



Trapping Coyotes

Coyotes (*Canis latrans*) are members of the dog family. They prey on a wide variety of animals including rodents, rabbits, deer, game birds and livestock. They also consume vegetation such as prickly pear apples, mesquite beans and persimmons. Coyotes come into conflict with ranchers and farmers when they prey on livestock such as sheep, goats, cattle, hogs and poultry, and when they cause damage to watermelons, cantaloupes and other agricultural crops. Coyotes cause millions of dollars in damage yearly to livestock and crops in Texas.

Biology and Reproduction

Adult weight: Average 25 to 45 pounds.

Total length: 39 to 51 inches.

Color: Grizzled gray or buff overlaid with black.

Feet: Tracks are similar in appearance to dogs.

Gestation period: Approximately 63 days.

Litter size: Five to seven.

Number of litters: One litter per year, usually born in March, April or May.

Life Span: Generally 6 to 8 years in the wild.



Damage

Coyotes normally kill livestock by biting them around the throat. To determine if an animal has been killed by a coyote, carefully peel back the skin around the throat and look for tooth puncture wounds surrounded by hemorrhaging. Since some other predators may kill in a similar way, it is also necessary to look for signs such as tracks and droppings to determine which predator did the killing. If there are no teeth marks on the head and throat and little bleeding, the animal probably died from some cause other than depredation. Domestic dogs also kill livestock, but not as effectively as coyotes. Animals killed by dogs usually have many other puncture wounds on various parts of the carcass. In addition, dogs seldom feed on their kill.

During the watermelon and cantaloupe seasons, coyotes often feed on ripe melons in the field. Raccoons also eat melons, but coyote damage can be recognized by large holes in the melons and by tracks around the damaged fruit.

Where coyotes cause damage to livestock or crops, it may be necessary to remove the coyotes to stop the depredation. Trapping with leghold traps is an effective way of removing coyotes. But to successfully trap coyotes, you must be aware of their habits and abilities and have some basic knowledge of setting a leghold trap.

Habits

Coyotes are very adaptable and live in a variety of habitats ranging from ranching and farming areas to city suburbs. Coyotes are most active at night, in early morning, and in late evening. They rely on their acute sense of smell, keen hearing and eyesight for hunting prey and avoiding possible danger.

Coyotes establish regular travel routes along livestock trails, ranch roads, canyons, ridges or any path that offers easy travel and good visibility. A trapper can find these travel routes by looking for coyote sign, tracks and droppings.

Coyote tracks are similar to dog tracks, but it is possible to distinguish between the two. Dog tracks are round with the toes spread apart. Toenail marks usually are visible on all toes. Coyote tracks are more rectangular with the toes closer together. If any toenail marks show, they are usually on the middle two toes (see Figure 1). Also, coyote tracks appear in a straight line, while those of a dog are somewhat staggered.

Coyote droppings, or scat, contain animal hair and bone fragments. This readily distinguishes coyote droppings from those of domestic dogs that have been eating table scraps or dog food. Fresh coyote scat is black, but turns grey or white as it weathers.

Coyotes establish scent posts by urinating at various locations along their travel routes. These scent post locations may be tufts of grass, small bushes, animal carcasses, skeletons or other objects. Often there are scratch marks near a scent post which help identify it. Natural scent posts or ones created by a trapper are good locations for trap sets.

Trap Sets

There are several types of trap sets that can be used to trap coyotes, depending on the situation. The most common are scent post sets, dirt hole sets, blind or trail sets and animal carcass sets.

Scent Post

If a scent post can be found, a trap should be set at this location. If a scent post cannot be found, one can be established by placing coyote or dog urine on a tuft of grass or other suitable object near the pathway. The trap should be placed approximately 6 inches on the downwind side of the scent post.

When making a scent post set, consider what senses the coyote uses to locate a scent post. Smell

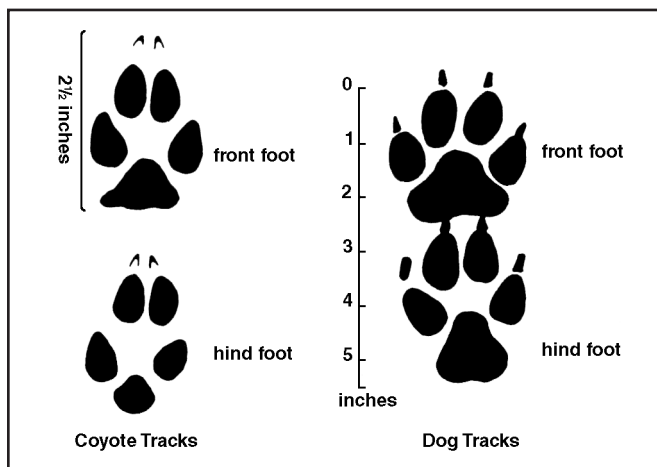


Figure 1.

is most important, but vision is also a factor. The scent should be one that arouses the interest of the coyote and makes it want to investigate. The scent post should be placed so that the wind blows the smell across the coyote's path. If wind direction is variable, then two scent post sets might be used on either side of the trail. A scent post set is most effective when placed near a highly visible object along a trail, such as a skeletal bone, tree stump or lone tuft of grass. Coyotes are very curious animals and the trapper should take advantage of this trait when choosing sites for trap sets.

Dirt Hole

The dirt hole set also must be close to the coyote's path, and placed so that the wind will carry the scent of the bait to the approaching coyote.

To make a dirt hole set, dig a slanting hole 3 to 5 inches wide and approximately 8 inches deep at the base of a grass clump or embankment. The trap should be placed 6 to 8 inches in front of the hole. A fetid bait is placed in the hole and lightly covered with dirt or grass. Any remaining dirt can be scattered away from the hole to make it appear that an animal has dug the hole.

Guided by the coyote sign present, the trapper should carefully examine the area for good trap sites. It is important with both the scent post and dirt hole sets that the traps be placed so that the animal will pass reasonably close to them. Good locations for these sets are the intersection of two or more trails, water holes, fence corners, pasture gates and stream crossings.

Trail Set

The blind or trail set is useful where coyotes are crawling under a fence, regularly traveling a certain trail, or have become wary of scent sets. The trap is set on the trail with small pebbles or sticks placed on each side of the trap to guide the animal into it. To increase the chances of a catch, two traps can be set with the trap pans about 10 inches apart and a guide stick placed on the trail between the traps. No scent or bait is used with the trail set. An excellent place for a trail set is where coyotes step over a rock, stick or any other object on the trail. A disadvantage of the trail set is the livestock and other wildlife using the trail may interfere with the trap.

Carcass Set

Coyotes, along with other animals, often feed on fresh carcasses. Traps set in the area of a carcass are effective. To avoid trapping non-target animals such as vultures, opossums, skunks, etc., the trap sets should be located along trails leading to the carcass but well away from it (several hundred yards to a half mile or more).

Traps

A variety of traps are available. Cage traps are generally ineffective. The most effective traps are the number three or four double spring leghold

with offset jaws (see Figure 2). Coil spring traps no smaller than a number three should be set for coyotes.

Stakes or drags must be attached to the traps to anchor the trapped coyote. Staking the trap is accomplished by attaching an 18-inch iron rod by a swivel to the trap spring or base with about 18 inches of chain. Drags should be attached to the trap with about 6 feet of chain, but length may vary depending on the type of terrain or other circumstances. Stakes and drags can be purchased through trapping supply companies or a farm and ranch supply store.

It is important that traps be kept clean and in good working condition. New traps have a thin coating of grease and must be cleaned before use. Boiling in water or setting the traps out to weather is usually sufficient to remove the grease. Old traps should be periodically cleaned by wire brushing and boiling to remove any odors, heavy rust, or dirt that may slow the action of the trap. During the cleaning process, traps can be simmered in log wood crystal dye or walnut and/or pecan leaves and hulls to help preserve them. Log wood crystals are available from trapping supply companies and directions for dyeing traps are on the packaging.

Setting Traps

The trapper needs some specific equipment. A good trapper's kit contains a kneeling or setting cloth, digging tools, hammer, screen dirt sifter, small whisk broom, pan covers, gloves and scent.

The setting cloth, about 3 feet square and made of canvas, is for the trapper to kneel on while setting the trap and for placing dirt on from the trap hole. Masonry hammers, small grubbing hoes, garden trowel and hatchets can be used for digging the trap hole. A dirt sifter used for covering the trap with dirt can be made from $\frac{1}{4}$ inch hardware cloth in a wood or metal frame. Denim material, canvas, screen wire or plastic sandwich bags make good pan covers. The pan cover should be $5\frac{1}{2} \times 7$ inches in size for a number four trap, with a slit cut in one side for the trap trigger. The pan cover is necessary to keep dirt from getting under the trap pan, which would prevent the trap from springing. Pan covers vary in size depending on the trap size.

When trapping for coyotes, the leghold trap is always buried. Whether the trapper is making a scent post, dirt hole or trail set, the basics for setting the trap are the same. When the trap site is chosen, the trapper should kneel on the setting cloth to dig the trap hole and be careful to place the dirt on the cloth rather than scattering it around the trap site (see Figure 3). The trap hole should be about 5 inches deep and shaped to accommodate the trap. Double spring traps require a "V" shaped hole, while coil spring traps need a square hole.

When setting a double spring trap, depress the springs until the trap jaws can be opened fully. Then, while holding the jaws open with your foot,

set the trigger mechanism by placing the trap dog (trigger) over the jaw and in the notch of the pan. The trigger can be adjusted so that the pan sits level and has minimum distance to travel before the trap throws. The trap springs must be turned back toward the trap dog in order for the front jaw to stay open.

After the hole has been dug and the trap mechanically set, the trap drag or stake is placed in the hole first. If a stake is used, it is driven into the ground with a hammer. If a drag is used, it is placed in the hole with the chain on top of the drag and covered with dirt until the hole is about 2 inches deep (see Figure 4). This dirt should be packed to provide a firm foundation for the trap. Place the trap in the hole, being sure that it is level and seated firmly so that it does not rock from side to side. If a coyote feels movement under the ground from an improperly seated trap as it steps up to investigate the scent or bait, it will most likely become suspicious and shy away from the set. The next step is to place the pan cover over the trap pan. Raise the front jaw of the trap and, sliding the pan cover under this jaw, place the notched end of the cover around the trap dog (see Figure 5). Cover the pan completely so that dirt cannot get under the pan. A small stick is helpful in positioning the pan cover. Now, using the dirt sifter, cover the trap with finely sifted dirt to a depth of approximately $\frac{1}{4}$ to $\frac{1}{2}$ inch (see Figure 6). Use the whisk broom or a stick to touch up and lightly pack the soil around the trap. The idea is to make the trap set appear as natural to the surrounding area as possible. Any remaining dirt on the setting cloth can be discarded some distance from the trap set.

The last step is to place the scent or bait behind the trap so that the coyote must step on the trap to smell the attractant (the attractant may be placed before covering the trap with dirt to make it easier to align with the trap pan). Small guide sticks can be placed over the trap springs to ensure that the coyote will step on the trap pan.

When working with trap shy coyotes, the trapper may want to wait a day or two after setting the traps before adding the attractant. This extra time will allow most of the trapper's scent to disperse. With wary coyotes, guide sticks should be eliminated as they tend to make the animal suspicious.

Other wildlife is also attracted to the scent or bait used to trap coyotes. To avoid trapping non-target animals such as opossums, raccoons, skunks, badgers, etc., under-pan springs can be used to increase the amount of pressure required to throw the trap. The under-pan spring fits on the base of the trap and provides tension to the underside of the trap pan. This allows the trap to throw under the weight of a large predator, but keeps smaller animals from being caught.

For more information and assistance, contact the nearest office of the Texas Wildlife Damage Management Service.

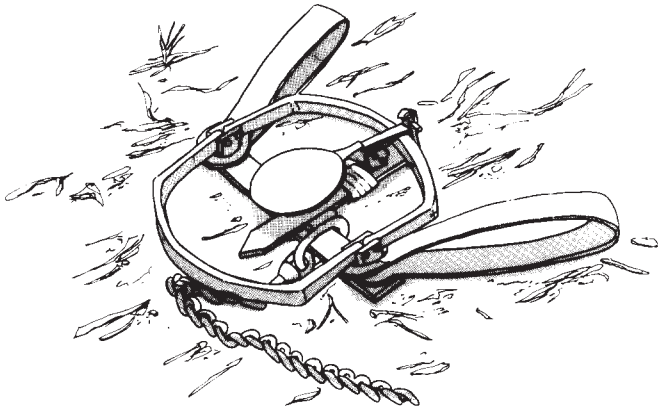


Figure 2



Figure 3

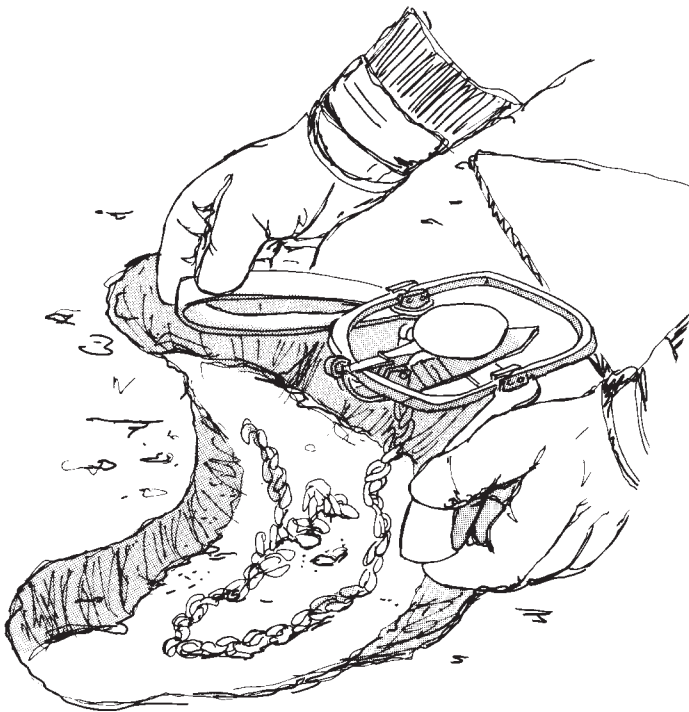


Figure 4

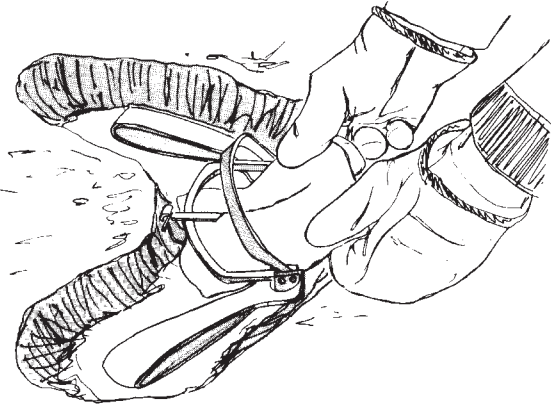


Figure 5

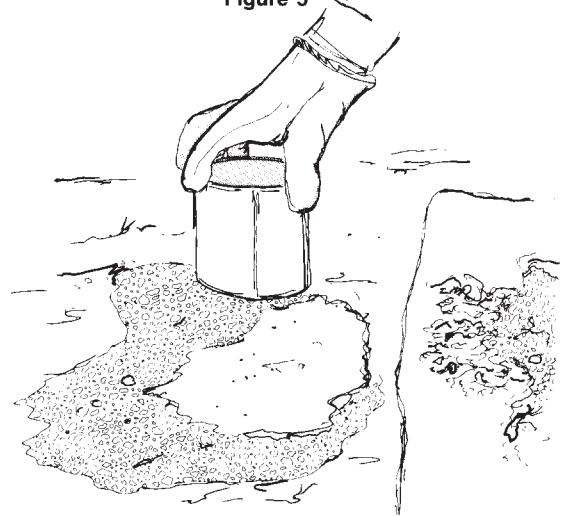


Figure 6

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Cooperative Wildlife Services Program is implied.

Programs conducted by the Texas Wildlife Damage Management Service are open to all people without regard to race, color, sex, disability, religion, age or national origin.

The Texas Wildlife Damage Management Service is a cooperative program involving Texas Cooperative Extension, United States Department of Agriculture—Animal and Plant Health Inspection Service—Wildlife Services.

500 copies, Reprint