Alley Cat Rescue and our network of colony caretakers and veterinarians have successfully trapped and sterilized tens of thousands of feral cats. With over 30 years of experience working with feral cats, we have put together this chapter as a guide for veterinarians and their staff, who may not have previously worked with feral cats.

The most important thing to keep in mind is that the wild nature of feral cats presents a unique challenge when treating them. Therefore, the less you handle them, the safer it is for both veterinary staff and for the cats. Feral cats can be treated without mishaps by using the proper equipment and implementing these simple steps and procedures.

**Preliminary Plans**

When planning a colony management program, the caretaker should consult a veterinarian prior to trapping. The caretaker should note: the size of the colony (adults and kittens); the health of the colony (Do there appear to be sick or injured cats?); and if there appear to be any tame or adoptable cats in the colony. This information is pertinent to devising a proper plan of action. It is difficult to guarantee that the cats will be trapped on an exact schedule. Caretakers may not know the exact number of cats, and they may not be able to predict either the weather conditions or their luck with trapping.

Most Trap-Neuter-Return (TNR) projects, especially with colonies, require flexibility and patience from both the client and the veterinarian. ACR recommends veterinarians draft a list of what they require or expect of their clients. This should include hours of operation, the procedures caregivers need to follow (with the important message that the cats must remain in their traps), and the terms of payment, including whether some of the cost is a donation by the clinic. The caretaker should also let the clinic know if the cats will be returned to the outdoor colony or kept for possible adoption, fostering, barn homes, etc.

It is important to remember that the cat’s well-being is the top priority. No cat should be exposed to any danger or allowed to become too stressed while remaining in the trap. Cats should have little human contact after surgery and should be allowed to recover in a calm, quiet environment, with traps or cages covered by blankets or towels.

**Fundraising and Payment Plans**

Payment plans should be worked out ahead of time. Both caretaker and veterinarian must remember that while clinics cannot function without adequate remuneration, a caretaker attempting to manage
a colony usually has limited resources and is working to help resolve a community problem using their own personal funds. A workable plan usually can be devised to suit both veterinarians and caretakers. ACR provides resources on our website for finding funding and listings of low-cost clinics in the U.S. Caretakers can also contact SPAY USA (800-243-SPAY), which maintains a national registry of low-cost spay/neuter service providers. There are also national low-cost sterilization programs available. Veterinarians can participate in the Friends of Animals subsidized program (800-321-PETS), which reimburses veterinarians for part of their surgical costs.

**Equipment and Handling**

Having the proper equipment is vital when working with feral cats. Special traps, squeeze-side cages, nets, restraint modules, and cages to house the cats after surgery are all necessary items. All equipment containing feral cats must have large notices attached that read, “Warning! This cat may bite.” A small transfer cage, which fits against the sliding door of the trap, can be used to move the cat if necessary.

Some veterinarians tranquilize feral cats by tipping the trap on its side. It is easier to immobilize them while they are still in their traps. Feral cats should be handled only when tranquilized. (For information on purchasing equipment, refer to the Helpful Resources listing at the end of the handbook.)

**Pre-Exposure Rabies Vaccinations**

As a precaution, all individuals working with feral cats should receive pre-exposure rabies vaccinations. Refer to “Steps for Successful and Safe Trapping” for more information on rabies vaccines for humans, and to the “Zoonotic Diseases” chapter for information on additional health hazards.

**Surgery**

Male cats who are part of a TNR program should be sterilized through castration, while female cats should receive an ovariohysterectomy. Castration is the complete removal of the testes in male cats, and ovariohysterectomy is the removal of the uterus, fallopian tubes, and ovaries in females. Vasectomies and hysterectomies are NOT recommended; leaving the testicles and ovaries intact will perpetuate nuisance habits such as fighting, yowling, and spraying. While several studies suggest that Trap-Vasectomy-Hysterectomy-Release (TVHR) could be equally or more effective at population control (Mendes-de-Almeida et al., 2011; McCarthy et al., 2013; Ireland & Neilan, 2016), more recent research indicates that TNR is significantly more successful at reducing nuisance behaviors (Ireland & Neilan, 2016; Janeczko, 2019). Therefore, the traditional method of TNR is preferred over the TVHR method.

In England, where these programs have been implemented for over four decades, flank incisions are used for females (who are not pregnant), as this could possibly lessen the chance of infection and evisceration (internal organs protruding through the incision). However, most U.S. veterinarians perform the midline incision; proper use of inner and outer sutures minimizes the risk of evisceration when using the midline method. (Refer to “Left Lateral Flank Spay Technique” for more information on this procedure.)

While the cat is still under anesthesia, an overall physical exam should be performed so any other conditions can be addressed.
The cat should be examined for wounds, and any lesions should be examined for parasitic or fungal infections and treated accordingly. Eye and ear infections should also be treated. The cat’s mouth and teeth should be examined; any decaying teeth should be removed. Any matted or painfully knotted fur should also be removed.

A long-lasting antibiotic, such as Convenia, should be administered to prevent postoperative infections and to treat any other underlying infections. If antibiotics are needed after release, they should be given to the caretaker, who can mix crushed tablets or liquid medication into moist food. It is also recommended that a pain medication such as Trobutrol be administered.

**Anesthetics**

A number of general anesthetics that cause minimal post-surgical trauma are available for surgical procedures. Some veterinarians use a combination of Telazol, Torbutrol, and Propofol plus Isoflurane, an inhalant gas, which helps keep the cats at an appropriate level of sedation. Each veterinarian will use their own drugs, but these are suggestions of what vets ACR has worked with have used successfully over the years.

**Sutures**

Absorbable sutures and surgical glue should be used to avoid the trauma of having to retrap cats for suture removal. PDS (Polydioxanone) sutures in size 3-0 are recommended for internal closure, and Vetbond by 3M for external closure. The surgical glue is very important as it will prevent any chance of evisceration.

**Ear-Tipping**

Left ear-tipping is the preferred universal method for identifying sterilized feral cats belonging to managed colonies (Griffin et al., 2016). Ear-tipping will easily allow the caretaker to spot a new cat entering the colony and identify cats who have already been sterilized. Any ear-tipped cat trapped in error can easily be identified within the trap and released, and animal control staff will see that the cat comes from a managed colony and the cat can then be returned to the caretaker.

All feral cats, while still under general anesthesia, should have the top quarter inch of their left ear removed. The shape of this ear is then unmistakable, even from a distance. It must be emphasized that if too much of the pinna is removed, the ear looks cropped and may be aesthetically unacceptable to the cat caretakers. If the cut is not straight, the silhouette is not distinctive enough. Ear-notching is NOT recommended, because this can be confused with an injury from a fight.
American Veterinary Medical Association recommends using multiple forms of identification in conjunction with ear-tipping, especially reliable methods such as microchips (Griffin et al., 2016).

**Vaccinations**

Feral cats who are over one year old should be given a three-year rabies vaccine, along with a distemper vaccine (FVRCP) to prevent Rhinotracheitis, Calici, Panleukopenia, and Chlamydia psittaci. It is also highly recommended that a feline leukemia (FeLV) vaccine be administered, regardless of whether the cat is tested for the disease. ACR's veterinarians administer a distemper vaccine that includes the FeLV vaccine; using this combination vaccine saves money in the long run over administering separate distemper and FeLV vaccines.

The American Veterinary Medical Association recommends that all cats be vaccinated for common feline viral infections (2017). Sterilization has been repeatedly shown to decrease susceptibility to these infections (Gates et al., 2016; Garigliany et al., 2016; Stavinsky et al., 2017), but recent research also suggests a correlation between increased caretaker involvement and pathogen transmission within feral cat colonies, likely related to population density (Hwang et al., 2018).

**Testing for Viral Diseases**

Testing for viral diseases, such as FeLV and FIV, in feral cat colonies should be optional, not mandatory. As discussed in earlier chapters, the rate of transmission for FeLV and FIV in feral cats is very low, and sterilization will decrease the spread of these infections. Also, funds for TNR programs are usually limited, therefore resources are better spent on sterilization and rabies vaccines rather than on testing. (For more information, refer to the section on “To Test or Not to Test?” in the chapter, “Health Care for Feral Cats: Guidelines for Colony Caretakers.”)

**Kittens**

Early age spay/neuter is highly recommended and can be performed on kittens who are eight- to 16-weeks-old, as long as they weigh at least two pounds. Please make sure they recover on heating pads and their body temperatures are closely monitored. To prevent hypoglycemia, kittens under four months of age should only fast for three to four hours prior to surgery, and they should also be encouraged to eat a small meal within one hour of recovery from surgery. In addition, all kittens should be examined for signs of upper respiratory infection. (Please refer to the chapter, “Early Age or Pediatric Spay/Neuter” for more detailed information.)

**Pregnant and Lactating Females**

Colony caretakers should be advised against trapping lactating females if possible, as her kittens could die from starv-
tion and exposure while she is at the veterinary clinic. However, if a lactating female is inadvertently trapped, and her kittens can be located and fostered, the mother cat can be spayed through a flank incision, or even a midline incision, as long as the incisions are well sutured. Once fully recovered from anesthesia, a lactating female can be returned to the colony and reunited with her kittens to resume nursing, or she can be fostered along with her kittens.

Because healthy cats are euthanized in shelters every day and TNR funds are usually limited, Alley Cat Rescue recommends that pregnant cats who are not far along should be spayed. If the caretaker wants to keep a pregnant cat, she should be fostered at the veterinary clinic or in a home until the kittens are born and have been weaned, and then she be sterilized along with the kittens. Ultimately, the final decision should be made based on what is safest for the mother cat. All options should be discussed with the cat’s caretaker prior to trapping, so that fostering arrangements can be made if necessary.

More information on safely fostering feral cats can be found in the chapter, “Feral Kittens and Pregnant Cats” chapter.

**Postoperative Care**

No cat should leave the clinic until fully conscious. Male cats need a minimum of an overnight stay in the clinic or in a home, where their recovery can be monitored. Female cats, especially previously pregnant cats, need to be kept longer to recover properly; at least two or three days is recommended. Cats who appear to not be recovering well from surgery should be rechecked by a veterinarian prior to release. If a cat is not fully conscious after six hours, she may need fluids.

It is safest to allow the cat to recover in a large carrier or in a trap, because these can then be used for direct transportation to the colony site. This will lessen the risk of injury to humans and trauma to the cats, which can often occur while transferring cats from a cage to a carrier and vice versa. Cover the trap or carrier with a sheet or towel to lessen the cat’s stress.

If feral cats stay in cages at the clinic, remember they are wild. A small enclosure/den that can be secured shut can be placed inside of a cage. These boxes give feral cats somewhere to hide and will make them feel more secure. This will also prevent the cat from escaping, and make it safer and easier for staff to clean the cage. A sheet or towel should be pulled over the front of the cage. Make sure the cage is securely locked to prevent escape and write on the cage card, “Warning! This Cat May Bite.”

Never underestimate the ability or determination of feral cats to escape. Exercise great caution when changing cat litter or when feeding. Their sometimes docile appearance can be very deceptive, and they may lunge at the door in an attempt to escape.

### What to Do if a Feral Cat Escapes in the Clinic

If a feral cat escapes from a trap or cage while in the clinic, a special net can be used to recapture the cat. Under no circumstances should anyone try to catch the cat by hand. Do not attempt to throw a towel or blanket over the cat; this is dangerous because the cat can still attack.

If the cat hides in an inaccessible place, it is best to set a trap. Cats can be left for three days without food to make them hungry enough to enter the trap. Water should be left for them outside of the trap.
Euthanasia

Veterinarians and colony caretakers should discuss guidelines for euthanizing feral cats prior to trapping. Most feral cats are healthy, and common illnesses and infections are easily treatable with antibiotics and parasite control measures. However, for conditions that require long-term, in-house care, but where such treatment is not possible, it is more humane to euthanize the cat than it would be to release her back outside. In extreme cases of injury or illness that exceed medical capabilities, the cat should also be euthanized. Euthanasia should only be practiced when all other options have been exhausted.

Conclusion

Feral cats can be difficult to handle and present certain challenges for a veterinarians and staff, but by following the simple steps mentioned above, TNR programs can be implemented with minimal mishaps. Communicating openly will ensure that the veterinarian and caretaker are on the same page.