

# CALLING AND AERIAL HUNTING AS TOOLS FOR PREDATOR CONTROL

**ROBERT G. SIMS**, Texas Wildlife Damage Management Service, P.O. Box 2162, Kerrville, TX 78029, e-mail: [robert.g.sims@usda.gov](mailto:robert.g.sims@usda.gov)

**MARK E. MAPSTON**, Texas Wildlife Damage Management Service, 122 North East Street, Uvalde, TX 78801, e-mail: [mark.e.mapston@usda.gov](mailto:mark.e.mapston@usda.gov)

**Abstract:** Many control options are available for use in predator damage management. Among the most selective lethal control tools are the techniques of calling and aerial hunting. Both of these methods require that the target predator be seen before it is taken. This eliminates the taking of non-target species. Under favorable conditions, calling or aerial hunting can provide immediate relief from a predator damage situation. In a long-term predator control program, however, these methods are used as a supplement to other control methods. No single control method works best by itself. Calling is a relatively inexpensive tool to use while aerial hunting of predators is much more cost prohibitive. Both methods require skill and experience in order for them to be used successfully in a predator damage situation.

---

## CALLING

All animals, including predatory species, can be called to within a short distance of a concealed hunter. This fact is nothing new as Indians were very proficient in the art of calling animals to lure them into bow and arrow range. Coyotes (*Canis latrans*), bobcats (*Felis rufus*), red fox (*Vulpes fulva*) and gray fox (*Urocyon cinereoargenteus*) can be called almost at will by the experienced caller. Mountain lions (*Felis concolor*) and black bear (*Ursus americanus*) will sometimes respond to a predator call. The calling of predators is done by the use of the mouth and/or a mouth-blown "call" made to imitate the sound of an animal, or with the use of an electronic device that automatically plays the recorded sounds of animals. Mouth-blown calls use a wind-vibrated reed to produce the desired sounds. Electronic calls use cassettes, compact discs or computer

chips with the recorded sounds of animals. The person proficient at mimicking the distress cries of rabbits, (*Sylvilagus* and *Lepus spp.*), rodents, kids, lambs, fawns and birds with his mouth can get excellent results due to the fact that the sounds produced are almost identical to those made in nature. Similar results can be had with electronic calls. The calling of predators can be very exciting and fascinating as one becomes proficient at it.

It would be very hard to describe in print the many types of calls that are made and are available for use by the caller. Many makes and models are advertised. It is entirely up to the discretion of the caller as to the type of call that it is to be used. All have produced desirable results under the right conditions of use. Calls can be wooden, plastic, or diaphragm, mouth-blown or electronic, open reed or closed reed, metal reed or plastic reed, loud or soft,

high-pitched or low-pitched, long range or short range, cassette or compact disc or computer chip, hand-held or remote, howler or siren, jackrabbit or cottontail, and so on. Calls can be purchased from sporting goods stores, hunting and trapping supply houses, specialty stores and the computer Internet. Some predator callers prefer to manufacture their own calls.

Successful predator calling requires some skill and experience. Calling cannot be approached in a haphazard fashion, especially in a predator damage situation. Proper training in the use of calling is necessary as the predator can be easily scared away rather than be attracted to the call. Much information on calling predators is available for use by the beginner via articles in hunting and trapping magazines, on the Internet, in books, on videos or by attending training sessions on calling predators put on by experienced specialists. Basic knowledge about the predator to be called also is a tremendous help. To call predators, one must take advantage of every known hunting condition. The type of weapon used, the type of call used, the weather, the abilities of the caller, the abilities of the shooter, the target predator, the time of day, the terrain, etc., all must be considered. High winds and stormy weather conditions are poor for calling. Early in the morning and late in the afternoon are the best times to call. Suggested weapons of use include rifles for open country and long shots, while a shotgun or pistol is best for brushy areas or close shots. Some callers even prefer to use decoys and/or cover scents while calling. Both of these help to attract the attention of the called animal away from the caller.

The caller should choose a stand

(e.g. a calling location) that allows an unobstructed circular view of the surrounding area and has a reasonable shooting distance. The stand should also be located in a position where the calls can be made upwind of the desired area to be called. Openings, clearings, old roadways, scenderos, clear-cuts and phone-line right-of-ways, all make good stand locations. Avoid calling in heavy brush. If this is not an option, then try to find an area in the brush that has an opening or where the vegetation is not as thick. If possible, take a stand with a higher elevation than the surrounding area to be called. Also take a stand that will help avoid animals approaching from behind. Predators may show up from any direction and disappear as quickly as they came. A second hunter can be helpful as he can watch in the opposite direction of the caller. More than 2 people working together, however, is a serious handicap and usually poor results are obtained.

The type and location of the stand taken is very important. Experience has taught that it is much better to take a stand in front of a well-foliaged bush, tree, rock or a bluff than to get behind it and look around. Possibly the best site is a bush that a caller can get well underneath and yet still see a large area. Haystacks, brush piles, old buildings, deer blinds and old farm machinery or car bodies in the pasture provide good hiding places. The caller needs to be concealed by brush or other camouflage to avoid detection. Using the correct-colored clothing plays an important role. With today's choices of camouflage clothing, one can find a suitable pattern that will match most any environment.

Calling should be performed as close

as possible to the area where predation has occurred or in an area where fresh or abundant predator sign has been located. Sign includes tracks, droppings, visual sightings, hair on fences, etc. In coyote damage situations, the use of a siren or howler may be helpful in finding a stand site. Coyotes are very vocal animals and often will respond to siren blasts and howling giving the caller an idea of where they are located. After making a careful entry into the area to be called and taking the most desirable stand, the caller should take a comfortable sitting and shooting position facing downwind. With the use of an electronic call, the caller should have the speaker and decoys, if used, in place before entering the stand. The caller should then take a few minutes of silence to allow calm to return to the area. Movement should be kept to a minimum at all times. Then, when the caller is ready, from 3 to 8 or 9 blasts from the mouth-blown call, not too loud, should be made upwind or crosswind. If an electronic call is used, it should be turned on at this time as well. After a pause of 30 seconds to a minute, a few blasts should be repeated. This should be continued for at least 30 minutes per stand with longer pauses taking place between blasts as time proceeds. Some louder blasts can be included to attract predators from long range.

If a predator is seen approaching, the calls should become softer or stopped depending upon the animal's distance from the caller. Mouth squeaks can then be used to entice the animal into closer range if it is not already. Some predators may remain hidden in cover. Intermittent calling may eventually bring them into the open. Remember, most predators try to circle the caller and approach from downwind. Also,

once the animal is seen, it is easier for the animal to see the caller. It is critical at this time to keep all movement to a minimum. This gives an advantage to the electronic callers as they are located a distance away from the caller and the caller's hands are free to operate a firearm. If an animal is taken, or a shot is missed, the caller should remain in the stand and continue calling for several minutes. Other animals could be in the area and responding to the call.

Throughout the calling process, the caller must be patient. Although many predators respond to the call quickly, others, especially bobcats, will take more time. If an animal does not respond to the call, the caller should move at least a mile before trying again. In areas of heavy brush or when calling with high winds, the caller may need to only move a half-mile or so. An eye should also be kept on what other animals are doing in the calling area. Hawks, crows, ravens and other birds of prey often precede the approach of a predator. Also, the disturbance and movement of rabbits or birds often serves as warning of a nearby predator.

Predators can become "call-shy" in an area. This means that they will not respond to calling at all or are very reluctant to respond. Probable causes are due to an overabundance of calling, improper calling, missed shots or carelessness on the part of the caller during any phase of the calling process. In some situations, changing to a different sounding call can be helpful. One that has a different pitch or tone can be tried with limited success. In most cases it is best to let the area "rest" for some time before calling is tried again. Several weeks are usually needed to combat this.

## AERIAL HUNTING

Aerial hunting of predators involves the use of aircraft to take target animals that are depredating or to quickly reduce a high predator population. Aerial hunting is a highly selective tool and can be used to take specific depredating animals. It involves the use of fixed-wing aircraft or helicopters. The Presidential Executive Order in 1972 banning the use of toxicants for predator control created the need for a replacement control tool that was as effective as toxicants but more selective. Aerial hunting helped to fill that niche. In the western U.S., the USDA-APHIS-Wildlife Services program has been using aerial hunting as a major predator control tool mainly for the protection of livestock since the toxicant ban. Private use of aerial hunting has occurred on a more limited basis.

In the United States, aerial hunting is regulated by federal and state authorities. In Texas, an aerial hunting permit is required and can be obtained from the Texas Parks and Wildlife Department. Texas Parks and Wildlife Code states, "The department may issue a permit to any person if the department finds that the management of wildlife or exotic animals by the use of aircraft is necessary to protect or to aid in the administration or protection of land, water, wildlife, livestock, domesticated animals, human life, or crops and will not have a deleterious effect on indigenous species." Included in the definition for "wildlife," are depredating animals including bobcats, feral hogs (*Sus scrofa*), red foxes, coyotes, and crossbreeds between coyotes and dogs.

As with calling, aerial hunting is used as a supplemental predator control

tool. This method can be used to try and obtain immediate relief from predation. To be successful, aerial hunting must be employed with professional ability under suitable conditions, therefore, it is generally not suited for use by the amateur. It is an extremely dangerous method for an individual with limited experience. The inherent hazards of low altitude flight and the high expense must be greatly considered before this method is selected. Aerial hunting is most effective in areas with open and flat terrain which contain limited amounts of brushy cover. It is much more difficult to use in areas with heavy brush and timber or rough terrain. Fixed-wing aircraft are most useful over flat or gently rolling terrain where there is not much brush. They must have the ability to fly sufficiently slow as to allow a gunner to have the best possible opportunity for an effective shot at predators. Helicopters can be used in all types of terrain and cover due to their ability to fly slow and maneuver quickly.

In aerial hunting 2 men are required, 1 to pilot the aircraft, and the other to do the shooting. They must act as a team at all times. They must also have full confidence in each other so that each can give their undivided attention to his respective duties. Each individual should form routine safety practices in his respective duties. A mistake by either individual could result in a serious or fatal accident for both. After they have worked together gaining experience, they will become more proficient.

A 12-gauge semi-automatic shotgun is the weapon of choice for aerial hunting from a fixed-wing or helicopter aircraft. Barrel length should be no more than 28 inches to allow easy handling in the aircraft.

A full-choked shotgun is also desirable. Ammunition should be from BB to No. 4 buckshot in size. The gunner should be completely familiar with the operation of the shotgun before entering the aircraft. He should also be completely familiar with the necessary movements of the gun in the aircraft and shooting from the aircraft.

The success of most aerial hunting greatly depends upon the ground work that is done before it is attempted. This is particularly true where predator damage has occurred or where predator populations are low. Specific areas of predator activity should be located before any flying is done. A ground crew with radio communications with the aircraft also enhances the success of aerial hunting. They can help locate predators or predator activity as the aircraft is flying. A ground crew can also elicit vocal responses from coyotes by calling, howling or using a siren to help pinpoint the coyote's location for the aircraft and, can use calling to get predators up and moving to make the predators easier to be seen by the aircraft. The ground crew can also assist by driving predators out of heavy cover for the aircraft.

Extremely low level flying involving maximum maneuvering and flying at slow air speeds for shooting are necessary in aerial hunting. This creates problems not ordinarily encountered during flying. Again, every safety precaution should be taken. Hunting should be done only when flying conditions are favorable. All equipment should be kept in the very best of condition. Only experienced pilots and gunners should undertake this type of predator control. Hunting is done by flying at variable low altitudes, depending upon air conditions, the terrain and visibility, but low

enough to easily see predators on the ground. The area is systematically hunted as in ground hunting, working out draws, ridges, knolls, hills, waterways, brush patches and any other likely places where predators are found. Both the pilot and gunner watch for predators. When a predator is observed, the pilot maneuvers the aircraft into a position for an approach on the animal. Flying as slow as possible, the aircraft is moved into effective shooting range.

Each predator reacts differently when approached by an aircraft. Usually they will start to run, but some will often stand and watch the aircraft or not move until the aircraft is right over the top of the predator. After they have been chased or shot at, they become wise to the aircraft and will make every effort to escape. In areas of routine heavy aircraft use, some predators will not respond to aerial hunting. They will not move at all or will stay holed up in heavy cover where they cannot be seen. During these times, other predator control efforts must be utilized.

## **CONCLUSION**

Calling and aerial hunting of predators can be a selective way to remove problem predators from an area. As with other predator control tools, each of these methods have their advantages and disadvantages. Both methods must be employed with professional abilities under the most suitable conditions in order to be the most successful for predator damage situations. Responsibility rests with the individual to become aware of laws and regulations relating to the use of calling and aerial hunting.

## LITERATURE CITED

Special Report 15. Arizona Game and Fish Department. Tucson, Arizona. 39 pp.

Alberta Agriculture. 1982. Predator damage control in Alberta. Handbook Agdex 684-4. Crop Protection and Pest Control Branch. Edmonton, Alberta. 38 pp.

Coolihan, C. 1990. The use of dogs and calls to take coyotes around dens and resting areas. Pages 260-262 *in* L. R. Davis and R. E. Marsh, editors. Proceedings of the fourteenth vertebrate pest conference. University of California, Davis.

Dorsett, J. W. 1995. Lethal options for controlling coyotes. Pages 158-161 *in* D. Rollins, C. Richardson, T. Blankenship, K. Canon, and S. E. Henke, editors. Coyotes in the Southwest: a compendium of our knowledge. Texas Parks and Wildlife Department, Austin, Texas.

Hill, E. P., and E. J. Jones. 1998. Coyote control in the eastern United States. Mississippi State University Extension Service. Publication 1509. Mississippi State, Mississippi. 7 pp.

Presnall, C. C. 1950. Handbook for hunters of predatory animals. USDI-Fish and Wildlife Service, Washington, D. C. 64 pp.

State of Texas. 1999-2000. Pages 115-117 *in* Texas Parks and Wildlife Laws. Permits to manage wildlife and exotic animals from aircraft. Title 5, subtitle A, chapter 43, subchapter G.

Wade, D. A. 1973. Control of damage by coyotes and some other carnivores. WRP-11. Colorado State Cooperative Extension Service, Fort Collins, Colorado. 28 pp.

Woolsey, N. G. 1985. Coyote field guide.