
Sterilization and Vaccination: 70% or Flunk

by Merritt Clifton

Street dog and feral cat sterilization and vaccination efforts must get 70% or flunk.

WEST PALM BEACH, Florida; BANGKOK, Thailand – Bitten by a rabid cat on July 22 at Ocean Reef Park on Singer Island, Florida, feral cat colony caretaker Judy Solomon struggled for weeks to save her cats through legal action, but lost the last round on August 8 when Palm Beach County Circuit Judge Jorge Labarga ruled that she could not be considered the cats' legal owner, and that "There is a public interest in capturing, testing, and euthanizing these animals if necessary."

Meaning well, Solomon had made too many basic mistakes, beginning with failing to accurately identify the number of cats she was dealing with. She testified that she had reduced the population from about 36 to as few as five – but there were actually 16 cats in the vicinity. Not knowing how many cats there were, she did not manage to get all of them vaccinated against rabies. She maintained the colony in a public place, in proximity to protected wildlife habitat, each a circumstance sure to create controversy even without a rabies outbreak.

In the end, Solomon inadvertently created an exhibit for those who argue that attempting to sterilize and vaccinate street dogs and feral cats is costly, dangerous, and futile. After she was bitten, Palm Beach County animal control officers tried to capture the cats until one of them was also bitten. The county then called in USDA Wildlife Services to complete the job.

The city of Palm Beach seized the opportunity to enforce a bylaw that officials say prohibits feeding,



sterilizing, and vaccinating feral cats. The Palm Beach council voted unanimously to buy 20 traps, to enable the animal control department to eradicate all 32 of the local feral cat colonies that Palm Beach Cat Rescue and Humane Society founder Catherine Bradley has monitored and tried to control for about 15 years.

"We don't establish the colonies. The cats establish the colonies," Bradley tried to explain.

Police chief Michael Reiter estimated that as many as 1,400 feral cats are at large on Singer Island, doubting that they could ever all be eliminated.

A parallel situation developed in Bangkok, Thailand, where "authorities admit neutering is not working," Vaudine England of the *South China Morning Post* wrote on August 26.

"We have reallocated the money because our plan to sterilize stray dogs has failed to achieve its goals," said Bangkok health department director Krit Hinzanras, MD.

"Instead of sterilizing 30,000 dogs by the end of September as planned, only 5,200 have been sterilized since June 1," England explained. "City officials found it difficult to catch the dogs, and not enough veterinarians were available to perform the surgery."

The Bangkok program began in May. All of the estimated 120,000 dogs on the streets of the city were supposed to have been microchipped, vaccinated, and sterilized within one year by the 23 Bangkok city veterinarians, plus 39 more veterinarians hired for the campaign. But many of the new positions went vacant.

Now, Hunranras told England, the dog-catching bounty will be increased from about 19¢ apiece to 50¢, and kennels will be built to house the captured dogs, in lieu of sterilizing them and returning them to their capture points.

Already keeping about 600 street dogs at two city shelters, Hunranras reportedly anticipates taking in as many as 12,000.

Yet removing the dogs from the habitat will make more refuse and rat carcasses available to those who escape the catchers. These elusive dogs will swiftly breed and raise more puppies to replace the dogs who have been taken. Soon there will again be as many dogs as ever on the streets, plus all the kenneled dogs to feed – or kill, or because Thailand is a Buddhist nation with strong scruples against directly killing dogs, allow to die from fighting, disease, and starvation, as was for decades the norm in Taiwanese pounds, and at some pounds still is.

The Animal Protection Law, adopted by Taiwan in 1988, was supposed to end the practice of killing dogs through passive neglect, but did not, vice secretary general Chi Shu-ying of the Life Conservationist Association and Wu Hung, chair of the Environment and Animal Society of Taiwan, jointly charged in March 2002 after finding starving dogs cannibalizing the dead at the Chian Township pound in Hualien County.

The pound was fined and two staffers were fired, Sandy Huang of the *Taipei Times* reported, but an organization called the World Alliance for Stray Animals sued the Taiwan Council of Agriculture Bureau of Epidemic Control and Quarantine anyway, for alleged nonenforcement of the Animal Protection Law.

Why 70%?

Sterilization and vaccination of either street dogs or feral cats can quite effectively reduce the homeless

animal population and almost eradicate rabies. The number of feral cats killed by U.S. animal shelters has declined by two-thirds since neuter/return became popular 10 years ago, for example, and despite the Singer Island fiasco, rabid feral cats are rarely detected – but the results are only seen if the work is done on an adequate scale.

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Sterilizing and vaccinating 70% of the street dog or feral cat population in any given locale is the minimum standard for success, but there is no “gentleman’s C” in grading this kind of test. Reach 70% and the effort earns an A for All’s well, because then the odds that animals will meet who are capable of infecting or reproducing with each other drop to the vanishing point.

Fall short of 70%, however, and a sterilization and vaccination project will get a big F for fecund animals, fearful people fleeing dog packs, feline feces in gardens and children’s sandboxes, and frothing-at-the-mouth critics flinging allegations of fraud.

Impatient politicians will re-institute the high-volume killing campaigns that have failed to lastingly reduce street dog and feral cat populations despite more than 1,000 years of effort in some parts of the world. Years may pass before sterilization and vaccination get another chance – which will not be a fair chance until and unless the resources needed to reach 70% are available.

To avoid becoming entangled in unfair tests, advocates of sterilizing and vaccinating street dogs and feral cats need to learn to promise only what they can deliver. For example, sterilizing a lesser percentage of the animals at risk somewhere will not bring any visible reduction in numbers. Instead, the dogs or cats who have not been sterilized will have less competition for food and cover, and will be able to raise larger litters.

If the carrying capacity of the habitat has already been reached, the larger litters may experience higher mortality, through predation, starvation, or disease,

and sterilizing only 10% or 20% of the street dogs or feral cats per year might over time produce the sum of 70% sterilized. But humans typically consider street dogs and feral cats intolerably abundant long before their populations ever approach carrying capacity.

Animal aid societies often introduce sterilization and vaccination programs on a limited scale, of economic necessity. Yet acceding to economic reality must not be confused with economic prudence, because sterilizing and vaccinating 70% can be done most economically by getting to 70% within a single breeding cycle.

Further, the most effective demonstration a small and poor group can make of the value of sterilization and vaccination is to concentrate the effort on a particular building, block, or neighborhood, within which 70% can be realized. Scattering efforts beyond that range usually will have little or no demonstrative value, because the results will be almost invisible.

“We go into areas and sterilize, take out animals who are beyond help and so on, and if in six months’ time we went in again and could see a difference, we could say the destruction [of about 1,400 dogs and cats per month] was worth it. But when we go back six months later and find we are starting again at square one, it becomes soul-destroying,” admitted Animal Welfare Society chair June Woodman, of Western Cape, South Africa, in a recent edition of the South African magazine *Animal Voice*.

Reality is that going into each area the Animal Welfare Society visits at six-month intervals is probably foredoomed to fail. Yet focusing efforts on a single area might create an influential and inspirational model, which other small organizations might emulate.

Vet Skills

The sterilization volume that Bangkok set out to do should not have been impossible. The 23 veterinarians already on the city staff could have reached the summer goal of 30,000 surgeries by doing an average

of 20 apiece per working day – about half the pace of the top U.S. shelter vets.

In Clinton, an upstate New York town of just 6,000 people, the sanctuary organization Spring Farm Cares financially assisted 25,000 dog and cat sterilizations between September 1999 and July 2002, working with private practice veterinarians scattered throughout a six-county rural area. Bangkok should have been able to take that approach at least as effectively, if just finding enough veterinarians was in itself the problem.

In truth, the biggest impediment to rapid sterilization progress in most of the world now – apart from the lack of access to injectible immunocontraceptives and chemosterilants which could eliminate the need for time-consuming surgery – is lack of sterilization skill among veterinarians who have rarely been formally trained to operate on small animals, and have not learned the high-speed techniques which now prevail in the U.S.

Jeff Young, DVM, who teaches sterilization surgery abroad for Spay/USA, recently told ANIMAL PEOPLE that he has come to expect that the veterinarians for whom he performs demonstrations will not know that a spay incision should ideally be very short to prevent infection and promote faster healing, will not know how to use a spay hook, and will not understand many basic principles of maintaining antiseptic conditions. Typically, Young finds, he is training veterinarians who learned most of what they know in commercial agriculture. Many rarely if ever performed internal surgery during their previous practice, and seldom treated dogs and cats.

That does not mean that they are necessarily bad vets, Young said, but it means that they must be willing to master new skills in order to reach an acceptable rate of speed and safety for a sterilization specialist.

Beyond the lack of veterinarians with good sterilization skills, underdeveloped nations typically also lack veterinary technicians. A good team of vet techs can do all the preparation work on each dog or cat who is to be sterilized, and can even suture the incisions

after each surgery, freeing veterinary time to operate on more animals.

Some nations, however, still have virtually no vet techs. Others have only informal vet tech teaching programs, in which each veterinarian trains his/her own help, while no one trains vet techs available for hire.

Young is soon to open a clinic he has been building with his own funds in Slovakia. His idea is to teach there by doing. He picked Slovakia partly because the location is easily accessible from much of eastern Europe, ideal for a training facility.

Revaccination

In theory, an aggressive global vaccination campaign using both injectible and oral vaccines could eradicate canine rabies entirely, eliminating that concern even before sterilization brings the street dog population into permanent check.

In actuality, street dog vaccination progress in much of the world is impeded by the perceived need to revaccinate the dogs at frequent intervals to maintain rabies immunity – which diverts personnel and equipment into endlessly recapturing dogs who have already been treated, instead of catching those who have yet to be vaccinated.

The standard Indian ABC protocol, for example, requires revaccination every 11 months, on the presumption that obsolete locally manufactured vaccines may be used, and that they may lose potency due to inconsistent refrigeration.

Those problems occur – but it is both more effective in terms of preventing rabies, and much less costly in the long run, for an ABC program to purchase a reliable veterinary refrigerator with a backup power source, and use quality vaccines that last three years, than to waste resources doing any revaccination before the 70% vaccination and sterilization targets are reached. Once the 70% targets are reached, which should be in under three years in most locales, if the effort is well-directed, revaccination can proceed as necessary. However, since three years is close to the

life expectancy of a street dog, relatively few dogs will have to be recaptured each year if the work proceeds on a three-year cycle. In addition, even if dogs vaccinated in the first year of a three-year cycle lose their rabies immunity by the end of the third year, the two-thirds of the dogs who are vaccinated in the second and third years will keep the background vaccination level close to 70%: high enough to keep any rabies outbreaks from spreading.

Moscow Gets It

Beyond the shortages of skilled veterinary personnel and the revaccination issue, Indian ABC programs are often crippled by political gamesmanship. Responsibility for sterilizing street dogs tends to be divided in most major cities among nonprofit humane societies, which typically work with the best efficiency they can manage, and government agencies, which perpetually fall short.

As August 2002 ended, the city ABC program in New Delhi was reportedly sterilizing just 1,200 dogs per year. Jeff Young has often sterilized more dogs by himself in just six weeks. Two serious maulings of small girls by street dogs brought to light in Pune that the city dogcatchers had allegedly not delivered any dogs to the local ABC clinic in more than a year. An organization called Stray Dog Free Bangalore meanwhile sued the city of Bangalore, trying to halt public funding of the ABC program there in favor of resuming high-volume dog-killing.

But India at least has ABC programs. Also in late August 2002, city veterinarian Mario Arriola of Zamboanga, the Philippines, built a gas chamber that kills dogs with fumes from car exhaust, and announced his intention of killing at least 10,000 street dogs with it. His staff had reportedly captured about 100 dogs since a rabid dog bit 17 Zamboanga residents on April 23, touching off a regional panic.

Police in Semporna, Malaysia, shot 200 of 700 dogs believed to be at large in the neighborhood where Mohd Nasran, age 6, was on August 18 killed by two dogs and partially eaten.

In Sibul, Malaysia, public health standing committee

chair Yiu Sie Ming, MD, told *The Sarawak Tribune* that, “Despite all our efforts to get rid of dogs, their number seems to grow. It is estimated that there are now more than 10,000 stray dogs here.”

The need to introduce high-volume sterilization and vaccination might have seemed obvious, but Ming only promised to try to increase the killing, recently proceeding at the rate of about 70 dogs per month.

The same lesson was ignored in Armenia, where bounty hunters killed 4,000 street dogs during 2001, then killed as many during the first five months of 2002.

Despite the futility of trying to keep street dog and feral cat populations down by killing, lethal responses remain politically popular because they produce quickly visible results that temporarily quell public concern, appear to cost little despite being more expensive in the long run than sterilization and vaccination, and – often – can be managed to create patronage jobs.

But there seemed to be good news from Moscow, where recently appointed animal control chief Tatiana N. Pavlova in mid-2001 replaced catch-and-kill with sterilization and vaccination.

“Several years ago, biologists surveyed Moscow and determined that its garbage bins and Metro stations support a stable population of about 25,000 homeless dogs,” Douglas Birch of the *Baltimore Sun Journal*

wrote in March 2002. “These strays occupy an ecological niche in Russia’s capital. Rounding up and killing them never made much difference. Exterminate a dog, the biologists say, and another will take its place. But replace fertile females with sterile females, and the population will gradually decline.”

Pavlova told Birch that she continues to have trouble with private animal control subcontractors who bill the city for sterilizations not performed, and kill the dogs they catch instead.

But Birch indicated that Pavlova, a longtime prominent animal advocate, seems to have swung public opinion firmly to her side.

This article was originally published in Animal People in October 2002.

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