

# Implant Cattle Properly

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**W**hen used properly, growth-stimulating implants offer the commercial cow-calf producer a fast, easy-to-use method of increasing the weaning weight of calves. Implants have been proven effective through research, as well as through routine use in the beef industry.

Implanting is a relatively easy management practice to perform; however, adequate restraint of the animal is required. If inadequate facilities are available, consideration should be given to purchasing/constructing needed components.

Producers planning to purchase a squeeze chute or other handling-facility components may apply for a cost-share through the Tennessee Agricultural Enhancement Program administered by the Tennessee Department of Agriculture. Premise identification and Beef Quality Assurance certification are prerequisites for applying for the funds. Approval of the request must be received before items are purchased.

Implants are placed under the skin on the back of the ear. They exert a positive effect by increasing growth hormone and insulin, resulting in increased formation of muscle tissue and decreased fat. Growth hormone is naturally produced by the pituitary gland and is an important regulator of growth.

Generally, male calves should be implanted when they are castrated. **DO NOT** implant bull calves that you intend to save for breeding. Implanting bulls can retard the development of the reproductive organs, thus causing them to be less fertile. Feeder heifers should be implanted.

Implants must be administered properly. The potential benefit of implants cannot be seen if they are not properly administered. In addition, a calf with an

improperly placed implant runs the risk of having residues when slaughtered.

## Administer Implants Correctly

1. Properly restrain the animal.
2. Determine in which ear you want to position the implant instrument so that the needle can be positioned next to and parallel to the ear, with the slant side of the needle facing outward. (Implant all calves in the same ear to minimize confusion).
3. Select the proper implant site on the back of the ear (Figures 1 and 2). Place the implant between the skin and cartilage in the middle third of the ear.
4. Clean the needle and implant site with a disinfectant to reduce contamination of the needle wound. (Use a paint tray and sponge to lay the implant gun on.)
5. Grasp the ear with one hand while the other hand positions the instrument parallel to, and nearly flush with, the ear. Put the point of the needle against the ear with the beveled part facing outward.
6. Use the tip of the needle to prick the skin. Then lift slightly so you can completely insert the needle under the skin.
7. Depress the plunger of the implant gun and withdraw the needle.
8. Feel the ear for the implant under the skin to see that it is inserted properly.

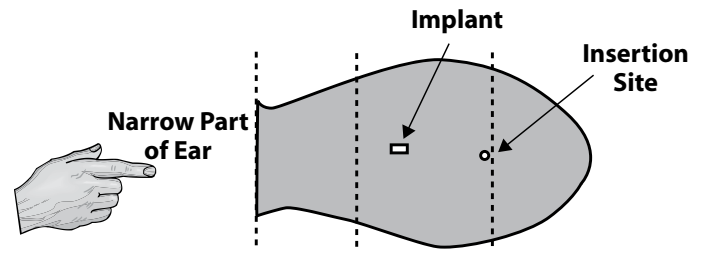
## Precautions When Implanting

1. When the ear is grasped and the needle inserted, the animal may throw its head. This can be prevented by using a nose lead, halter or a headgate equipped with a head-and-nose bar.



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2. Avoid piercing or cutting ear veins with the needle.
3. Do not allow the needle to gouge or pierce through the cartilage. If you feel resistance as you insert the needle, it is quite probable that the cartilage has been gouged, and pellets may be covered with scar tissue and “walled off,” resulting in very poor drug absorption and decreased gain.
4. Never sacrifice a careful implantation technique for speed.



**Figure 1. Site of Insertion for Ralgro7 Implant. Source: Burris, Roy et al. 1990. Growth Stimulating Implants for Beef Cattle, ACS-25, Cooperative Extension Service, University of Kentucky, Lexington, KY. (All other implants should be place at same location on ear as outlined above.)**

\* Adapted from “Guide to Assuring Beef Quality on the Farm,” written by the Kentucky Beef Cattle Association, 1992.

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The National Animal Identification program is designed to provide the capability of tracing an animal back to its point of origin within a 48-hour period of time in the case of an animal-disease outbreak. It is also supposed to identify all locations where an animal has been during its lifetime. The mechanism for tracing requires that every location (premise) where animals reside must be identified (for example: owner’s farm, livestock market, order-buyer lot, fairs, shows, veterinary clinics, etc). Each animal must be individually identified with some type of electronic identification (i.e., electronic ear tags, electronic implants or similar devices). Registration of premises is currently being conducted. Premise registration forms are available at local Extension offices, Farm Bureau offices, local Farmers Cooperative stores and Farm Service Agency offices. Premise identification and individual animal identification are now voluntary except for participation in Tennessee Agricultural Enhancement programs. It is anticipated that participation in the premise and individual animal identification programs will increase as information provided by these programs is needed to market animals.

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