

Livestock Guardian Dog Case Study

Campbell Mayer Live Oak Ranch, Edwards County



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Curry & Bonnie Lou Campbell, Edwards County

Ranch Scenario -

The ranch is in Edwards County near Rocksprings and is mainly flat with light brush and oak trees. Grass is plentiful on the ranch during years with adequate rainfall. Brush control has been a long-term priority on the ranch which is very evident in the open pastures with mature oak trees. The ranch maintains herds of Rambouillet sheep, Dorper sheep, meat goats and cattle. New fencing has been installed around the perimeter of the ranch in the last few years. The ranch has no cellular signal and internet is limited to the headquarters location. This required the use of a new solar powered satellite-based GPS ear tag tracker for livestock. The trackers were attached to the dog's collars and weighted so that they could receive solar power.

Overall Management Plan -

The sheep herd fluctuates based on the amount of rainfall but generally totals a couple hundred ewes of Dorper and Rambouillet sheep. They use the rule of take half, leave half when it comes to grazing the ranch pastures to leave adequate plant growth to regenerate for the next grazing period. Lambs are born in the spring and generally weaned in June and July unless the grass is still growing which would allow them to be sold later in the year. Prescribed fire has been used to control brush historically on the ranch, however, mechanical mulching has also been done recently in some pastures.

General Observations -

The ranch received 4 dogs from the project in October of 2022, two males and two females. One of the dogs was pure Akbash, two were Akbash x Great Pyrenees and the last dog was Akbash x Great Pyrenees x Anatolian Shepherd. The two dogs that were bonded by AgriLife were placed with the Rambouillet sheep herd and the two dogs that were bonded by a different producer, were placed with the Dorper sheep herd. No issues with herding dogs were seen when the livestock were moved after the initial time the LGDs were exposed to the herding dogs. All the dogs were well socialized and easy to catch in the field. The dogs were all fed using an automated self-feeder along with supplemental feed when seen in the field. The solar powered GPS trackers were not able to function correctly on the dogs and required several updates to the reporting time. Several of the trackers were also damaged or broken by the dogs scratching on their collars and had to be replaced.

The male producer bonded dog was seen chasing livestock and deer on several occasions. He also followed hunters to their blinds. A yoke and dangle stick were placed on the dog to help stop his adolescent behaviors.



LGD Bonding Protocol:

All puppies were purchased from breeders across Texas for this project at 8 weeks of age. This ranch received two dogs from another producer in the Sonora area that could not complete the project based on the assumption that the dogs were killing mature sheep and goats. The dogs were bonded them with sheep and goats 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 twice during the bonding period. The dogs escaped from the bonding pen several times through a hole by a water trough but did not leave the general area of the bonding pens. The dogs were well socialized during the bonding period.

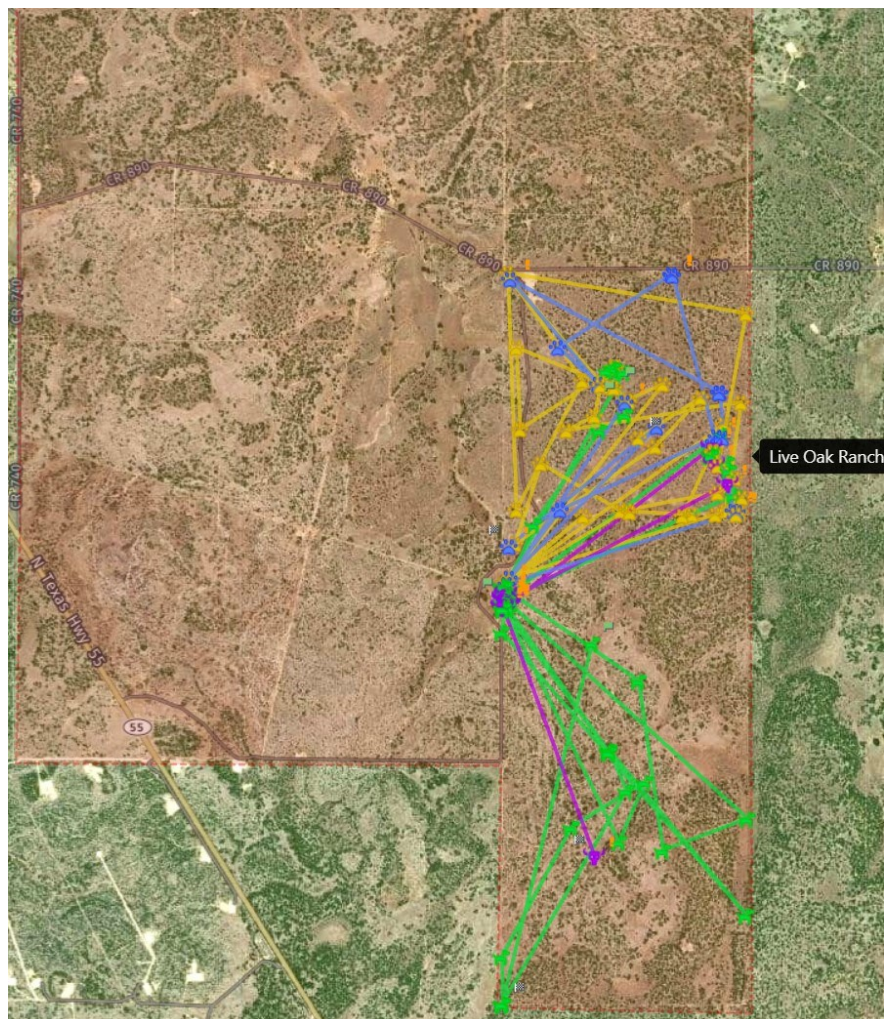
The other two dogs the ranch received were bonded by AgriLife personnel. The dogs were bonded in a pen with hot wire and received socialization, leash training, tether training and truck rides each week. Livestock were rotated in the pens every three weeks. The dogs were placed with the original cooperating producer at 10 months of age and moved to the ranch at 11 months of age and tracked until 18 months of age. No deaths of livestock were seen with any of the dogs in either group of sheep at the Campbell Mayer Live Oak Ranch.

LGD Movement -

The dogs with the Rambouillet sheep were often seen with the herd while the dogs with the Dorper sheep were often seen on the perimeter of that pasture. The dogs bonded by AgriLife were often seen working together while the producer bonded dogs tended to separate with the groups of Dorper sheep. The male dog with the Dorper sheep was frequently seen chasing sheep and deer. He also dug out of his home pasture several times to join the dogs with the Rambouillet sheep. A dangle stick and a yoke were placed on the dog to decrease these problems which worked well over the course of the project.

Predation -

The main predators on the ranch are coyotes, Cara Cara, and Black Headed Buzzards. No predation was seen after the dogs were placed in the pastures. Predation still occurred in other areas of the ranch that did not have LGDs with livestock.



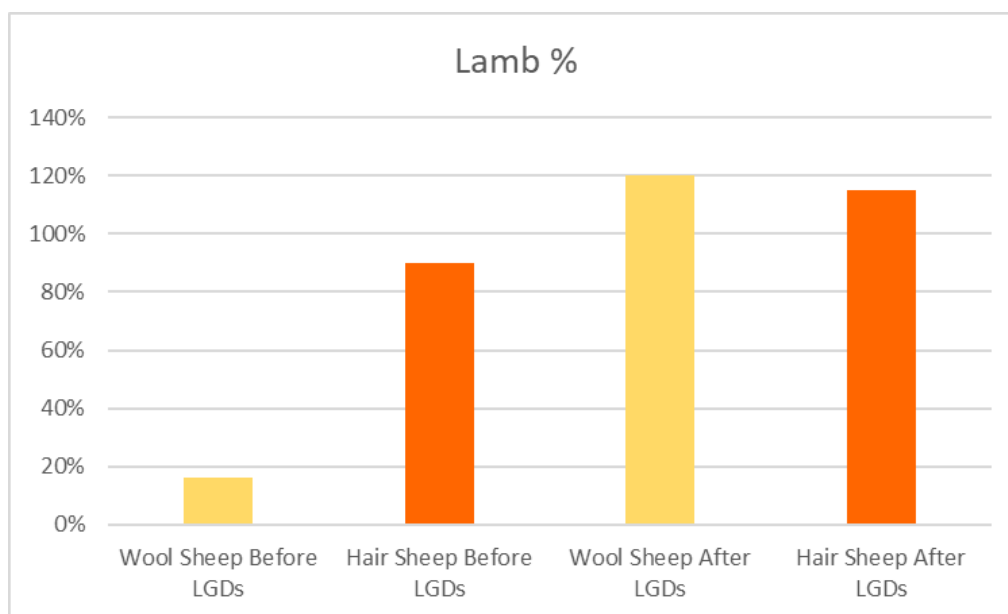
Lamb Crop Information and Herd Size -

Before LGDs – October 2022

Before dogs were placed on the ranch the lambing percentage on the Rambouillet herd of ewes was 16% and the Dorper ewe herd had a 90% lamb crop.

After LGDs — June 2023

After LGDs were used on the ranch the Rambouillet herd achieved a 120% lamb crop and the Dorper herd of ewes achieved a 115% lamb crop.



Q&A – Curry and Bonnie Lou Campbell

What were the most positive benefits of the program?

The best thing about the project was the increased number of weaned lambs that we were able to sell.

What was the greatest challenge with the program?

The dog that was chasing sheep and digging out of pastures, along with following hunters to their blinds was the biggest challenge that we faced. AgriLife personnel suggested a yoke and dangle stick to stop the behaviors which worked on him most of the time. We are a husband-and-wife team that operates two different ranch locations so labor was limited to deal with this issue. Another issue was not being able to constantly track the dogs with the ear tag trackers.

What are your future ranch plans related to LGDs?

Even though our lambing percentage increased dramatically on the Rambouillet herd we are planning on moving to all Dorper sheep and increasing our meat goat herd. We will transition the dogs over to meat goats and possibly add more dogs if predation is not controlled to acceptable numbers.

What would you have done differently?

We would have liked to have a different GPS tracker system that had an app for our phones so that we could observe the movement and locations of the dogs easier. Using a different GPS tracker instead of the solar powered livestock trackers would have been better.