



## Tools for California Livestock Producers to Discourage Wolf Presence, Guidance for Suspected Wolf Depredation, and Wolf Legal Status

These tools, and other similar non-lethal techniques, are generally more effective when used in combination. These techniques may also discourage the presence of other potential livestock predators, such as coyotes and black bears.

### Livestock and carcass management

- To the extent possible, make pastures and other areas less attractive to wolves.
- Remove diseased, injured, or dying animals from pastures and open range areas.
- Dispose of carcasses so they are less accessible to wolves and other scavengers.
- Clean up, remove, or fence old carcass disposal areas (bone piles).

### Placement of Barriers

- Fence or pen livestock at night using permanent or portable fencing.
- Consider the use of electrified fladry (a series of cloth or synthetic flags hung at a regular interval along a strand of electricity-conducting polywire). Fladry is a visual deterrent to wolves, and the electrified polywire can reinforce the barrier and help prevent habituation.

### Human Presence

- Increase the frequency of human presence in localized areas.
- Consider the use of trained “range riders” or herders for open range livestock.

### Electronic predator aversion devices

- Install flashing lights and/or noise-making equipment such as predator scare boxes, radios, etc. near areas of concentrated livestock.
- Some predator aversion devices are triggered by motion, while others turn on at random intervals (e.g., “Foxlights”).
- Move individual device locations regularly to reduce the potential for wolf habituation.

### Livestock protection dogs and guard animals

- Livestock protection dogs can protect livestock in pastures and pens.
- The effectiveness of livestock protection dogs depends on breeding and training, and their utility may be limited in large areas with dispersed livestock.
- Multiple livestock protection dogs accompanied by herders appear to provide greater livestock protection and less risk to individual dogs.
- Because Fish and Game Code Section 3960(b) makes it unlawful for dogs to pursue endangered mammals (e.g., gray wolves), all livestock protection dogs should be trained to remain with livestock herds and groups.

### Non-injurious harassment (hazing)

- Techniques that aversively condition wolves without injuring them may be considered on a case-by-case basis if prohibited take can be avoided.
- Techniques for non-injurious harassment may include approaching the wolf (on foot, on horseback, or with a motorized vehicle), making loud noises (yelling, air horn, gunshot directed away from any wolves, etc.), and spotlights.
- CDFW emphasizes the distinction between *approaching* with the intent to disperse it from a site and *pursuing* a wolf after it departs the site.



### **Injurious Harassment Is Prohibited**

- Injurious harassment, including causing any object to physically contact a wolf, firing bullets or nonlethal ammunition at a wolf, or pursuing a wolf with motorized equipment would be prohibited take in most circumstances.

### **Suspected Wolf Depredation on Livestock**

Please report possible wolf depredation on livestock, livestock guarding and herding dogs, or other domestic animals to the California Department of Fish and Wildlife and/or USDA/APHIS Wildlife Services (contacts below). To protect the scene prior to agency response, please:

- Avoid walking in and around the area except to protect evidence.
- Keep dogs and other animals away.

### **Gray Wolf Status**

Gray wolves are listed as an endangered species under the California Endangered Species Act (CESA) and there are prohibitions against “taking” wolves. Under CESA, “take” is defined as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill” and is prohibited with limited exceptions (e.g., FGC sections 2080.1, 2081 and 2800).

### **Contacts**

- CDFW Wolf Specialist: Kent Laudon, (530) 215-0751
- CDFW Northern Region Office, Redding: (530) 225-2300
- CDFW North Central Region Office, Rancho Cordova: (916) 358-2900
- USDA/APHIS Wildlife Services: Derek Milsaps, (530) 708-0369