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William D. Fitzwater
*Director New Mexico Outdoor Communicators*

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**William D. Fitzwater**
Director
New Mexico Outdoor Communicators
7104 Bellrose Avenue, NE
Albuquerque, New Mexico 87110

# HOUSE CATS (Feral)

Fig. 1. House cat, *Felis domesticus*

## Damage Prevention and Control Methods

**Exclusion**

Practical for protecting small poultry and mammals.

**Cultural Methods**

Clean up debris, burn refuse and brush piles, seal buildings, reduce habitat and food sources.

**Repellents**

Many products are registered but are practical only for small areas.

**Frightening**

Dogs.

**Toxicants**

None are registered.

**Fumigants**

None are registered.

**Trapping**

Box traps.

No. 1, 1.5, or 2 leghold traps.

No. 220 Conibear® or body-gripping traps.

Snares.

**Shooting**

Centerfire rifles, .22 rimfire rifles, and shotguns are effective for quick removal.

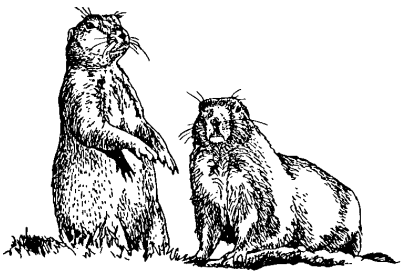
**Other Methods**

Responsible care by cat owners.

## Identification

The cat has been the most resistant to change of all the animals that humans have domesticated. All members of the cat family, wild or domesticated, have a broad, stubby skull, similar facial characteristics, lithe, stealthy movements, retractable claws (except the cheetah), and nocturnal habits.

Feral cats (Fig. 1) are house cats living in the wild. They are small in stature, weighing from 3 to 8 pounds (1.4 to 3.6 kg), standing 8 to 12 inches (20 to 30.5 cm) high at the shoulder, and 14 to 24 inches (35.5 to 61 cm) long. The tail adds another 8 to 12 inches (20 to 30.5 cm) to their length. Colors range from black to white to orange, and an amazing variety of combinations in between. Other hair characteristics also vary greatly.



**PREVENTION AND CONTROL OF WILDLIFE DAMAGE — 1994**

**Cooperative Extension Division**
**Institute of Agriculture and Natural Resources**
**University of Nebraska - Lincoln**

**United States Department of Agriculture**
**Animal and Plant Health Inspection Service**
**Animal Damage Control**

**Great Plains Agricultural Council**
**Wildlife Committee**

## Range

Cats are found in commensal relationships wherever people are found. In some urban and suburban areas, cat populations equal human populations. In many suburban and eastern rural areas, feral house cats are the most abundant predators.

## Habitat

Feral cats prefer areas in and around human habitation. They use abandoned buildings, barns, haystacks, post piles, junked cars, brush piles, weedy areas, culverts, and other places that provide cover and protection.

## Food Habits

Feral cats are opportunistic predators and scavengers that feed on rodents, rabbits, shrews, moles, birds, insects, reptiles, amphibians, fish, carrion, garbage, vegetation, and leftover pet food.

## General Biology, Reproduction, and Behavior

Feral cats produce 2 to 10 kittens during any month of the year. An adult female may produce 3 litters per year where food and habitat are sufficient. Cats may be active during the day but typically are more active during twilight or night. House cats live up to 27 years. Feral cats, however, probably average only 3 to 5 years. They are territorial and move within a home range of roughly 1.5 square miles (4 $km^2$). After several generations, feral cats can be considered to be totally wild in habits and temperament.

## Damage

Feral cats feed extensively on songbirds, game birds, mice and other rodents, rabbits, and other wildlife. In doing so, they lower the carrying capacity of an area for native predators such as foxes, raccoons, coyotes, bobcats, weasels, and other animals that compete for the same food base. Where documented, their impact on wildlife populations in suburban and rural areas—directly by predation and indirectly by competition for food—appears enormous. A study under way at the University of Wisconsin (Coleman and Temple 1989) may provide some indication of the extent of their impact in the United States as compared to that in the United Kingdom, where Britain's five million house cats may take an annual toll of some 70 million animals and birds (Churcher and Lawton 1987). Feral cats occasionally kill poultry and injure house cats.

Feral cats serve as a reservoir for human and wildlife diseases, including cat scratch fever, distemper, histoplasmosis, leptospirosis, mumps, plague, rabies, ringworm, salmonellosis, toxoplasmosis, tularemia, and various endo- and ectoparasites.

## Legal Status

Cats are considered personal property if ownership can be established through collars, registration tags, tattoos, brands, or legal description and proof of ownership. Cats without identification are considered feral and are rarely protected under state law. They become the property of the landowner upon whose land they exist. Municipal and county animal control agencies, humane animal shelters, and various other public and private "pet" management agencies exist because of feral or unwanted house cats and dogs. These agencies destroy millions of stray cats annually.

State, county, and municipal laws related to cats vary. Before lethal control is undertaken, consult local laws. If live capture is desired, consult the local animal control agency for instructions on disposal of cats.

## Damage Prevention and Control Methods

### Exclusion

Exclusion by fencing, repairing windows, doors, and plugging holes in buildings is often a practical way of eliminating cat predation and nuisance. Provide overhead fencing to keep cats out of bird or poultry pens. Wire mesh with openings smaller than 2.5 inches (6.4 cm) should offer adequate protection.

### Cultural Methods

Cat numbers can be reduced by eliminating their habitat. Old buildings should be sealed and holes under foundations plugged. Remove brush and piles of debris, bale piles, old machinery, and junked cars. Mow vegetation in the vicinity of buildings. Elimination of small rodents and other foodstuffs will reduce feral cat numbers.

### Repellents

The Environmental Protection Agency (EPA) has registered the following chemicals individually and in combination for repelling house cats: anise oil, methyl nonyl ketone, Ro-pel, and Thymol. There is little objective evidence, however, of these chemicals' effectiveness. Some labels carry the instructions that when used indoors, "disciplinary action" must reinforce the repellent effect. Some repellents carry warnings about fabric damage and possible phytotoxicity. When used outdoors, repellents must be reapplied frequently. Outdoor repellents can be used around flower boxes, furniture, bushes, trees, and other areas where cats are not welcomed. Pet stores and garden supply shops carry, or can order, such repellents. The repellents are often irritating and repulsive to humans as well as cats.

### Frightening

Dogs that show aggression to cats provide an effective deterrent when placed in fenced yards and buildings where cats are not welcome.

### Toxicants

No toxicants are registered for control of feral cats.

### Fumigants

No fumigants are registered for control of feral house cats. Live-trapped

cats or cats in holes or culverts can be euthanized with carbon dioxide gas or pulverized dry ice (carbon dioxide) at roughly 1/2 pound per cubic yard (0.3 kg/m$^3$) of space.

### Trapping

***Live Traps.*** Live-trapping cats in commercial or homemade box traps (Fig. 2) is a feasible control alternative, particularly in areas where uncontrolled pets are more of a problem than wild cats. Trap openings should be 11 to 12 inches (28 to 30 cm) square and 30 inches (75 cm) or more long. Double-ended traps should be at least 42 inches (105 cm) long. The cat can be captured and turned over to animal control agencies without harm, given back to the owner with proper warnings, or euthanized by shooting, lethal injection, or asphyxiation with carbon dioxide gas. Sources for commercial traps are found in **Supplies and Materials**. Set live traps in areas of feral cat activity, such as feeding and loafing areas, travelways along fences, tree lines, or creeks, dumps, and garbage cans. Successful baits include fresh or canned fish, commercial cat foods, fresh liver, and chicken or rodent carcasses. Catnip and rhodium oil are often effective in attracting cats.

***Leghold Traps.*** Leghold traps No. 1, 1.5, or 2 are sufficient to catch and hold feral cats (Fig. 3). These traps are particularly useful on cats that are not susceptible to box traps. Place the traps in a shallow hole the size and shape of the set trap. Cover the pan with waxed paper and then cover the trap with sifted soil, sawdust, or potting soil. Place the bait material far enough beyond the trap that the cat must step on the trap to reach it. Traps can be set at entrances to holes where cats are hiding, entryways to buildings, or near garbage cans. Domestic cats caught in leghold traps should be handled with care. Cover the cat with a blanket, sack, or coat; pin it down with body weight; and release the trap. Catch poles can also be used to subdue trapped cats.

***Conibear® or Body-gripping Traps.*** Conibear® or body-gripping traps are lethal traps that work like

1 - Door up in grooves guiding its fall.
2 - Treadle board resting on a fulcrum. (Fulcrum made by nailing a small piece of wood across floor of trap. Weight of animal on back part of treadle depresses treadle, pulls back trigger wire and allows door to fall.)
3 - Trigger wire. (Three-gauge wire is connected to a screw eye at one side of treadle and back of fulcrum, extended along side of box to top of trap and passed through a second screw eye. When trap is set, door rests on the projecting end of trigger wire.)
4 - Back wall with 3-inch square opening. (Inside of opening is screened and provided with a tight door on outside to permit observation of captive animal and introduction of a fumigant for its disposal. Door is open when trap is set; closed when fumigant is introduced.)
5 - Uprights containing grooves in which door slides. (Grooves should be greased for easy action of door.)

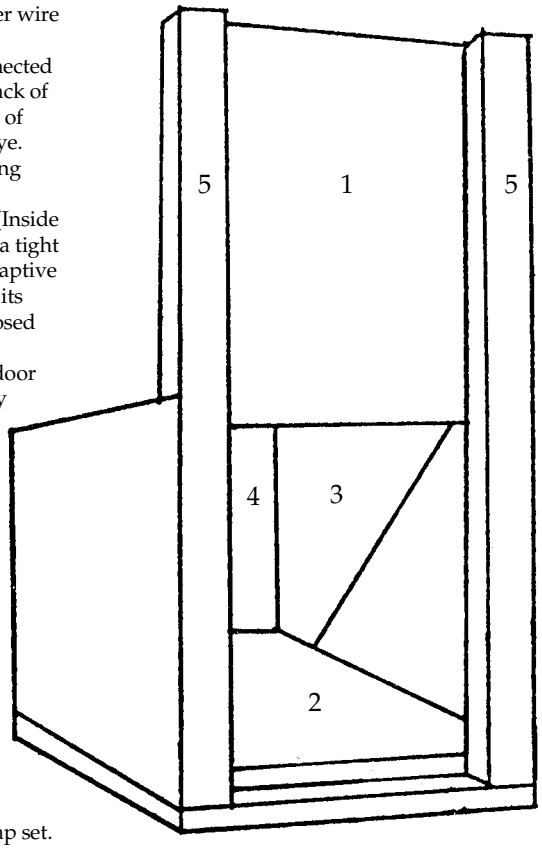



Fig. 2a. Front and partial interior of box trap set.

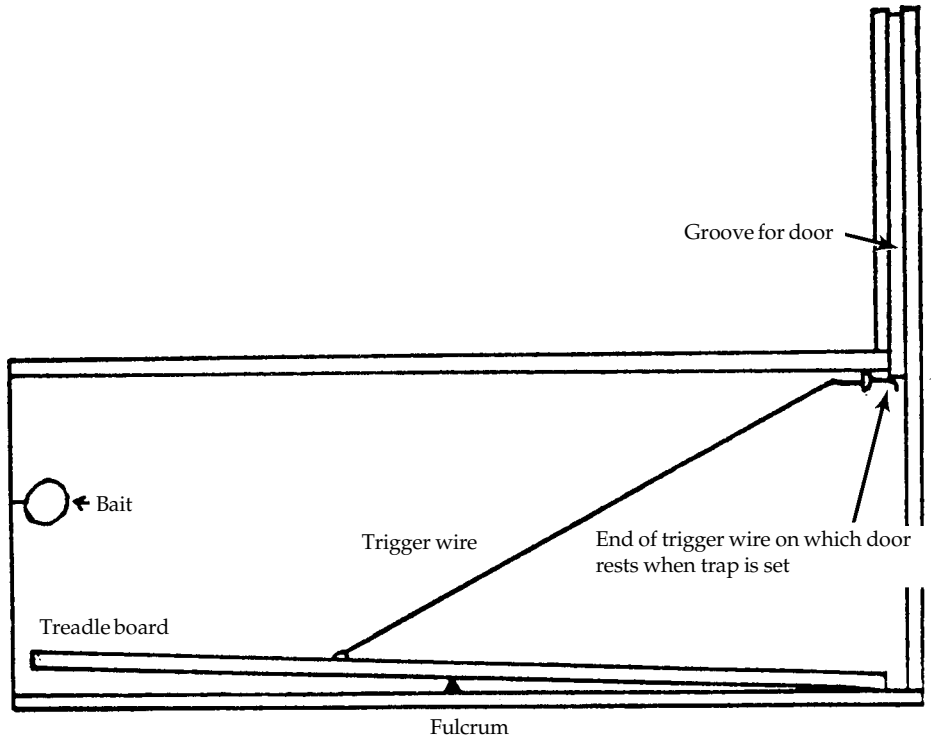



Fig. 2b. Side view of cat trap.

double-jawed mouse traps. They should be set only where no other animals will get into them. The No. 220 size is most effective for cats. Set traps in front of culverts or entry holes, in garbage cans, or boxes with the bait placed in the back (Fig. 3).

***Snares.*** Snare sizes No. 1 and 2 are very effective as live traps or kill traps when set properly. Place snares in entrances to dens or crawlthroughs, in trails in weeds, or in garbage cans, boxes, or other restricted access arrangements where bait is placed (Fig. 4). Sources for snares are found in **Supplies and Materials**.

### Shooting

Feral cats can be shot with .22 rimfire and other calibers of centerfire rifles and shotguns in rural areas where it is safe. In buildings and urban areas, powerful air rifles are capable of killing cats with close-range head shots. Cats can be lured out of heavy cover for a safe shot by using predator calls, elevated decoys of fur or feathers, or meat baits.

### Other Methods

Supplemental feeding of feral or free-roaming house cats will probably have little effect in reducing their depredations on songbirds and other wildlife. Even well-fed cats will often bring home a small prey they have caught and proudly display it to their owners without eating it. Laboratory studies suggest that hunger and hunting are controlled by separate neurological centers in the cat brain, so the rate of predation is not affected by the availability of cat food.

The hunter is often the hunted. Dogs and coyotes, which are adapting to urban environments, are probably the greatest predators of cats, next to humans and cars. Feral cats are often found on the borders of human habitation. Large predators such as bobcats, mountain lions, fox, coyotes, and feral dogs eliminate cats that stray too far afield.

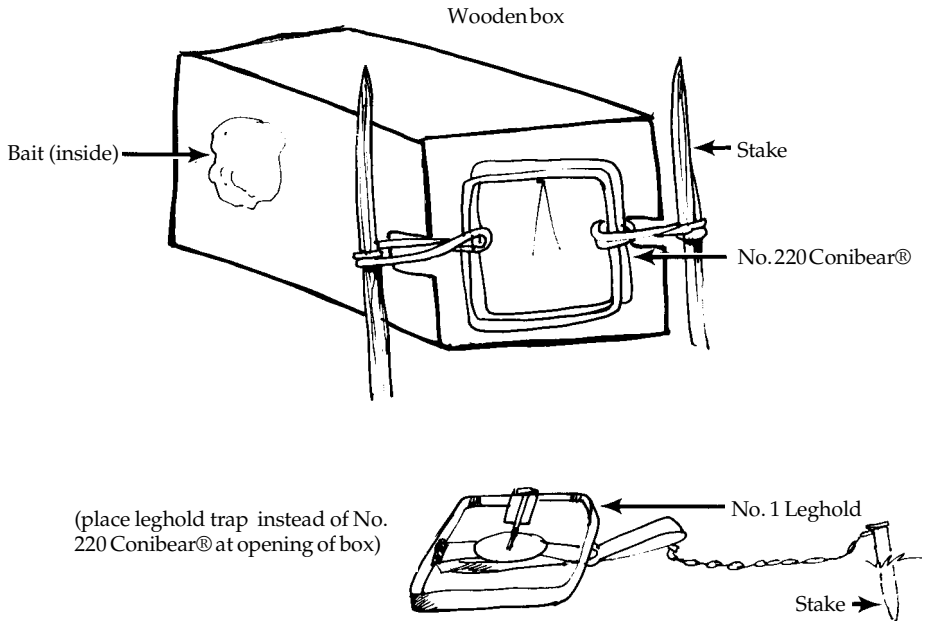



Fig. 3. Cubby set (box set) with Conibear® or leghold trap.

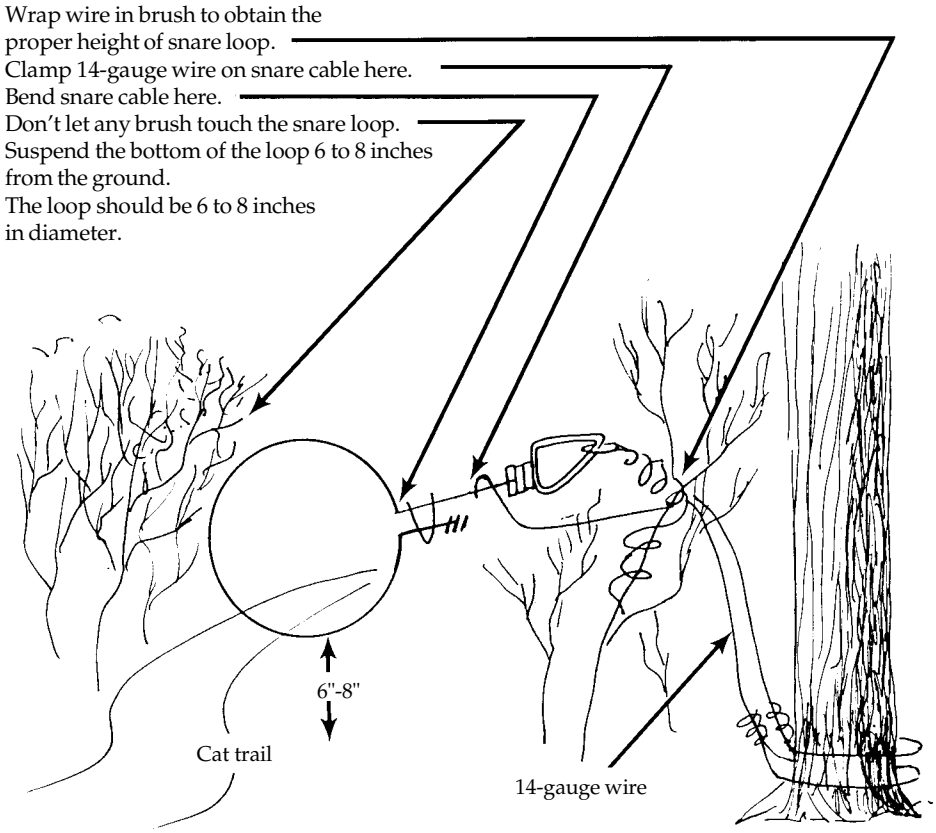



Fig. 4. Trail snare set

In the final analysis, many problems with feral cats could be avoided if cat owners would practice responsible pet ownership. The same licensing and leash laws pertaining to dogs should be applied to cats. Spaying or neutering should be encouraged for household pets not kept for breeding purposes. Neutering is not a cost-effective program for controlling feral populations. Unwanted cats should be humanely destroyed, not abandoned to fend for themselves.

## Economics of Damage and Control

The place of cats in the modern urban world is certainly secure even though their reputation as rodent controllers has not been supported by objective research. Cats have replaced dogs as the most common family pet in the United States. Their owners support a growing segment of the economy in the pet food and pet supplies industries. On the other hand, feral cats are responsible for the transmission of many human and wildlife diseases and kill substantial amounts of wildlife.

## Acknowledgments

I wish to acknowledge M. L. Boddicker, who was the author of the "House Cats" chapter in the 1983 edition of *Prevention and Control of Wildlife Damage.*

Figure 1 by Emily Oseas Routman.

Figure 2 adapted from Boddicker (1978), "Housecats" in F. R. Henderson, *Prevention and Control of Wildlife Damage*, Kansas State Univ., Manhattan.

Figure 3 by M. L. Boddicker, adapted by Jill Sack Johnson.

Figure 4 courtesy of Gregerson Manufacturing Co., adapted by Jill Sack Johnson.

## For Additional Information

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**Editors**

Scott E. Hygnstrom
Robert M. Timm
Gary E. Larson