How do you tell which feral, free-roaming, or street dogs have been sterilized? Being able to clearly identify dogs from a distance after they have been sterilized is necessary to avoid needless recapture. Ideal marking methods for use with a nonsurgical sterilant are:

- Permanent
- Do not require anesthesia
- Are clearly visible from a distance
- Do not cause excessive pain
- Do not result in infection

But does that “ideal method” exist? Come attend Dr. Raffaella Leoci’s presentation at the 2013 ACC&D Symposium, Friday 3:45 in the field implementation track, on a comparison of marking methods for dogs. Some highlights are reported here.

**Ear Tags**

Ear tags come in several sizes and materials. The more common tags are made of plastic with a two-piece design. They are clipped to the dog’s ear with a clamping device. Two tags were evaluated, a round roto-tag and a swivel tag.
Benefits to the plastic ear tags:
- Easy to apply
- Quick to apply
- Trained technician could complete tagging
- Little reaction of dog to tag application
- Additional information can be included (town, sex, date)
- Easy to acquire/purchase materials

Disadvantages of the plastic ear tags:
- Some dogs initially scratched or rubbed their ear tag (more often with roto-tag)
- Swivel tags caused abrasions on several dogs’ ears where they rubbed against the skin
- May not be permanent

“Ear Whiting” or Freeze Branding
Freeze branding is completed by using a copper brand that is cooled in liquid nitrogen or dry ice. The brand is then applied to the shaved skin of the dog and held in place. Depending on the length of time the brand is applied, the hair will grow in white or not at all.
Benefits to ear whiting:
- Permanent mark
- Little reaction from dog to mark application
- No complications

Disadvantages of ear whiting:
- Requires extensive experience with the materials and branding technique
- Slow process
- More expensive
- Extended ear handling causes handling stress or requires heavier sedation (may be easier to apply to torso)
- Results not evident until hair grows back, up to 8 weeks later
- Logistically difficult, since liquid nitrogen or dry ice need to be carried to location and dissipate quickly
- May be difficult to find liquid nitrogen or dry ice, depending on the country

Conclusions
- Ear tagging was simple, practical, and efficient, and dogs showed little reaction to application, but some tags caused abrasions.
- Ear whiting was better tolerated than expected, with handling stress but no pain reaction, but was complicated and time-consuming; consistent results would require extensive experience.
- Ear tagging wins out in terms of ease of use; for further conclusions on animal welfare and effectiveness after follow-up, please attend the talk “A comparison of ear-tagging and ‘ear whiting’ as methods of identification in dogs” at the ACC&D 5th International Symposium on Non-Surgical Contraceptive Methods of Pet Population Control, Friday at 3:45 (or view it online).

More information
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