



ANIMAL PREDATORS

MANAGING CANID PREDATORS

The term canid refers to the members of the Canidae family (dog family).

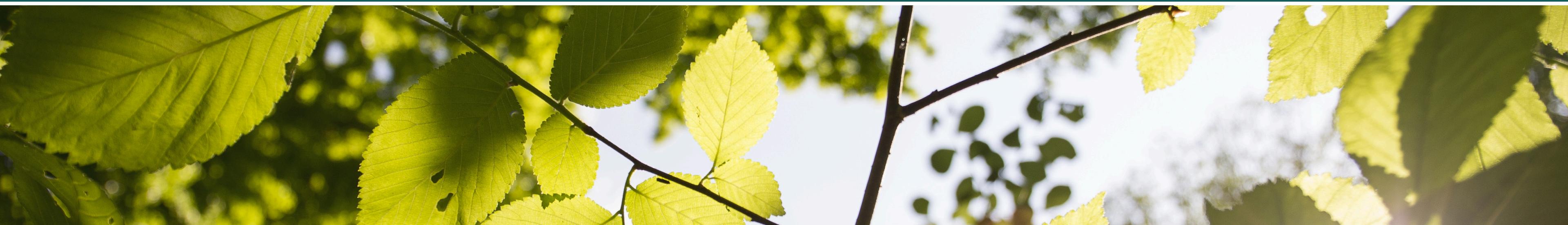
In general, predation problems with foxes are rare.

The most common trapping technique used for foxes is a buried number 1 foot-hold trap (with bait). The bait should be placed between 6 inches and 10 inches in front of the trap. Traps should be placed close to where tracks have been spotted. Traps should be in an open enough spot that the fox can see for some distance.

Traps that are placed outside of an occupied territory, far away from fresh tracks, or up against logs, rocks, or other large objects the fox can't see over have little chance of success.

Gray foxes may enter a live box trap. If you're patient, setting out bait and waiting with a rifle might pay off. Usually, livestock owners will be the only people with sufficient time to do this.

Red fox dens are often quite visible, and denning might be possible. In many states, all foxes are considered a game animal with some legal protection. It's important to know which management methods are legal (and under what circumstances). Both kit foxes (in California and the Southwest) and swift foxes (in the Northern plains) have endangered subspecies. (A subspecies is a regionally distinct member of a species.) When trapping either of these animals for relocation, a number 1 soft-catch foot-hold trap or a live box trap would be appropriate.



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Signs of coyote predation include eyewitness sightings, tracks, the discovery of carcasses with strangulation bites, carcasses that were consumed in place, and livestock that have bites on the rump area (sometimes these bites are quite severe). Coyotes generally kill small animals (up to the size of fawn) by placing a strangulation bite around the throat. Coyotes kill adult deer or sheep by biting them repeatedly in the rump area. There may also be bites to the throat if there's more than one attacking coyote. There will probably be no trace of small-animal prey, and the pack will consume most of an adult carcass.



If a foot-hold trap is used, it must be buried. Since coyotes have extremely fine senses and are difficult to trap, the trap needs to be very solidly bedded so that the animal can't sense any movement under its feet. Usually, a chain between 10 inches and 18 inches long is sufficient. However, on sandy soil, one chain placed on each of two posts may be needed. Some trappers prefer a longer chain on a drag hook; in this case, the chain and drag must be buried under the trap. Note that there can be no sign of the trap or chain when you're trapping coyotes. Once a coyote has had an experience with a trap, it will be almost impossible to catch that coyote again.

A buried or dirt-hole set with bait is usually effective. Carcass bait placed about 50 feet from the buried trap is also effective. A scent post with coyote urine (commercially available) also works well as bait. Position the bait and trap so that the coyote will step on the trap while investigating the post. The foot or body snare is also commonly used. Body snares are used on trails, most commonly under fences. Other methods of population reduction include sport shooting, aerial shooting, denning, and the use of the livestock protection collars. As mentioned earlier, the livestock protection collar must be registered by the EPA for use in a particular state. Furthermore, states have varying individual laws concerning allowable predator management methods.



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Not surprisingly, the presence of wolves in an area causes a reduction in the number of coyotes. This makes sense if you remember that coyotes increased after wolves were eliminated. Wolves consider coyotes to be competitors and will kill them if they find them in their pack territory.

Signs of wolf predation can include eyewitness accounts, knowledge of wolf populations and activities, and howling followed by kills in area. Wolves, like coyotes, lack a distinctive trademark pattern of biting. Wolf kills are distinguished from coyote kills based on several factors, including the size of the track, the size of the prey (a cow calf versus a lamb), and a general knowledge of what animals are at work in the area. Also, tracks around a carcass, a carcass that was consumed in place, live prey animals with extensive bite marks in the rump area, or bites around the nose of a prey animal are indicative of wolf predation.

The techniques that are used to trap wolves are similar to those used with coyotes. However, the foot-hold trap that's used for wolves is one size larger—a number 4. Aerial gunning, denning, and livestock protection collars may or may not be allowed depending on your state, province, and specific situation. In areas where the wolf is listed as endangered, only trapping and relocation is allowed. Foot-hold traps (usually soft-catch or offset) are the trap of choice for relocation. Juveniles must be relocated a long distance, often over 100 miles. The state of Alaska is experimenting with birth control or anti-fertility techniques (both drugs and physical sterilization). This would be an example of population reduction by lowering fertility.

MANAGING FELID PREDATORS

The term felid refers to the members of the family Felidae (cats family). Signs of bobcat predation include tracks; eyewitness accounts; bite marks to the back of a prey animal's head, neck, or throat; claw marks on the sides of prey animals; cached prey; large-size prey; and known populations.

In most states, bobcats are protected furbearers with open and closed seasons. During the closed seasons, animals requiring control would have to be relocated (to relocate a bobcat, you'll probably need to tranquilize it). Sometimes, a bobcat can be caught in a wire box trap baited with fresh bait or a lure (a scent, shiny tin foil, or feathers).

The usual trap used is the number 2 coilspring or number 3 longspring foot-hold. The most successful set is buried at the entrance to a cubby supplied with bait or lure. Sticks should be arranged in a way that will guide the cat to step into the trap.

Sometimes, a trap placed on the ground will work. A drag-and-hook or a chain on a double stake should anchor the trap. Some trappers are using foot snares with mountain lions, and the snare may work for bobcats as well. Traps or snares should be set in prime habitat, since bobcats may seldom use poorer areas of their home ranges.





MANAGING FELID PREDATORS

Signs of lynx predation include bite marks to the back of the head, neck, or on the throat of a prey animal; claw marks in the sides of prey; large size of prey; tracks; known populations in the area; and eyewitness reports. Lynx are generally trapped using the same trapping techniques that are used with bobcats.

Mountain lions are known to prey on livestock, particularly sheep, but also cattle. Occasionally surplus killing occurs, and may be the doings of one individual mountain lion. A study in Colorado showed that surplus killing occurred in clusters.

When depredations occur, there are a number of options:

1. Do nothing and hope the depredations stop (the lion may be a transient).
2. Document the depredations so the livestock owner can file a damage claim.
3. Allow the livestock owner to kill the lion (he may kill the wrong lion).
4. Allow the livestock owner to kill the lion with assistance of a professional.
5. Allow a professional to kill the lion.
6. Allow a professional to trap the lion.
7. If trapped, euthanize (kill) the lion or relocate it. This would be under the advice and assistance of state wildlife personnel.

A mountain lion may be captured in several ways. One way is to track the animal with dogs until it's treed, then shoot or tranquilize it for relocation.

Foot-hold traps are used for mountain lions, and a number 4 trap is recommended. Blind trap sets may be used on a trail, either buried or above ground and baited with a lure (bait, scent, or a strip of tin foil). Blind trap sets may also be buried or placed above ground near a carcass or at a lion kill. A buried trap at a lion kill is usually effective.

When lions are to be trapped for relocation, foot-hold traps can cause foot damage. For this reason, a soft-catch trap or a modified foot snare should be used to minimize injury. A study found that a high rate of success occurred when a buried modified foot snare was used at actual lion kills.



MANAGING MUSTELID PREDATORS

Signs of river otter predation include damaged fish traps, feeding middens (piles of mollusk shells or other debris), and tracks. Other signs of otter are the rounded five-toed track with webbing, scat piles at latrine sites, and shell middens (piles) where the otter has eaten its catch of mussels.

To catch otters, fur trappers use body-gripping traps, or number 3 or number 4 foot-hold traps set in water. Body-gripping traps are set in shallow water runs. A stick suspended over the top forces the animal to swim through the trap. The trap should be set to close from top to bottom.

Foot-hold traps are set in water near the end of a slide, a haul out (a place where an aquatic mammal crawls or pulls itself out of the water), or a beaver dam. The trap is set on a wire so it will slide into deep water, lock there, and drown the animal.

Studies have been done on live trapping for research and relocation purposes. The Hancock beaver trap has been used for this purpose. This trap closes like a suitcase and is sometimes called the suitcase trap. It's very heavy, difficult to set, somewhat dangerous to the trapper, and may cause injury to the animal in it. Researchers have also tested double-jaw foot-hold traps, and these were found to be satisfactory for capturing otters for relocation. First, these traps were boiled to remove any scents. Then, they were buried just below the ground surface at latrine sites (no bait was used). Foot injury was minimal and tooth injury was much less than occurred in the Hancock trap (otters try to chew their way out of the Hancock trap).



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Most depredation reports about fishers concern domestic cats. It's arguable how many cats are killed by fishers, but wildlife authorities are reluctant to grant depredation permits to trap fishers based on reported domestic cat depredation. Most trappers use a medium-sized body-gripping trap on a slanted log or running pole with bait placed so the fisher will go through the trap. Fishers are considered to be valuable furbearers. Some states, such as Pennsylvania, are actively trying to reintroduce them. Fishers can be caught in a baited cage trap for relocation by placing the trap on a running pole as mentioned previously.

Mink predations signs include bite marks on the throats of prey, tracks, eyewitness accounts, and a proximity of wetland.

Depredation reports are uncommon (however, some muskrat trappers complain that mink kill muskrats). To trap mink during the trapping season, most trappers will use a 112 foothold trap set under shallow water, buried under an overhanging bank, or placed in front of a bait cubby. A medium-sized body-gripping trap may also be used in the water and on land. Bait isn't essential, but using sticks to guide the mink into the trap is important. A medium-sized baited box or cage trap can be used to live-trap.

Since martens are uncommon near areas of human habitation, depredation problems are rare or nonexistent. No marten predation on domestic animals has been reported. Prey is limited to wild and small animals only. Marten tracks are shown in Figure 36.

To trap marten, fur trappers place a small (number 0 or number 1) uncovered foot-hold trap in front of a cubby. They use meat baits or commercial scent lures. Body-gripping traps may be set on a slanting log at the entrance to a bait cubby or box. Marten may also be live-trapped for research or relocation.



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Weasel predation signs are variable and circumstantial. A surplus killing of poultry, signs of throat damage in the prey, and the elimination of other predators can lead to the conclusion of weasel predation.

Weasels can be trapped with small foot-hold traps. The traps don't need to be baited, but it can help. Traps should be placed near holes or places that a weasel might investigate. Body-catching traps also work.

Signs of black-footed ferret predation include the typical five-toed track and prairie dog holes that have been plugged (prairie dogs plug their burrow entrances with dirt if there's a ferret around). Cage-traps are used to capture ferrets for research purposes.

Badgers aren't generally known to commit depredations, but they do kill rodents and snakes in burrows. They may also be classed as nuisance animals due to their prodigious burrowing. For this reason, livestock owners may need to have badgers killed or trapped. A badger track is shown in. The value of the badger as a furbearer is minimal, but trappers catch them in coyote traps. They've traditionally been neither protected or persecuted.

To trap a badger, a buried, unbaited number 2 or number 3 foot-hold trap can be placed at the burrow entrance. The trap is placed to one side or the other of the entrance, since badgers walk somewhat straddle-legged. A metal anchor stake should be buried securely in an area well away from the trap, since badgers will dig all around the trap and may even dig a stake loose if placed too close.

A medium-sized body-gripping trap can also be placed in the den entrance, or a badger can be caught in a live trap. However, be prepared to run very fast (only for a short distance) when releasing a badger. They're very aggressive and will make charges at humans.

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Signs of wolverine predation include large prey with throat or head bites, cached prey, cached carrion, tracks, and odors. Wolverines are more apt to be a nuisance in remote areas, where they're known to damage traps, sheds, and dwellings in search of food.

Although conservation efforts are underway, the wolverine may still be harvested or live-trapped. Due to their mustelid curiosity, wolverines aren't particularly difficult to trap, but they're difficult to hold. They're so strong and manipulative that they seem able to escape from almost anything. However, a new type of live box trap made of heavy logs is able to hold wolverines. The wolverine can't chew its way out of the trap before the trapper can check on it.

Typical signs of skunk predation include tracks, eyewitness accounts, trademark smells, loss of eggs in a henhouse, or a surplus killing of hens. Skunk tracks show five toes and have rather long digits, resembling a small raccoon track. Skunk scats are small and usually full of insect parts.

Animal control agents can expect numerous skunk calls. Fortunately, skunks are easy to trap if a cage trap or box trap is used, it's a good idea to wrap it in a blanket or a piece of canvas to avoid being sprayed when you approach the trap (a skunk won't spray in a confined box). Or, use a special skunk trap that's surrounded in sheet metal. Don't try to wrap the cage after it's occupied—it won't work!

In many states, skunks are protected furbearers, while in others, it's legal to use strichnine egg baits. Thus, it's important to be aware of depredation regulations in your area.

rap using a variety of baits, from cat food to rotten eggs. A number 1 foot-hold trap in front of a baited cubby works well. Skunks will also step into a trap on the ground, and this may eliminate non-target animals. A double-jaw trap will help prevent the skunk from chewing off its foot.

MANAGING OMNIVOROUS PREDATORS



Signs of bear predation are variable, but may include the cached carcass of a large animal, tracks, and eyewitness reports. Bears may kill with a head or neck bite and leave claw marks on the sides of an animal, which may lead the wildlife manager to the mistaken belief that a mountain lion is at work. However, most bear predation complaints concern human encounters. Check eyewitness accounts, tracks, claw marks, and bite marks on food containers. There may be break-in evidence in dwellings and vehicles.

Bears are plantigrade, meaning that they walk on the soles of their feet, as do primates. This results in a very identifiable track, at least in snow or soft dirt. Their soles, toes, and claws show . Actually, the sole shows more on the hind foot than on the front. It's possible to trap bears with foot snares or culvert traps, to relocate them, or to destroy them as the situation dictates. (Depredation avoidance techniques are important, as discussed earlier.) When trapping a bear, a culvert trap or an Aldrich foot-hold snare with bait may be used. Never approach a trapped or snared bear alone, and make sure that at least one person is armed with a large-caliber weapon.



MANAGING OMNIVOROUS PREDATORS

Avian predators include raptors (hawks and eagles), owls, and piscivorous (fish-eating) birds such as common mergansers, cormorants, or loons. Eagles are protected by three federal laws, including the Migratory Bird Conservation Act; the Bald Eagle Protection Act, which protects both bald and golden eagles; and the Endangered Species Act (ESA), which lists the bald eagle as threatened. This means that it's illegal to take or harass a bald eagle. Furthermore, golden eagles may be live-trapped only with a depredation permit.

Verified, witnessed predation of livestock is the only reason for which a federal depredation permit may be issued. All other raptors and owls are protected by the Migratory Bird Conservation Act. Some are on the ESA threatened list (for example, the peregrine falcon). If a depredation permit is obtained, a raptor can be captured using a pole trap (however, these traps are illegal in many areas). A pole trap is a large pole placed in the ground with a soft-catch foot-hold trap set on top. The trap must be anchored to a slide wire to the ground so the captured bird can rest on the ground.

When handling a raptor, be sure to throw a cloth over its head. With sturdy raptor gloves, grasp the legs. Do not let the bird grip your wrist or arm unless you're well protected. Place the bird in a covered transport cage for transporting. Owls can be captured by placing a live mouse in a cage in the vicinity of a nest tree, and arranging numerous nylon filament loops over the cage. When the owl tries to capture the mouse, it will get entangled in the loops. You must not leave this trap unattended. Hide, watch, and wait. You should handle owls in the same way as raptors; however, it isn't usually necessary to cover the head. Note that it isn't always legal to capture owls. Even when owl predation is confirmed, it may be very difficult or impossible to obtain depredation permits. This author knows of at least one waterfowl breeder who experienced losses to great horned owl predation; however, depredation permits couldn't be obtained. The only alternative was to cover the waterfowl pens with very expensive covers. Ultimately, the breeder had to give up the business. Piscivorous birds may wreck havoc with aquaculture fishways (long, large concrete pool of water in which fish are raised commercially). Again, the author of this unit does not know of any cases where operators were able to get permits to kill the birds.



Covering the fishways is expensive, and may not work. Noisemaking and frightening devices work temporarily, but birds have a remarkable adaptability to such things.



MANAGING OMNIVOROUS PREDATORS

Signs of opossum predation include sightings, missing eggs, and disruption of garbage. Tracks are similar to those of the raccoon, but the opossums' toes aren't as long. As shown in Figure 49, opossum tracks show less elongated digits than raccoons and a toe on the hind foot. Opossums can be easily caught in number 1 foot-hold traps (unburied, and baited with any kind of food in a cubby). The trap can be anchored to a stake or grapple. Cage traps also work well to capture opossums in suburban areas.

Raccoons may damage waterfowl nests or steal eggs, leave tracks, or be sighted. Most nuisance calls concern garbage, attics, or bird feeders. Raccoon tracks are very distinctive. They show long digits, or fingers and toes, and the heels and palms of this plantigrade animal.

Trapping or shooting may be recommended for raccoon control on waterfowl refuges. Number 1.5 or number 2 traps may be set underwater at stream edges, with stink baits placed on shore. Traps on dry land should be well staked or anchored with a grapple. In states where foot-hold traps can't be used, raccoon traps have been developed which act more like a hand snare. However, they're padded and don't cause injury.