A Focus on Feral and Free-roaming Felines

Summary of the Discussion, written by session chair Karen Green

Panelists: Gregory Castle, Bryan Kortis, Dr. Julie Levy, Dr. Margaret Slater, Dr. Stephen Zawistowski (see speaker biographies for details and contact information of panelists)

This was an interactive session engaging panelists and audience members in discussion. The goals of this session were to:

- Bring more stakeholders into the conversation about priorities for these populations
- Identify key challenges and opportunities
- Explore priority topics and develop recommendations or next steps

Feral and free-roaming cats have unique characteristics that impact how these populations can and should be managed:

- "Herd health" vs. owned pet (Lower response rates may be effective for managing a colony, but pet owners will want something with very high efficacy rate)
- Wide range of services (Some areas have subsidized, high-volume, high-quality spay/neuter programs for ferals, whereas in others, the only surgical option may cost over \$100 per cat from a private-practice veterinarian)
- Wide range of target population size, from a few cats to a whole city
- Capture, handling, recovery stressful to cats (and handlers!)
- Dependence on ear-tipping for ID, which requires anesthesia
- Cats are difficult to count, observe, track
- No "owner" to foot the bill (Options must be very low cost or significantly subsidized)
- Population includes owned pets and friendly strays as well as true "ferals" (Our approach must consider legal and ethical issues of impacting owned, free-roaming cats)
- Wide variety in fertility, fecundity, mortality (A shorter-acting product could be very effective in areas with low life expectancy, but ineffective in areas with high life expectancy)
- Controversy over allowing cats to remain vs. culling (Any birth control option may be opposed by some groups and individuals)

Summary of Primary Areas of Discussion

Identification

The question of how to mark cats as infertile if they are able to be sterilized or contracepted without surgery is a significant concern to many stakeholders. The current standard for identifying sterile cats is to remove the tip (about ¼ inch) of the left ear. This allows sterile cats to be identified visually from a distance. Ear-tipping prevents cats from being re-trapped for surgery and in some communities ear-tipped cats are returned to their caregivers if they are picked up by animal control. Community members may also be more tolerant of ear-tipped cats, realizing that those cats have received medical care and are not producing unwanted litters.

However, ear-tipping or other visual marking methods (e.g., tattoos) must be administered to anesthetized cats; otherwise these methods would be inhumane. Microchipping is an alternative, but does not provide a visual method of identifying cats (cats would have to be contained and scanned for microchips), and microchips are prohibitively expensive in some cases. A database with photos identifying cats may allow a caregiver to identify which cats have been sterilized, but only those with access to the database would have this important information.

Panelists and audience members suggested that scientific and/or technological advances may provide the solution for marking cats, just as these advances may lead to non-surgical sterilants. Advances to be considered include nanotechnology (which may allow for color-marking cats) or a microchip that could be read with a transponder.

It was acknowledged that there is a large market for a permanent or long-acting, non-invasive, visual method of marking cats. ACC&D recognizes the importance of this issue and is considering best methods for stimulating work in this area. Ideas and contacts are welcome (info@acc-d.org).

FeralStat®

FeralStat is an oral contraceptive marketed for feral cats. The product is added to wet/canned food once per week and is recommended by the distributor as a "stop gap" measure to prevent reproduction until a colony can be trapped and permanently sterilized. The active ingredient in FeralStat is megestrol acetate. Megestrol acetate has not been approved by the Food and Drug Administration (U.S.) as a contraceptive for cats but has been used in Europe for this purpose. Megestrol acetate is known to cause negative effects, including diabetes mellitus and pyometra in some cats at traditional doses. The dose of megestrol acetate in FeralStat is significantly lower than that used historically, and for that at which effectiveness and safety have been studied. It is possible that the lower dose is effective and is not associated with significant side effects. However, no studies have been done to demonstrate effectiveness or safety. ACC&D bases its perspectives and actions on sound science, and without data showing that FeralStat is safe and effective, ACC&D cannot recommend use of this product.

It was noted that there is clearly a market for an oral contraceptive that can be delivered in food. This would allow colony managers to administer the product themselves in a non-invasive way, which is understandably desirable. Until or unless products that are studied and introduced meet this demand, we might expect to see products like FeralStat on the market. Although ACC&D's priority has been permanent or long-acting products, it would be valuable to establish whether or not a low dose of megestrol acetate (or another oral contraceptive) could be used safely and effectively. ACC&D will consider options for evaluating the safety and efficacy of such approaches.

FeralStat is prescribed by a veterinarian in Connecticut by phone to caregivers. The product is not distributed wholesale to other veterinarians for resale. Several participants expressed concerns that this method of distribution may not be legal and advised that, if caregivers are going to use a low dose of megestrol acetate in this manner, they may contact a local veterinarian to request a prescription. A compounding pharmacy could be used to prepare the drug so that it is more palatable to cats. Megestrol acetate is inexpensive and is available in the U.S.; it is used for treatment of breast cancer in some women and for short-term contraception in female dogs.

Delivering any contraceptive in food to outdoor cats also carries risks, as it is challenging to ensure that each cat consumes the proper dose and that other animals (i.e., wildlife, owned pets) do not consume any of the product. Strategies some caregivers have used include withholding food the day before, portioning food out onto individual plates and putting them out for each cat, and supervising cats while they eat, removing any remaining food after the cats are finished eating. These strategies are not possible or successful in every situation. Caregivers using oral contraceptives are encouraged to take great care in how the contraceptive is fed to the cats.

Another concern brought up is the need to educate caregivers fully about the risks of oral contraceptives, including the additional risks of delivering contraceptives in food to free-roaming cats (as discussed above). Many participants felt that caregivers may be misled by information distributed by FeralStat. For example, the FeralStat website says that the active ingredient has "FDA approval for extra-label use." However, "extra-label" or "off-label" use means use other than as approved by the FDA. (Off-label use of drugs is common in veterinary medicine, but it should not be confused with FDA approved use.) This and other statements may give caregivers the impression that FeralStat has been tested for safety and efficacy, whereas there are no known studies establishing safety or efficacy of megestrol acetate at this dosage regimen. Session participants expressed (and ACC&D concurs) that caregivers should have more information so that they can make an informed decision about whether to use FeralStat (or similar products). ACC&D has product profiles and position pieces on Feral Stat and megestrol acetate available here. (Note that the FeralStat piece is in the process of being updated; the veterinarian who had been prescribing FeralStat passed away in 2010, although the organization is continuing to market and prescribe the product.)

It was recognized that the cost-benefit analysis for using FeralStat (or similar products) varies between feral colonies and owned cats. Feral and free-roaming cats face many risks to their health; mating behaviors, pregnancy, birth, and sustaining young kittens are not the least among these risks. Some caregivers may determine that remaining fertile is more risky for their colony cats than an untested oral contraceptive.

Potential of a Three-year Contraceptive

A product was developed by Intervet for one-year contraception in female dogs which, in an early study, showed approximately three years of contraception when delivered to female cats. The technology received regulatory approval for use in bitches by the European Union; however, the company has gone through two major mergers in the past several years and has not pursued introduction of this product. The fact that the technology has been developed and was able to achieve regulatory approval in a rigorous review process is quite promising, especially until we have longer-acting alternatives available.

ACC&D has long felt that a permanent sterilant would be ideal, but realizes that a product lasting three years or more may have significant potential for controlling populations not able to be managed (or managed quickly enough) with surgical spay/neuter. (Please see Dr. Margaret Slater's presentation from this symposium on the population model she developed to understand the potential of a three-year contraceptive.) For the purposes of discussion to assess interest in a three-year product, a product was described as being safe and effective in males and females; having non-reproductive (i.e., behavioral) effects similar to surgical sterilization; administered with a needle as a small implant (similar to inserting a microchip), and costing \$13 to \$17 (U.S.). Discussion focused on the cases in which a three-year contraceptive might be of benefit:

- In areas where there is a shorter life expectancy for feral cats (i.e., where three years is a more significant portion of the cats' lives)
- Where spay/neuter surgery is not an option (three years of contraception is better than none at all)
- Where recovery space is a limiting factor in spay/neuter programs (a product that could be administered to an awake cat in a trap would eliminate the need for anesthesia and recovery time)
- Where the veterinarian's time is the limiting factor (and a vet may be able to contracept many more cats than could be sterilized surgically in the same time)
- For cats that are not good candidates for surgery for health reasons or are unlikely to be taken to a vet for surgery
- As a stop-gap measure when surgically sterilizing a full colony will take a long time

It was noted (and detailed in Dr. Slater's earlier presentation) that targeting juvenile female cats provides the greatest population control benefit, whether birth control is through a contraceptive or through traditional spay surgery.

The primary concerns raised about a three-year contraceptive included the following:

- Re-trapping cats is logistically demanding and can be difficult, as cats can become "trap savvy."
- Caregivers may not be willing to re-trap, or may not follow through on re-trapping.
- There is no current method for marking cats as "contracepted." Caregivers would need to keep records or risk re-trapping and treating cats that were still contracepted from an earlier treatment.
- The cost may be prohibitive if cats need to be treated multiple times during their lives.

Several panelists and participants encouraged ACC&D to pursue a three-year contraceptive. In a post-symposium survey of participants, 59.2% of respondents strongly agreed with the statement, "I think ACC&D should take action to advance a single-treatment, 3-year contraceptive," and another 14.3% agreed with that statement. ACC&D will evaluate opportunities for moving forward in this area.

Regulatory Pathways for Feral Cat Contraceptives or Sterilants

It was noted that it may be possible to seek regulatory approval for a product for feral cats through the EPA rather than the FDA. This has not yet been tested; no known feral cat product has been reviewed and approved through the EPA to date. This regulatory pathway could potentially save time and money, and might allow for licensed administrators to administer the product, rather than requiring a veterinarian. However, there may be significant risks of classifying feral cats as "pest animals," which is believed to be required if regulatory approval is sought through the EPA. This issue calls for further and careful consideration. Time constraints prevented thorough discussion during this session.

Next Steps

ACC&D is carefully considering how we can advance work in the areas identified and explored in this session. We would like to continue dialogue with feral and free-roaming cat caregivers and advocates. Those interested in this discussion are invited to contact ACC&D at info@acc-d.org to share questions, comments, or ideas. We thank all who participated in this session!