









Living With Wildlife

Coexistence Tools and Techniques

Americans are fortunate to share the landscape with a spectacular abundance of wildlife. That means, however, that people and wildlife sometimes come into conflict: Predators prey on livestock; bears get into trash; prairie dogs graze on grass ranchers want for their cattle. Fortunately, a suite of tools and methods exists to help prevent these conflicts.

METHOD/TOOL	DESCRIPTION	APPLICATION
 <p>Food storage lockers and food-hanging poles</p>	Wildlife-resistant metal storage lockers with secure latches or poles for suspending food to keep it away from bears and other wildlife.	Installed in campgrounds, recreation areas and communities to prevent wildlife from associating food with humans. Lockers being tested in Alaska for effectiveness in keeping polar bears out of subsistence food supplies as ice cellars fail due to climate-change-related melting of permafrost.
 <p>Wildlife-resistant garbage containers</p>	Wildlife-resistant garbage storage options such as reinforced residential bins, sheds, dumpsters and garbage holsters.	Placed at locations near communities with high risk of conflict between bears and people to prevent bears from receiving food rewards and becoming habituated to humans.
 <p>Fencing and enclosed structures</p>	An enclosure made of wire mesh, solar- or battery-powered electric strands or panels or a combination of materials that is high and secure enough to keep predators and other wildlife out. Roofed to keep panthers and other big cats out where necessary.	Permanently installed as night corrals to protect small livestock operations or enclosures for pet kennels, chicken coops, beehives or other property and to secure other attractants such as trash, barbeque grills or compost piles. Set up temporarily by larger livestock operations with constantly moving animals.
 <p>Fladry</p>	Rope strung with red or orange flags at fixed intervals, a barrier that scares wolves away from livestock pastures. Known as “turbofladry” when electrified line is added to boost effectiveness.	Used in situations that call for an inexpensive, highly portable, easy-to-install way to keep wolves away from livestock.
 <p>Livestock guarding dogs, donkeys or llamas</p>	Great Pyrenees, Anatolian shepherds, Akbash and other rugged canines specially bred to protect flocks from predators. Used for centuries by shepherds around the world. Donkeys and llamas also used in some cases.	Trained to live with livestock year-round and warn of approaching predators. Typically more than one dog is used and herders or range riders are present to respond to the alarm sounded by the barking dogs.
 <p>Range riders and herders</p>	A much-needed human presence on the open range to watch out for wolves and grizzlies and actively protect herds and flocks.	Deployed to closely monitor herds and flocks and surrounding terrain for signs of wolves and grizzlies, to scare off wolves and grizzlies when they do appear, and to remove sick or dead livestock that may attract predators.









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 <p>RAG box</p>	Short for radio-activated guard (RAG) system, an alarm that consists of a receiver, loudspeakers, strobe lights and a battery-operated computer housed in a metal box.	Placed on or near fences and set to blare and flash when it picks up the signal from an approaching radio-collared wolf, scaring the animal away.
 <p>Noise and light deterrents</p>	Air horns, noisemakers such as propane canons, high-density spotlights, flares or other lights.	Used to scare predators away from livestock or from hikers and campers in bear country.
 <p>Nonlethal ammunition</p>	Ammunition (rubber bullet, beanbag shell) shot from a gun to scare an animal with a loud noise or a nonlethal hit. Designed to deter rather than harm.	Fired to discourage predators and other wildlife from approaching livestock or communities by negatively reinforcing the behavior.
 <p>Alternative grazing strategies</p>	Moving livestock to grazing sites with lower risk of predator encounters; providing hay to feed cattle in safe areas; altering timing of and consolidating calving season to produce larger, easier-to-monitor and less vulnerable calves for grazing.	Offered as an option in situations where other proactive measures cannot be implemented quickly or effectively enough to prevent livestock losses—when wolves are denning in a grazing area, for example.
 <p>Vegetative barriers</p>	A fence or swath of 12-inch or taller vegetation that obstructs prairie dogs' ability to see predators, significantly reducing their movement.	Used to reduce opposition to prairie dog ecosystem restoration by keeping colonies from expanding from conservation sites into neighboring areas where landowners oppose their presence.
 <p>Relocation</p>	Physically relocating entire prairie dog colonies from conflict areas to protected areas designated for restoration.	Offered as an alternative to poisoning with the added benefit of active restoration in designated areas.
 <p>Camera traps</p>	Motion-sensor cameras placed in often remote locations and triggered by approaching wildlife.	Often coupled with an incentive program to reward individuals for coexisting with wildlife while also non-invasively gathering information to understand wildlife movements and patterns of conflict.
 <p>Diversionsary feeding</p>	Moving food such as animal remains to a safe location away from communities.	Used for a variety of wildlife, particularly bears, although careful design and use is required to avoid food-conditioning of wildlife. Being explored in Alaska as a technique to reduce conflicts with polar bears in coastal communities as sea ice melts and bears are stranded on land for longer periods.

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