

Developing new visible marking options for free-roaming dogs and cats sterilized or contracepted non-surgically

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This presentation addresses the global challenge of identifying free-roaming dogs and cats who are sterilized/contracepted with non-surgical fertility control (NSFC), a challenge that shares some commonalities with marking and identifying contracepted wildlife. Current NSFC options for dogs, and those future alternatives envisioned for cats, do not require general anesthesia, a positive in field use but precluding the ear notch/tip commonly used to identify sterilized dogs or cats.

The Alliance for Contraception in Cats & Dogs (ACC&D) spearheaded an initiative to develop a humane, affordable, effective method to 1) identify NSFC-treated animals, and 2) communicate the timeframe of contraceptive treatment. It has convened experts in veterinary medicine, veterinary pain management, animal behavior, fiber science, electrical engineering and RFID technology, animal sciences, and wildlife biology, among others. This presentation will share progress to date including the learning from two resulting small field trials in dogs and one in cats.

The project launched with a review of methods currently used to mark and identify companion animals, wildlife, farm animals, and marine mammals. This was followed by an InnoCentive Brainstorm Challenge to crowdsource ideas from around the globe, and then an ACC&D Scientific Think Tank. During the latter, the team determined that ear tags offer promise if optimized in terms of design, materials, humane application, safety, and comfort.

The initiative advanced to a partnership with Cornell University and its faculty of veterinary medicine, fiber science, and electrical engineering. A prototype ear tag was designed with shape and color scheme to convey information. Externally mounted RFID was explored to provide capacity for additional information. With Cornell, initial testing was done locally and then in dogs in cooperation with a Romanian shelter. A short follow-up trial in Kenya added a National Science Foundation postdoctoral researcher as a collaborator in conjunction with a rabies vaccination campaign (as a proxy for NSFC). Separately, a pilot was conducted in indoor/outdoor pet cats in Illinois, with results for 15 months as of this conference. A test in additional cats of a refined tag is planned for 2017. Results of trials to date are more encouraging for cats than for dogs. The most current action plans will be shared at the time of presentation.