how to trap a coyote

Coyote trapping is not difficult. By understanding a few biological traits you can learn to outwit coyotes and trap them successfully.

The coyote is a member of the canine (dog) family. This intelligent mammal is at home in rangeland, cropland, mixed woodlands, or even suburban areas. Coyotes stay in one area in spring and summer but may roam in late summer, fall, and winter. Most coyotes are territorial but do not become dominant and establish a home territory. They are opportunists that kill and eat whatever is easiest to obtain.

Coyotes follow regular paths and crossings, establishing regular scent posts to guide them. They inhabit high hills or knolls from which they can view a wide area and disappear by moving just a few yards. Coyotes depend on their ears, noses, and eyes to protect them and hunt with their noses into the prevailing wind. They learn from unpleasant or frightening events and avoid them in the future.

In Kansas, coyotes can be trapped year-round for fur or sport, or to control livestock predation. Techniques for trapping coyotes in response to livestock damage are similar to those used for fur trapping. A successful trapper will have a good understanding of coyote biology and behavior.

Items needed to set a coyote trap

- One 5-gallon (19 ½ inch) plastic bucket to carry equipment.
- One No. 3- or No. 4-sized trap per set (inside jaw spread should be at least 5 inches).
- One 18- to 24-inch stake for the holding trap in place.
- Straight claw hammer to dig a hole in the ground for trap placement and to pound the stake into the ground.
- Leather gloves to protect fingers while digging the trap bed.
- Cloth (or plastic) feed sack to kneel on while digging a trap bed and pounding the stake.
- Roll of plastic sandwich bags to cover and prevent soil from getting under the pan of the trap.
- Screen sifter for sifting soil over the traps.
- Brush or rib bone for leveling the soil over the trap once it has been set in place and covered.
- Bottle of coyote urine to attract the coyote to the set. (Keep urine away from other equipment.)

The first step in trapping coyotes is to locate them. Coyotes regularly inhabit the same areas. A trapper should learn to identify coyote droppings and notice the number of droppings along roads and farm or ranch trails. Coyotes like to travel along the edges of pastures or farm fields and often run on

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field terrace tops. Look for trails under fences and tracks at road crossings.

Types of traps

Many traps are suitable for catching coyotes. Both No. 3- and No. 4-sized traps are good choices. Many trappers prefer the No. 3 coil spring, round-jawed offset trap with four coil springs and welded, straight link machine chain. The length of the chain depends on whether the trap will be staked or equipped with a drag. A longer chain should be used with a drag. Offset jaws are designed to reduce foot injury, but not allow the coyote to wriggle out of the trap. Coil-spring traps are great for catching coyotes, but require more upkeep than double long-spring traps.

The type and size of trap may be regulated in each state. Large body- gripping traps are dangerous and illegal in some states. When pet dogs might be present, a padded-jaw trap should be used. Coyotes will not normally enter cage or box traps, but some trappers have used them successfully.

Although additional testing is needed, results of research to reduce injury using padded-jaw traps have been encouraging. In tests with No. 3 Soft-Catch coil springs, No. 3 NM long springs, and No. 4 Newhouse long springs, capture rates for coyotes were 95 percent, 100 percent, and 100 percent, respectively. Soft-Catch traps caused the least visible injury to captured coyotes.

Other trap models and sizes suitable for catching coyotes can be found in the publications, "Best Management Practices for Trapping in the United States," developed by the Association of Fish and Wildlife Agencies. A section on traps suitable for both eastern and western coyotes is available at http://www.fishwildlife.org/.

Best places to set traps

The person who lives on the land has the best chance of locating the proper place to set the traps. This is especially true if that person gets in the habit of watching for coyote signs year-round. Coyotes travel where it is easy to walk, such as down old roads or farm trails. They have favorite places to travel, hunt, rest, howl, and roam. Traps are usually set near some obvious landscape feature – an area without any vegetation, large rock, tree stump or limb, or even a large animal burrow. The following list shows good places to set traps on Kansas farms and ranches. Watch the wind. Always make sets so that the prevailing wind (southwest in summer, northwest in winter) carries the scent across the coyote's path. Do not set traps directly in a trail. Set them to one side at a place where coyotes might stop, such as a hilltop, gate, or where cover changes. Make the set on level ground so that the coyote walks across level ground to the set. Tracks indicate good locations. Set the trap so the coyote has clear visibility as it approaches the trap. Position the trap in the scent dispersal cone at about a 45-degree angle from the lure holder. The coyote will approach the trap at an angle and is usually reluctant to approach over dry leaves, tall grass, or rough ground. Good locations tend to be near these landmarks.

- saddles between high hills
- high hills
- isolated land features
- isolated bales of hay
- trail junctions
- pasture roads
- livestock trails
- waterways
- dry or shallow creek beds
- game trails
- pond dams
- field corners
- eroded gullies
- animal carcasses
- brush piles
- stream crossings
- under rim rocks
- old cowhide or bone piles
- fence crossings
- salt or mineral feeders

The attractant can be anything a coyote or dog might urinate on. It should be obvious and differ from surroundings. It can be a clump of grass about 10 inches tall or a rock or old bone driven into the ground. Feathers and old pieces of fur or cowhide also appeal to coyotes.

Anchoring a trap

Chain swivels are necessary for trapping coyotes. One swivel at the stake, one in the middle of the chain, and one at the trap are recommended. When staking the trap, a relatively short chain can be used. Extremely short chains may allow the coyote to pull the stake out of the ground, but they prevent stress from long runs as the coyote lunges to get away.

Stakes for anchoring traps in open areas should be at least 20 inches long and ½ inch in diameter, and made of iron. A good trap stake can be made of rebar material with a washer welded just below the upper end. The other end can be tapered to make it easier to drive into hard ground. The stake should be 20 to 28 inches long. The trap should be fastened to the stake with a chain repair link or large S hook, and the link should be welded shut. Do not use wire to attach the trap to the stake. In loose soil such as

sand, cross-stake the traps using two stakes fastened at the top and then attached to the trap chains. Earth anchors, now widely available, can be used but are more difficult to pull out of the ground when done trapping. Some trappers leave them in the ground for future use.

Drags instead of stakes can be used where brush and trees are abundant or where the ground is too rocky to use a stake. Use a long chain (8 feet or more) on a drag.

Making the set

Coyotes are suspicious. Locate traps in level, open areas. Place the trap about 9 to 10 inches from the attractor and about 2 inches to one side. If using two traps per set, the second trap will be equal distance from the attractor and about 10 inches from the other trap.

After finding the proper location, dig or chop out a bowl-shaped trap bed with a claw hammer or digging tool. The bed should be just slightly larger in diameter than the trap when set. Place the stake through the end link of the trap chain and drive the stake in the center of the trap bed until it is flush with the bottom of the bed (usually about 3 to 4 inches deep).

Compress the springs of the trap and engage the trap dog to hold the trap open. Make sure the trap pan is level with the trap jaws. Use a plastic bag, clean shop cloth, towel, or waxed paper as a pan cover to prevent soil from getting under the trap pan. The pan must have room to move when the coyote steps on it. Some trappers use fiberfill under the pan instead of a pan cover.

Firmly pack the soil in and around the trap jaws. This is probably the most important step in trapping coyotes. The trap must not wiggle or move when properly bedded. Use the soil dug from the trap bed and drop it through a sifter to keep small stones or dirt clods from covering the trap. Use a brush or stick to level the soil over the trap. The pan should have about ¼ inch of soil over it. Leave a shallow depression directly over the trap pan. When set, the trap will not be visible and will be still be about ½ inch below ground. Blend the bare soil with vegetation from the site to disguise the trap bed. Two traps per location increases the chance of making a catch, but one trap at each attractor is sufficient. You can also set another trap at a different attractor using a different lure within 20 to 30 feet of the first set.

Resetting traps and checking trap sets

Once a coyote is caught at a set, reset the trap in the same place. The odor and disturbance at the set where a coyote has been caught often attracts other coyotes. Rake the loose material in the trap circle into two ridges about 10 inches apart and reset the trap between the ridges. Sometimes other coyotes will approach but not enter the circle where the coyote was caught. If this is the case, move the trap set to just outside the circle. Leave all sets out for at least 2 weeks before moving traps to a new location. Check traps once every 24 hours, preferably

photo courtesy Kansas Department of Wildlife, Parks and Tourism

Procedures for setting a trap

Step 1. Select the trap set location. The middle of a trail road and the presence of coyote droppings indicate a suitable location. Dig out the soil with tools and by hand.

Step 2. Place the stake through the end link of the trap chain.

Step 3. Drive the stake until it is flush with the bottom of the trap bed.

Step 4. Using the heels of your hand begin compressing the springs of the trap.

Step 5. Hold the trap open with one hand while you engage the trap dog to hold the jaws open.

Step 6. Move the trap pan to the proper notch making sure the pan is level with the jaws.

Step 7. Some traps can be set completely inside a plastic bag. Use a thin plastic bag and test it with your particular trap.

Step 8. With other styles of traps, stretch the pan cover across the pan and under the jaws.

Step 9. Take out or add soil until the trap pan and jaws are about ½ inch below the level of the surrounding ground.

Step 10. Firmly pack the soil around the trap jaws and inside the trap bed.

Step 11. Collect the soil from the trap bed and place it in a sifter to remove the clods and rocks. Vigorously shake the sifter until the trap is covered with about ¼ inch of sifted soil.

Step 12. Use a brush, stick or rib bone to level soil over the trap. Make sure the finished set is still below the level of the surrounding soil.

Step 13. Blend the bare soil with vegetation to disguise the trap set.

Step 14. Place about 10 to 15 drops of coyote urine on old coyote droppings or grass clumps that are about 8 to 10 inches behind the center of the trap pan.

Step 15. Collect the soil you dug from the trap bed and dispose of it away from the trap site.

Finished. Completed set should be blended into surroundings so it is difficult to see, or the set can be left obvious to attract the coyote's attention.

One of the most difficult aspects of using traps is trapping when the ground is frozen, muddy, wet, or damp. If the weather is expected to turn cold or wet, set and cover the traps in one or a combination of the following materials: Canadian sphagnum peat moss, very dry soil, dry manure, buckwheat hulls, waxed dirt, or finely chopped hay. A mixture of one part table salt or calcium chloride with three parts dry soil will prevent the soil from freezing over the trap. When using peat moss or other dry, fluffy material, cover the material with a thin layer of dry soil mixed with 1 teaspoon of table salt. This will blend the set with the surrounding soil and prevent the wind from blowing peat moss away from the trap. As an alternative, traps could be set in a bed of dry soil placed over the snow or frozen ground.

around 9 or 10 a.m. Reapply the scent every four days, using 8 to 10 drops of coyote urine and/or a good lure.

Human scent and coyote trapping

Minimize human scent around trap sets. If traps are being set in warm months, make sure the trapper has bathed recently, has clean clothes, and is not sweating excessively. Leave no unnecessary foreign odors, such as dripping sweat, cigarette butts or gum wrappers, near the set. Wear clean gloves and rubber footwear while setting traps. A landowner may have an advantage over a stranger who comes to set traps because the coyotes are acquainted with the landowner's scent and expect him/her to be there. Coyotes have been known to leave an area after encountering an unfamiliar human scent.

Because of human scent, coyotes are more difficult to catch with traps in wet or humid weather. Wear gloves, wax traps, and take other precautions in areas where humans are not commonly present, where wet weather conditions are common, and where coyotes have been trapped for several years and have learned to avoid traps.

Lures and scents

Coyotes are interested in and may be attracted to many odors in their environment. Commercially available lures and scents or natural odors such as fresh coyote, dog, or cat droppings or urine may produce good results. Coyote urine and food baits work well and sex gland lures can be added during the reproductive season (January to March). Multiple scents at each location will cause a coyote to spend more time at the set, which increases the opportunity for a catch.

Guiding coyote footsteps

In a plowed field or other area where there are dirt clods, sticks, small rocks, or stickers, place these around the covered trap set to guide coyotes to the trap. Coyotes tend to avoid obstacles and place their feet in bare areas. Do not use this method to the extent that the set looks unnatural. Do not worry if the coyote visits the set and does not step on the trap pan; the coyote will return.

Care of coyote traps

New traps can be used to trap coyotes, but dyed and waxed traps work better. When new traps are used, rusting soon occurs. Light rusting does not harm the traps, but after continued use rust often slows trap action and may weaken coil springs, causing a coyote to be missed. Traps may also become contaminated with skunk, gasoline, oil, blood, and other odors. For continued success in catching coyotes, they should be kept clean and in good working condition. Some maintenance tips follow.

Traps that have been used and are rusted should be cleaned with a wire brush. Check traps to make sure the trigger and pan are working freely. Check chains for open links. Make

photo courtesy Kansas Department of Wildlife, Parks and Tourism

Problems in Trapping Coyotes

Some experience is required to effectively trap coyotes. Trapping by inexperienced or untrained people may serve to educate coyotes, making them difficult to catch, even by experienced trappers. Coyotes exhibit individualized behavior patterns. Many, but not all, coyotes become trap-shy after being caught and then escaping from a trap. One coyote was reported to have been caught eight times in the same set. Some coyotes require considerably more time and thought to trap than others. With unlimited time, it would be possible to trap almost any coyote.

Adverse weather, heavy rain, deep snow, and freezing and thawing can cause significant problems for coyote trappers. Numerous techniques can be used to keep traps working under such conditions. Dry soil should be collected in advance and stored under cover. Dry soil can be collected from gopher mounds, plowed fields, dry cliff banks, or ditches. Some trappers bed traps with a mixture of salt, peat moss and soil, ground hay, or even dried cow manure to prevent them from freezing. The use of waxed soil is recommended during the freezing and thawing times of the year because waxed soil will not absorb water and thus will not freeze. Adding about 2 to 3 cups of flaked wax to finely sifted dry soil and heating and stirring until the wax coats all the soil particles takes time to prepare, but works well. Mixing about 1 cup of table salt or livestock salt to the soil below and covering the trap is easy but will shorten the lifespan of the traps.

If a coyote digs up or springs a trap without getting caught, reset the trap in the same place. Then carefully set one or two traps near the first set. Use gloves and be careful to hide the traps. The coyote, intent on digging up the first trap again, will step in the second, better hidden, trap. Changing scents or using tricks, such as placing a lone feather near a set as a visual attraction or a ticking clock in a dirt hole set as an audible attraction, may help catch wary coyotes. Natural baits such as field mice, rabbits, or pocket gophers are good baits. A dead fish hung in a bush about 4 feet off the ground is also a good coyote attraction.

sure the swivels are working. File the triggers and receivers to eliminate rounded edges. Make adjustments so the pan is level and the trap will perform perfectly.

Put traps in a clean container out in the open, adding more than enough clean water to cover them. Obtain some walnut bark, sumac, or walnut hulls. Sumac heads and cedar leaves have a natural wax that acts as a rust inhibitor. Wood chips or crystals for dyeing traps are available from trapping supply outlets.

Add the material to the water. Cover the traps with water, but do not let them sit on the bottom of the container close to the fire. Bring the solution to a boiling point and immediately temper down. Let the traps simmer for one hour. Any scum that forms on the top of the solution when simmering should be skimmed off. When ready, the traps should be lifted out of the dyeing solution with an iron hook.

Waxing coyote traps helps protect them from additional rusting. Heat trap wax in a container large enough to completely submerge the trap. Leave the trap in the wax long enough to bring it to the same temperature as the wax. Lift to remove and hang it in a clean area to dry.

Killing a trapped coyote

A coyote will make its most desperate attempt to escape from the trap as a human approaches. As soon as you are within a few feet of the coyote, check to see that the trap has a firm hold on the coyote's foot. If so, shoot the coyote in the chest or head with a .22 caliber firearm. It is often a good idea to reset the trap in the same place. The blood from the coyote will not necessarily harm the set as long as it is not on the trap or on the soil over the reset traps. Reset the trap regardless of the animal species captured, skunks included.

Draw stations

Draw stations are natural areas or places set up intentionally to draw coyotes to a particular location. For example, the straw and cleanings from a chicken house can be placed in an area where coyote tracks are found. Traps can then be set around the edges of the straw. Areas around carcasses or parts of animals, such as a cow's head, are good places to set traps. Wire the carcass to a stake driven into the ground and out of sight. Once coyotes start feeding, set traps 30 to 60 feet upwind from the carcasses or draw station. Never set traps close to carcasses because nontarget animals such as vultures, eagles, hawks, skunks, and opossums may be caught. The exception is if you are a livestock producer and know that coyotes will return to the freshly killed livestock you find on a particular evening. Then set a trap next to the carcass. Wire the carcass to another stake driven out of sight into the ground. Then set another trap 20 to 60 feet upwind. Do not scent the carcass set. If sheep graze in an area where traps are set, cover the traps with a disc blade or brush during the day and uncover them at night when sheep are penned.

Dirt hole set

Another way to set a coyote trap is to find a burrow dug by an animal or dig a hole to look like a burrow, and set traps in front of this burrow. Some trappers dig a burrow and bait it with meat-based bait. Then, when coyotes are known to visit this place and take the bait, traps are set. Coyotes have a tendency to investigate all newly dug burrows. The angles of the burrow and diameter of the opening influence where you should place the traps. Coyotes tend to look where they smell. If the opening is straight up and down (like a post hole), then set one trap close to the opening, within 4 inches, and set the other trap back as far as the chain will reach, at least 36 inches away, preferably where the soil from the burrow trails out. The opening does not have to be large – 2 to 3 inches is large enough. Bait should be buried under a thin layer of grass at the bottom of the burrow. The burrow should be dug at a place where there is a backdrop such as a bush or a bank. This will cause the coyote to approach the burrow from the side on which traps are set.

Opposition to traps

Opposition to foothold traps is based on two main objections: (1) a lack of selectivity for the animal being trapped (2) foot injury sustained by the captured animal. Trap pan tension devices such as sticks, forked twigs, springs, and sponges placed under the trap

pan have been used for many years to reduce captures of nontarget species. Many coyote traps have an adjustable pan tension screw. One study evaluated two pan tension devices. Preliminary results indicated that the use of either device could exclude nearly 90 percent of the gray foxes, swift foxes, striped skunks, opossums, and jackrabbits that stepped on traps, as compared with 24 percent on average for unequipped traps. A variety of other species were excluded at even higher rates. Some coyotes were also excluded, but because more traps remained functional, the net result appeared to be an increase in coyote trapping efficiency.

Advances in trap design, including offset jaws and padded-jaw traps, have increased the humaneness of foothold traps. Traps should be checked once or twice each day to minimize the length of time that an animal must remain in a trap. Keep in mind that trapping practices are under scrutiny and trappers' actions will help determine the future of this activity.

Summary

The method described is not the only way to set a coyote trap. Many trappers use other techniques that are equally as effective. This may not be the best technique but it has worked well for other trappers. The key is to set traps near areas that coyotes visit frequently. Use urine and food or curiosity lures to get the coyote to approach the attractor by stepping over the trap. Make sure the trap is bedded solid and keep traps working regardless of weather conditions.

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