

Livestock Guard Dog Case Study

Price Ranch, Coke County

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Scenario			
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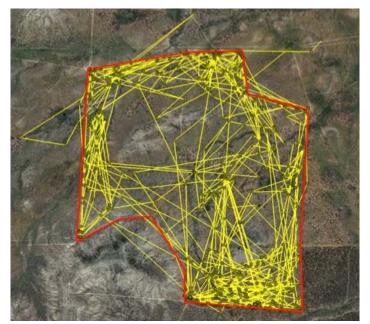
A ranch between San Angelo and Robert Lee was recently stocked with a flock of hair sheep to be used for this project. Pastures vary to some extent, but most are moderately rough terrain with a light density of brush. These pastures are also stocked with cattle, although sheep and cattle are not always in the same pasture. In years past, sheep were stocked in these pastures; however, they were removed because predation was too severe to justify running sheep.

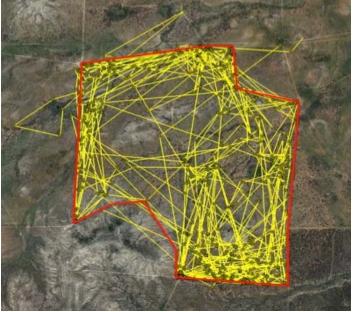
Overall Management Plan _____

Two bonded livestock guardian dogs (5R Stock Dogs, Billings MT) were placed with $\sim\!150$ crossbred hair ewes. The sheep and dogs were held in a water lot (2 acres) for 24 hours and they were released into the pasture the next morning. A small percent of the ewes lambed in the winter and the rest of the ewes lambed in the spring. The sheep and dogs are checked multiple times per week. Sheep are rotated to new pastures frequently (monthly). Pastures vary in size; however, most are around one section (640 acres).

Compred Observations		
General Observations		

The dogs stayed in the pasture with the sheep and there were no reports of them straying off property. The dogs were not overly friendly, but they were relatively easy to catch in a pen when gathering sheep. The dogs were most often seen with sheep. It was noted however, that the dogs were seen traveling the perimeter of the pasture that the sheep were in.





Figures 1 & 2. The map contains the hourly GPS locations of each dog during a 45 day period in the spring. The red lines are the pasture fencelines. The pasture in the center of the map with the guard dog feeders is 675 acres.

Guard Dog Movement _____

At minimum, the LGDs travelled an average of 3.3 miles per day. This was determined by measuring the distance between points taken every hour. Their home range was calculated to be 576 acres. Home range was determined by assessing where 95% of the GPS points were located.

Predation

Coyotes were thought to be responsible for approximately six lamb deaths. The majority of lamb loss occurred when ewes were in a pasture that was adjacent to a neighbor that has coyote issues. Ewes were moved from this pasture and cows added into the pasture with the sheep. Thereafter, lamb loss was stopped. Feral pigs were noted to leave pastures when sheep and dogs were moved into the pasture.

Camera Trapping _____

Two game cameras were put out for one month quarterly during the year. They were checked weekly. Locations were selected that were likely to catch predator movement, along roads, near water sources, etc. Feral swine were commonly detected on the game camera at the beginning of the project, as shown in Table 1.

Table 1. Predators detected with game camera survey.

	Winter	Spring	Summer	Fall
Coyote	0	0	0	0
Bobcat	0	0	0	0
Red Fox	0	0	0	0
Grey Fox	0	3	0	0
Feral Swine	3	16	0	0

Lamb Crop	
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This flock of ewes weaned a 130% lamb crop. The last time that sheep were ran on this ranch, lamb crops were as low as 50%.

Problems _____

The horses used to gather were very wary of the dogs. Deer hunters reported that the dogs barked at them when they were getting into their deer blinds.



Question and Answer:	Sims Price	 _

➤ What were the most positive benefits of the program?

The dogs, sheep, and cows mixed very well. We are looking to try it again.

▶ What was the greatest challenge with the program?

We have concerns with trapping around the dogs.

➤ What are your plans for the future related to guard dogs?

We are looking to expand and put more sheep on another ranch with guard dogs.

➤ What would you have done differently?

Try and locate cheaper dogs.