



TATTOOING AS METHOD FOR SMALL STOCK IDENTIFICATION

ERIKA VAN ZYL, PETER OOSTHUIZEN & PHUMZILE MSUNTSHA

The Animal Identification Act, 2002 (Act No. 6 of 2002), stipulates:

“It is compulsory for livestock owners in South Africa to mark all cattle, sheep, goats and pigs with a mark allocated by the Registrar of Animal Identification.”

The national register for Animal Identification Marks acts as the first line of defense against stock theft. It enhances identification of property and supports traceability.

All livestock owners must apply for a registered identification mark with the Registrar of Animal Identification. An application fee is levied. Application forms for an identification mark can be obtained from extension offices, Magistrate’s offices, Stock Theft units of the SAPS or from the Registrar of Animal identification itself.

The forms can also be downloaded from the Department of Agriculture, Forestry and Fisheries website (www.daff.gov.za) or can be contact at:

Tel: (012) 3197449/33;

Private Bag X 138, Pretoria, 0001

Small stock tattooing

The preferred way to put a permanent identification mark on small stock is by tattooing. The sites for tattooing are the ear, and less commonly, flank and tail web. Tattoos provide an excellent means of permanent identification since they normally last the life of the animal.

The disadvantage of tattoos is that they are difficult to read from a distance. It is often necessary to restrain the sheep/goat to read the tattoo - especially with flank and tail web tattoos. Tattoos may be difficult to read on dark-skinned animals. Regarding small stock, the Animal Identification Act enforces the following:

- Small stock must be tattooed by the age of one month
- Purchased animals must be tattooed within 14 days after a person becomes the owner of the animal. Within these 14 days, the animal can be resold, bartered or given away without remarking the animal, since it already has the previous owner’s mark on it. The seller must provide the new owner with a document of identification, which must be kept for a year
- The characters of a tattoo may not be larger than 20 mm (wide or high)
- The mark may have 1, 2, or 3 characters
- The characters must be placed next to each other
- The first owner can place the tattoo in the left ear, the second owner in the right ear.

Method of tattooing

The tattooing instrument or tattoo applicators consist of a plier-type device which has dies in the form of letters or numbers (Figure 1). The dies are made of sharp, needle like projections that pierce the ear when the handles of the instrument are squeezed together. An indelible ink is rubbed into the small puncture wounds. After healing, the tattoo is permanent.

Tattoo applicators range from very simple to more complex. Cost and convenience will dictate the choice of applicator.

Inks are available in black, green, red and white and in paste or liquid form. On light-skinned animals the color of the tattoo is less important. Black ink is most commonly used in white-skinned breeds and green in dark-skinned breeds. On such animals holding a flashlight at the back of the ear will help when reading the tattoo.



FIGURE 1: Tattoo applicator and ink

Alternatively, animals can be tattooed inside the rear flank or in the thin webbing at the base of the tail. In the case of the earless sheep, these alternative tattoos provide an option. A disadvantage of flank tattooing is that the animal has to be turned on its side to be able to read the tattoo. Sometimes the animal has to be shaved to see the tattoo.

It is imperative to clean the tattooing equipment thoroughly after each use as it is likely to become contaminated with blood. This can lead to the transmission of diseases. This is especially important if an individual tattoos for other farmers, not to unwittingly pass blood-borne diseases from one animal to another or from flock to flock. If equipment is shared, ensure that all tattoo letters and/or numbers are disinfected, at least by immersion in alcohol (70%) methylated spirits, before being used on their own animals.

The tattooing process

Ear tattooing

After loading the tattoo pliers with the relevant characters, be sure to check if the tattoo pliers is in proper working order. Immediately replace characters that are broken or worn.

1. The tattoos should be tested on a piece of cardboard to be certain that the characters are in the correct order in accordance with the certificate of registration.
2. Restrain the animal gently and securely and hold the animal's head to prevent jerking during tattooing.
3. Flatten the ear as best as possible to be able to see inside the ear. Clean the ear with a cloth soaked in alcohol to remove wax and dirt. Dry the area.
4. Apply tattoo ink generously on the clean area. Plastic gloves can be used to keep the operator's hands clean.
5. Place the ear between the jaws of the tattoo pliers. Locate the two ribs of the cartilage that divide the ear into top, middle and lower thirds. Make sure that the symbols of the tattoo are parallel to and between the cartilaginous ridges of the ear, providing that it will not interfere with later ear tagging. Alternatively the tattoo can be placed in the top of the ear just above the cartilage rib and approximately equidistant from the base and tip of the ear, or in both locations for example flock mark and individual animal number (Figure 2).



FIGURE 2: Example of tattooed ear showing the correct position of the tattoo

6. Choose an area free from freckles or warts that might disfigure the tattoo. The accidental piercing of a good-size vein may spoil the tattoo and cause bleeding.
7. The imprint onto the ear is then made with the tattoo applicator (Figure 3). Make the imprint with a quick, firm movement of closing the tattoo pliers, squeezing the handles firmly. Use just sufficient pressure to ensure that only the skin is pierced and not through the ear.



FIGURE 3: Making the imprint

Tattoo needles must make holes large enough to let an adequate amount of ink into the skin (Figure 4). If the ear/skin sticks to the needles, gently peel it off the pliers. Immediately apply more ink and rub vigorously and continuously for at least 15 seconds to ensure penetration. If each hole is not completely filled with ink, add more ink and repeat the rubbing process.



FIGURE 4: Applying the ink on the ear. In this case green ink is used

8. This is the only chance to achieve a good tattoo, so take time and do a proper job. One or more of the punctures may bleed. Gently squeeze a paper towel over the bleeding area until the bleeding slows substantially (about 10 or 15 seconds). Do not disturb the tattooed area until the healing process is complete. This may be from 5 to 21 days depending on the age of the animal.

Flank tattooing

This method is more labour intensive and time consuming, compared with ear tattooing and it is not used often.

1. The tattoo should be tested on a piece of cardboard to be certain that the characters are in accordance with the certificate of registration.
2. The animal usually has to be laid on its back and restrained.
3. Locate the skin fold in the flank. The inside of the flank normally has exposed skin, while the outside is covered with hair/wool (Figure 5).



FIGURE 5: Applying black ink to the flank

4. Clean the area to be tattooed with a cloth soaked in alcohol, dry the area and apply the tattoo ink on the cleaned area.
5. Position the pliers over the skin fold with needle side on the inside of the flank. Only skin must be felt inside the head of the pliers i.e. do not tattoo into muscle.
6. Press down firmly and then release the pliers. Gently pull the skin away from the needles.

7. Follow the same procedure as described for ear tattooing.



FIGURE 6: The finished flank tattoo

Tail web tattooing

This method is more suitable for goats, but it is not a method that is popular.

1. The tattoos should be tested on a piece of cardboard to be certain that the characters are in accordance with the certificate of registration.
2. Restrain the animal gently.
3. To position the pliers, pull the end of the tail upward and spread out the sides to get an idea of how much area you have to work with. A helper can either hold the end of the tail or help spread the sides (Figure 7).

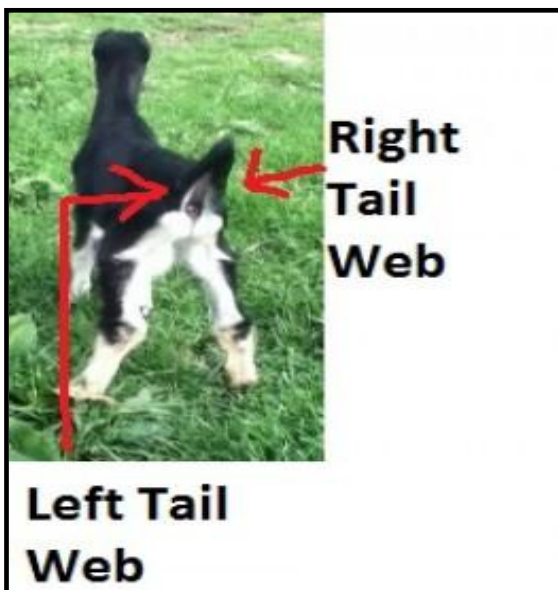


FIGURE 7: The position of tail webs

4. Clean the tail web with a cloth soaked in alcohol to remove wax and dirt. Dry the area.

5. Apply the tattoo ink on the clean area to be tattooed. Plastic gloves will keep the operator's hands clean (Figure 8).



FIGURE 8: Green ink applied on the tail web

6. Clean the area with a cloth soaked in alcohol and applies the tattoo ink on the cleaned area.
7. Position the pliers over the area with the most "skin room," towards the side edge of the tail and almost in the middle, between the base and tip of the tail. The letters should not be too close to the hair, away from the tail bones.
8. Press down firmly and release the pliers. Gently pull the skin away from the needles.
9. Follow the same procedure further as described for ear tattooing.

Contact

Dr. Erika van Zyl

Professional Scientist

Tel: (034) 212 2479

erika.vanzyl@kzndard.gov.za

Peter Oosthuizen or Phumzile Msuntsha

Scientific Technician

Tel: (034) 212 2479

peter.oosthuizen@kzndard.gov.za

phumzile.msuntsha@kzndard.gov.za

KZN Department of Agriculture and Rural Development

Livestock Production, Grassland and Forage Science

Dundee

Published November 2015