



Identifying and Prioritizing Marking Methods for Non-Surgically Sterilized Cats and Dogs

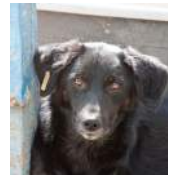


Valerie Benka, Project Manager, ACC&D

on behalf of
ACC&D's Scientific Think Tank Team

The objective

To identify a new method, or improve upon an existing method, to mark animals as non-surgically sterilized or contracepted.



Target Populations (our focus):

- Non-surgically sterilized cats, particularly free-roaming/feral populations
- Non-surgically sterilized free-roaming/community dogs
- Dogs and cats who are temporarily contracepted and require re-treatment, with a focus on free-roaming/community populations



Potential applications for:

- Surgically sterilized free-roaming cat and dog populations
- Rabies vaccination campaigns (free-roaming animals, esp. dogs)
- Even livestock and marked/monitored wildlife populations

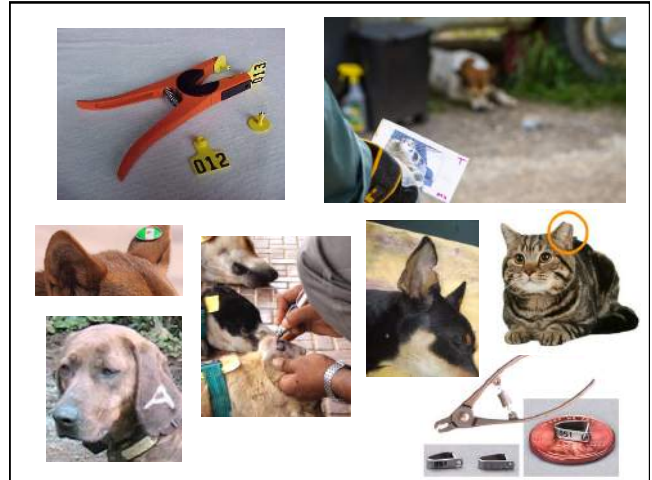
Current Marking Methods

Used for dogs and/or cats

- Observation/imaging
- Collars
- Microchips
- Tattoo
- Ear tags
- Ear notching
- Ear tipping
- Freeze branding

Used for other species

- Leg bands
- DNA profiling
- Iris/retinal scanning
- Hot branding
- Paint



Solutions



- Focused on ear marking to enhance visibility
- To date, have ear tag options really been optimized?
 - Opportunities for innovation: materials, shape, placement, analgesia, antiseptic/antibiotic, piercing mechanism
- Optional RFID technology



Solutions: Visible Component

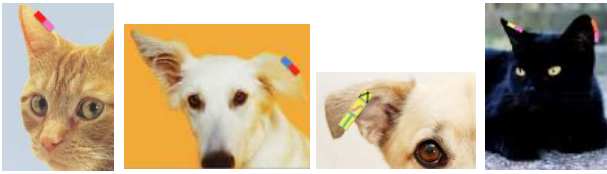
- Ear stud with disk. Advanced material (e.g., flexible, non-reactive silicone).
- Disk potentially convex/concave to reduce contact with fur/skin.
- Bright center post, color- or shape-coded to ID procedure, date, location applied, additional desired information.



- Apply with ear piercing-type gun using local anesthetic/NSAID/antiseptic – e.g., Tri-Solfen. Use squeeze trap for cats.
- Outreach component (option for caretaker to have matching stud, community education about meaning of stud/colors).

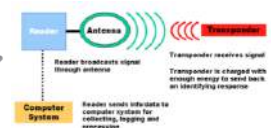
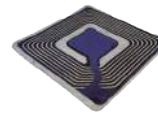
Solutions, cont'd: Visible component

- Flexible (breathable? reflective?) ear wrap attached with 2+ thin posts, folded over ear
- Appropriately sized/shaped for individual animal.
- Color-coded or patterned to convey information.
- Apply with local anesthetic/NSAID/antiseptic – e.g., Tri-Solfen. Use squeeze trap for cats.



Solutions, cont'd: Technology add-ons

- Optional add-on: SAW RFID/QR code
- External placement = extended range
- Possibility of adding RFID or QR code once optimal “tag” design is determined
- Value-add: “smart traps” release treated animals, auto-monitoring using detectors at feed stations



Next Steps

- **Tag and application design:** Design and fabricate tag prototypes, accounting for myriad factors and outsourcing to experts.
- **Study design:** Controlled and field.
- **Potential partner outreach:** Identified broad potential partner categories, plus multiple possible partners within each. Explore opportunities for partnerships.
- **Community considerations:** Account for cultural and physical barriers to application/compliance in target communities.

Interested in learning more?

- Check out our complete Think Tank report and literature review of current marking methods in the 5th International Symposium online proceedings.
- Questions/suggestions? We'd love to hear from you! Please contact Valerie at valerie@acc-d.org, (734) 780-7817.

