Ask the Herdsman

Guard Llamas

By Hank Kauffman

Question: We have heard that llamas are used to guard herds of sheep. Is this true, and how well do they work?

Answer: Llamas are used as effective guard animals in sheep herds. The Ohio State University uses a guard llama in each of their research sheep herds. They have reduced their predator losses to almost zero. Here is an article I wrote on the subject for an Ohio farm magazine. It should answer most of your questions.

The search for a simple technique to prevent coyote predation on sheep has led to field use of guard animals. A guard animal is an animal of another species kept with the flock that represents, if not actually poses, a threat to coyotes. The ideal guard animal should protect sheep against coyotes while requiring minimal training, care, and maintenance. It should stay with and not disrupt the flock and live long enough to be cost effective. A variety of guard animals currently in use includes dogs, donkeys, kangaroos, and llamas. Of these, dogs are by far the most common. However, during the last decade llamas have become more popular as guard animals for sheep flocks and have proven to be very effective. This article is primarily in reference to guarding sheep, but llamas are also used to guard goat and alpaca herds.

The characteristics of llama, sheep, goat, and alpaca husbandry practices are similar and guard llamas do reduce predation after they have been introduced to the herd. There is no difference between geldings and intact males in their effectiveness in protecting sheep, nor is there any difference between males and females. It is, however, recommended that geldings be used instead of intact males. Intact males have been known to try to breed sheep during estrange. The high cost of females, usually several thousand dollars, makes them an impractical choice unless they are also used as breeding stock. It does make a difference whether single or multiple guard llamas are used. Multiple guard llamas work in some cases, but overall, predation is higher in flocks with multiple llamas compared with flocks with one llama. With multiple guard llamas in the same flock, the llamas tend to form their own herd and not guard sheep.

Although llamas have been introduced to sheep in a variety of situations, there is no difference in the llama's eventual effectiveness in protecting the sheep. Sheep first introduced to guard llamas in an open field, however, experienced higher initial predation than those introduced in a barnyard setting. Although lambs affectionately interacting and playing with a llama is a striking and impressionable sight, llamas introduced to sheep with lambs ultimately are no more effective than llamas introduced to flocks without lambs.

The actual age of the guard llama (excluding those less than 1 year old) is not related to its effectiveness. However, it appears that llamas don't become fully protective until at least 18 months to 2 years of age.

Llama and sheep behavior toward each other does not influence the llama's guarding abilities. Surprisingly, there is no difference in losses of sheep ranging with a guard llama in open habitat vs. habitat with cover (wooded, shrubby, gullies, ravines, etc.) Just the same, a llama is expected to more easily detect a potential predator in open terrain.