

LLAMAS, ALPACAS & DONKEYS

- Similar feed requirements as sheep
- Easy to fence in
- Generally calm temperaments
- Less effective in hilly terrain
- Don't roam or bark
- Less prone to accidental death than dogs
- Long working life
- No training required
- Can guard sheep, goats, cattle, poultry
- Generally bond to livestock that can be wary of dogs
- May not be effective against larger predators
- May not protect well if used with others of their kind

Llamas, alpacas and donkeys can make excellent livestock guard animals — particularly against coyotes — and can be a good choice for ranchers who don't have the time or expertise to train a guardian dog.



FLEARDS

Flelds are cattle and sheep grazing together to form a herd. Cattle offer some protection to sheep but pen bonding is required to ensure sheep bond with cattle. Bonding is accomplished by penning sheep with cattle for a couple of weeks. A creep feeder should be available so lambs can escape if necessary. Once you have some trained sheep, others can be added to flerd without requiring pen bonding.

NIGHT CORRALS

Since most predators attack at night, putting animals in smaller, predator-proof corrals provides greater protection from attack. Keep the corrals well lit and clear of brush. Feeding grain in the corrals initially will make sheep easier to gather. Many predators hunt at dusk and dawn so be sure livestock is in corrals before dusk and let out after dawn.

SHED LAMBING

Lambing inside a barn can prevent many losses from predators and also makes it easier to spot birthing problems and sick or injured animals who might be overlooked in pastures.

SCARE TACTICS

Predators — especially coyotes — are wary of new things in their environment, so scare tactics can be very effective. Change and rotate these deterrents to reduce habituation. They are especially useful when added to other nonlethal methods during critical times like lambing.

Examples:

- Park vehicles in different or unusual spots
- Use an outdoor radio on a dusk-to-dawn timer set to a talk radio station
- Hang outdoor Halloween decorations that move and make noise, either randomly or by motion sensor. If motion activated, be sure the sensor is far from livestock so they don't constantly trigger the device.

FOXLIGHTS

Foxlights deter nighttime attacks by mimicking the appearance of a person patrolling pastures with a flashlight. Their dusk-to-dawn solar-powered sensors randomly flash LED lights at 360 degrees and can be seen up to a half mile away. Foxlights have been used successfully around the globe to protect livestock and crops from a variety of species including snow leopards, wolves, elephants, foxes and coyotes. Foxlights attach easily to existing fencing and are best placed where livestock bed down at night.



HUSBANDRY PRACTICES & SHEPHERDING

Simple husbandry practice reduce livestock losses. Some important protocols include:

- Maintain human presence; range riding and being on the land and around livestock are effective ways to keep predators at bay
- Remove carcasses and sick animals from your ranch as soon as possible
- Keep carcass pits well away from livestock
- Prevent livestock from grazing in areas with dense cover where they can be easily ambushed

PROTECTING POULTRY

Chickens are vulnerable to attack from many animals including raccoons, rats, skunks, owls, bobcats and dogs. Take steps to protect them. Effective predator-proofing is essential. Chickens should be brought into safe coops every night well before dusk.

- Use a LGA in areas with high predator loads
- Cover any opening in the coop or outdoor run with ¼ inch hardware cloth
- Bury the hardware cloth 12 inches into the ground around outdoor runs to prevent predators from digging underneath
- Cover the runs to prevent attacks from raptors
- Secure door and window latches to prevent raccoons from accessing the coop

For more information and updates on new innovations visit ProjectCoyote.org



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Ranching with Wildlife

Nonlethal Solutions to
Reduce Conflicts



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HUMAN PRESENCE AROUND LIVESTOCK IS ONE OF THE MOST IMPORTANT WAYS TO KEEP PREDATORS AT BAY.



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RANCHING WITH WILDLIFE NONLETHAL SOLUTIONS TO REDUCE CONFLICTS

Livestock losses are an unfortunate reality of ranching. Most losses are disease or weather related or result from birthing complications; predators can also kill livestock, but good animal husbandry practices combined with strategic nonlethal predator control methods can considerably reduce such losses. Ranchers can choose which methods will work best for their livestock operation. Although many nonlethal techniques exist for reducing livestock losses to predation, the specific technique(s) employed will depend on the type and size of livestock operation, habitat/terrain, native predator species present, cost, and available resources.

LETHAL OR NONLETHAL?

The best livestock protection strategy is to have effective nonlethal systems in place and to use lethal control only as a last resort with chronic depredation and when non-lethal methods have proven ineffective.

THE COST OF LETHAL METHODS

- 🐾 Reactive — generally used after livestock is killed
- 🐾 Rarely target offending animal
- 🐾 Disrupt predator social structures, which can lead to increased conflicts with livestock
- 🐾 Can lead to an increase in rodent/rabbit populations
- 🐾 Often inhumane, causing pain and suffering
- 🐾 Labor intensive — requires ongoing killing as predator populations rebound
- 🐾 Snares, poisons and body-gripping traps can injure or kill non target animals, including pets and livestock
- 🐾 Can negatively impact ecosystems

THE VALUE OF NONLETHAL METHODS

- 🐾 Proactive — prevent losses before they occur
- 🐾 More humane
- 🐾 Offer long term cost effectiveness
- 🐾 Less harmful to ecosystems
- 🐾 Allow predators to control rodent/rabbit populations
- 🐾 Depending on types used, can provide long term 24/7 protection
- 🐾 Often more cost-effective

WHAT KILLED MY LIVESTOCK?

When finding a carcass that has been fed upon, identify whether the animal was killed or was simply scavenged after death. Bleeding can only occur before or shortly after death, so look for blood at the area of suspected attack and around the carcass site. Bites on live animals will cause bruising under the skin. In heavily woolled sheep

it may be necessary to shave or skin the head and neck to check for punctures or bruises. Signs of a struggle, drag marks, broken and bloody vegetation and a nervous flock are also evidence of predation. Lack of these signs suggests a scavenged carcass. Domestic dogs often severely mutilate their victims and rarely feed on carcasses.

FENCING

Fencing is a rancher's first and best defense. But predators can penetrate a fence by digging under, jumping between wires, crawling through holes, or jumping over.

Absolute predator-proof fencing, although possible, is generally cost prohibitive; however, woven wire fencing in good repair will deter many predators from entering pastures, especially if vertical stays are no more than 6 in. apart and horizontal wires are spaced 2 to 4 inches apart at the bottom. Although more expensive than high-tensile electric fences, woven wire has many advantages and should be considered for perimeter fences. High-tensile electric fencing is another option. Perimeter fences should consist of at least five strands of high-tensile smooth wire. Increasing the number of wires will improve effectiveness and wires need to be properly spaced (bottom wires must be closer than top wires). Where there is adequate soil moisture, all wires should be electrified. Otherwise, the fence should have a mixture of both live and ground wires. A good height for keeping sheep in and predators out is 48 inches. Fence lines must be kept clear of vegetation. Weeds and grass that touch the fence will reduce voltage and effectiveness of the shock.

FLADRY/TURBO FLADRY

Fladry is a line of rope mounted along a fence line with hanging strips of red nylon flags. The flags frighten predators, making them unwilling to cross the line. Fladry lines were traditionally carried by wolf hunters in Eastern Europe to drive wolves to areas where they could then be killed. Studies show that fladry can deter wolves for several months. While fladry also deters coyotes, they generally cross flags sooner than wolves. Turbo fladry is fladry with hot wire added. Turbo fladry can remain effective up to twice as long as regular fladry.

LIVESTOCK GUARDIAN ANIMALS (LGAs)

When obtained from responsible breeders and trained and used correctly, LGAs can significantly reduce losses from predators. Whether you choose dogs, llamas or donkeys consider these tips:

- 🐾 Use a reputable breeder who sells animals specifically for guardian work. Most llama and donkey breeders offer 30-day trials. Dog breeders should be willing to answer questions during the training process.
- 🐾 Not all LGAs will work. Some may ignore or even attack livestock. Never leave LGAs alone with livestock until they have bonded.



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"I LIKE TO SAY THAT MY DOGS ARE PROFESSIONALS. MY SHEEP ARE THE ENTIRE FOCUS OF THEIR LIVES...THEY'LL DEFEND THE SHEEP TILL THEIR DEATH IF THEY HAVE TO."

*Marcia Barinaga, Barinaga Ranch, Marshall, CA
San Francisco Chronicle, April 27, 2012*

DOGS

- 🐾 Popular guardian breeds include Great Pyrenees, Anatolian Shepherds, Maremma, and Akbash
- 🐾 Unusual to find trained dogs for sale and pups take a year or more of training before they are ready to work
- 🐾 Can guard poultry, sheep, and cattle
- 🐾 Can work with other guardian dogs
- 🐾 Secure fencing may be required to prevent some dogs from wandering
- 🐾 May be aggressive to and may bark at people or pets who enter pasture
- 🐾 Require dog food instead of hay or forage
- 🐾 Usually more expensive than llamas and donkeys
- 🐾 Short lived compared with other guardian animals
- 🐾 Spaying and neutering makes dogs more reliable guardians