

Livestock Guardian Dog Case Study

Trans Pecos Ranch, Pecos County



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This research project was funded by the Texas Sheep & Goat Predator Management Board

and the National Sheep Industry Improvement Center .

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Warren Cude, Pecos County

Ranch Scenario -

The ranch is approximately fifteen thousand acres and is in Pecos County. The terrain consists of light to heavy low brush in rocky terrain with small to large hills and canyons. New fencing has been installed across the ranch over the last seven years to help with predator control. While the ranch has been a 2000 head sheep seedstock operation for many years, it is transitioning into goats and cattle as well to better utilize the properties rangeland. The ranch also maintains a helicopter service to a variety of industries and needs in the area. When not focused on those duties the owners regularly patrol for predators. Pastures are all about one thousand acres in size. Cellular service is poor in the area which required the use of a LoRa cellular tracking system to monitor the movement of the dogs. The LoRa system uses a base station or gateway that transfers the tracker data to a cellular tower. This allows for more frequent updates and a lower overall cost.

Overall Management Plan -

The long-term management plan for the ranch is to keep 150 ewe lambs per year to add sheep back into areas that were difficult to control predators in without LGDs. Ewes generally lamb in the spring and fall. Ewe lambs are sold for resale currently while most ram lambs are sold for meat. Management of brush is continually done either mechanically or chemically for mesquite and grease wood on the ranch. LGDs are checked and supplemental fed regularly. The dogs are monitored using GPS trackers throughout the day.

General Observations -

The ranch received four dogs as part of the NSIIC project, three males and a female. Two of the dogs were pure Akbash and the other two dogs were Akbash x Great Pyrenees x Anatolian Shepherd. Dogs were fed using a self-feeder in a feeding station but were often hand fed a supplement when livestock were checked each day. The AgriLife dogs were more easily caught in the field than the producer bonded dogs. The rancher regularly saw LGDs with sheep and were often seen protecting ewes while they were lambing. Dogs were observed to trail a coyote out of a pasture and into a snare once. They were found fighting with the coyote as the rancher approached the location. The only difference the producer has seen between the dogs he bonded and AgriLife bonded dogs was that one of the AgriLife dogs seemed to start roaming into other pastures near the end of the project. The male dog was found to be following oil trucks to wells on the ranch on several occasions.



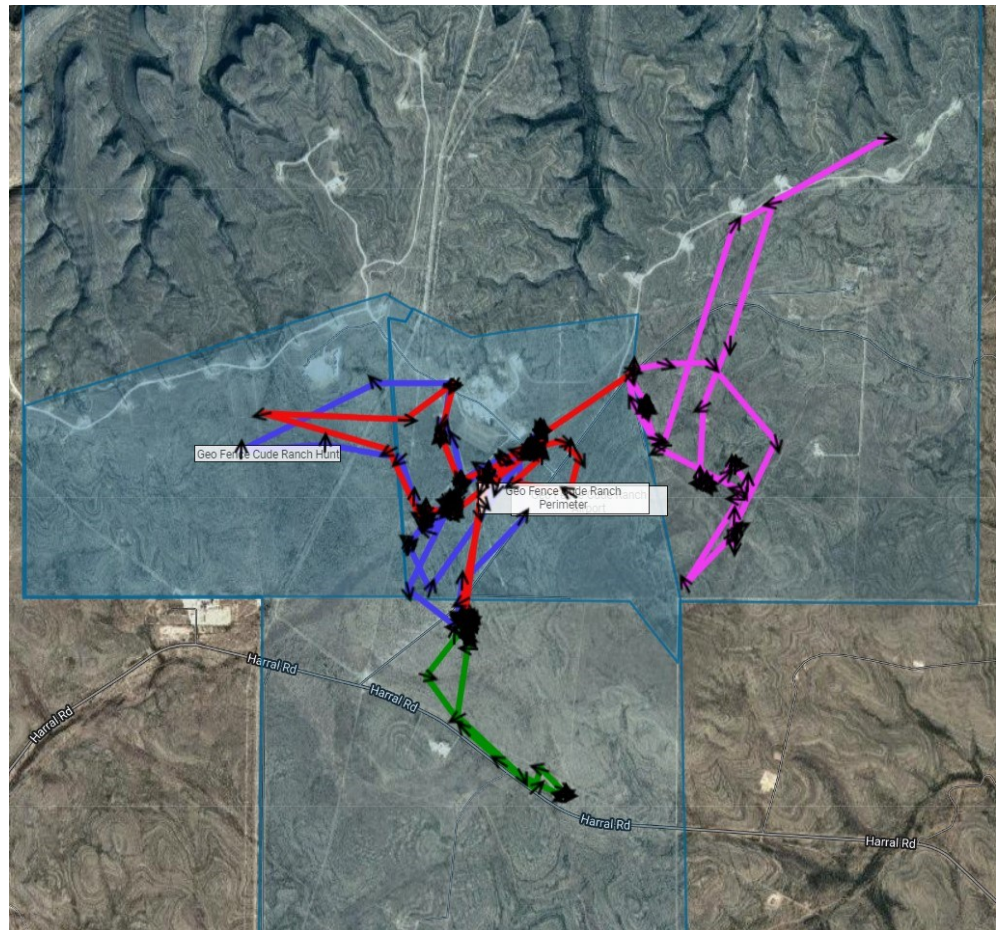
LGD Bonding Protocol:

All puppies were purchased from breeders across Texas for this project at 8 weeks of age. This ranch received two dogs that the producer bonded with sheep in a bonding pen from 8 weeks of age until the dogs were 10 months old. The dogs pens gradually increased in size over time and the number of animals were increased as well. The animals were also rotated out during the bonding period. The two dogs escaped from the bonding pen a couple of times through a hole in the fence to chase racoons, but did not leave the general area of the bonding pens. The dogs were well socialized during the bonding period.

The other two dogs the ranch received were bonded by AgriLife personnel. The dogs were bonded in a pen with hot wire and received socialization, leash training, tether training and truck rides each week. Livestock were rotated in the pens every three weeks. The dogs were placed at the Cude ranch with the producer bonded dogs at 10 months of age and tracked until 18 months of age.

LGD Movement -

During the heat of the day the dogs stay with the herd. Sometimes all the dogs would join up and travel to a specific location. This was verified by GPS tracker data. The producer has found evidence of coyotes and mountain lions in the areas when this occurred. The dogs were often with separate flocks of sheep, throughout the pastures. GPS tracker data often showed the dogs in separate locations in the pastures. One of the male dogs did travel to the headquarters several times when puppies were being bonded but did not stay in the area more than a few hours. GPS tracker data showed that the dogs tended to cross paths regularly, sometimes staying together for a couple days at a time.



Predation -

The main predators on the ranch are mountain lions, coyotes, bobcats, and eagles, with coyotes being the main predator. Predation is still an issue even though LGDs are being used on the ranch near Ft. Stockton. The producer is adding additional dogs to the ranch to help further reduce predation.

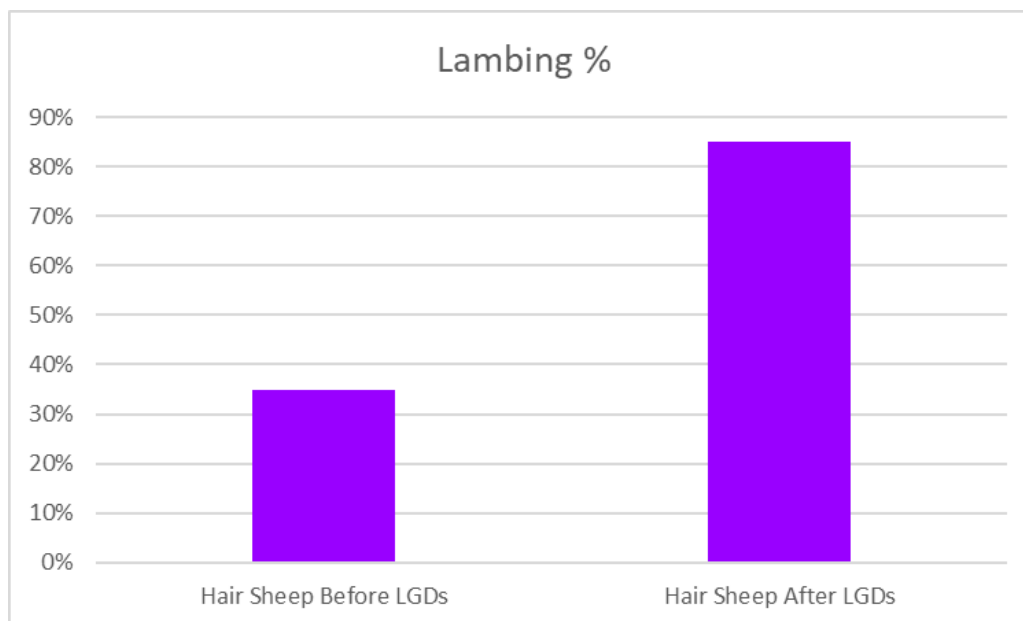
Lamb Crop Information and Herd Size -

Before LGDs – October 2022

Prior to using LGDs a 35% lamb crop was sold on 2000 head of Dorper sheep.

After LGDs— June 2023

After using LGDs for less than a year an 85% lamb crop on 2000 Dorper sheep was marketed by the producer.



Q&A – Warren Cude

What were the most positive benefits of the program?

The most positive benefit from being involved in the project was the increase in our lamb crop. The dogs have kept the sheep operation profitable and in business for a future generation. It was great learning about LGDs and working with AgriLife personnel. Bonding the dogs was enjoyable and it was great to be able to see the results of our work with them as puppies.

What was the greatest challenge with the program?

The greatest challenge we had was letting go of tools to control predators in our pastures and trusting that the dogs would work to control predators. We have seen an increase in lambs using LGDs and we plan to continue using GPS trackers to monitor their behaviors so that we can more effectively control predators in specific areas of the ranch.

What are your future ranch plans related to LGDs?

We have started breeding Kangal dogs for our ranch as we have found them to be a good fit for our operation. We are going to add more dogs to further increase our lamb crop. We are hoping to find a purebred Kangal stud for our females.

What would you have done differently?

We would have liked to be able to get text notifications from the GPS trackers instead of only emails. I wish we would gotten involved with the Agrilife LG Program much sooner.