

TRAP AND SNARE USE FOR PREDATOR CONTROL

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Abstract: Trapping and snaring of predators has been in use for many years in areas where predator control has been needed for the protection of livestock and wildlife. The steel leghold trap is a mechanical device that is a very versatile tool for the control of predators. The importance of steel leghold traps in trapping for fur and for control work has long been known. This device is the trapper's chief tool. Traps can be set to work in a variety of situations. The successful use of traps for predator control requires skill and experience in setting traps, appropriate use of attractants, as well as a knowledge of predator behavior. Snares are relatively simple mechanical devices that can be used effectively in certain situations to trap predators. Snares are also relatively economical and do not require as much skill or training in order for them to be used effectively. A snare consists of a loop of flexible wire cable with a locking device that tightens around an animal's body as it passes through the loop. Snares are most commonly set where predators are crawling under or through a fence, but they can be used in trail sets and at den entrances.

LEGHOLD TRAPS

There are a variety of leghold traps available for use. The most popular are the number 3- or 4-size double long-spring traps with offset jaws. Coil-spring traps, also called jump traps, can be used. One of the advantages of the coil-spring trap is that they can be more easily concealed than long-spring traps. The size of the trap used should correspond with the size of the animal to be trapped. Generally, the larger the animal to be trapped, the larger the trap needs to be. No trap smaller than a number 3 size should be used for animals the size of coyotes (*Canis latrans*) and bobcats (*Lynx rufus*). Number 2 traps are large enough to catch foxes, but are usually considered too small for coyotes and bobcats. Larger predators (e.g. mountain lions, *Felis concolor*), usually require an even bigger sized trap.

Stakes or drags must be attached to the trap to anchor the trapped predator. Trap stakes can be made by attaching 18-inch iron stakes by a swivel to the trap spring or base with approximately 18 inches of welded link chain. Stake use on traps may be necessary in areas where there is no vegetation (e.g. brush and/or trees) for a captured animal to hang up on, or where it is necessary to keep the captured animal at the trap location. One disadvantage of stake use on traps is that a firmly anchored trap increases the amount of leverage that a trapped animal can use to pull free from the trap.

Drags can be purchased from trapping supply houses. The iron drags should be attached to the trap with at least 6 feet of chain. Chain length may vary depending on the type of terrain, the presence of non-target animals and other

circumstances. When a predator is caught, the toggle drag allows the trapped predator to pull the trap from the immediate area but prevents it from moving so far as to be difficult to find. The free drag also allows the trap to move with the trapped animal. This helps to prevent foot “pull out” by the captured animal which usually occurs during the first seconds of struggle after the animal is caught (Woolsey 1985).

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 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 and heavy rust or dirt that slows the action of the trap. During the cleaning process, traps can be simmered in logwood crystal dye, walnut or pecan hulls, sumac berries, cedar and juniper or creosote leaves. This helps to create a protective coating on the trap to eliminate heavy rust and any foreign odor. It is usually best to allow new traps to rust a little to help better hold the trap dye. After dyeing, some trappers also prefer to wax their traps with a thin coating of wax. Wax can help to better preserve the trap and it serves as a lubricant which adds to the speed of the action of the trap when it is thrown.

SETTING TRAPS

The trapper needs some other specific equipment that is used during the trap setting process. A good trapper’s kit contains a kneeling 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 upon while setting the trap and to place dirt from the trap hole on. Masonry hammers, small grubbing hoes, garden trowels and hatchets can be used for digging the trap hole. A dirt sifter used to spread the dirt over the trap once it is in place, can be made from 1/4-inch hardware cloth in a wood or metal frame. Canvas, denim, screen wire or plastic sandwich bags make good pan covers. The pan cover should be sized slightly larger than the pan size of the trap which is used. The pan cover is necessary to keep dirt from getting under the trap pan which could prevent the trap from springing. A notch must be cut in one edge of the cover. Gloves should be used to handle clean traps and during the trap setting process.

The selectivity of the leghold trap to catch the target animal can be increased by the use of under-pan-tension devices that minimize the capture of small non-target wildlife species (e.g. rabbits, opossums, skunks, etc.). Many devices have been developed in the field to avoid trap interference by smaller animals (Presnall et al 1950). Twigs, wads of grass, foam rubber, metal tape measure splints, clock springs and USDA clamp-on and slide-on metal underpan springs have all been used successfully. The under-pan device or spring fits underneath the trap pan and increases the amount of pressure required to spring the trap. The tension on the trap pan should be adjusted such that the trap will only spring with the weight of larger predators, usually 4 to 5 pounds. Some traps already have pan tension adjustments on their trigger mechanism.

When trapping for predators, leghold traps are always buried. Whatever type of

trap set is being made, 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 site. The trap hole should be about 5 inches deep and shaped to fit the trap. Double long-spring traps require a "V" shaped hole, while coil-spring traps need a square hole.

To set a double long-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 back jaw of the trap and into 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 toward the trap dog in order for the front jaw to stay open. Coil-spring traps are set the same except that the jaws must be pried open by hand before your foot can stand on them in order to set the trigger.

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 into the hole with the chain on top of the drag. Dirt is then placed over the chain and drag until the hole is about 2 inches deep. This dirt should be packed to provide a firm foundation for the trap to rest on. 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 predator feels movement under the ground from an improperly seated trap as he steps up to investigate, 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. Cover the pan completely so that dirt cannot get underneath it. 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 approximately 1/4 to 1/2-inch. 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 away from the trap site.

The last step is to place the scent or bait behind the trap so that the predator must step on the trap to smell the attractant. The distance that scents or baits are placed from traps is important. No hard or fast rules can be given as several factors must be considered. Among these are the size of the animal, length of its stride, height of the scent post and location of the set. Generally, scents or baits will be placed 6 to 20 inches behind the trap (Presnall et al 1950) dependent upon the animal to be trapped (e.g. the closer the distance, the smaller the animal). In some cases, small guide sticks can be placed over the trap springs to insure that the animal will step on the trap pan. With wary animals, particularly coyotes, guide sticks should be eliminated as they tend to make the animal suspicious.

TRAP SETS

There are several types of trap sets that can be used to trap predators, depending upon the situation. The most common are

scent post sets, dirt hole sets, blind or trail sets and animal carcass sets. It is essential that all traps be set so that the animal to be trapped will pass reasonably close to them regardless of the type of set made. As a rule, traps must be set within a few feet of a predator's travel route to be the most successful. All predatory animals have routes in which they regularly travel. Once these spots are known, they make ideal trapping locations.

Scent Posts

Natural scent posts where predators urinate or defecate along their travel-ways are good locations for trap sets. Scent posts can be established by placing predator urine or droppings at the base of a tuft of grass or other suitable object near the pathway. When considering a scent post set, consider what senses the predator uses to locate the scent post. Vision and smell are often the most important factors. The scent should be one that arouses the curiosity of the predator and makes him want to investigate. The scent post set should be placed where the wind blows the smell across the path of the animal and placed near a highly visible object (e.g. piece of bone, tree stump, individual clump of grass or weed) instead of an obscure object.

Dirt Hole

As mentioned previously, this set must be made close to where the predator is traveling in order that the animal will catch the scent of the bait. Any meat can be used as bait. To make a dirt hole set, dig a slanting hole 3 to 5 inches wide and approximately 8 inches deep (Dorsett 1995) 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 should be scattered away from the hole to give the appearance that an animal has dug the hole.

When using the scent post and dirt hole sets, the trapper should examine the area for the best trap sites. Good locations for these sets include intersections of 2 or more trails or ranch roads, water holes, fence corners, pasture gates and stream crossings. Naturally, if predator sign such as droppings and/or footprints are found, these areas would potentially be good trapping locations as well.

Trail Set

The trail or "blind" set is useful where predators 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, 2 traps can be placed with their pans about 10 inches apart and a guide stick set on the trail between the traps. No scent or bait is used with this type of a set. An excellent site for a trail set is where predators step over a rock, stick or other object on the trail. One disadvantage of the trail set is that any animal using the trail may interfere with the trap.

Carcass Sets

Predators, along with other animals, often feed on fresh carcasses. Traps set in the area of the carcass can be effective. Traps set around carcasses should be located along trails leading to it but well away from it. This will help to eliminate trapping non-target animals. Traps may be placed from

several yards to several hundred yards and even a half-mile or more away from the carcass. Large carcasses will draw animals to it for several weeks.

SNARES

Snares can be successfully used in predator control, however, they must be used with extreme care. Any animal traveling through a snare is likely to be caught. The neck snare is the most common tool used for predator control in sheep and goat areas. To make a snare, a loop is formed with wire cable and an attached locking device. At the anchor end of the cable is a swivel which prevents twisting and breakage of the snare. Snares used in predator control are made of flexible wire cable and are either 1/16 inch, 5/64 inch, 3/32 inch or 1/8 inch in diameter. Larger cable can be used for mountain lions and black bears (*Ursus americanus*). The length of snares varies, but they are usually between 32 and 48 inches long. The snare should be long enough to allow the trapper to attach the swivel end to a firm object or drag with enough cable left to make a loop from 8 to 10 inches in diameter. Minimal experience is required in order to use snares.

Typically, snares are used in areas that contain fenced pastures. As a rule, they are most effective at woven wire or net-wire fences rather than at those made of barbed wire, unless brush or weeds restrict a predator's movement to a specific point of entry on the barbed wire fence. Snares can be set under the fence or between wires where the animal is passing through, in trails in the brush, or at a den entrance. The device is placed in such a manner that the animal must pass its head through the loop

as it passes through the restricted area. Once the snare is around the head or body of the animal, the more the animal pulls, the tighter the snare gets.

One advantage of using snares is that a trapper needs only a small amount of equipment. A supply of snares that have been cleaned and are ready to be placed in the field are the main necessity. To prepare snares for the field, they can be placed in the open air for aging; or they can be boiled in a mixture of ½ pound of baking soda to 3 gallons of water for 30 minutes. These techniques help to remove the oil on the cables. After cleaning, trap dye or wax can be added to the snares, if the trapper desires. Also needed is some heavy wire, such as bailing wire, to attach the snare to the fence or drag, and a small thin wire or sewing thread to hang the snare. A pair of clean gloves are also recommended for use in setting snares as they help to reduce the amount of human odor on the snares. The only other equipment needed is a pair of pliers capable of cutting and bending the wire.

Snare Sets

As previously mentioned, snares can be set in holes through or under fences that predators are traveling through. Signs such as tracks, hair on the fence, or digging will indicate predator use. Some predators will dig a crawl under the bottom strand of the fence. Crawls can be found by following predator trails through the brush or grass leading to a fence.

The snare is set by firmly attaching the swivel end to the bottom strand of the fence or to a drag, such as a heavy log. Heavy wire is used for this purpose. Some

trappers prefer to use drags instead of attaching the snare to the fence because once caught, predators will pull the drag away from the fence and keep the snare site from being disturbed. Although the loop size can vary, most are usually set between 8 and 10 inches in diameter. If the loop size is too small, the snare may be knocked down when the animal crawls under the fence. If the loop size is too large, the animal may crawl through the snare without getting caught or it may be caught around the body. The snare should be positioned directly underneath the fence. The top of the loop should be attached to the fence by means of the small, thin wire or a single strand of sewing thread. Clips can even be made from the heavy wire much like the shape of hairpins and used to attach the snare loop to the fence. This will help keep the snare in the proper upright position, but allow it to be easily released with the slightest pull.

Snares can also be set in trails that predators are using through timber or brush. Sets are generally made with the use of limbs or branches that are placed over the trail at the proper height for the attached snare to catch the respective predator that the trapper is after. The anchor end of the snare is then tied to an extension and drag or to a stake. Other trail sets can be made with the use of a pair of metal or wooden stakes that are driven into the ground on each side of the trail. A heavy gauge wire is then strung to each stake across the trail at the proper height. A snare is then tied to this wire and attached to a firm anchor. Trail sets work best when used in locations where the trail becomes narrow.

Snares are not a very selective tool and will catch non-target wildlife. Non-

target catch can be somewhat minimized by adjusting loop size on the snare and height of the loop placement. Because the neck snare is designed to kill the animal rapidly, it must be used with caution. Placement sites should be selected with caution and the snare must be set properly.

CONCLUSION

It should be recognized that state statutes and regulations vary regarding methods that can be used in controlling predators. Responsibility rests with the individual (trapper) to become aware of laws and regulations relating to trapping, snaring, hunting and other methods. He should also be aware of regulations relating to protected species and seasons of the year when predatory species may be taken. Contact your state game agency regarding any such regulations. When possible, control efforts should be directed toward the offending predator that is causing damage.

Any predator control method used requires a degree of knowledge, skill and experience by the trapper in order for that method to be used effectively. Before beginning a trapping and/or snaring campaign, the trapper needs to accurately determine the predator that is responsible for wildlife losses and target his efforts toward that animal. A good basic knowledge of the different predatory animals will greatly aid in that effort. There are many sources of information on predators and trapping available in literature and on the modern age computer Internet.

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