Use of Guard Llamas in an Integrated Predator Control System

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BACKGROUND

- Historically, the llama has been used as a pack animal, carrying almost 20% of their body weight for miles up steep mountains. While they are still used for this purpose in South America, Northern Americans have found a new way to utilize these hardy animals.
- Using the llama as a guard animal has been proven to negatively impact predation on newborn lambs, which in turn results in a more successful operation.
- With proper care and handling, the llama should be regarded as a viable way to control predation within a flock.

HOW THEY PREVENT PREDATION

- Typical responses and protection tactics that the llamas use include alerting attention to the sheep and caretakers, making an alarm call, walking and/or running towards the predator, locking and/or pawing the predator, herding the sheep to move them away from the predator, and positioning itself between the flock and the predator (refer to Figure 2).
- Llamas provide aggressive interactions with the canine when needed, but also provide passive protection, because some predators that rely on stealth may abandon the hunt if they see the llama in the pasture.

LLAMA CARE

- 80% percent of farmers with llamas said that daily care for the llamas was the same as their sheep, and they did not need to provide any special feeds. ¹
- A separate food container for the llama should be provided at a height the sheep cannot reach, to minimize the chances of any food-based aggression. ²
- The average daily intake of a gelded llama is 7-15 lbs of grain feed per day; a granular supplement and fresh water should be given free choice. ³
- Vaccinations should include tetanus and contagious diseases, which are readily available on farms in a typical sheep operation. ³

PRICE ESTIMATE

- Gelded males are the most popular form of guard llamas, mainly because they are less aggressive to the sheep and have a cheaper upfront cost of somewhere between $300 and $700 (See Figure 5).
- Buying a female llama, which can cost several thousand dollars, would only be worthwhile if you planned to breed or have a use outside of just being a guardian option. ³
- Average annual costs for feed were $90 and veterinary costs were only $16. ⁴

TRAINING

- Llamas reach their prime protecting age at 1-2 years old. ¹
- The working life of a llama is typically 10-15 years. ⁴
- Very little training is required, and 80% of llamas have adjusted within one week after introduction. ¹
- To encourage bonding, llamas and sheep should be kept together in a small paddock for 4-6 weeks rather than pasture. ²
- The use ofPackage, or castored males, is recommended over intact males as intact males may try to mate with the ewes. ²
- For one llama, the size of the sheep flock can be as little as four sheep, and as many as 2,100; however, the average flock size is 250-300 sheep. ⁴
- Once bonded with the flock, they become the llama's family group, and then pasture the llama's territory. ¹

PREDATORS MOST EFFECTIVE AGAINST

- Llamas are known to be most effective in protecting against canine species such as coyotes, red fox, wolves, and domestic dogs. ⁴
- This is thought to be the case because llamas already have an innate fear of canines, so their instinct is to chase the animal away and alert others to its presence. ⁴
- Studies also show that llamas work better alone rather than having multiple llamas working together in a pasture. ⁴

FIGURES

- **Figure 1:** Llama outside of Machu Pichu
- **Figure 2:** Methods Llamas Use to Prevent Predation
- **Figure 3:** Guard llama with its flock
- **Figure 4:** CDT vaccine
- **Figure 5:** Comparison of characteristics of guard llamas and guard dogs
- **Figure 6:** Reported average annual loss of sheep and lambs due to predation before and after obtaining a guard llama
- **Figure 7:** Survey of Owner Satisfaction

RECOMMENDATIONS

- Llamas are a valuable animal that are easily trained, cost effective, and most importantly are able to effectively protect your livestock.
- While llamas are helpful guardians, they should not be your only method to prevent predation and are most effective if used as an added measure with your preexisting protocol.

BIBLIOGRAPHY
