

Tattooing of Cattle and Goats

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The proper identification of animals is essential for all aspects of efficient livestock production. It allows for the orderly proof and transfer of ownership and becomes more important as herds increase in size. Unique identification is required if the owner wishes to register purebred animals with breed registries or exhibit them at most livestock shows. Proper identification enables the producer to keep comprehensive records of milk production, reproduction, health problems and management practices. The efficient maintenance of this information requires a permanent identification system.

Several systems of identification may be used. The system selected will depend upon the size of the herd, the environmental conditions under which they are maintained, the primary purpose for identifying individual animals, rules and regulations of breed-governing bodies or shows you attend and equipment that is available.

There are two basic types of identification: permanent and non-permanent. Breed associations and most shows require permanent

identification. Identification within the dairy or beef herd requires visibility and is most commonly accomplished using permanent ear tags. These are also used for goats. Generally, smaller ear tags are preferred for goats rather than the larger cattle ear tags. Non-permanent identification includes paint, chalk and stick-on tags.

Tattooing is one method of identification that is permanent if properly done. However, it is not easily viewed and may require another complementary method of identification, such as an ear tag, that is visible from short distances. This publication primarily addresses tattooing of dairy cattle, beef cattle and goats but is applicable to other animals.

Tattooing requires a pair of pliers and numbers or letters made of sharp, needlelike projections which pierce the skin. The tattoo ink is forced into the punctures and remains visible after the puncture wounds heal. Tattooing is usually done on the ears, and tattoos can be seen best on animals that have white ears. Those with black pigment in the ears can be

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tattooed, but the numerals and letters are more difficult to read. La Mancha goats lack large external ears, so they are tattooed on the tail web.

On dark-pigmented ears of cattle or goats (for example, Alpine goats), use green or white ink instead of black. Many brands of indelible ink are available through your livestock supply house, local livestock store or cooperative. The roll-on applicators, rather than the paste, have been proven to save ink and make the job cleaner (Figure 1). Remember to use a non-black ink on a dark ear.



Figure 1 – Two varieties of ink available are the roll-on (top) and the paste (bottom). The roll-on variety is most commonly used.

Restraint Required

The restraint of animals for tattooing will vary with the age and strength of the animal but requires that the ears be stable with little movement. A small, young animal can be held in the arms of an assistant. Older animals should be placed in a stanchion or chute. Young goats are often placed in a box that holds kids for disbudding.

Getting Started

Biosecurity protocol should be followed by working in an environment that is as clean as possible. Other



Figure 2 – Gathering materials is the first step in getting ready to tattoo.

measures to decrease spread of disease include wearing gloves, using separate cloths or pads to clean animals' ears and disinfecting equipment between animals. First, gather the necessary materials (Figure 2):

- Gloves
- Halter
- Alcohol pads or rubbing alcohol and a soft, clean cloth
- Spray bottle of rubbing alcohol
- Tattoo ink
- Tattoo kit

Consider the purchase of a small animal tattoo kit with 5/16" digits (compared to the normal size of 3/8") and tattooing at less than two weeks of age. The animals are easier to restrain, the smaller numbers are easier to insert in the ear and the tattoo will grow with the animal. Rotary tattoo kits also are available.

Be sure to maintain tattooing equipment, keeping it clean and replacing broken or dull characters (letters and numbers). A buildup of dirt or broken and/or dull equipment can result in improper or illegible tattoos.

Tattooing Procedures

Step 1. Clean Ear with Alcohol

Using an alcohol pad, clean out the ear completely (Figure 3). Wax interferes with the permanency of the ink; if wax is mixed with the ink, the tattoo will most likely fade. Hair can also interfere with a proper tattoo, so the ears may need to be clipped. If no alcohol pads are available, rubbing alcohol and a soft, clean cloth or cotton swab also will work as long as the wax is completely removed. Water is normally not used to clean the ears as it can get in the ear canal and may cause an ear infection. A damp cloth can be used, but it is less sanitary than alcohol. Be sure the tattoo does not interfere with a present or future Brucellosis tattoo for cattle.



Figure 3 – A clean ear is the first step to a successful tattoo. Clipping ears may also be necessary to avoid interference from hair.

Step 2. Applying Ink

Apply a generous amount of ink over the area to be tattooed, usually between the middle ribs of the ear (Figure 4). Keep away from the hair around the edge of the ear. An area slightly larger than the tattoo equipment should be covered. Remember to use a non-black ink on a dark ear.



Figure 4 – Apply ink between the first and second ribs. The ink should thoroughly cover the skin.

Step 3. Tattooing

Hold the animal securely. After verifying the correct tattoo by punching it into a piece of paper, position the tongs in the center of the ear between the ribs of cartilage and squeeze firmly (Figure 5). Avoiding the ribs will prevent bleeding. Be sure to lift the tongs out straight; many tattoos have been ruined by scratches. If you must repeat the process, tattoo in the exact same place as previously to avoid overlapping numeral/numbers. This will cause the tattoo to be indistinguishable.



Figure 5 – Keep a firm grip on the calf or kid to avoid any movement that could cause the tongs to slip.

Step 4. Reapplying Ink

Again, apply ink and rub in firmly. This single step will assure a lasting tattoo if you have followed the above procedure. An old toothbrush may be used to help push the ink into the punctures.

Step 5. Sanitizing Equipment

Sanitize the tattoo kit between animals by spraying rubbing alcohol on the tongs and the individual tattoo pieces that have been used (Figure 6). This cleaning will minimize infection in the tattoo and should be done before and after each procedure.



Figure 6 – Sanitizing tattooing equipment is just one way to follow biosecurity protocol.

Step 6. The Finished Product

After several weeks, the ink will dry and flake out of the ear, leaving a legible tattoo and a permanent means of identification (Figure 7). A note of caution – remind your veterinarian there is a tattoo in that ear and that it should be avoided if a vaccination tattoo is inserted.



Figure 7 – After several weeks, the tattoo should become legible as the dried ink flakes out of the calf's or kid's ear.

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