

Coyotes and Livestock: A reference guide for islanders



Photo credit: Les Palenik

For well over 150 years, especially in the Midwest and West, coyotes have been condemned as the supreme predator of livestock of many kinds, from chickens to cattle, but mainly of sheep. This belief led the US government (and many states as well) to embark upon campaigns of coyote killing that continue to this day. The controversy over these control measures has simmered endlessly and occasionally boiled over when certain aspects of the programs have been revealed to the public.

However, as these programs have yielded to public pressure for more transparency, and as more research has been done to examine the relationship between predators and livestock, a more clear-eyed view of coyotes and livestock has emerged. The more nuanced view is that coyotes clearly do prey on livestock, sometimes significantly, but they are not the rapacious livestock-killers they are often made out to be. In fact, domestic dogs, especially as feral packs or even pets running loose, often do almost as much or more damage to livestock. Certainly, some coyotes do become habitual livestock killers but the benefits that coyotes provide by controlling rodents and other small pests of crops and pastures often offset this.

We humans are not entirely blameless in the problem. Our endless genetic manipulation through numerous breeding programs has produced livestock with the traits we desire—docile, fast growing, ease of birthing—but has left many breeds without the fleetness, alertness, or parental and protective instincts of their ancestors. These modern traits make many breeds very susceptible to predation.

Coyotes and sheep

Sheep are the livestock most often taken by coyotes. While few statistics are available for Washington, coyotes were implicated in over $\frac{1}{4}$ of all sheep and lamb deaths in Montana in 2010. Nationwide, coyotes were the main cause of lamb deaths, even more than disease or severe weather. Given the often helpless nature of our domesticated sheep breeds, their relatively small size, and our tendency to leave them in pastures without tending or refuge, these losses are not entirely unexpected.

Still, coyotes generally do not prey on domesticated livestock. The most likely to prey on livestock are the dominant animals in their territory, often a two year old (or older) male and his mate, especially when the pair has young to feed. Attacks are most likely to occur when sheep or other livestock have very young (and helpless) offspring and at various times in the coyote life cycle—when pups must be fed or when parents are teaching their offspring to hunt. This usually means early spring through late summer in this part of the country. Livestock owners should be especially vigilant during these months.

Protecting your stock: Advice and Recommendations for Livestock owners

Farmers, ranchers and researchers have developed a number of management tools to aid in protecting livestock, especially sheep, from coyotes. While these have been developed with sheep in mind, they are applicable to poultry, cattle, and other livestock as well. Keep in mind that few single tools or techniques will be completely effective in isolation, or even at all times. Like most wild canids, coyotes are smart and learn quickly; many researchers suggest that communication among pack members is well-developed, that information can be passed to other members about food resources but also about traps, snares and baits.

- *Build and maintain coyote-proof fences.* In general, regular 42 or 48 inch high stock fence is inadequate for keeping coyotes from your stock. If a stock fence is your only defense, it should be at least 5 ½ feet high and the openings no greater than 4" by 4"; coyotes have been seen squeezing through the regular 6" X 4" opening of a graduated stock fence. Galvanized deer fence is a suitable alternative. If building a new fence, consider electrifying the top two strands as you build or construct a New Zealand type electric fence. This type consists of 7-12 strands of high tensile wire and is 4 to 4 ½ feet high. Electrified netting fences can be effective deterrents for poultry protection. If you have a regular stock fence in place, consider adding a hot wire along the top, 6 to 8 inches above the top strand. In all cases, maintain your fences regularly and repair any breaks or holes promptly. In some cases, attaching metallic ribbons that flutter in the breeze has discouraged coyotes but some animals learn quickly that the ribbons pose no threat.
- *Watch your stock more closely.* Without full time shepherds, this task falls to the stock owner. Check your flock or herd at irregular intervals, day and night, and avoid pasturing them in remote areas, out of sight and far from the main farmyard, especially, avoid pasturing in areas adjacent to dense cover, woods, ravines or gullies, and watercourses.
- *Bring your stock into protective areas at night.* If you have a barn, sheds, or corrals, bring the flock or herd into the safety of that cover at night. Bring the flock closer to human habitation if possible. Most livestock, and especially sheep, learn quickly to show up at the appropriate time to be sheltered. In many cases, the flocks seem to appreciate the shelter from the weather.
- *Use lights (and other methods) to discourage coyotes.* Well-lighted corrals or barnyards are an effective deterrent against coyote attacks. In some instances, even parking a pickup in the pasture seems to keep coyotes at bay. Irregular noises—even human conversation—have at times been used to deter coyotes. A lighted area seems to offer the best protection, however, and is unlikely to offend the neighbors late at night.
- *Remove coyote and rodent cover.* Remove brush piles, stumps, and debris piles that may harbor prey for coyotes from your pastures.

- *If you have cattle, pasture them with your other livestock.* Studies indicate that the presence of cattle seems to repel coyotes.
- *Clean up.* Do not leave the bodies of dead livestock lying about in pasture areas. This carrion can attract coyotes from a considerable distance. Bury the carcass at least two feet deep, burn it, or have it hauled away as soon as possible.
- *Consider a different breed.* If you have sheep or other livestock that have weak flocking and protective instincts, consider changing to a breed that retains those characteristics. There are many sheep breeds and other livestock breeds that have not been so strongly domesticated that they have lost their ancestor's characteristics of alertness, fleetness, or protectiveness. Search these breeds out (some will be heritage breeds) and consider them for your flock or herd.
- *Get a guard animal.* Although not a sure-cure for all stock losses, a guard animal, good fencing, and careful stock management will go a long way toward protecting your livestock from coyotes and other predators. Guard animals, most often guardian dogs, have a long history in other countries, and are becoming more common in the US. Donkeys, llamas, even alpacas, are used to guard flocks of sheep in many countries and throughout the US. Guardian dogs, however, are the most common guard animals. But we are not talking about the breeds of dogs we most often associate with sheep—border collies, Australian shepherds, kelpies, and the like. Guardian dogs are often large, quite independent animals, with a long history of protecting livestock; they are often raised alongside their flocks from a very young age, the better to bond with their charges. Some common guardian breeds are the Great Pyrenees, Maremma, Komondor, Akbash, and the Kangal. Anyone considering a guardian animal, but especially a guard dog, should consult with experienced owners, trainers, and breeders before choosing an animal for this purpose.

Further Questions: Want to talk with a person?

- **Coyote working group of Vashon-Maury:** a volunteer group of local islanders composed of scientists, livestock owners, sportsmen, veterinarians, wildlife landscape architects, and pet owners. This group has worked together to put together the local resource pages (including this one) that are found on the VNC [website](#). Main contact: Bianca Perla at Vashon Nature Center--info@vashonnaturecenter.org, 206-755-5798. Inquiries will be directed to the coyote working group email list or to the most appropriate expert in the group.
- **Washington Department of Fish and Wildlife:** WDFW is experienced with coyotes in Washington and can answer many questions. See the WDFW [coyote fact page](#). Still have questions? Contact—Chris Anderson (425) 775-1311 or Christopher.Anderson@dfw.wa.gov

- **United States Department of Agriculture:** USDA is another good resource for information about living with coyotes. Both USDA and WDFW prefer non-lethal control methods for mitigating coyote-human conflicts and will work with landowners on this front. USDA has the power to use lethal control as a last alternative. Contact: Andy Cleland 253-329-6234.

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