

The Electronic Guard: A Tool in Predation Control

The Electronic Guard helps reduce wildlife damage to agricultural resources. Developed by the Animal and Plant Health Inspection Services' (APHIS) Wildlife Services (WS) program, this device combines two scare tactics, sound and light. Although it was created by WS' National Wildlife Research Center (NWRC) to protect sheep from coyote predation, the Electronic Guard can be used to protect other livestock and commodities from wildlife damage.

A light-sensing device activates the Electronic Guard at nightfall and turns it off after daybreak, thus operating the machine when predation is most likely to occur. A timer regulates a siren and a strobe light—sometimes just flashing the light, sometimes just sounding the siren, and sometimes doing both at once. This random arrangement helps keep potential predators at bay. NWRC's tests have shown that using the Electronic Guard can temporarily reduce predation an average of 80 percent in range and pasture situations and 60 percent in mountain grazing areas.

Frightening Predators

For centuries, livestock producers have used frightening devices to ward off potential predators. Most predators are initially fearful of unexpected disturbances and keep their distance. Over the years, the devices have changed from simple scarecrows and bells or other noisemakers to more modern devices like the Electronic Guard.

The Electronic Guard should be used only when necessary because most predators eventually learn to ignore the periodic light-and-sound show. This device is not a cure-all for predation problems but is one tool in a comprehensive approach to controlling predator damage. It may help producers complete the lambing season with minimal loss by stopping predation until sheep can be moved or until other control methods can be used.

Other Uses

A survey of users of the Electronic Guard by WS found the device to be successful in keeping black bears out of vineyards and white-tailed deer out of gardens and cornfields. Customers also report that

they use the Electronic Guard to prevent damage to haystacks and orchards by elk and deer, discourage beavers from building dams, and frighten birds away from commercial fish farms.

Using the Electronic Guard

The Electronic Guard should be hung from a tree or a post on a high area near where predation has occurred. When possible, one guard should be placed in the center of the bedground with other guards around the edge, especially when the bedground is near a coyote pathway.

The number of Electronic Guards needed to protect sheep will depend on the size of the pasture, the vegetation in or around it, and the terrain. In general, at least two units should be used in small, fenced pastures (20–30 acres) or in level pastures with short grass. Three or four units should be used in large, fenced pastures (31–100 acres), hilly or wooded pastures, or those with tall grass. In open-range conditions, the number of Electronic Guards depends on the number of sheep and the size of the bedground. NWRC testing shows that at least 4 guards should be used with a band of 1,000 ewes and their lambs.

How to Order

The WS program manufactures the Electronic Guard, which is a self-contained, 11-pound cylinder that can operate for approximately 60 days on a 12-volt alkaline battery. The Electronic Guard costs about \$250, not including the battery, and can be ordered through your State APHIS WS office listed in the blue pages of most telephone books under "U.S. Department of Agriculture." The device also may be obtained directly from WS' Pocatello Supply Depot, 238 E. Dillon St., Pocatello, ID 83201. Each unit is shipped with a complete set of instructions.

Additional Information

You may obtain further information about WS from any State APHIS WS office. For the address and telephone number of the office in your area, call the WS Operational Support Staff at (301) 734-7921. You can also find information on WS programs by visiting the Web site at <http://www.aphis.usda.gov/ws>.

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