How to manage the feral cat population is among the most contentious of animal welfare topics. Animal shelters nationwide receive several million unwanted cats each year. Because of a shortage of available homes, approximately 75% of these cats are euthanized. Additionally, 82% of all kittens are born to feral cats [1, 2] and they represent the single most important source of cat overpopulation [3]. The Mohawk Hudson Humane Society (MHHS) located in, Albany County, received 3,766 cats in 2009; about 55% of which were strays and only 10% of those animals brought in were previously sterilized [4].

Despite the plight of cats, public opinion shows that 81% of Americans believe that “leaving a stray cat outside to live out its life is more humane than having the cat caught and killed”[5].

Problem Definition:

- Cats are extremely prolific and can have up to three litters a year averaging over four kittens per litter. Eighty-two percent of cats in households throughout the United States are neutered. In contrast, less then 3% of stray and feral cats are neutered [6].
- Outdoor cats are often regarded as a nuisance because of noise from fighting and mating, and by spraying pheromone-scented urine.
- Except in certain island situations, eradication of feral cats to control population is not effective. In a process called the “vacuum effect”, vacated areas with shelter and food resources are soon filled by other cats that start the breeding process all over again [7]. Additionally, it has been shown that with reduced competition for food resources (i.e. more calories available), the average litter size increases.
- Though the incidence of rabies in the cat population in NYS is quite low (less than 3% of rabid animals tested), cats account for one third of human exposure incidents. More than 80% of post-exposure prophylaxis (PEP) treatments for exposures to cats were a result of contact the stray or feral cats [8]. These bite and scratch incidents have to be investigated and the bite victims have to undergo expensive PEP treatment.
- Free-roaming (both owned and unowned outdoor cats) are responsible for up to one billion birds killed a year in addition to killing many other types of wildlife [9,10].
- The life of a cat living outside in Upstate New York is often very difficult. The winters are very cold. There are dangers from vehicles, other animals, and they are often the object of human cruelty [11]. Even cats in well managed colonies must have a challenging existence.

Solutions:

Everyone can agree that a sterilized outdoor cat is preferable to a breeding one. Nuisance behaviors are all but eliminated, infectious disease transmission is dramatically reduced, and they are no longer perpetuating the cycle of feline homelessness. TNvR, or Trap-Neuter (vaccinate) and Return (commonly referred to as TNR), is a “full management plan in which stray and feral cats already living outdoors in cities, towns, and rural areas are humanely trapped, then evaluated, vaccinated, and sterilized by veterinarians” [12]. Kittens and tame cats are adopted into good homes. Healthy adult cats too wild to be adopted are returned to their familiar habitat under the lifelong care of volunteers. TNR is the most successful method of achieving sustained reduced feral cat numbers and is more economical to local governments than attempted eradication. Management with the goal of gradual attrition through spay/neuter, according to Dr. Julie Levy, is “the only practical way to reduce the cat population because it’s the only thing the public will help us with” [13].
State and local governments have seen the benefit of TNR, and many have decided to help fund it. Other state and local governments not only assist in funding spay/neuter for feral or stray cats, but also promote managed colonies. Numerous examples of the successes of TNR exist (as are summarized by the Animal Law Coalition and Alley Cat Allies) and they have shown:

- Dramatic reductions in the overall numbers of cats in an area (often greater than 66%).
- Dramatic cost savings (often of 50% or more) of subsidized or volunteer-run or TNR versus animal control trapping, housing the cats for mandatory holding periods, and ultimately euthanizing them.
- Significant reductions in the numbers of unwanted, unowned cats being presented to animal shelters and their subsequent euthanasia (by up to 80%).

No single strategy for feral cat management will work best in all situations. Reducing the number of feral and free-roaming cats in the environment and entering shelters will take cooperation and persistence. Important steps include:

- Involve wildlife experts from nearby colleges, parks, or state/federal agencies, community health officials, veterinarians, conservation groups, and animal shelter facilities to work together to address cat overpopulation problems in their area.
- Legislatively:
  - Support TNvR and responsible colony management.
  - Restrict colonies from areas where wildlife is threatened.
  - Subsidize and promote spay/neuter services for not only feral and stray cats, but for owned pets as well.
  - Discourage the public from feeding stray cats.
- Responsible cat owners should:
  - keep cats indoors, or in an outdoor enclosure, or on an attended leash.[1]
  - have cats micro-chipped for permanent identification and wear bells on break-away collars to alert wildlife of their presence.
- Veterinarians need to encourage pediatric or prepuberal spay/neuter (i.e. between 8-16 weeks of age).
- Research should be supported to produce a safe and effective nonsurgical contraceptive for cats.

In the Capital Region, several organizations exist that engage in TNR for the public:

- SCRUFF (Spaying Capital Region Unowned Feral Felines) is an all volunteer-run organization that, since 2006, has sterilized over 2000 feral cats. [14]
- The Animal Protection Foundation (APF) in Scotia, NY offers to spay/neuter services for feral cats brought to them by different rescue organizations in the region. [15]
- Organizations such as Kitten Angels, Robin’s Nest, H.O.P.E., Whiskers, Cat Tales, and Guilderhaven often take in litters of kittens to be socialized and placed for adoption.

Summary

Sterilization eliminates nuisance behaviors such as yowling and stresses associated with mating. It reduces disease transmission by the reduction in cat fighting. Controlling the population through TNR is less costly than repeated attempts at extermination. Costs for repeatedly trapping and killing feral cats are far higher than promoting stable, non-breeding colonies in the same location. Vacated areas are quickly re-inhabited by other cats due to the “vacuum effect”. Through managed TNR, litters of new kittens are prevented and available environmental resources are limited by competing cats. Stabilizing the food resources available and by limiting the number of cats in the colony will cause any new acquisitions to the colony to have smaller and fewer litters and make it possible for the caretaker to intercede with prompt sterilization.
The American Society for the Prevention of Cruelty to Animals considers TNR to be "the only proven humane and
effective method to manage feral cat colonies" [16]. Although no single control method is suitable for all situations
the American Association of Feline Practitioners [1] supports humane population control methods such as trap-neuter-
return, relocation to managed colonies or appropriate sanctuaries away from threatened wildlife, and where
appropriate, adoption into homes. The goal of colony management should be the eventual reduction of the colony
through attrition, and managed colonies are the interim solution to the problem of free-roaming abandoned and feral
cats. The American Veterinary Medical Association [17] regards responsible TNR as just that.

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