennessee. Some of the agents were as good as the specialists in solving problems for the commercial pork producer. Agents who weren't exposed to it daily were not able to keep up with new technology.

James Tracy has made a strong contribution to the pork industry in Tennessee. He likes working with agents and pork producers and he has brought energy and enthusiasm to the swine section over the years.

The swine section has also received strong support from Extension administration. Troy Hinton was especially supportive. The agricultural economics department has made a strong contribution through Bill Hicks, Estel Hudson, Emmit Rawls, Ray Humberd and Clark Garland. Much help has come from the Extension agricultural engineering department, mainly through George Grandle, who helped on building design and ventilation.

Ralph Hall, Extension veterinarian, supported the swine Extension program in Tennessee. He must be singled out for his support of the swine section over the years. He came to UT in 1973 from veterinary practice in Illinois.

Jim O'Neal retired from the UT swine section in 1985 and Glenn E. Conatser was hired to replace him in 1986. Conatser came to UT from the American Yorkshire Club where he had served as executive secretary for 15 years. Conatser is a Cumberland County native who graduated from UT in 1960.

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Entomology and Plant Pathology

Charles Hadden, Professor and Leader

Insects and plant diseases were in their "heyday" in Tennessee prior to 1946. However, their free rein came to an abrupt halt in 1946 with the appointment of J.O. Andes as Extension entomologist and plant pathologist with the Agricultural Extension Service. Andes, having been trained in plant pathology, relied heavily on the research entomologist staff to assist him with Extension entomology programs. He served as Extension entomologist and plant pathologist until 1950 when he became head of the plant pathology department. At that time the entomology and plant pathology departments were separate units.

Robert P. Mullett became Extension entomologist and plant pathologist with the Extension Service in 1950. Some agents have said there were no boll weevils in Tennessee until Mullett arrived. He often remarked that he fought boll weevils all summer and Extension administrators all winter. Although trained in entomology, Mullett became a good general plant pathologist through experience in the school of hard knocks.

Mullett wrote numerous, outstanding, Extension publications on insect control. He was often commended by the County Agents Association for providing timely information on insect control. He also produced an excellent set of 4-H publications in entomology, which led to numerous national winners in 4-H entomology. Mullett relied heavily on the research plant pathology staff -- Leander Johnson, Howard Reed, Andes and Earl Felix -- to assist him in plant disease identification. He retired from the Extension Service in 1976 and died in 1978.

Charles A. Thomas Jr. joined the University of Tennessee as an Extension entomologist in 1963. His appointment was 75 percent research and 25 percent Extension and he was located at the West Tennessee Experiment Station in Jackson. He worked primarily on insects of field crops, especially cotton. Thomas left the UT in 1965 to join the Clemson University Extension Staff.

Rachel Carson's best-selling book, "Silent Spring," published in 1962, created great public concern about the environmental effects of pesticides. This public concern about the safe use of pesticides resulted in federal funds being provided to each state for pesticide safety programs. Most states used their increased appropriation to add staff specialists in weed science, entomology and plant pathology. As a result of this funding, Charles Hadden, Harry Williams and Willie Johnson joined the Extension staff in Tennessee in 1965.

At this time, the entomology and plant pathology specialists were combined into the Agricultural biology section. Mullett became the first section leader. The research staff of the entomology and plant pathology were likewise combined into the department of agricultural biology.

Johnson was located at the West Tennessee Experiment Station in Jackson. He worked on field crop insect control with emphasis on cotton and soybeans. Johnson retired from the Extension Service in 1974. He moved to Mississippi and died a short time later following a lifetime problem with diabetes.

Williams joined the Extension entomology and plant pathology staff as an entomologist in 1965. His major responsibilities have been urban entomology, apiculture, fire ants and 4-H entomology. Williams was referred to as the "dean of little ole ladies," because in his work in urban entomology, he often had to console homemakers who encountered outbreaks of insects in their homes, lawns and gardens. He has conducted an annual pest control school for licensed commercial termite and pest control technicians since 1970. He has conducted 4-H projects in entomology and beekeeping. He has provided bee diseases and pest diagnostic service for beekeepers since 1974. Williams also became well-known among his colleagues as the "fountain pen beetle expert," after discovering a pen being consumed by insects.

Hadden was hired as the first full-time Extension plant pathologist in Tennessee in 1965. He and Williams shared an office in the old Entomology-Plant Pathology Building, currently known as the Plant Pest Annex. Hadden's area of responsibility as stated by the then-assistant dean of Extension, William D. Bishop, was "to know all there was to know about any disease which occurred on any plant in Tennessee." This was quite a challenge for a young Ph.D. fresh out of school.

In 1967, the Extension agricultural biology section moved into the new Plant Science Building, later to be named Ellington Hall. Hadden established the first official Plant Disease Diagnostic Clinic in Tennessee. For many years, until 1986, no permanent home was established for the clinic. In 1973, Melvin Newman was hired as the second full-time Extension plant pathologist in Tennessee. He was located at the West Tennessee Experiment Station in Jackson and was responsible for field crop diseases.

At that time Hadden assumed responsibility for diseases of tobacco and all horticultural crops. He continued this work area until 1983, when he was named professor and leader of the entomology and plant pathology section (previously the agricultural biology section). The research and teaching and the Extension staff were separated again into two separate units.

In 1985, following the hiring of two additional Extension plant pathologists, Hadden's crop responsibilities were reduced to tobacco diseases and diseases of home lawns and gardens. About 50 percent of his time was allocated to section administrative duties.

In 1971, Stelman Bennett, head of the department of agricultural biology, also assumed leadership of the Extension agricultural biology section, which was combined with the department of agricultural biology. He held this position until his death in 1974. During his tenure, additional growth in the Extension agricultural biology staff occurred with the funding of the cotton integrated pest management, the pesticide safe guard and the pesticide applicator training programs. Bennett was known for his work in controlling the alfalfa weevil, especially for his work in flaming alfalfa stubble to destroy overwintering eggs of the weevil.

L. Dale Haws joined the Extension agricultural biology section in 1972. He had recently returned from a tour of duty with the UT India program. He held a joint appointment with research and Extension. His major work area was livestock pests. He resigned from the Agricultural Extension Service in 1973.

Jimmy E. Pendergrass was hired in 1972 to develop the Cotton Integrated Pest Management program in West Tennessee. He was very successful in developing a program, which has continued until today (17 years) with a few modifications. Pendergrass completed his Ph.D. at Mississippi State University while stationed at the West Tennessee Experiment Station in Jackson. He continued in his position with agricultural biology section until 1981 when he accepted a job in private industry. He was later employed by the National Cotton Council of America.

Edward E. (Gene) Burgess began work as an assistant-in agricultural biology in 1964. After he graduated with a Ph.D. in entomology in 1969, under Bennett, he was appointed to a temporary position as assistant professor in agricultural biology to replace Short Heinrichs, who took a sabbatical to India for two years. Burgess continued Heinrich's research on insect pests of turfgrass and nursery plants.

Following Heinrichs return from India, Burgess accepted an appointment with Extension in Jackson on Oct. 16, 1972. He worked there on project safeguard, a program emphasizing the safe use of DDT substitutes. He also worked on insect control of various field crops and fruits and vegetables. He started developing educational materials for the pesticide applicator training program.

On Sept. 1, 1976, Burgess returned to Knoxville to replace Mullett who returned. His new responsibility was pesticide coordinator. He continued with the pesticide applicator training program and insect control of various commodities.

In 1973, Melvin A. Newman was hired as the second full-time Extension plant pathologist in Tennessee. He was located at the West Tennessee Experiment Station in Jackson. His assignment, as an assistant professor, was to provide leadership in the disease control of field crops. In 1977, Newman was promoted to associate professor.

Soybean diseases began to cause severe damage in the early 1970s due to intensified production. Newman assisted in organizing the Southern Soybean Disease Workers in 1973. He has held several offices through the years including president in 1978. He also received the outstanding soybean disease workers award for Extension programs in 1983. In 1979 the Tennessee Agricultural Chemical Association was created. Newman helped draft the constitution and served as one of its early board members. In addition to serving on many committees he was elected president in 1987.

Newman developed a soybean cyst nematode detection service at Jackson in 1976 where several thousand cyst samples were processed each year. He also provided leadership in developing a mobile plant pest diagnostic laboratory in 1978.

In addition to a mobile pest laboratory, Newman and Pendergrass conducted large field crop disease and insect control demonstrations.

Newman and Ray Thompson developed the first Soybean IPM program in Tennessee in 1978. This program was credited with helping producers become aware of the soybean cyst nematode and using resistant varieties for its control. In 1983, Newman was promoted to full professor.

In the early 1980s, wheat acreages and subsequently wheat diseases were on the increase. Newman organized and became the first president of the Mid-South Association of Wheat Scientists in 1985.

A chemical storage shed and workshop was built in Jackson in 1986 to handle and store demonstration chemicals and equipment. This building was increased in 1988 to include storage for large equipment such as tractors, combine and weigh wagons.

Following the death of Bennett in 1973, Carroll Southards was named professor and head of the department of agricultural biology, which included the Extension agricultural biology section. During Southard's tenure, Integrated Pest Management funds became available for use on crops in addition to cotton. Integrated Pest Management programs were developed on snapbeans, tomatoes and soybeans. The pesticide impact assessment program began in 1978. Additional staff were added to initiate and develop these programs. Southards gave up his Extension duties in 1983 to devote full-time to being professor and head of the department of entomology and plant pathology.

Raymond G. Thompson was hired as an Extension entomologist at the West Tennessee Experiment Station Jackson in 1977. He worked primarily on field crop insects until 1979 when he left the Extension Service in Tennessee to accept an Area Extension entomologist position in West Texas.

Nancy Taylor joined the Extension agricultural biology section in 1978. She held the position of pesticide impact assessment coordinator and was

assigned 75 percent Extension and 25 percent research. Her primary responsibility was determining the impact of pesticide changes on agricultural production. She also assisted with the study of pesticides under review. During her last two years, before her resignation in 1986, she assisted in the Plant Disease Diagnostic Clinic. She left the Extension Service in Tennessee to accept a position in the Plant and Pest Diagnostic Center at Ohio State University.

Charles R. "Russ" Patrick joined the entomology and plant pathology staff as an Extension entomologist in 1980. He had previously been an entomologist with the Tennessee Department of Agriculture in West Tennessee from 1970 to 1980. Patrick's major areas of work with the Extension Service in Tennessee are insects of stored grain, grain sorghum, small grain and corn. He worked extensively with pests of stored grains and IPM programs on his assigned crops.

Patrick's hobby is serving as volunteer reserve deputy sheriff in Madison County, working with regular deputies in all facets of law enforcement.

Richard E. Caron joined the entomology and plant pathology department as an Extension entomologist in 1981. He served as assistant professor until 1986, when he was promoted to associate professor. His major program emphasis is Integrated Pest Management with responsibilities for cotton, soybeans, pecans and forest insects. He has coordinated all of the state IPM programs

Darrell Hensley began work with the entomology and plant pathology section of the Extension service in May 1984 as an Extension assistant in Jackson. His responsibilities were laboratory maintenance, disease diagnosis, soil analyses for the presence of soybean cyst nematodes, fungicide demonstrations and monitoring levels of wheat leaf rust. He resigned in September 1986 to return to graduate school. He rejoined the entomology and plant pathology section as an Extension assistant after receiving a Master of Science Degree in entomology and plant pathology. Upon his reappointment in November 1988, he worked with the national pesticide impact assessment program and the cooperative agricultural pest survey. His headquarters location is in Knoxville.

Elizabeth A. Long joined the entomology and plant pathology section in May 1984 as an Extension assistant, with responsibilities for IPM scouting demonstrations, plant disease diagnosis and participating in a cooperative pest survey program with USDA-APHIS-PPG. From spring 1984 through 1986, Long assisted in designing and equipping the Plant and Pest Diagnostic Center, a new Extension diagnostic laboratory in Nashville.

In the fall of 1986, she was transferred to Nashville to be the plant diagnostician for the plant and pest diagnostic center with responsibilities to supervise the day-to-day operation of the center and diagnose and identify routine plant and pest problems submitted to the laboratory. Long is also

responsible for coordinating pest survey information with the UT, state agencies and USDA-APHIS-PPQ. The Plant and Pest Diagnostic Center was opened and dedicated on Dec. 11, 1986.

Alan S. Windham joined the entomology and plant pathology section in April 1985 as an assistant professor working in the areas of forage, floral crop, woody ornamental, forest and turfgrass pathology. He established testing and sampling procedures for the fescue endophyte fungus and assisted with diagnoses of plant problems at the Plant and Pest Diagnostic Center. Windham coined the name "Nashville wilt" for a physiological disorder widespread in eastern white pine in the Middle Tennessee area.

A second plant pathologist, Steve Bost, also joined the staff at the Nashville office in April 1985. He and Windham claimed that diseases were more important than insects, since only one entomology position was located at Nashville. Jaime Yanes countered by saying that he could do the work of two plant pathologists.

Bost's work areas include diseases of commercial fruits and vegetables and dark tobacco, providing leadership in the section's nematology activities and assisting with plant diagnosis at the Plant and Pest Diagnostic Center.

Jaime Yanes Jr. joined the Extension entomology and plant pathology staff in April 1985. His areas of responsibility were insect pests of commercial type fruit, vegetable and ornamental crops and dark-type tobacco. He initiated IPM programs on commercial tree fruits and vegetables. He established field and green house insect control demonstrations in many counties. He won an award for his expertise in turtle hunting after helping capture a large turtle while making a farm visit. Rumors indicated he literally made soup of the turtle. Yanes was very knowledgeable in computers and helped the entomology and plant pathology section greatly in the adoption and utilization of computers. He resigned his position with Extension to accept a position with an agricultural chemical company.

In 1987, Jay P. Avery filled the position previously held by Nancy Taylor. The title of this position was changed from pesticide impact assessment coordinator to Extension assistant. He was responsible for the national pesticide impact assessment program and assisted with the cooperative agriculture pest survey, the National Pesticide Information Retrieval Service and the National Agriculture Pest Information System. Avery transferred from this position to an assistant county agent position in Gibson County in 1988.

Extension Veterinary Medicine

Ralph F. Hall, D.V.M., Professor
Hugh S. McCampbell, D.V.M., Associate Professor and Leader

Veterinary Medicine first became a part of the Tennessee Extension Service in 1957 (FY58) with the creation of a 30 percent Extension position for George Moore Merriman. In addition, Merriman had a very active role teaching in the department of animal science. He provided animal health care to the various herds and flock of the Experiment Station as well. As his teaching and animal care responsibilities increased over the years, his Extension appointment was decreased to 10 percent. At the end of FY68, his Extension appointment was ended and he devoted full-time activity to teaching and research.

Renewal of veterinary Extension activity began with the appointment of Ralph Franklin Hall to a full-time position in the Tennessee Extension Service on June 1, 1973. Hall worked statewide in all phases of animal health and care including dairy and beef cattle, swine, horses and small ruminants. He also gave leadership to the Dog Care and Training 4-H project, creating a series of five handbooks for the members enrolled in this project. In 1980, the 4-H Animal Science project, known as veterinary science in other states, was renamed and became the responsibility of veterinary medicine Extension.

In 1976, W.W. Armistead, dean of the University of Tennessee College of Veterinary Medicine (CVM), in the interest of having a closer relationship between veterinary medicine Extension and the CVM, prevailed upon the Institute of Agriculture administration to establish joint appointments in Extension and CVM. Horace Truett Barron, head of the department of rural practice, CVM, became leader of veterinary medicine Extension with a 20 percent Extension appointment on July 1, 1976. Barron continued in this appointment until 1984. At the same time, Hall became a member of the department of rural practice, CVM, with a 40 percent appointment, while continuing with 60 percent Extension responsibility.

On Sept. 1, 1978, in an effort to expand veterinary Extension activities, especially in Middle and West Tennessee, Robert Dean Linnabary received a joint appointment in the Tennessee Agricultural Extension Service and the UT College of Veterinary Medicine. Linnabary had extensive training and experience in general veterinary practice, regulatory medicine as a member of the USDA, APHIS veterinary services staff and staff person at the Tennessee Veterinary Diagnostic Laboratory. Based in Nashville, Linnabary performed the whole gamut of veterinary Extension activities, including county meetings, publications, consulting with veterinarians, livestock producers and county Extension personnel. In September 1981, Linnabary moved to a full-time appointment with the College of Veterinary Medicine in Knoxville.

Veterinary Extension nationwide had an important role in the eradication of hog cholera, which was declared eradicated from the U.S. in 1974. Bovine brucellosis eradication has been a concern of the cattle industry since 1934. In 1973 there were more than 600 infected herds in the state of Tennessee. An accelerated program was initiated in the state in 1976, which quickly brought about a massive reduction in the number of infected herds. Veterinary Extension has aided the effort by assisting county personnel with information about control of the disease, facilitating coordinated efforts between state/federal personnel and the producers of cattle to identify infected herds, as well as test and slaughter of infected animals and herds. At present (1990), there are fewer than 10 infected cattle herds among 70,000 herds in Tennessee.

With the eradication of catastrophic diseases, such as hog cholera and bovine brucellosis well under way, the nation's food producing organizations turned their attention to improved food safety. Drug residues in food animals occupied a large part of veterinary Extension's attention in the late 1970s and 1980s. As part of a national effort to find sources of drug residues in food animals and develop means of reducing these residues, veterinary Extension, in conjunction with poultry Extension, won a grant funded by Food Safety Inspection Service to study sulfonamide residues in poultry and swine production systems. Extension teaching materials, including slide sets, video tapes, pamphlets and radio scripts, were produced by this effort. Sulfonamide residues in slaughter swine have declined from a high of 15 percent in 1978 to 1.4 percent in 1988.

True prevalence of animal disease in the U.S. has never been known. This prompted animal plant health inspection service in 1983 to initiate a surveillance program, now know as National Animal Health Management System (NAHMS). The objective of this project is to develop tools for estimation of the prevalence of various diseases in the U.S. When Tennessee was chosen one of two pilot states to test the proposed system, Hall and other members of CVM participated in the initial survey. Subsequently, Hall was involved in a second round measuring the prevalence and cost of disease in beef cattle herds in Tennessee.

In 1985, veterinary Extension was expanded markedly with the addition of Hugh Shannon McCampbell as full-time Extension veterinarian and leader of the section. McCampbell, coming from full-time beef and dairy practice in East Tennessee, greatly increased the ability of the section to provide information, teaching and literature in veterinary medicine to county Extension personnel, veterinarians and producers.

McCampbell, in a response to the need of dairy producers to reduce somatic cell counts in milk, initiated a series of dairy milking schools across the state in 1987. These schools, teaching improved milking practices, have helped many dairy producers and the persons doing the milking in the parlors to produce a higher quality milk with reduced somatic cell counts.

With the onset of computer technology, the section has used a software program designed to track reproductive performance in swine herds. Information gained for the computer printouts of sow performance is useful to the producer in making management decisions about breeding practices, sow culling and prevalence of disease as reflected in reduced production of pigs.

Because Extension is the public service information source for agriculture and veterinary medicine, Extension specialists in veterinary medicine receive a constant flow of questions about animal health and care from county agents, homeowners, producers and veterinarians. A typical day may bring questions about what to feed a newborn orphaned animal, the possible toxic effect of a drug, the effect of frost on certain pastures, what would be a desirable book on cattle breeding to give to a friend.

The section annually participates in in-service training for agents presented by beef-sheep-horse-dairy and swine sections of the UT Agriculture Extension Service.

Changes in animal agriculture in the form of larger scale agricultural production units, altered demand for products, technological innovation such as bovine and porcine growth hormone and new programs for the elimination and eradication of specific disease, insure that veterinary Extension will continue to be challenged to serve animal agriculture and companion animals in Tennessee.

Food Technology and Science

Hugh Jaynes, Professor and Leader

Traditionally in land grant universities, the processing of foods was covered in academic departments that addressed the production of food plants and animals. Thus, meat processing was in departments of animal husbandry, dairy products in dairy departments that covered dairy farming and processing plant foods in departments of horticulture.

Prior to 1972, this was the situation at The University of Tennessee. About 30 years ago, forward thinking educators began to see the utility of considering the technology and science of converting agricultural products into foods as a unitized discipline. Departments of food science and food technology began to evolve in which all foods, regardless of origin, were considered together in single academic units.

In 1972, the administration of the UT Institute of Agriculture (UTIA) moved to establish such a comprehensive foods department. The department of Food Technology and Science (FT&S) was organized to serve the people and the food industry of Tennessee. The department was created by combining a small existing food technology department with the products portion of the departments of dairying, animal husbandry and poultry. Resulting concurrently were departments of animal science and plant science.

Space for the new department of FT&S included McLeod Food Technology Building and a portion of McCord Hall. At the same time, the UT Creamery became an operative unit of the department. James T. Miles, formerly head of the UT dairy department was appointed department head. The eight original faculty for teaching and research were drawn from the former departments. Key actors in the reorganization were UTIA vice president, Webster Pendergrass, Experiment Station dean, John Ewing and college dean, Glen Hall.

Extension carries the technology developed by research and academic programs to the people of the state. With the reorganization of research and teaching concerning food products the need to extend educational programs to the food industry and consumers across Tennessee was recognized as a productive function of the department of FT&S. Extension dean, Bill Bishop, and department head, Miles, directed the creation of an Extension section in food technology and science in 1972. Unlike several other groups of specialists, this Extension section was conceived as an integral part of the academic department and the department head was appointed section leader.

Miles and three specialists constituted the section. Their mission was to serve as educational technology transfer agents, working through the Extension system across the state, to assist the Tennessee food industry. As a unit of

an academic department, the specialists benefited from close interaction with teaching/research faculty and they served to interface their academic colleagues with the food industry. Original specialists included Herbert Holt, who worked with milk and dairy products, Ivon McCarty, who worked with fruit and vegetable processing and several other segments of the food industry, and David Kirkpatrick, who worked with meat processors. Only Holt had previous Extension experience.

First year activities centered on getting a program organized and identifying the target clientele. A major accomplishment was becoming familiar with Extension policy and procedures and unraveling acronyms like POW, TEMIS, POWA and POA. Early activities centered on carryover contacts from the teaching/research program, developing relationships with Extension administration, district and county staffs and initiating public relations contacts to work across the state.

The major audience of the Section was food processors and food service personnel, but it also was to include homemakers, farmer-processors, food entrepreneurs and Extension agents. This audience mix set FT&S Extension apart from the traditional section programs of the Extension Service that interacted directly with agriculture.

Extension programs were new to the food processing industry of Tennessee, especially the concept of having "cost-free experts" to help with problems. Industry tends to judge quality somewhat by "cost of goods (services) received," and a "free lunch" was new to them. Initially, this resulted in some skepticism, which has evaporated over the years as the program has come of age. Several early educational programs helped bridge the gap with industry. One led to the successful implementation of the federally mandated OSHA and FDA/National Canners Association better process control training program by the food industry in the state. No Tennessee food industry was cited for a major violation under either of these programs. Training provided by the FT&S section helped materially to put these programs into effect.

Also effective was assistance in helping industry develop waste management programs to meet EPA requirements and assistance in understanding and implementing nutrition labeling requirements promulgated by FDA beginning in 1973. The section also worked with OEO and other federal agencies to develop a successful community cannery program in Tennessee. Working closely with county Extension, some 30 centers were established across the state.

Other successful activities that began early and have continued included helping to establish the Volunteer and Mid-South sections of the Institute of Food Technologists, establishment of the National Sweet Sorghum Producers and Processors Association and the Appalachian Honey Co-op. Food preservation in the home has been supported through the lawn and garden exhibits and the "tele-tip message" program. Specialists continue to interact effectively with a number of food commodity groups and associations.

A program was established to determine quality of dairy products across the state. Three times each year samples of milk, chocolate milk and cottage cheese have been collected and analyzed by appropriate quality tests. Results are sent back to processors and help to indicate problem areas which are addressed by the dairy products specialist. Training programs for dairy lab personnel have resulted in successful state certification of all dairy plant labs.

A contest has been held each year at the Tennessee State Fair in which processor's products are judged by a nationally recognized judge of dairy products. Each year the Dairy Institute, a conference/workshop has been held for dairy farmers, processors and sanitarians. Done in cooperation with the Dairy Extension Section, this event attracts about 150 participants each year.

Programs to enhance the quality of meat products have assisted that segment of the food industry, with both large plants and small processors. New techniques for production of quality products have been introduced. Sources of and controls for spoilage microorganisms have been identified and corrections implemented to save money and improve acceptability of meats. Assistance to comply with USDA and other regulatory requirements have helped processors to improve quality, and, in particular, have helped new processors in starting businesses, including several that produce those good Tennessee cured hams

The FT&S section has evolved over the years to become an effective unit to help the Tennessee food industry through the Extension system. Key components of the current program of assistance through education include: broad-based assistance to entrepreneurs who are starting food businesses; solving problems in processing operations; advice on plant renovations, new construction and new equipment specification; programs for waste management in processing operations; improvement in safety and quality of food products; and food-related assistance and training for Extension personnel. Benefits to consumers include information on food quality and safety, nutritional aspects of foods and advice on food handling and home preservation techniques.

Two 4-H programs for Tennessee have benefited youth and their leaders. One covers dairy products and the other meats. Both programs provide training and information on how products are processed, nutritional benefits, food preparation and the recognition and preservation of product quality. Judging activities are included. These have been popular areas for 4-H youth. Enrollment in the dairy foods program now stands at 3,380 and the meats program at 1,670. In the past nine years, Tennessee has had eight national winners in Dairy Foods.

Over the years, some changes in personnel have occurred. The first meats specialist, David Kirkpatrick, returned to the animal science department in 1973. Sam Winfree continued this work from August 1974 to August 1980 when he accepted a position at Tennessee Technological University. Since

January 1983, the meats specialist has been Curtis Melton, who moved from teaching/research in the department to Extension.

Ivon McCarty retired April 1989 after a long and successful career. His area has been assumed by William Morris who transferred into the section November 1989 from nutrition and food sciences in the UT College of Human Ecology. Miles, department head and section leader, retired in July 1985. He was replaced by Hugh O. Jaynes, who had been teaching/research in the department. Herbert Holt remains the "old timer" who has been with the section since its inception in 1972.

The FT&S section has evolved as an effective Extension unit working with the food industry, consumers, youth and other Extension personnel across the state. Rather unique originally as an industry-related, rather than farm-related group, it has established and implemented programs that accomplish the mission of service and assistance to its clientele.

Forestry, Wildlife and Fisheries

John B. Sharp, Professor

Tennessee, like most other states, initiated an Extension forestry program as a result of the Clarke-McNary Act of June 7, 1924.

Five years after passage of this law, 32 states had organized cooperative forestry Extension programs. Most of these programs started either in 1925 or 1926. Tennessee's first Extension forester, G.B. Shivery was hired in 1926. Iowa, Maine, Maryland, North Carolina, Pennsylvania and South Carolina had forestry Extension programs a few years prior to 1924.

The earliest Extension forestry demonstrations from the 1926 annual report were as follows: the J.C. Rambo farm in Johnson County with a three-acre planting of white pine and a two-acre planting of yellow poplar on north and east exposures; a tree marking and marketing demonstration on the C.A. Hutton farm in Blount County; a fire prevention and timber stand improvement demonstration on the L.J. Kerr woodland in McNairy County; on the W.O. Whittle farm in Sevier County, the demonstration consisted of tree planting, TSI and fencing out livestock (At this time there were no livestock laws in Tennessee. The term "open range" was used to describe the management of livestock operations.); and on the J.F. Rosenbaum farm in Washington County a very early woodland improvement demonstration was established on 21 acres of predominately yellow poplar with a scattering of mixed oak and miscellaneous species.

Prior to 1926, R.S. Maddox was employed part-time to do forestry and horticulture work for the Extension service, but there were no official annual reports or plans of work at that time. He was followed by Wilbur R. Mattoon, who spent time in Tennessee and other southern states while he was Extension forester with the federal Extension service. In 1915 he talked with the parents of J.F. Rosenbaum. This was the very beginning of that demonstration, which was carried on by the county agent and Extension forester up through 1959.

The 1928 and 1929 annual reports of the Extension forester indicates problems somewhat similar to the problems of today. The 1928 report states that: "The most encouraging feature of the farm forestry program is the acceptance, pretty generally, by Extension forces, that the best economic disposition of the low-grade, less fertile land, aside from use of suitable land for pasture, is its use for growing forest trees. The highest farm income is secured by intensive cultivation of high producing acres in cultivated crops with use of marginal land for timber production. However, in parts of West Tennessee, it may be true that cotton can be grown at a profit on all well-drained land, regardless of fertility, with the aid of the proper fertilizer. Timber

as a crop continues to be handicapped by its being a comparatively long time venture."

The 1929 report adds that: "Our effort is to develop work suitable for the varied conditions and stages of development throughout the state and yet limit activity to a relatively few simple clear-cut projects to avoid confusion. The attitude of the county agent is of equal importance with the project in any continuous county program of work. Consequently, the project or projects in any county or section of the state must remedy or improve some unfavorable feature and at the same time make an appeal to the county agent as well as be capable of being readily grasped by farmers and woodland owners."

Shivery worked for many years alone, covering the entire field of natural resources as an Extension forester. His first assistant, John Sharp, was hired in 1947 and stationed at Jackson to work primarily in the western part of the state.

Prior to this time, especially before and after World War II, much emphasis was given to tree planting because free forest tree seedlings had been available from the Tennessee Valley Authority nursery. The state nursery at Pinson was being established in the early and mid-1940s. TVA foresters were stationed at various field locations. In many ways, they assisted the county Extension staffs, especially with tree planting and other demonstration work.

The ASC offices in the different counties offered incentive payments for the A-7 practice (tree planting) and the B-10 practice (timber stand improvement). Enlargement of these programs continues today.

There was a limited amount of forestry 4-H Club work in a few counties primarily because the county agent had an interest in the subject of forestry. That same agent not only worked with the Extension youth, but also did forestry adult work. The first agent to give concerted effort to forestry was G.C. Wright, county agent of Montgomery County. An equal interest was shown by Ralph Ring, who worked in both Montgomery and Lawrence counties.

The greatest emphasis on youth work in forestry did not occur until after World War II. I.B. Tigrett, president of the Gulf Mobile and Ohio Railroad was also chairman of the board of trustees of the University of Tennessee. He grew up on a farm in Crockett County and although he was a banker and railroad president, he had a genuine interest in rural development and assisting farm people, especially in West Tennessee.

Shelby Robert, director of forestry and agriculture of the GM&O, was assigned the task of creating an interest in forestry among civic clubs throughout West Tennessee, but especially those clubs in counties served by the GM&O. Along with the railroad, these civic clubs became donors of awards in different counties for outstanding 4-H forestry projects. There was competition among 4-H members terminating with a 4-H forestry banquet in

November for all 4-H members who participated. Awards were presented to the top five individuals. This emphasis started in 1945 and continued until the late 1950s.

In 1949, Jim Warmbrod was employed as Extension forester working primarily in West Tennessee and stationed at Jackson. In 1952, John Sharp returned from academic leave and was stationed at Knoxville. For about five years, Tennessee had three Extension foresters.

An equivalent number was employed in other southern states with the exception of North Carolina, which historically has had more Extension foresters than any other state. At this particular time (1952), there were 11 Extension forestry specialists working out of the land-grant university at Raleigh, North Carolina. After Shivey's retirement in 1957, a few years passed when all phases of natural resources work was done by Warmbrod in the western part of the state and Sharp in eastern Tennessee although there was overlapping of the work. At times, both Extension foresters had to be at the same place at the same time.

In 1961, Earl Cady was employed as Extension forester for McMinn, Polk and Bradley counties. Within a few years, he was transferred to Knoxville and worked out of the Knoxville Extension office until he retired in 1976.

In the early 1960s, a special federal grant (Appalachian money) became available for Extension service to employ forestry specialists in the field of wood products and utilization. W.E. Duggan worked at this task from 1966 until his retirement in 1972. In 1974, Don Stumbo was employed and continues with the work of wood products and utilization.

In the early 1970s, Extension administration was agreeable to the employment of the first Extension wildlife specialist in Tennessee. James Byford was doing this work in Georgia and resigned there in 1972 to accept this new position in Tennessee. He continued the job until 1987. There were a few months in 1986 when he became acting head of the overall department of FWF, which included research, teaching and Extension. Byford left the university at Knoxville in 1987 to become dean of agriculture and home economics at UT-Martin.

In 1977, the vice president for the Institute of Agriculture merged Extension, research and teaching into one identity and employed Gary Schneider to head this department. Schneider held this position until 1985 when the new department head became George T. Weaver.

Prior to these administrative changes, there were other Extension personnel changes involving the broad field of natural resources. In 1978, Thomas K. Hill was employed as a full-time fisheries specialist and continues in this capacity. Also in the early 1980s, special federal monies (natural resources) became available and George Hopper was hired in 1983 as forest management specialist. He currently retains that position. Also in 1988,

Michael King was employed to replace Byford as wildlife specialist and he continues in that capacity.

In 1987, Rick Cantrell was employed as a full-time research assistant primarily to establish forestry and wildlife demonstrations throughout the state. He resigned in 1989 to pursue further academic work. Also, Neal Wilkins was employed in 1987 and stationed at Jackson primarily to do wildlife demonstration programs. He also resigned in 1989 to continue academic work.

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Ornamental Horticulture and Landscape Design

Brian E. Corr, Assistant Professor

Ornamental plants have been prominent in Tennessee as long as there have been trees and flowers in the mountains, meadows and fields. Tennessee has a thriving industry which produces and maintains ornamental plants to maintain and increase this beauty. The ornamental horticulture Extension section assists this industry; including commercial producers of sod, nursery plants, foliage plants, cut flowers, flowering potted plants and garden plants; as well as persons who operate businesses maintaining these plants.

The ornamental horticulture section is relatively young, but springs from a long and rich history. The section was formed Jan. 1, 1972, from a portion of the horticulture section. The remainder of horticulture merged with agronomy to form a new section -- plant and soil science. At one time, forestry and food technology were also parts of the horticulture department. Therefore, for a complete history, one must look at the histories of all these sections. This report concentrates primarily on the history of ornamental horticulture Extension at the University of Tennessee.

Long before an Ornamental Horticulture section was formed, even before there was an Extension Service, there were individuals at the UT dedicated to preserving and enhancing the beauty of the landscape with ornamental plants. The history of the ornamental horticulture section is a collection of the stories of the individuals who have made up the section.

Horticulture at UT began prior to the hiring of the first horticulturist. When Mr. R.L. Watts came to UT as horticulturist of the Tennessee Experiment Station and associate professor of horticulture in 1890 he found a very small orchard in place. Watts began experimental work with fruit and vegetable crops and expanded the orchard.

In 1900, Charles A. Keffer was hired as head of the department of horticulture. He was an expert on general horticulture and landscape gardening. Keffer previously worked in Minnesota, South Dakota, Missouri and New Mexico and for the USDA. With the passage of the Smith-Lever act in 1914, Keffer accepted the position of the first director of the Extension Service of Tennessee. Horticulture therefore gave Extension its first director. The first horticulture publication, "Farm Gardens," was published in November 1915. There was no mention of ornamentals in this publication, which dealt almost exclusively with vegetables.

Director Keffer wrote the first publication dealing with ornamental horticulture in January 1921. This publication, "Beautifying the Home Grounds," outlined concepts which are still discussed in publications today:

"In Tennessee... it is strange how little we take advantage of our climate in the way we live. We confine ourselves as closely to our houses as though we lived in the far North. We should eat our meals in the open air. We should entertain our friends in the shade of trees on the lawn, instead of stuffy rooms with the shades drawn.... We must make the outside of our houses beautiful; the home grounds must be furnished with grass and shrubs and trees and flowers, just as the house must be furnished with carpets or rugs and tables and chairs and pictures -- an unfurnished lawn is as dreary and uninviting as an unfurnished house."

Keffer went on to describe ornamental plants suitable for Tennessee yards, many of which are as useful today as they were then. Keffer served as Extension director until his death in 1935. To commemorate Keffer's contributions to 4-H programs, boys and girls of Tennessee chose his name for a ship launched under their sponsorship in June 1944.

When Keffer was promoted to Extension director in 1914, O.M. Watson was chosen as his successor as horticulture department head. As there was no horticultural specialist employed by the division of Extension, Watson also carried on Extension duties as needed and was therefore the first person to conduct Extension work in horticulture. Besides Extension, Experiment Station and teaching duties, Watson was responsible for care of the university grounds and for final grading and planting of grass on Shields-Watkin's field, in what is now Neyland Stadium.

Records show that J.C. Miles was part of the horticulture section from 1918 until 1919 and Harry Halcomb worked in the section in 1923. Both are listed as specialists, but no other information is available on these two individuals.

W.C. Pelton was hired in 1926 and continued the tradition of promoting landscaping. Pelton often landscaped schools as a demonstration of landscape principles and to introduce shrubs, particularly flowering shrubs. In 1929, Pelton wrote the first Extension publication that might be considered aimed at commercial horticulture, "Growing Ornamental Shrubs and Grapes from Cuttings." The importance Pelton placed on beautifying the landscape is shown in his publication "Food from Gardens and Orchards," written in January 1942 during World War II. The primary objective of the publication was to describe how to produce healthful food in "victory" gardens. Despite the emphasis on food-producing plants, Pelton encouraged planting flowering shrubs as well, to enhance the beauty of the garden.

Pelton retired in 1958, but published one more publication in 1959, "Planting and Care of Ornamental Trees and Shrubs." Pelton's love for ornamental horticulture was evident throughout his career.

One of many colorful Extension specialists in Horticulture was J.J. Bird. Bird was hired in 1946 and served ably until his retirement in 1969. Bird was born in Ireland and moved to the United States with his family when he was 7-

years-old. He received his bachelor's degree from Michigan State University and immediately began Extension and research work there in 1930. He worked for the UT Experiment Station at Crossville from 1935 until he joined Extension in 1946. Bird was best known for his work with strawberry production.

At his retirement dinner in 1969, Bird was described as, "A horticulturist first, imaginative and creative, inquisitive and versatile, enthusiastic and energetic, informative and entertaining, intelligent and ebullient, conservationist and conversationalist, hiker and archer, archeologist and craftsman, debater and UFO enthusiast." After retirement, Bird began a "pick-your-own" orchard of peaches and strawberries.

The next person to be hired into the horticulture section was John C. Clark in 1947. Based in Jackson, Clark's program emphasized pecan and vegetable production. Clark worked primarily with these crops throughout his career, but also assisted with homeowner questions, especially in West Tennessee. Clark died in 1974 while employed by the Extension Service.

Don Williams was hired in 1962, having earned his Ph.D. in horticulture at Pennsylvania State University with an emphasis in pomology. When hired, Williams was assigned to work with fruit producers and homeowners. In 1965, Williams was promoted to horticulture section leader. Williams is known throughout the state for his knowledge of plants and promotion of sensible landscape techniques. Stories are told of travelling with Williams through the state and studying plant material at 55 mph, as well as watching for red-tailed hawks. It is said that Williams is so knowledgeable of the roads of the state he is able to schedule his travel within 10 minutes from any point in the state to another. One of the more unusual talks that Williams was known for during his career was one called "Red Cedars, Tennessee's Most Unusual and Interesting Trees." Williams was appointed the first head of ornamental horticulture when the department was formed in 1972.

An able craftsman, Williams built his own home in Knoxville overlooking the Tennessee River. He resigned from his Extension duties in 1982 and continues to devote himself to teaching and research in the department of ornamental horticulture.

Robert Freeland joined the horticulture section in 1968, having served as a specialist in resource development since 1963. Freeland's responsibilities were predominately with vegetable production. He was assigned to the plant and soil science section when the horticulture section was separated into two parts in 1972.

Until 1970, specialists in the horticulture section concentrated on food crops. The Tennessee ornamental horticulture industry was growing and needed someone with detailed knowledge of the industry. The first specialist with responsibility for ornamental crops alone was James L. Pointer, hired in 1970. Pointer received an master's degree at Virginia Polytechnical Institute and

State University and his Ph.D. at UT. Prior to being hired as a specialist, Pointer worked for UT from 1950 to 1953 as manager of the UT farm and as an instructor. After operating a farm tractor and implement business in Maryville for 10 years, Pointer began his Extension career in the Knox County office as a community development and public relations specialist in 1963.

As a specialist, Pointer worked with ornamental crops, especially floricultural crops. Regardless of how long he was on the road, there was always one more greenhouse to visit and Pointer has been known to examine a crop by car headlights. Pointer developed an extensive series of publications on ornamental plants, many of which are still widely distributed today.

Pointer and a dedicated group of greenhouse operators formed the Tennessee Flower Growers Association in June 1970. This organization worked in cooperation with the Extension service to promote floriculture and to improve production practices. Pointer was very involved with people, seemingly knowing everyone in the state. His contacts with lawmakers benefited the ornamental horticulture industry. Following his retirement in 1986, Pointer continues his involvement in the floriculture industry as a consultant.

The next specialist to be hired was Don Wagner, joining the section in 1972, with responsibility for nursery crop production. Tennessee has one of the largest nursery industries in the United States, so a nursery specialist was long needed. Wagner left the section in 1976, going to Clemson University.

Will Witte was hired in 1977 to continue the Extension program in nursery production. Witte had previously worked at the University of Florida as an Extension specialist in floriculture crop production for three years, then environmental horticulture for three more years. Witte received his Ph.D. at the University of Maryland in 1971.

As nursery specialist, Witte instituted the "Tennessee Nursery Digest," conducted numerous short courses and organized a series of nursery clinics and seminars in the "nursery belt" near McMinnville. In 1983, Witte's responsibilities were transferred to nursery crops research in the department of ornamental horticulture, where he continues to serve.

G. Douglas Crater was hired in 1982 to serve as section leader and department head for ornamental horticulture and landscape design. Crater received his Ph.D. at Ohio State University and then worked as an Extension specialist in floriculture at the University of Georgia. Prior to earning his Ph.D., Crater had been a vocational agricultural teacher and county agent in North Carolina. He continues to aggressively and enthusiastically lead Extension, teaching and research activities in ornamental horticulture.

After Will Witte assumed research duties, Ken Tilt was hired to continue the Extension program in nursery production. An enthusiastic plantsman, Tilt earned his Ph.D. at North Carolina State University and came to the

University of Tennessee in 1984. Tilt's down-to-earth style and dedication to the nursery industry in Tennessee gained him strong support from nursery operators. Tilt worked with the Tennessee Nursery Association to develop the annual nursery short course into one of the best educational opportunities for the nursery industry in the Southeastern United States. Attendance increased approximately 300 percent. Tilt coordinated the development of a training manual for certification of nursery professionals. He left UT in July 1989 to work at Auburn University where he conducts an Extension program and research in nursery production.

The retirement of James Pointer left a huge void in the floriculture industry. Richard Vetanovetz was hired in 1987 to continue this successful program. Vetanovetz earned his Ph.D. from Ohio State University, specializing in nutrition of floricultural crops. After six months, Vetanovetz left the UT to conduct product research for the W.R. Grace Company.

Tom Samples, hired in 1985, became the ornamental horticulture section's first specialist in turf production and maintenance. Samples has developed an Extension program to reach the commercial turf industry, including sod production, sports turf, lawn care, golf courses, football fields, parks, etc. Samples earned his master's degree and Ph.D. from Oklahoma State University.

The most recently hired specialist in the ornamental horticulture section is Brian Corr, who has responsibility for commercial floriculture. Corr was hired in 1988 after earning his Ph.D. at the University of Minnesota. Prior to earning his degree, he worked in the greenhouse industry.

In 1986, three area specialists were hired with responsibilities in ornamental horticulture. These positions were developed as a direct result of legislative action initiated by the Tennessee Nursery Association, the Tennessee Turfgrass Association and the Tennessee Flower Growers Association. While these area specialists are administered through the district in which they serve, they are an integral part of programs of the ornamental horticulture section.

Cindy Weaver was hired with responsibility for all aspects of commercial ornamental horticulture in District 1, except for Shelby County. Weaver is based in Jackson and has developed a very strong rapport with producers in that area. She worked as a vocational agricultural teacher prior to joining the Extension Service in 1986. Weaver is a UT graduate.

Mark Halcomb was promoted to area specialist from his previous position as agricultural agent in Shelby County, where he had served for 10 years. Halcomb earned a degree in agronomy from UT. Prior to joining the Extension Service, he operated a garden center in Hamilton County and served in the military. Halcomb has responsibility for commercial nursery production in Warren, Coffee, DeKalb, Franklin, Grundy and Van Buren counties in Tennessee's nursery belt. Halcomb conducts his program with an

exemplary thoroughness. Specialists always know that when Halcomb calls all the necessary information has been gathered to enable preliminary determinations to be made.

Hugh Conlon was also hired in 1986 to serve the greenhouse, nursery and Christmas tree industries of northeast Tennessee. Conlon received degrees from Cornell University and the University of Delaware. His first Extension job was as a home grounds Extension specialist in Rhode Island. He then became an area horticulture specialist in southwest Iowa responsible for all areas of horticultural production. Conlon is a hard-driving individual who takes grower's problems to heart, not resting until a solution is found.

The ornamental horticulture section continues to serve the commercial greenhouse, nursery and turf industries in 1989 as enthusiastically as when it was formed. Under the leadership of Doug Crater, the section is looking forward to the 1990s as a period of increased interest in ornamental horticulture in Tennessee. Ornamental horticulture crops are an alternative to traditional agriculture. Landscape maintenance is another aspect of horticulture which will undoubtedly increase as more Tennessee citizens are living in urban areas. The ornamental horticulture section continues to develop programs and hire personnel to serve the people of Tennessee.

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Plant and Soil Science

**Elmer L. Ashburn, Professor and Leader
Gilbert N. Rhodes, Retired Professor and Leader**

The plant and soil science section has a long and gloried history of serving the needs of our clientele. From the hiring of J.C. McAmis as the first crops specialist (1914-1928), our goal has been to provide usable information to Tennessee producers. This information has helped them increase crop yields and crop quality, lower production costs, improve soil and water resources and reduce labor requirements.

Tobacco

Our first tobacco specialist was R.H. (Roy) Milton (1922-1953). He was housed in Nashville and traveled by bus, train and whatever means of conveyance was available to assist county agents in carrying out demonstrations on modern tobacco production.

Tobacco became increasingly important to Tennessee's producers and Gilbert N. Rhodes (1952-87) and Joseph N. Matthews (1953-57) were hired to carry on educational work in this important cash crop. They had the distinction of helping introduce agents and farmers to fumigants for tobacco beds, improving varieties and new fertilizer practices. Emphasis was placed on proper suckering and grading practices to improve tobacco yield and quality. Rhodes became section leader in 1959 and continued to conduct an educational program in tobacco until his retirement in 1987.

Donald J. Fowlkes was hired in 1985 to continue the educational excellence in tobacco.

"Tennessee Farmer" recognized Rhode's contribution to Tennessee agriculture by naming him "Man of the Year in Tennessee Agriculture" in 1986.

Seed

The importance of good seed of known variety and purity was beginning to be recognized in the early 1930s. With new emphasis on cotton, tobacco, corn and forage varieties H.E. Hendricks (1935-45) was hired as the first seed specialist. H.W. (Harry) Wellhausen (1939-54) soon was employed to assist with this rapidly-changing educational effort. These two specialists helped agents and farmers learn about the increased yield potential that could be realized by adopting the new Hybrids. Hybrid seeds had a dramatic impact on Tennessee agriculture and enabled producers to significantly increase yields while obtaining better insect and disease resistance.

Raymond E. Cobble (1957-82) was hired as the next specialist in seed certification. He served as executive secretary of the Tennessee Crop Improvement Association and continued to maintain high standards of seed purity and quality in Tennessee's Certified Seed Industry.

Soil Testing

Soil Testing was the next area to receive educational emphasis in the agronomy section. B.W. Hatcher (1944-49) was hired as the first specialist in this educational area to help agents and farmers in understanding the importance of proper liming and the need for phosphate and nitrogen fertilizer to supply the nutritional needs of the new higher-yielding crop varieties. He was followed by L.J. Strickland (1939-61), William D. Bishop (1950-59), Haywood Luck (1954-56) and Joseph N. Matthews (1957-86) as specialists with primary assignments in soil testing. The forage testing laboratory began operation in 1965.

With the introduction of ammonium nitrate and high-analysis fertilizers the educational area of soil testing and soil fertility was greatly expanded.

To help with the increased demand for demonstrations and practical information on how to best utilize new fertilizer technology William H. (Bill) Walker (1961-65) was hired as soil fertility specialist. He was followed by Donald D. Howard (1966-75) and then by John R. Jared (1975-present).

William D. Bishop served as leader from 1957 to 1959. He then moved into administration and later became dean of the Extension Service. Don Howard left our section when he was promoted to superintendent of the Tobacco Experiment Station.

Forage Crops

Forage Crops was the next area to receive educational emphasis. With the movement from open-range to the fencing in of livestock, Tennessee's farmers needed to improve their forage acres. American workers in the city were demanding higher quality and larger quantities of meat and milk.

Webster Pendergrass (1948-57) was employed as the first forage specialist. He also served as leader of Extension agronomy before being promoted to dean of agriculture in 1957 and later to vice president of the Institute of Agriculture. Lewis H. Dickson (1951-56) soon joined in the effort to help improve the millions of acres of pasture and hayland in Tennessee.

Joe D. Burns became Forage Specialist in 1957 and continues in that capacity to the present time.

Through statewide educational programs emphasizing improved forage species, the addition of legumes to grass pastures, recognition and awards to outstanding forage producers, IF-PUP and large multi-state events, such as

the national grassland field day held at Middle Tennessee Experiment Station in 1965 with 25,000 in attendance and EXPO '87 held in Greene County and attended by 10,000, the Tennessee educational program in forages has been at the forefront of assimilating, demonstrating and helping farmers implement improvements in forage production.

The forage specialist was most instrumental in establishing the Tennessee Forage and Grassland Council in 1984. This organization brought together the efforts of industry workers in seeds, fertilizers and equipment with university professionals in livestock and forages, coupled with a strong nucleus of livestock and forage producers, to increase the statewide educational efforts in forage production.

"Tennessee Farmer" rewarded contributions by Joe Burns to Tennessee agriculture by recognizing him as their "Man of the Year in Tennessee Agriculture" in 1977.

Field Crops

The field crops area which first received emphasis under the leadership of McAmis was not forgotten. G.S. Hollingsworth (1937-47) carried on in this tradition.

Luck left the soil test laboratory and took over the educational leadership in cotton and soybeans in West Tennessee (1957-72). He assisted agents with a large number of field demonstrations and grower meetings as farmers adapted to new fertilizer practices, variety selection, mechanical harvesting and other innovations in cotton production. Luck was very instrumental in getting widespread adoption of recommended production practices for the new wonder crop called soybeans. "Tennessee Farmer" rewarded his contributions to Tennessee agriculture when they recognized him as their "Man of the Year in Tennessee Agriculture" in 1969. Luck became superintendent of West Tennessee Experiment Station in 1972 and district supervisor, Agricultural Extension Service in 1977.

Wayne T. Flinchum joined the staff in 1973 as soybean specialist. Paulus P. Shelby also joined the staff as cotton specialist that same year. Both men are located at Jackson and continue to conduct extensive statewide educational programs with numerous field demonstrations and a large number of farm tours and grower meetings. Shelby also accepted educational leadership in wheat in 1983.

Soil Conservation, Soil Management and Erosion Control

The area of soil conservation, soil management and erosion control first received emphasis with the hiring of James H. Robinson (1952-81). He worked primarily in the organization of soil conservation service districts and served as executive secretary of Tennessee state soil conservation committee.

George J. Buntley (1968-87) was hired to increase educational emphasis on soil improvement, soil classification, erosion control and increased input into mapping Tennessee's soils. Paul H. Denton joined the staff in 1988 and continues the educational program in this area to help insure that future generations will benefit from implementation of improved practices of soil and water management.

Weed Control

As more and more Tennessee residents left the farm to work in factories, alternatives had to be utilized to control weeds in crops. The development and use of herbicides to control weeds brought about the need for educational emphasis in this area. D.M. (Pete) Gossett (1965-70) was employed as the first weed specialist. He conducted an active statewide demonstration program on herbicide usage in corn, pastures, soybeans and cotton. Gossett later became dean of the Agricultural Experiment Station and currently serves as vice president of the Institute of Agriculture.

Dave Weaver (1970-72) and Elmer L. Ashburn (1972-present) followed in the rapidly-expanding field of herbicides. Field demonstrations, publications, agent in-field training, farm tours and grower meetings helped Tennessee producers adapt this new technology into their farming program. The emphasis was increased with the hiring of David Monks (1985-89) at the diagnostic laboratory in Nashville. Monks wrote our first publication in nursery weed control and helped to solidify our program in weed control in fruits and vegetables.

Horticulture

The Extension agronomy section became the Extension plant and soil science section with the addition of educational programs in fruit and vegetable production in 1972. Robert D. Freeland (1972), horticulture specialist located in Knoxville, John C. Clark (1972-75), horticulture specialist located at Jackson, and B.S. Pickett (1972-73), tree fruit specialist located at Knoxville, were transferred from the old horticulture section to the newly-created plant and soil science section.

Alvin D. Rutledge (1972-present) was hired to succeed Freeland when he was promoted to superintendent of the plateau experiment station. David Lockwood (1973-present) was hired as tree fruit specialist to succeed Pickett. Richard Winston (1975-present) was hired to work with low-income vegetable producers and gardeners as a joint appointment with Tennessee State University. David Sams (1977-present) was hired as vegetable and small fruits specialist in Jackson. Kenneth Johnson (1985-present) is the latest addition to our staff in this area. He has educational responsibilities in small fruits and vegetables.

The horticultural area is a highly-visible and rapidly-expanding educational area. The above-mentioned specialists have conducted energetic statewide

educational programs. Their efforts have resulted in grower adoption of recommended production and marketing practices. Some of the more notable accomplishments have been the formation of the Tennessee Viticultural and Oenological Society, The Tennessee Fruit and Vegetable and Horticulture Association, the orchard show at Flippen's Farm in Obion County and the gardening program assisted by TVA.

Summary

The plant and soil science section has a proud history. "Progressive Farmer" has recognized three of our staff members as the "Man of the Year in Tennessee Agriculture" award. Two staff members went on to become vice president of the Institute of Agriculture. Three staff members became Experiment Station superintendents and one became dean of Extension.

In the fiscal year 1989, our staff conducted 332 grower meetings, assisted county staffs with 310 demonstrations, revised 31 publications, conducted 111 field tours, wrote 10 new publications, wrote 92 news articles, analyzed 45,000 soil samples, analyzed 2,600 feed samples and answered hundreds of calls and letters in an effort to keep agents informed in the area of plant and soil science.

Our staff in plant and soil science faces the future with anticipation and great expectation. As the educational needs, environmental concerns, alternative enterprises, new technologies and audiences change we are confident that our abilities and energy will be sufficient to assist the county staffs and Tennessee citizens in adapting to these changes.

HOME ECONOMICS PROGRAMS

"Home is where the heart is". . .and the heart of the Extension home economics program is found in the many homemaker and 4-H Clubs across our state.

Because farm family resources are directly tied to agricultural income, Extension's clientele have a deep and abiding love of the family farm, home and community. Nurturing children, managing home activities, helping with farm chores and performing volunteer leader tasks in the community place the homemaker in an enviable role of honor and responsibility.

Through the decades Extension specialists and county home economics agents have met the challenge of new inventions, changes in social standards and customs, educational opportunities that removed children from familiar surroundings and the increased role of care given to aging parents. Programs have been developed to reduce the burden of household work, encourage the exploration of underdeveloped talents, heighten self-esteem and properly recognize the value of the "unpaid" homemaker role to the well-being of the family.

Consequently, all family members are the beneficiary of the home economics program. Seven subject-matter sections, directed by 17 specialists and 182 county home economics agents, breathe life into new technology, foster cottage industries, give direction for stress management and teach arts that enhance the home and bind the family into a caring, giving, sharing unit.

Our home economics heritage is impressive and important. But, our written history does not do justice to the success of the mission. The reader may wish to contact the local Extension office or the section leader for more information about their area of interest.

Home Economics-Clothing

Helen Rader, Professor and Leader

An Early Beginning

The Extension clothing program began as a result of the 4-H Canning Clubs which were organized in counties in 1914. The 4-H Canning Club members needed appropriate clothing to wear while preparing and processing the tomatoes. They used what was available -- flour and feed sacks -- to make aprons, caps and pot holders, deemed necessary to this activity. The home demonstration agent, along with mothers of canning club members, helped the girls make their aprons and caps. As a result of their activity, the mothers became interested in meeting together to learn more sewing techniques. This was the beginning of the home economics program on the county level where the home demonstration agent worked with farm families.

A specialist was hired in 1918 to work with both women and 4-H girls in all areas of home economics. Lillian Keller accepted the position of clothing specialist in 1924, even though she also provided leadership to management and family economics areas. Keller was a gracious lady who was always perfectly groomed. She was a typical home economist and much respected among her peers. Keller prepared Publication 153, "Hints for the Home Dressmaker" (1928), which not only gave information on clothing construction, but also acquainted women with how to select colors, the effect of line and design on the figure and the pros and cons of wardrobe planning.

The 1930s

Cotton piece goods was available in general stores and department stores. Rural women fashioned house dresses, children's clothing and undergarments from these fabrics. Wool fabrics provided a creative outlet for those who were more skilled and enjoyed making better dresses, coats and suits.

Clothing money for rural families was scarce. Families were urged to make wardrobe plans. Clothing budgets for different size families were outlined in Publication 200, "Clothing The Farm Family" (1937). In this publication, a note on clothing expenditures kept by farm families showed that a family of five spent an average of \$111.37 for clothing for one year. Records kept by 250 farm families revealed that the price range for shoes purchased by farm men and boys was from \$1.77 to \$5 per pair. Women usually spent \$3 per pair for footwear and hosiery for women cost 60 cents per pair.

Literature for 4-H clothing was first developed and used in mimeographed form. The printed version, Publication 258, "4-H Club Sewing" (1942), had the cover done in color -- red, white and blue. Information on patching and

darning, as well as such construction techniques as seams, hems, zippers, and both hand and machine worked buttonholes, was given.

The 1940s

County, district and state competition was held for home demonstration club seamstresses. The "basic dress" flourished as a category. Women demonstrated their creative talents as well as their economic acumen. State contests were held during Farm Women's Week (1941). The event was featured in "Progressive Farmer" as well as local newspapers.

During the early 1940s, life for families was dominated by the war effort. Emphasis was placed on conservation. Leaflet 47, "Shortcuts in Sewing," Leaflet 49, "Your Clothing Score on Family Planning in Wartime" and Publication 289, "Teaching Old Clothes New Tricks," were keyed to careful selection, conservation and remaking clothing (1942-45). During the war period (1942-43), over 75,000 leaflets were distributed on mending, reweaving or remaking clothing.

The 1950s

Keller retired in 1950 and for a brief period Quinelle McRae served as clothing specialist (1950-51). Our clothing files do not record McRae's accomplishments.

Ida Anders, textile and clothing professor, University of Tennessee, College of Home Economics, conducted district training seminars on tailoring for home demonstration agents.

In the early 1950s the Bishop method of clothing construction, developed by Edna Bryte Bishop, was introduced to home demonstration agents. Mary Jane Bell, clothing specialist (1952 and 1953-55), conducted in-service training for agents. They constructed a shirtwaist style cotton dress. The Bishop method eliminated pinning and basting, which was a revolutionary method since seamstresses had previously been taught to laboriously pin and baste every seam before stitching. The key words were "grain perfect" which emphasized carefully laying the pattern on the straight grain of the fabric, then pinning and cutting so that garment pieces would fit together perfectly. Many seamstresses had to unlearn several construction techniques.

The discovery of new man-made fibers, which resulted in new fabrics, prompted Bell to write a publication entitled "Fabrics From a Test Tube." She also authored Publication 259, "Adventures in Sewing" for beginning 4-H seamstresses. This was a needed publication since there was much interest in sewing among Tennessee 4-H'ers. Tennessee was one of the top states with enrollment in the clothing project.

Lenore Gabbard served one year (1952-53) as clothing specialist while Bell was on study leave. Lenore's specialty was tailoring. She taught Ander's method of tailoring.

During Virginia Boswell's tenure as clothing specialist (1956-59), a progression system for learning clothing construction techniques was developed. Home Demonstration Club members could enroll in basic construction classes. If work was satisfactory, they could take the advanced dressmaking workshops. Those completing the advanced course would proceed to the tailoring classes. Boswell trained agents to teach these skills and also taught clothing construction workshops in counties upon request. Boswell loved to sew and her work exhibited perfection. If you were around her long, her enthusiasm for sewing was contagious. She made sewing seem so easy!

Although clothing construction was the main emphasis of the state clothing program, other areas were not slighted. Clothing design, good buying principles and clothing care were also taught. Boswell entered UT to study for her master's degree in 1958.

Helen Rader was hired as assistant clothing specialist in 1958 during Boswell's absence. When Boswell returned to work, she accepted the position of state leader of Extension home economics (1959). Rader was promoted to clothing specialist.

Clothing construction was still the major thrust in the state clothing program. Most Home Demonstration Club members were full-time homemakers. They had the time to sew and wanted to learn more clothing construction techniques. Rader taught basic, advanced and tailoring workshops as well as pattern alterations and fitting.

As new fibers and fabrics were introduced, methods for sewing with the new fabrics were taught. During her tenure as clothing specialist, she has written over 200 publications, circulars and leaflets. Publication 719, "Basic Sewing Techniques," has been a popular publication for over 15 years. Other publications include S.C. 362, "Tailoring," Cl. Info. 86, "For Speedier Sewing" and Cl. Info 5, "Shortcut Tailoring." In 1982, she received the Dutch and Maryilee Cavendar award for her publications.

The 1960s

Geneva Potter joined the state Extension staff in 1961. By this time, county requests for all home economics specialists was so great that the five Extension districts were assigned weeks in each subject matter area. This was planned a year in advance so each specialist knew the exact county she would be working in and the subject to be taught. Specialists were scheduled in the field (counties) from two to three weeks each month. Potter developed workshops for constructing children's clothing. Both agent training and county work was done on the subject. She also revised the Unit I 4-H Clothing Unit.

During this time, separate agent training sessions were conducted for the 1890 agents. Later, these agents were integrated into the regular Extension programs and received training with the white agents.

The entire country was involved in civil defense preparation. Rader prepared Publication 481, "Clothing Needs in Time of Disaster." She served on a committee in Washington to develop a national publication on the subject.

Agents requested and received training on altering paper patterns and also in making and altering patterns made in muslin. Specialists also conducted county workshops to adjust patterns for Home Demonstration Club members.

In addition to workshops and home demonstration club meetings, Extension information was dispensed through special interest meetings. Audiences were young homemakers, the elderly and working homemakers. This group often could not spare the time to attend three or four day workshops, so a shorter method of dispensing information was desired.

Clothing renovation was a timely topic. A loan kit of renovated garments, which could be used in exhibits and county or district meetings, was developed by clothing specialists.

In the mid-1960s, a study of color was initiated on the federal level by Alice Linn, federal clothing specialist. In Tennessee, the Extension interior design and crafts section joined the clothing section in the study. Interdisciplinary in-service training was conducted for agents. The agents learned to see color in nature, learned to use color in decorating, learned to select colors becoming to them and the psychological effect of color on people. Agents taught lessons on color relating to clothing, interior design and crafts. The elements and principles of design relating to all three Extension sections were also part of agent's training.

Specialists in the three sections again joined forces to conduct agent in-service training on storage. The specialists involved loaded up a station wagon and their cars with teaching materials and started across the state to conduct training in each district. Loading and unloading the vehicle became an 'art,' since everything had to have its own space or it didn't get loaded.

On the national level, Extension adopted a program call "Focus." The family was the focal point with emphasis on economic and social problems.

The Bishop method of sewing seemed to be forgotten when tracing carbon paper and the tracing wheels become important sewing tools to mark all seams before stitching. Care had to be exercised in the use of the tracing carbon or it showed up on the outside of the garment. In spite of explicit instructions, many garments were made less attractive by telltale carbon markings in red, yellow or blue. The markings were virtually impossible to remove.

The 4-H clothing judging activity become part of the clothing project. Specialists developed the guidelines and conducted the activity. The expertise of the participants in the areas of selection and buying, care and grooming was determined by true-false or multiple choice questions. Construction samples of darts, seams, hems and buttonholes were judged as to appropriateness to fabric and method used. District competition was conducted by the Extension agents.

This judging activity has been upgraded several times. The objectives are to teach decision-making skills through judging the quality of garments and products. Fabric identification, wardrobe planning and the elements and principles of design have been added in the 1980s.

In 1969, the Agricultural Extension Service, both agriculture and home economics, put on progress shows across the state. The clothing section gave informative presentations on sewing with fabrics appropriate for each of the construction workshops -- basic, advanced dressmaking and tailoring. Clothing exhibits and presentations were done in tents. The weather was very hot, but there were capacity audiences at each session.

The 1970s

New construction emphasis was on rainwear, knits and lingerie. Workshops were held all over the state.

During the years when clothing construction was the main Extension program emphasis, Rader and Potter developed 14 different workshops to teach pattern alteration and construction techniques. A day-by-day schedule for accomplishments was worked out for each workshop.

A new 4-H clothing activity began in 1971. The Southern Cotton Ginners sponsored a "Sew With Cotton" contest for senior 4-H members. The requirements were that fabrics, interfacing and notions had to be 100 percent cotton. The rules were difficult to follow since most interfacing fabrics and zipper tapes were made of man-made fibers and fabrics. The state award was an all-expense paid trip to Memphis and a gold watch for the three top winners. This was a much sought after trip since the event involved participants from Arkansas, Mississippi, Missouri and Louisiana, as well as Tennessee. This activity was part of the Tennessee 4-H program until 1985.

Potter developed clothing literature for 4-H boys on three grade levels. It dealt with clothing selection, care and construction. The literature was used several years until the information was incorporated into the 4-H clothing manuals as they were revised. Her other popular publications included Publication 653, "Selecting and Sewing With Knits," Publication 631, "Fitting and Making Pants for Women," Publication 699, "Making a Men's Jacket" and Publication 761, "Fitting and Altering Patterns."

Boys have been active participants in the 4-H Fashion Revue. Sports jackets, trousers, shirts and tuxedos have been constructed and modeled by these talented 4-H members.

In 1972, Mary Louise Ritter, later to be Mary Louise Beasley, from Tennessee State University, joined the Extension staff. Beasley was popular with low income groups and worked well with them, as well as with senior citizen programs. She did very effective training on appropriate colors for the black woman.

A series of eight television programs were aired during the 1970s. Subjects related to clothing selection, buying tips, care of different fabrics, grooming and personal appearance and clothing construction.

Margaret Clem, associate district supervisor, home economics in District III, planned a Sew-A-Rama, which was held at a shopping mall in Chattanooga. Representatives from the textile industry for fabrics and notions and sewing machine companies were invited to show the latest in technology. Exhibits and demonstrations went on simultaneously. Industry people demonstrated their wares and local merchants displayed their products. Specialists demonstrated techniques for sewing with faux suede fabrics and for constructing men's jackets, using knit fabrics.

Several other Sew-A-Ramas were held during the 1970s. Mini-college type programs also become a way of dispensing information. Several different home economics areas could be covered in one or two days, with classes rotating to give participants a chance to attend two or three sessions per day. Clothing was always included, dealing with wardrobe planning, design, clothing care or construction techniques.

Clothing specialists began preparing lessons for the county Home Demonstration Club clothing leaders. The subjects varied from recommended clothing care, to clothing design or small construction details. Clothing specialists continue to prepare from two to four leader lessons each year.

Faux suede and knit fabrics dominated the clothing construction workshop requests in the 1970s. Dresses, coats, jackets and pants, were made of double knits. Knits were popular fabrics. Wool was scarce, so knits were used for major outerwear items.

A substantial savings could be realized by making, rather than buying, garments made of faux suede. At first, the women were afraid to cut into the expensive fabric, but gradually they gained confidence and some exquisite garments were constructed in workshops. It is still a popular fabric, although it is still expensive.

During the late 1970s, economic conditions made it necessary for many homemakers to seek employment outside the home. Attendance at home demonstration clubs decreased and methods of getting Extension information across changed. Special interest meetings, which required from one to four

hours, were scheduled by Extension agents. Both specialists and agents made presentations at special interest meetings. In many cases, the special interest meetings replaced clothing construction workshops. Instead of a hands-on approach where participants completed garments in a three to four day period, the clothing construction information was given in step-by-step demonstrations by the agent or specialist. Another deterrent to clothing workshops was the disappearance of fabric shops in towns around the state. In many counties, fabrics and sewing notions are not available today.

The clothing section led the way in developing bench-mark surveys to determine program needs for clientele. The survey was first used with home demonstration members. The survey has been revised several times and audiences other than home demonstration members have been contacted. Questions concerning buying habits and care and construction have been asked. Other home economics sections also do surveys now.

The 1980s

An accident while on a trip to Memphis with the Sew-With-Cotton winners put Rader on the injured list for several months. Potter and Beasley did an excellent job in getting the new home economics thrust, called "IMPAC" underway. This was a short term program designed with built-in evaluation methods. Again, the family was the main focus. Solving economic and social problems was the objective. The Extension home economists pushed the program and it was declared a success. Over 25 clothing publications were prepared for this special program.

Both Potter and Beasley retired in 1980. Alma Hobbs from Tennessee State University joined the Extension clothing staff in 1981. Hobbs added much to the Extension clothing program. Her forte was fashion and image development. Her poise and grace made her an effective teacher. She directed the 4-H modeling at state 4-H Roundup and at the state clover collection competitions. Hobbs also taught workshops on various aspects of consumer buying. She left the Tennessee Extension clothing staff to direct the national initiative, "Developing Human Capital," in Washington in 1989. She is now acting administrator of the Extension Service at Tennessee State University.

For the past decade, emphasis has been placed on the economic well-being of the family. Due to time restrictions of the busy homemaker, who also holds down a job outside the home, most clothing items must be purchased, rather than home sewn. Publications on the pros and cons of acquiring clothing items at factory outlets, yard sales and through mail order have been prepared. Consumer buying leaflets have been prepared for teenagers and senior citizens also.

Consumer buying information has been dispensed through role-playing at club meetings, through newsletters, learn-by-mail courses and lunch-and-learn sessions. The 4-H'ers have learned how to be better consumers by

participating on clothing judging teams where quality of both fabrics and workmanship is judged.

Emphasis has also been placed on personal appearance. Clothing appropriate for job interviews and the workplace have been stressed for both 4-H members and adults.

The emphasis on color analysis has also encouraged people to take notice of their personal appearance. Agents received training on color and taught classes on the subject.

Wardrobe planning for all family members has been pushed to alleviate the task of the homemaker who is usually responsible for purchasing the clothing for young children and the men and boys in the family. The subject has been dealt with in almost every conceivable way and still people are reluctant to make written plans. Rader developed several leaflets on wardrobe planning and the importance of a good appearance.

Clothing care is a major problem for families. Care labeling laws which went into effect in 1972 and were revised in 1984 have not solved the problems. Both specialists and agents receive many calls for aid in stain removal or some other problem related to clothing care. Rader prepared Publication 1301, "Stain Removal," to aid clientele with this problem.

Bridgett W. Smith joined the Extension clothing staff in 1984. She deals with people in an easy manner, which makes her a popular teacher for special interest groups and seminar-type meetings. Her expertise is in the study of textiles, wardrobe planning, design in clothing as well as clothing construction. She also loves to sew and is a good advertisement for her talents.

Since she joined the staff, agents have had training in heirloom sewing, revising the French hand sewing method on a sewing machine, smocking and shadow quilting.

With the addition of the serger or overlock machine as a major piece of equipment for clothing construction, new construction techniques were necessary. Smith has made the task much easier for both agents and the clientele through her workshops and demonstrations. She has also authored three publications on buying and using sergers -- Publication 1353, "Serger Selection," Publication 1254, "Serger Basics" and an unnumbered publication, "Serger Construction Techniques."

Sewing for the home was a joint training session conducted by Smith and the interior design specialist, Martha Hetrick Keel. Pillows, table top covers, shower curtains and duvets were featured in the training. District kits composed of each item were constructed during the training. Literature showing how to make the items was also prepared.

Shortcut methods of clothing construction were requested. Rader gave training on shortcut tailoring techniques using fusible interfacing and also training on other shortcut methods which reduces the time required to complete garments. Publications were developed to accompany each of these training sessions.

For those with time to sew, literature was developed on specialty sewing techniques such as cutwork, appliques, topstitching and quilting.

Over the years, the reasons for sewing have changed. Women once sewed for economic reasons, but now they sew more to show off their creative talents and as a means of relaxation.

The safety of our environment is also important to families. The clothing section has addressed this problem by training agents in the type of clothing to wear when applying pesticides and how to care for pesticide contaminated garments. Leaflets on selecting appropriate clothing for pesticide application and the care of contaminated clothing items have been prepared.

A change in the method of determining district and state winners in 4-H clothing and fashion revues took place in the 1980s. Instead of demonstrations, winners were determined by an interview, along with record book scores. Fashion revue winners no longer model their garments at state 4-H Roundup as they once had done.

Some 4-H members wanted to make and model garments without having to keep and submit a record. A fashion show activity called the "Clover Collection" was started in 1985 and has added much interest to the 4-H clothing project. Blue ribbon winners in district contests are eligible to model in the state event. About 65 participants have modeled in the state Clover Collection Fashion Show each year. The show is sponsored by the Extension Homemakers Council and is held in conjunction with the Extension Homemakers Conference.

All eight units of the 4-H Clothing literature have been revised. A new leader guide has been written.

The Tennessee Extension Service has been fortunate to have excellent volunteer leaders who work with both the 4-H and adult programs. In an effort to increase participation in clothing construction, the master sewing teacher program was introduced in 1987. Agents train volunteers who in turn teach clothing construction to both youth and adults. The training was also designed to qualify participants to begin their own home-based business.

The objective of the state clothing program is to assist families in acquiring and caring for their clothing and to teach principles which enable them to look their best. Literature has always been a major vehicle for dispensing Extension information. At the present time, approximately 200 clothing publications and leaflets are available for distribution to clientele.

Over the years, teaching methods have progressed from the use of flannel boards to slides, to overhead projectors and transparencies, to computer programs. The latest method uses video tapes.

The Extension program for textiles and clothing is as essential today as it was at its beginning in the early part of the century.

Clothing specialists have attempted to keep up-to-date by participating in national clothing specialists workshops (1964 -- New York City, Rader and Potter, 1974 -- New York City with a follow-up study tour to London, Rader, Potter, and Beasley, 1980 -- Dallas, Potter, 1986 -- Raleigh, N.C., Rader, Smith and Hobbs). Specialists have also sought professional improvement by attending the annual American Home Economics Association meetings (Rader, Potter, Smith, Hobbs, Beasley). Smith participated in the consumer sewing show in Charlotte, N.C., in 1987.

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Home Economics-Expanded Food and Nutrition Education Program (EFNEP)

Ester L. Hatcher, Professor and Leader

During the early 1960s, attention was focused on malnutrition and hunger of the low income segment of the population. A country that provided food for millions of people in other countries had overlooked the hunger of its own citizens. It was in this atmosphere of concern that the Expanded Food and Nutrition Education Program (EFNEP) was created. Rather than simply providing food for families in or near poverty, EFNEP would concentrate on providing the knowledge of how to use available food resources and the importance of good nutrition.

Throughout the early- and mid-1960s, Extension Service, the educational arm of the U.S. Department of Agriculture, funded a series of pilot studies to test the practical methods for implementing such a program for low income families. The most ambitious and best documented of these studies was a five year pilot project in Alabama. Paraprofessional aides contacted families on a one-to-one basis and taught homemaking skills. The paraprofessionals worked with homemakers in their homes demonstrating recommended principles and techniques and guiding homemakers into sound nutritional practices. Increasing numbers of low income families participated and benefited from the education.

The Texas Cooperative Extension Service examined methods for reaching low income Mexican American families. The home visit and circular letters were the most productive methods tested in extending information to this population. The home visit was more effective in bringing about change and circular letters in bringing about awareness. (Pfannstiel & Hunter, 1968).

The Missouri project, funded by the Ford Foundation, combined the efforts of professional home economists with follow-up visits by volunteers in urban slum neighborhoods. The participating homemakers made substantial gains in using commodity foods and getting the most for their food dollar. The project also indicated the potential of paraprofessionals in helping low income families incorporate nutritional principles into their daily lives (Hunter, Greenwood, Norris & Stackhouse, 1965).

The Boston study indicated the feasibility of tailoring nutrition education programs to the needs of families in a large urban housing development (Eastwood, Knopp & Hunter, 1963).

The South Providence, R.I., project indicated the feasibility of modifying traditionally rural cooperative Extension Service home economics programs for use in urban slum settings (Silverman, 1966 [unpublished]).

The need for an effective nutrition education program for low income families was well established. Pilot projects provided some insight of practical methods for implementing such a program and the existing Extension Service organization provided an excellent structure for initiating EFNEP in 49 states, the District of Columbia and Puerto Rico.

Overall, the pilot effort showed that: an educational program tailored to the interests, needs, competencies and economic and educational levels of homemakers could be effective in changing their eating habits; and paraprofessionals, under the supervision of professional home economists could be trained to teach low income homemakers effectively.

Funds were appropriated by Congress in November 1968. A meeting of state personnel responsible for launching the program was held the following month. Virginia Boswell, associate dean of home economics, Nazza Noble, nutritionist and leader, and Reba K. Hendren, nutritionist, participated. Policy guidelines and procedures for implementing the program were discussed at this meeting.

Training for EFNEP in Tennessee started in January 1969. Professionals in 10 pilot counties were involved: Shelby, Gibson, Robertson, Davidson, Warren, Coffee, DeKalb, Putnam, Roane and Hawkins. These counties were considered to have the greatest need for the program based on the number of families at or below 125 percent of the income poverty guidelines prescribed by the office of management and budget. Consideration was also given to the work load and willingness of the existing Extension staff to accept the challenge of supervising and managing another program.

In January, 1970, the program was launched in 10 additional counties: Carroll, Decatur, Houston, Perry, Bledsoe, Grundy, Clay, Pickett, Campbell and Claiborne. A portion of the federal funds were earmarked for a youth component of EFNEP. The youth program is called "SPIFFY" meaning Special Program in Food For Youth. Additional state specialists were employed to lead the program: Marion Mariner, nutrition, Ester L. Hatcher, youth development and Janice Hurst Williams, communications. Nazza Noble served as leader from the inception of the program until 1974. Additional Extension home economists were employed to work only with EFNEP in Carroll County (Janet Sue Alexander), Davidson (Judy Fentress), Robertson (Mary Ann Gregory), Putnam (Donna J. Clouse), Campbell (Virginia Cobb) and Roane (Wanda S. Smith Pressley).

The program was initiated in 20 additional counties in 1971. The counties and home economists with EFNEP follows: Chester, Dyer -- Linda Gibson; Henry - - Patricia Lee White; McNairy -- Vivian Merrill Lee North; Hickman -- Susan Janice Howell Griggs; Lincoln -- Kathleen W. McCown; Stewart -- Wanda W.

Moore; Wayne -- Brenda Hobbs Laden Hamilton; McMinn -- Janice R. Elkins; Polk -- Freda Ann Rogers Hatcher; Van Buren, Fentress, Macon, Morgan -- Roye Estelle Combs; Scott -- Cecilia Faye Duncan; Carter -- Ann Weaver; Cocke -- Katherine W. Long; Grainger -- Jo N. Keeton; and Hancock -- Sandra R. Monk.

The program was initiated in White County in 1973, Wilson County in 1977 and Knox County in 1988.

EFNEP was at its highest level in 1973 with 41 counties and 371 program assistants. Counties were closed as they reached their potential audience and as the cost of program operation increased and federal funding reached a peak and leveled off. Chester and Perry closed in 1974; Robertson and Stewart in 1977; Houston and Claiborne in 1979; McNairy in 1980; Carroll, Fentress and Roane in 1982; Hawkins in 1984; Bledsoe, Grundy, Van Buren, Warren, Clay, DeKalb, Macon (youth phase closed in 1984), Pickett, Grainger in 1985; Decatur, Hickman, Morgan and youth phase of Polk County closed in 1986.

EFNEP is operating in 20 counties at the present time (Dyer, Gibson, Henry, Shelby, Davidson, Lincoln, Wayne, Wilson, Coffee, Hamilton, McMinn, Polk, Putnam, Scott, White [adult only], Campbell, Carter, Cocke, Hancock [adult only] and Knox).

The program assistants are key people in the operation of EFNEP. The majority have a high school education with a few college graduates and some with slightly less than high school. For the most part they live in the same neighborhoods as the families they teach. They can empathize with the clientele and, most of all, they can get inside the homes.

The program assistants receive three weeks of intensive training before beginning the job and regular in-service training thereafter. The Extension home economist is responsible for the training and supervision of the program. Program assistants do much of the planning with the homemakers since teaching is based on individual needs. They frequently find themselves in unpleasant surroundings and are often frustrated by observing pain and suffering that they are unable to alleviate. They are hard working employees who go where they are needed and do an excellent job of helping low income families improve their eating habits and food practices.

Most teaching is done on a one-to-one basis in the home of the homemaker, although program assistants are encouraged to work with homemakers in small groups. Groups are difficult to form and maintain with the low income audience, although two or more people comprise a group. The target adult audience is the young homemaker with children.

The adult curriculum is composed of 12 basic lessons and six special topics. Each lesson contains three competency levels with each homemaker receiving a minimum of 12 lessons before graduation. The graduated

homemaker is encouraged to serve as a volunteer leader and to participate in other Extension programs.

The youth program, SPIFFY, has demonstrated its ability to meet the nutritional needs of many Tennessee low income youth. The program is designed to reach 4-H age, low income youth, 4th- through 12th-grade with emphasis on those with parents enrolled in the program. Most meet in schools where the majority of the pupils are from low income neighborhoods. Some youth meet in small neighborhood groups that provide more opportunity to develop food preparation skills. The curriculum is composed of 12 lessons with from three to five competency levels. The youth are trained primarily by professionals and 11 paraprofessionals, although an average of 1,000 volunteers assist with the program annually.

EFNEP has made a difference in the lives of 225,072 families since 1969 and 233,152 youth since 1970. The program has been well documented from the beginning. The 24 hour dietary food recall and behavior checklists have been the principal forms of evaluation. Low income people will change their eating habits when properly motivated and educated. The program has helped participants help themselves to get off public assistance and achieve a new sense of dignity.

Program assistants feed their own families better, finish their high school education and sometimes move into higher paying jobs.

EFNEP has faced many challenges over the past 20 years and will continue to do so. The greatest challenge will be to find more cost effective ways to reach the increasing number of low income families, including the working poor. EFNEP will need to continue to develop innovative programs to meet the needs of the clientele.

Examples of Success in Adult EFNEP

The following success stories exemplify EFNEP's benefits to participants:

Dear Friend,

I am grateful for your food and nutrition program. It has helped me prepare more nutritious and money-saving meals. The recipes are great and the food delicious!

I was taught the basic food groups in school and now, thanks to you I know more about what the foods can do for my body. I had no energy, no appetite, problems with my stomach and wasn't sleeping like I should. The PA counseled me about my need for a better diet, exercise and especially rest. Now I follow her advice and I feel great. My family has even "perked up."

Cayce Homes should have a nutrition program at it's community room. It's a good location and the tenants will know it is being done to help them. Many of the tenants are food stamp recipients, but the food still runs out before the end of the month. This is another good reason for the program,

since stretching the food stamps can help people eat better the entire month. We, as well as our children, can perform our daily activities better.

Thank you again for your help with our health. I hope this program will always continue and help many others.

Sincerely yours,
Program Homemaker
Davidson County

A Hamilton County family was recruited through a referral from a community grocery store owner. The family included a wife, husband and two young sons. The husband was an alcoholic and worked very little. They lived in an old mobile home and had no telephone. The family received food stamps.

While the homemaker was in EFNEP she learned to cook a variety of foods, shop wisely and to plan nutritious meals for the family. She cooks more now and says she uses less "junk" food. When she entered the program her food recall score was 60. She weighed 99 pounds. At graduation, her score was 85 and she weighed 126 pounds.

The homemaker says EFNEP gave her the courage she needed to make change. Some of the changes in the family situation are that: the homemaker completed her GED, is employed in the school cafeteria and is a member of the PTA; the family has a new double-wide mobile home with a telephone and she provides a meeting place for SPIFFY meetings and refers eligible families to EFNEP; the husband is working full-time; and the sons have summer employment at a restaurant and on a truck farm.

A graduated homemaker in Hamilton County is living in a housing project where no program assistant is currently working. Because of her positive experiences with EFNEP, the homemaker serves as a volunteer teacher for others. She has taught a food buying course to one homemaker and is currently teaching the healthy baby course to a pregnant 18-year-old. The Extension office provides the teaching materials and the homemaker reports her progress to the staff.

The homemaker loves teaching and has expressed a desire to enroll in home economics classes at the UT-Chattanooga.

SPIFFY Success

A very shy, withdrawn 11-year-old girl joined a community group in Gibson County during the early stages of the program. Her fondest memories of the program were learning to eat and enjoy new foods. She also enjoyed the challenge of persuading her mother to purchase the foods that sounded so

exotic to an 11-year-old -- broccoli and zucchini squash. These vegetables have become favorites of the entire family.

She is now a college graduate and a television newscaster. She served as mistress of ceremony at the annual talent show sponsored to raise funds for the summer camping program. Her opening remarks were, "It is both a privilege and an honor to return and be part of a program that taught me to taste foods before hating them." She also said that the program offered more opportunities to develop leadership skills than any other group she had held membership.

A Hamilton County SPIFFY member learned to drink milk and eat vegetables at group meetings, but the thing that helped him most was the program assistant taking an interest in him as a person. He has natural talent for food preparation, which directed him toward a career choice as a chef. He is working as a cook at a pizza chain in preparation for his entry into a community college this fall for chef training.

He was on the honor roll his last two years in high school and gives the EFNEP program credit for helping him develop the self-confidence he needed for his academic training. He has served on dairy product judging teams, as junior leader at day camps and a community gardening program for the elderly.

Gardening stretches the family food dollar and is a way of introducing new vegetables to many low income youth. Eleven low income youth in Gibson County participated in a gardening program sponsored by the Tennessee Valley Authority. The seeds and supplies were purchased by TVA and SPIFFY members provided care along with the help and support of their families.

In addition to the fresh vegetables available for family consumption, the following vegetables were preserved: 329 quarts canned, 482 quarts frozen five bushels dried. The 11 gardens provided an estimated savings of \$4,263.

"What SPIFFY Means to Me"

I told my mother about the SPIFFY diet plan and she just loved it. She showed me how to make some of the things you are teaching us. My aunt showed me how to cook too. She taught me to cook eggs, bacon, toast and pancakes.

I enjoy talking about the food groups, how to prepare a balanced diet and caring for our teeth and the SPIFFY program has helped me a lot.

Home Economics-Family Economics

**LaVerne Farmer, Retired Professor
Etta Mae Westbrook, C.H.E., Professor and Leader**

Although the Extension Service began in 1914 with the passage of the Smith-Lever Act, time of establishment of the home management program in Tennessee is not known. The first specialist, Geneva Conway, was employed in 1918 to work in all areas of home economics. Following Conway was Maude Guthrie, who was also hired to work in all areas. Perhaps these women did some work in the area of home management. In 1924, Lillian Keller was employed as home management specialist.

In the beginning, Extension Service programs in home management were concerned with management of time and money, with demonstrations centered around efficient accounts. However, an early publication, "An Analysis of the Managerial Responsibilities of the Farm Home Maker," pointed up the importance of choice-making in a home situation and was intended to clarify home management concepts. As homemakers activities changed, so Extension Service programs changed to keep pace with newer knowledge made available through many sources.

With the appointment of Elizabeth Speer, home management specialist in 1935, home management was woven into educational programs. Planning and decision-making as basic home management activities were studied and research gave insight on how well a family managed.

Farm and home type planning was developed as a joint project of agriculture and home economics involving both husbands and wives. This program was under the leadership of Inez Lovelace, who was appointed specialist in 1943. Farm and home economics conferences were held. Husbands and wives met with Extension staffs, analyzed the standard of living farm families wanted and how much the farm would need to produce to reach these goals. Later, Extension workers through result demonstrations helped individual families analyze their situations and develop detailed plans for improvement.

Home management programs helped homemakers improve the physical facilities in their homes to make for more efficient living. This was especially true during the 1940s and 1950s. During this period, rural electric cooperatives were building electric lines in rural areas and homes were getting electricity. Following World War II, electric appliances became readily available and homemakers were seeking employment outside the home. As a result, much emphasis was placed on planning efficient work areas and making use of appliances to save time and energy.

In 1953, Lovelace became interior design specialist and Elizabeth O'Kelly was appointed home management and equipment specialist. She served until 1958.

LaVerne Farmer was appointed Extension home management specialist in September 1959, to fill the position that had been vacant for months. At this time, families were moving from a cash to a credit. Programs emphasized family economics and home finances to assist families in using credit wisely.

The outlook conference was originated in 1922 by the Bureau of Agricultural Economics and Extension Service. It provides a means of getting research results to rural families through home economists of the Extension Service. Since 1932, the bureau of human nutrition and home economics has prepared material on the outlook of farm family living. Information showing the situation and recent changes in rural living conditions, as well as trends in prices and other economic conditions that affect family living, is provided.

Beginning in 1959, a joint quarterly report was prepared by the agricultural economics and home management specialists for distribution to families in Tennessee. Later the agricultural economist determined that their reports needed to be distributed more frequently, but the family living outlook report continued to be distributed on a quarterly basis to approximately 28,000 Tennessee families until LaVerne Farmer retired in 1986.

Farmer also developed an estate planning program. She continued to emphasize family financial management and efficient use of time and energy.

In the early 1970s, the section name was changed from home management to family economics and resource management.

An energy shortage developed in 1971 and program emphasis rapidly shifted to conservation of energy resources. In collaboration with Lillian Clinard, associate director of the University of Tennessee Environment Center, a comprehensive program on energy conservation that encompassed all areas of home economics and related agricultural fields was developed.

The 1980s brought several years of drought, which resulted in a financial crisis for many Tennessee farm families. In 1986, the state legislature appropriated funds for the MANAGE program to work with farm families in the area of financial and stress management. In 1986, Etta Mae Westbrook was appointed family financial management specialist to work with the MANAGE program. In 1987, Westbrook became leader of the Extension family economics program.

Until 1960 the 4-H Home Management project in Tennessee had been active at the county level only. Available literature consisted of one leaflet. There was not a state or national sponsor. With the assistance of an advisory committee of county 4-H agents, a series of nine project guides was developed.

Home Economics-Family Life

Marion B. Mariner, Professor and Leader

The family life section of the University of Tennessee Extension home economics was formed on Jan. 1, 1973. Marion B. Mariner was transferred from the nutrition section (where she was working with the Expanded Food and Nutrition Education Program, EFNEP) to become the first family life specialist in Tennessee. Her job was to plan, implement, evaluate and report the human development, family relations and parenting phase of the home economics program of the Agricultural Extension Service.

Extension education in Tennessee has traditionally been with agricultural producers, managers of farms and their families and homemakers. Before the family life section was formed, the home economics educational program included very little on interpersonal relations, parenting, human development, family values, personal development, self-esteem and aspects of aging.

When Virginia Boswell was appointed state program leader in 1959, she set a goal to establish a family life section. She became assistant dean in 1970 and before she retired in 1974, she had achieved this goal.

The new family life program began in 1973 with no county priority program objectives for human development and family relationships identified. Everything had to be planned and Extension agents were encouraged to think family life as they taught families to improve food, shelter, clothing and management of family resources.

The first newsletter for agents was written in April 1973. It was named "Family Life News and Views" and gave agents their first research-based material on the many family topics. The first newsletter included the following suggestions:

Family Life Programs -- 1973-74

"So you didn't set up a priority program objective or even a teaching objective in family life? That's OK. The overall goal of The Extension program is to improve family living. More income and a beautifully decorated home with well-dressed and well-fed family members do not insure happiness, contentment and harmony in the home. Start this year with a family life program directed toward better human development and relationships.

Devotions on family life. Stress family life books in reading program. Emphasize better family communication, understanding and child guidance techniques at your achievement day programs. Survey your county this year and find out the real problems in interpersonal relationships, aging,

youth and social conditions that affect the family. When you find the problems, set up study groups to help parents, youth, children and communities. Write newsletter, do radio programs, feature family life in news articles. Don't forget camp and special events would be a great time to work on getting along with people, learning to know yourself, educating people about use of drugs, alcohol, smoking and sex. Learning centers and mini-courses for club members, individuals and program assistants would be helpful. All agents -- men and women -- can help improve the quality of family life."

Agents were encouraged to include family life objective in county plans of work. Giving inspirational programs became a part of the family life leaders responsibility. The homemakers reading program was expanded to include reading to improve parenting and interpersonal skills.

In 1981, the Tennessee Extension Homemakers Council was organized and TEHC became a member of the National Extension Homemakers Council with the family life specialist as advisor.

A family community leadership program, sponsored jointly by the UT Agricultural Extension Service and Extension homemakers, was implemented in state in 1987 with family life specialist as coordinator of this program with funding from the Kellogg Foundation. Every county will have a trained FCL team teaching leadership skills by the end of 1990.

A self-study made in the mid-1970s indicated that only six percent of staff time was devoted to family life education. Recommendations were made by the study committee to increase this to 15 percent by the 1990s. Because of the high priority being given to child care, parent education, family communications, interpersonal relations, stress management and aging, family life education offered by the Extension agents has steadily increased.

The farm crisis in the mid-1980s showed that families needed assistance in managing stress in crisis situations. A second family life professional, Anna Mae Kobbe was appointed in 1986. Stress management workshops were held across the state for those families in crisis situations as well as youth and adult audiences in many communities.

In the fall of 1987, Dolores Pillow, assistant professor at TSU, was appointed to the section staff to work on a special family life program -- leadership and adolescent problems -- as well as assist with other phases of family life education.

In-service training is offered each year on some phase of family life. Publications have been prepared on all phases of family life. These include the "Parent Pacifier," for new parents, "Children: One to Ten," "Teenagers Today" and "Strengthening Aging Families." Combatting illiteracy is an important part of the family life leader program.

4-H Personal Development project materials were prepared for junior and senior 4-H members. The enrollment in the Personal Development project has steadily increased. There are 9,207 boys and girls enrolled in this project.

The family life section is growing each year. The initiatives -- building human capital, children at risk and family and economic well-being -- include many critical issues that family life professionals are addressing in programs.

Home Economics-Food, Nutrition and Health

Reba K. Hendren, Professor and Leader

Soon after passage of the Smith-Lever Act, home demonstration work was begun in Tennessee. At first, there were two district agents, 20 county agents, 30 home demonstration agents and an assistant director in charge of home demonstration work. Headquarters was established at the University of Tennessee-Knoxville. Then, as now, food programs were planned to meet the needs and interests of consumers. When possible, programs were based on available research. Fortunately, although limited in quality and quantity, available research was largely in the field of nutrition.

Families were taught to grow, can and dry a variety of foods, thus providing nutritious food throughout the year.

On Jan. 1, 1916, the first home economics specialist was employed. She stressed the importance of adequate diet for all family members. Special emphasis was given to vegetable cookery and the place of vegetables in the diet.

On March 2, 1916, Lona A. Warner was employed as a health specialist. In addition to nutrition information, most families needed to improve sanitary conditions in and about their homes. Programs dealt with safety of water, controlling flies, general sanitation and prevention of disease.

On Nov. 1, 1919, Maude Guthrie became a food specialist. Some of her accomplishments are legendary. For example, she prepared a cookbook containing simple, easy-to-prepare recipes that remained in demand long after she retired in 1954. Also, she is remembered for her food preservation publications and for her efforts in helping farm families learn how to use the recommended procedures of that time when canning.

During the last 25 years (1964-1989), as new research has unfolded, advances in food and nutrition information have abounded. What is new one day may be obsolete in a few short months. Food and nutrition specialists have had to be constantly on guard to keep abreast of the changes that have occurred in research and in consumer trends. While preserving food remains high on the list of teaching objectives in Tennessee, the relationship of food to health and food safety have become the major concerns.

When Reba Coulter Hendren was employed as Reba King Coulter on Oct. 16, 1964, weight control was a very popular subject for adult audiences and misinformation was rampant. Numerous homemakers continued to use obsolete methods for canning food. Especially critical was their use of a risky method to can low-acid vegetables.

Also, there was a critical need for literature for 4-H projects in nutrition, bread, food preservation and health. There were only three 4-H project publications in the department. Since that time, specialists have either written or adapted project guides until, at the present, there are 33 guides and one 4-H judging publication. Since 1975 there have been a total of 41 national winners representative of the various 4-H foods, nutrition and health projects. In addition to the 4-H materials, specialists have written 67 publications covering a wide variety of nutrition and health topics for adult audiences. Thus, a total of at least 100 publications designed for teaching adults and youth have been prepared and more than 100 handouts bearing an information (INFO) number have been written. Other methods used to reach agents and consumers include briefs, news releases, radio, television and video.

In 1968, Noble and Reba Hendren were assigned the task of providing subject matter materials (lessons, leaflets, visuals), training agents and program assistants, plus assisting with reports concerning the Expanded Food and Nutrition Education Program (EFNEP). This was a federally funded food program. At first only 10 counties were involved. Later, more counties were added. As the program grew and federal funds were provided, Marion Mariner was added to the staff in 1970 as a specialist assigned to this program.

In 1973, Etta Mae Westbrook and Ester Hatcher joined the staff. After Noble left the section for another Extension position in 1974, Kayla Carruth, a registered dietitian, was employed in 1975. She worked with both the regular ongoing food and nutrition program and the EFNEP until she resigned in 1978 to take another position. Later, in 1978, Hatcher and Westbrook moved from the food, nutrition and health section and formed a separate section for the EFNEP. This simplified the work of each section. Hendren became leader of the food, nutrition and health section with responsibility for the regular ongoing food, nutrition and health program.

Melissa Grove Knox became part of the staff in 1979. Sometime after joining the staff, she completed registration requirements and became a registered dietitian. Her main contribution of written materials included a weight control program for adult audiences and a couple of publications for 4-H youth.

Mary Ann Haubenreich, a registered dietitian, was employed on July 1, 1983. For five years Haubenreich was an enthusiastic and optimistic worker. She prepared several publications for adult and 4-H audiences. One publication, "Novel Foods in Tennessee," received the Cavendar award for best publication in 1985. Also, she played an important role in generating award monies for the food and nutrition 4-H judging team.

In 1988, Gail W. Disney, a registered dietitian, replaced Haubenreich, who had accompanied her husband to his new post in Vienna. Disney's background in teaching and research made her well-qualified for the position. Some of her early projects in Extension were to update the audio-video library for food, nutrition and health programs and to assemble a supermarket tour guidebook along with leader lessons aimed at making healthy food choices.

She attributes the Extension Service, through prior 4-H work, with providing her the confidence and incentive to pursue a career in home economics.

In 1972, specialists housed at Tennessee State University (TSU), Nashville, became a cooperative part of the UT Extension Food, Nutrition and Health staff. Ozie Adams (phase of operation at TSU covered about 40 years -- 15 of these years were spent in cooperation with the UT) was an active and able supporter of Tennessee Extension food, nutrition and health programs until his retirement in 1987. He supplied many written educational materials and provided training for both adult and youth audiences.

Augustine Dartis (TSU) also provided training and written materials for both adult and youth audiences. Her special interests were in helping the elderly have a better diet. Dartis retired in 1978.

Carol Beck, a registered dietitian, replaced Dartis in 1984 and was active in both adult and youth work until she resigned in 1987. Beck prepared several publications. One of these publications, "Stress, Your Body's Response," received the Cavender award in 1986.

Betty Greer, a registered dietitian, was employed by TSU and, thus, became part of the UT Extension staff in 1987. Her major focus has been food safety, food preservation, reduction of dietary cholesterol and fat. She has written materials including publications addressing some of these issues.

During the 1960s and 1970s, programs for adult audiences centered around weight control, safe home food preservation practices, particularly vegetables and meat, preventive health care and the importance of calcium and iron in the diet. Use of the pressure canner for canning low-acid foods, better diets through use of the four food groups, maximum nutrients for dollars expended and preparation of food to conserve nutrients were stressed. State Extension food and nutrition surveys indicated that an intake of these nutrients was more likely to be low in the diets of Tennesseans.

To interest and educate 4-H youth, a special effort was made to provide appropriate guides for each grade level of the four project groups in food and nutrition and health.

The 1980s ushered in an area of much public interest in foods and nutrition as related to health and safety. Therefore, improving human nutrition and the understanding of diet/health relationships moved to the forefront of Extension's food and nutrition programs. To reach all audiences, materials and programs were designed to include two-career families, singles and single parents. Due to misleading information in much advertising, teaching was directed toward helping people evaluate food and nutrition information for accuracy.

In 1988, to meet the growing need of consumers to have and understand accurate data concerning the nutrition content, quality and safety of the nation's food supply, program focus became part of the national initiative --

improving nutrition, diet and health. Two issues under the initiative are, dietary practices related to lifestyle factors and health, and confidence in the safety, quality and composition of the food supply.

As stated earlier, Hendren came on the staff in 1964. She became a registered dietitian in 1969. In addition to numerous educational leaflets for various programs, briefs, news releases, radio and television programs, Hendren prepared 20 publications and co-authored eight. She served on numerous committees including national ones. She also received two grants. One grant was funded by SEA-F and FNS. It was part of a pilot project, "Using Extension Home Economists to Train School Food Service Managers." The other grant was from USDA for the purpose of evaluating a foods and nutrition computer program.

Hendren authored the first guide for the foods and nutrition judging teams, which was also the first judging guide published for Tennessee home economics 4-H subject matter judging activities.

Hendren, Greer and Disney are qualified for state licensure in the field of diet and nutrition and each specialist has applied for her licence.

Home Economics-Housing and Environment

Maxine McManus, Associate Professor and Leader

The housing and environment section is one of the newest Extension departments. It was formed in 1979 as a result of a comprehensive self-study and needs analysis. The name given to the new department was housing and equipment. In 1990, the name was changed to housing and environment to more accurately reflect the increasing emphasis on environmental issues that directly affect families.

Prior to 1979, housing education was a part of other departments including family economics, interior design and home management. Housing has been an important concern of Extension home economists from the time then Secretary of Agriculture David F. Houston reported on the first year's operation of the Smith-Lever Act in 1914. Tennessee's "women county agents," along with their counterparts in other states, "had worked on topics relating to the physical well-being of families -- home conveniences, eradication of flies and mosquitoes, proper preparation of food, care of poultry and marketing of eggs." Six thousand farm women had presented special demonstrations in home improvement to fellow homemakers.

Between the passage of the Smith-Lever Act in 1914 and the end of World War II, Extension home economists built a positive reputation. They won nationwide recognition for their role in helping families to cope during World War I, the Depression of the 1920s and early 1930s. They took an active part in New Deal programs and contributed to overcoming the national emergency of World War II.

During the Depression years in the 1930s and World War II which followed, housing construction virtually stopped. Because of economics and the war effort, few resources were available for building, remodeling, or even maintaining housing. When World War II ended, there was a massive need for repairs to existing housing as well as for new housing. This pent-up demand along with four percent Veteran's Administration loans precipitated a housing boom that lasted until the early 1970s. Although the National Housing Act of 1934 established the concept of amortized housing loans with 20-year maturities and 20 percent down payments, it was not until 1950 that we became a nation primarily of homeowners rather than renters. In 1950, the average size new house was slightly less than 1,000 square feet and cost \$9,500, about three times the average family income.

During the post World War II housing boom, the Farmers Home Administration was heavily involved in financing rural housing in Tennessee. The Extension Service assisted families by providing house plans which were well designed, varied in size and economical to build. When a FHA home loan was approved, the next step was usually a visit to the county Extension

office to select a house plan. Hundreds of houses were built across Tennessee from these Extension house plans.

In response to the energy crisis of the 1970s, the housing program emphasis shifted to energy conservation. Information on increasing energy efficiency of both houses and equipment used in the home was provided to Tennessee families. These educational programs in Tennessee, as well as in other states, resulted in a significant reduction of energy usage.

The early 1980s saw an unprecedented rise in interest rates and a corresponding decrease in housing affordability. Program emphasis became home maintenance, housing alternatives such as modular and manufactured housing and understanding the new adjustable rate mortgages in its many forms. Extension home economists visited manufactured housing plants and sales centers to become better informed about these housing alternatives.

In 1982, in conjunction with the World's Fair in Knoxville, the housing specialist hosted the annual conference of the American Association of Housing Educators and organizations made up of housing professionals in research, teaching and Extension. One of the interesting exhibits was the Canadian pavilion where an air-to-air heat exchanger was in operation. Other highlights included learning about housing research in Japan and some of the Scandinavian countries. In Japan, environmental testing chambers can simulate any climatic condition (including earthquakes!) to test both building materials and construction techniques. While the Fair was in Knoxville, plans were made for housing educators to visit Japan and learn about their home building industry and to visit the 1985 World's Fair in Japan where the theme was "Dwellings and Surroundings -- Science and Technology for Man at Home."

The last 20 years have brought about significant demographic and societal changes. These include an increasing number of elderly people, increased numbers of women working outside the home and changes in family composition. All of these changes affect housing needs and Extension housing programs addressed all these in the 1980s. Extension home economists reached thousands of people across Tennessee with information on housing adaptations for the elderly, efficient kitchens for working people, low maintenance houses and house plans designed for non-traditional families, which now account for more than half the families in the U.S.

A current housing focus is home moisture problems. Excessive moisture levels promote both structural degradation and health problems resulting from mold and mildew spores. This problem has reached epidemic proportions not only in Tennessee but across the country. County Extension home economists received intensive training in dealing with home moisture problems. In Tennessee, improper siting and construction techniques and lifestyles of the occupants appear to be the most frequent causes of home moisture problems.

In the environmental area, the drought conditions of most of the 1980s made us painfully aware that an adequate, safe water supply cannot be taken for granted. Extension responded to this problem with extensive programming in water management which received national recognition.

The quality of private water supplies is a current major focus in county programs. A limited number of private water wells across the state have been tested and a very high percentage are showing bacterial contamination. A more comprehensive testing and educational program is under development.

The state is currently facing a solid waste management crisis. Most of the landfills in the state are nearing capacity and new federal and state regulations will make both new construction and closing of present landfills very expensive. Opposition to new landfills and incinerators along with increasing amounts of waste that must be disposed of are problems which must be solved. Several county Extension home economists are extensively involved with waste reduction and recycling programs. Programming in solid waste management will likely increase as the problem becomes more acute and as state legislation is enacted.

Another environmental concern is indoor air quality. One of the results of more energy efficient housing is a reduced air exchange rate and increased levels of indoor pollutants. Health effects of indoor air pollutants are major concerns of both the medical professions and the building industry. Extension agents across the state report an increasing number of requests for information about dealing with this problem.

The Extension education program in housing is oriented towards assisting consumers in securing and maintaining housing that is structurally sound, safe, energy efficient, affordable and designed to meet their needs. A home is more than just shelter; for the vast majority of Americans, it's their largest financial investment. Research shows that the greatest determinant of a family's economic well-being or net worth is home ownership. Homeowners have significantly greater net worth than renters.

At the state level, the housing and environment section consists of one specialist. Barbara Nieri was employed as the first housing specialist in 1979. After a few months, Nieri accepted a position with the Tennessee Valley Authority. The second and current housing and environment specialist is Maxine McManus, a former housing specialist with Purdue University.

Home Economics-Interior Design and Crafts

Martha W. Keel, Associate Professor and Leader

Even before the Extension Service was officially established with the passage of the 1914 Smith-Lever Act, home economics Extension work had begun in Tennessee to try to help families with cooking, sewing, sanitation and beautification. Prior to World War I, early farm homemakers felt overworked and discontent because of their isolation and loneliness. They were looking for opportunities of finding pleasure outside their work. They yearned for a culture that would open their eyes to the beauty and joy of life.

In the early years, agents demonstrated canning, clothing construction and better laundry methods. Because homemakers wanted better things for their families within their homes, agents taught them to choose better designs and more harmonious colors in their furnishings.

Many women, through help from Extension agents, found ways to add beauty to their homes by refinishing their furniture, making rugs, curtains, bedspreads, baskets, shuck seat chairs and other items in pleasing color and design. Improved furniture arrangements contributed to convenience as well as beauty. The earliest household equipment, iceless refrigerators and fireless cookers, were demonstrated by the agents.

One of the first home economics specialists, Maude Guthrie (1914-1924), began programs on "the attractive home" in the early 1920s. The agricultural depression was beginning to take hold by this time. Improvements made by rural homemakers included linoleum-covered table tops, wood boxes on legs, adjusted heights of work tables, cabinet additions -- ready made and built-ins -- easier to clean floors, lighter walls and more convenient furniture arrangements. Kitchen campaigns became popular in many counties. A 1924 kitchen campaign in Monroe County was won by a family who labored themselves on their improvements and spent a total of \$1.89.

In 1928, a "better homes demonstration week" was sponsored by a dealer's and manufacturer's exhibit in a tobacco warehouse, which included many exhibits of special interest to farm women. Included were demonstrations of labor-saving equipment, methods of refinishing floors and woodwork, recaning chairs and so forth.

The 1930s brought with it the Great Depression. A few Tennessee farmers were making a little money or breaking even, but the great majority did not have enough to pay their taxes. Money was needed for shoes, clothing and necessities that could not be grown on the farm and to pay taxes and interest on the mortgage debts. Homemakers in increasing numbers joined the labor force to add to the family income. Some younger families gave up their homes and returned to live with their parents. Others used their home

products and their ingenuity to sell what they had in the towns and cities. During this time, Isadora Williams (1930-1955) was hired as a specialist in the area of marketing arts and crafts. With the depression, there was more need to supplement the income. Many farm families sold their handicraft items to extend the family's resources.

Agents continued with programs on better living in better homes. Farm people were shown different ways they could attain more satisfying rural life. Special emphasis was placed on mattress making, improved housing, rural electrification and consumer education.

The mattress program of 1939, 1940 and 1941 provided improved bedding for farm families with low income, at the same time teaching them to make their own mattresses. The distribution of free cotton and ticking was made possible because of the large quantities of cotton acquired by the Agricultural Adjustment Administration as a part of the cotton adjustment program. The home Extension workers were in charge of the educational work in connection with making the mattresses.

Tennessee home demonstration agents had their regular club work so well organized that they could devote most of their time during the summer months of 1939 and 1940 to the mattress program. They organized centers in most of the communities of each county and trained local leaders to teach other families to make mattresses for their families.

The mattress program required three phases. The first was a community meeting in which the agent explained this new opportunity for better bedding to all who would come to selected meeting places. Applications were taken from eligible families to be processed by the county agricultural adjustment committee. A member of the committee attended most of the initial meetings. A family was eligible to receive one or more mattresses if their cash income for the preceding year had been \$600 or less. The number of mattresses received was based on the number of family members.

Cotton and ticking were distributed to eligible families at the second meeting. This involved weighing 50 pounds of cotton and supplying 10 yards of ticking for each mattress to be made. Demonstrations on fluffing the cotton and on making the ticks were given and printed instructions supplied in order that families might be prepared for the making of their mattresses on the designated day.

Leaders, trained by specialists and agents, taught recipients to make their mattresses. This meant mastery of the techniques of mattress making, plus the organization and management of community centers. Mattress needles, twine and cotton tufts were furnished at cost for each mattress. These had to be distributed, the needles collected at the end of the day and records kept of number of families attending and number of mattresses made. (A first aid kit was often needed since some accidents occurred from using the long, sharp needles required for sewing the mattresses.)

Early in the morning, the mattress makers came to the centers in trucks, wagons, cars and otherwise. Centers were usually on school grounds. They brought their finished mattress ticks, each filled with 50 pounds of fluffy cotton. Each brought his own platform for working -- usually saw horses and wide planks.

The first task was beating the mattress with rapid strokes of slender poles to distribute the cotton evenly and remove all lumps. The noise was loud with mixed rhythm.

The beaten mattresses were sewn through with heavy twine, secured with cotton tufts on top and bottom. The needles for this operation were 14 to 16-inches long with three-cornered points at each end. They had to be used with great caution.

Shorter needles were used to make rolls around the edges on top and bottom of each mattress. Some families made as many as three mattresses in a day. Low cash income determined eligibility and number of family members determined the number of mattresses. Three was the limit.

Dozens of mattresses were made at each center each day. The leaders, trained by the home agents, were teacher-managers at the centers. Agents served as troubleshooters when needed, shared the business responsibility with the Agricultural Adjustment Administration committee and made all the necessary reports.

Marie Tatlock, home agent, in Haywood County, described her role in the mattress program in these words: "The home demonstration agent devoted an entire day to each of the 18 communities, supervising large numbers of families in the making of their mattresses. After teaching these chairmen how to carry out this project, it was turned over to them. However, the home agent remained responsible for getting all materials to the communities on schedule. These chairmen did a spectacular job and their contribution of time and energy was typical of the fine farm people in Haywood County. During this year (1940), 1,843 mattresses were completed."

The mattress program assumed major proportions in almost all of Tennessee's counties because there were many families who had low cash incomes. The above are examples from selected counties.

With the rural electrification of Tennessee in the 1930s, farm families faced a new situation. Housing, furnishings and improvement of home grounds -- the objective of home demonstration work was to encourage farm families to create finer, happier home relationships through more comfortable, more convenient and more beautiful home surroundings. Thousands of kitchens were made lighter, brighter and more convenient. Better storage spaces were arranged.

Representatives of the Tennessee Valley Authority worked cooperatively with the Extension specialists and agents. They held training schools for agents and for leaders, prepared publications, models and exhibits.

A six-week Extension course for home economics Extension workers was held at the College of Home Economics, University of Tennessee. Thirty-one home economists attended from nine states. In addition, there were three electrical equipment conferences in 1935, supervised by Eloise Davison from the Electric Home and Farm Authority of the TVA. They were attended by all district and county Home Demonstration agents.

Work to make houses more convenient with special emphasis on kitchens and living rooms was included. With limited funds to spend, homemakers used their ingenuity to make old things useful with refinishing, upholstering and slip covering.

World War II interrupted the normal life of the American farm community. Emphasis, as during World War I, was returned to food production and preservation.

The craft marketing program continued, however, with the addition of four professors from UT to assist with craft marketing. Ronald Slayton (1946-50), Marion Heard (1947-48), Jane Glass (1947-49) and Wilbur Armistead (1951-53) worked with Williams during the post World War II years.

Housing was given little attention in the busy war years. Therefore, by 1945, three-fourths of the dwellings needed repairs. One-fourth to one-half needed remodeling while one-tenth of the families needed to build new homes. These needs pointed to an extensive program of providing educational information about housing after the emergency had passed.

Homemakers worked continuously on beautifying the house and its surroundings. They refinished and upholstered furniture, made slip covers and repaired broken furniture pieces.

Lillian Keller (1950-52) was the first specialist to work exclusively in the area of home furnishings and home improvement. In 1953, Inez Lovelace, who was the home management specialist from 1943, took over the role of home furnishings specialist. During those years she built a strong program, with a solid base for agents to use with their clientele. All areas of interior design were covered, with special emphasis on upholstery work, drapery construction, furniture refinishing, as well as consumer information on buying furniture, floorcovering and other household products that were becoming available during the boom years following World War II.

Emma Jean Kirk worked with Lovelace from 1957 to 1958. Interior design, related arts and crafts and housing were further defined as a section. In 1958, Kirk (1958-1959) changed from home furnishings specialist to related arts and crafts specialist. Margaret Clem began work as the crafts specialist

and worked in cooperation with Lovelace to further strengthen the program. Areas of specialty taught statewide included reseating chairs, candlemaking, tie dying, batik, rug making, basket making, as well as numerous other native crafts. Her work not only taught Tennessee homemakers various skills, but also educated them to know, recognize and express good design.

Soon after Lovelace retired in 1958, Clem assumed the responsibilities of the interior design specialist until 1971. Phyllis Inman was the craft specialist from 1969 to 1983. The craft program, under her leadership, carried on the strong tradition of many of Tennessee's native crafts. Many workshops were offered to agents and homemakers all across the state. Inman developed an impressive set of arts and crafts project literature for the 4-H Clubs. Even today, the arts and crafts project carries the largest enrollment of all the 4-H projects.

Madge Guffey was named the next interior design specialist in 1971 when Clem retired. Housing issues were emerging during this period of time with many Tennesseans who were desiring better housing. Along with this, the energy crisis of these years triggered a growth in the demand on this section. Based on an in-house impact study, a separate housing section was established in 1979. Suzanne Long (1979-80) became the interior design specialist when Guffey left. Due to hiring freezes, there was no one in the interior design position for three years. Inman, who was the crafts specialist, carried out the essential events of the program. In 1983, Martha Keel, the current interior design specialist was hired.

The basic philosophy of interior design education has not changed since the early 1900s. Homemakers have always wanted better things for their families within their homes.

The means to attain these goals has changed drastically over the years as families have changed. Being self-reliant, early families were taught skills to design and construct their own home improvements. But as society has changed, so has the interior design program. No longer self-sufficient, families must have a stronger consumer base in order to choose goods and services. So today's interior design and crafts section strives to teach design principles, selection and use of goods and services and easy and efficient maintenance of the home.

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