

Deterrents to Predators of Livestock

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There are no foolproof methods for keeping coyotes and other predators away from livestock. There are, however, a variety of deterrent measures that offer some protection from predators. Most deterrents are aimed at coyotes. Farmers and ranchers can use deterrents singly or in combination with varying degrees of success. Often, a trapping program can be combined with use of deterrents to destroy a problem predator. Best results are obtained when a deterrent system is compatible with farm or ranch operations.

On farm operations, deterrents are aimed at frightening predators or making it difficult for them to reach livestock. On rangeland operations, where sheep move from one vast grazing pasture to another, deterrent efforts center on management of sheep flocks.

Deterrents Applicable to Farm Operations

Frightening devices introduce unfamiliarity into the predator's environment. A coyote risks injury or death each time it preys upon a large animal. Unfamiliar sights and sounds in the pasture represent a potential danger, making the predator cautious and less aggressive. The time span of the deterrent's effectiveness varies with individual predators. In general, deterrents provide only temporary relief from predation and are used primarily for operations that confine the livestock at night.

Visual deterrents

Place a vehicle in the pasture near the night holding area. Provide lighting in the night holding area. The effect may be enhanced by using blinking or revolving lights.

Audible deterrents

Bell the livestock. The deterrent effect improves with an increase in the number of animals wearing bells. Gas exploders, rope firecrackers, continuous cassette tapes, and radios may also provide effective deterrence. Gas exploders and firecrackers should be set at intervals of less than five minutes between explosions. The use of exploders and fireworks produces the greatest initial disturbance to livestock of the deterrents mentioned. There is also a high annoyance factor to humans with the use of these devices.

Aggressive animal deterrents

Dogs can be chained outside the night holding enclosures. Chaining the dog to a cable run will offer it greater mobility. No specific breed is necessary. The most important requirements are that the dog is large and aggressive.

Special dog breeds such as the Komondorok and Great Pyrenees are touted as guard dogs with the capability of protecting sheep flocks from predators. These dogs are allowed to roam freely among the flock. The effectiveness of these breeds as guard dogs to reduce predation is under investigation in the United States. Supply is limited and, consequently, an untrained puppy may cost \$200 or more.

Ponies, billy goats, and other domestic livestock that are more aggressive than domestic sheep can be penned or run with a flock. There is no prescribed ratio of the number of aggressive animals per number of sheep because the situation changes with each operation.

Measures that reduce predator accessibility

Predator fencing can lower losses by reducing the predator's accessibility to livestock. The feasibility of fencing is dependent upon suitability of terrain and economic limitations of each operation. The utility of predator fencing is limited primarily to farm flock situations.

Confinement of livestock in barns or other structures can be used for nightly penning and protection of a flock. If no suitable protective structure is available, then an area enclosed by predator fencing can be used as an alternative. The size of the night holding enclosure is dependent upon the number of sheep to be confined.

Entire pastures can be enclosed with predator fence, but costs may be prohibitive. An alternative fencing scheme is to construct a predator fence around a pasture used for lambing or during other critical periods. This provides some protection during periods when predator problems are acute. Predator fencing becomes even more feasible in operations where breeding programs are designed to shorten the lambing season. If predation is intermittent, sheep can be enclosed in this predator-fenced pasture until the problem predator has been destroyed or ceases depredations.

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Deterrents Applicable to Range Operations

Pasture rotation for deterrence

Pasture rotation is a grazing system where livestock are moved from pasture to pasture on a schedule that enhances forage production and utilization. Predation should be considered in the planning of a pasture rotation system. Pasture rotation can be planned to provide some protection to the flock during critical periods like lambing or the first month of life. Some predators will be discouraged by bringing the flock closer to centers of human activity. Additionally, livestock can be inspected daily, predation detected, and prompt action taken to prevent further losses. When predation occurs in one pasture, livestock may be rotated to a different pasture. Coyotes have definite territories and movement of the flock may place it out of the problem predator's hunting area. Pasture rotation plans that take predation problems into account are suited to farm operations as well as range operations.

Shepherds

Shepherds decrease predation and other losses such as lambing, mismothering, and accidents. Farm operations in western Oregon, however, usually do not have a sufficient number of sheep to justify the use of shepherds. Shepherds are used primarily in open range situations where large bands of sheep are trailed from

one grazing area to another. But shepherds like the Basque herders, with their well-trained sheep dogs, are hard to find.

Unskilled laborers have been suggested as potential herders, but proper care of a flock is not easy to teach. It takes a special person to endure the rigorous lifestyle of a shepherd. There is also the problem of providing good sheep dogs. Shepherds and dogs must work as a team, therefore, shepherds should have their own dogs. Labor costs vary with local situations and may be prohibitive for some producers. A farm owner employing more than 500 man-days of agricultural labor per quarter must pay a minimum wage of \$2.00 per hour. There are no minimum wage requirements for labor engaged in range production of livestock because of a special exemption (Sec. 13A6E) within the Fair Labor Standards Act.

Predator deterrents should be used in combination to minimize the producer's reliance on direct predator removal. The particular combination of deterrents that will maximize livestock protection varies, but most livestock producers need to include predator deterrents in planning an animal husbandry program. New predator prevention methods are being tested in laboratory and field trials. Sound, scent, and visual deterrents may become more efficient in preventing losses to predators.