### A Case Study of the Livingston Ranch-2019 Leopold Conservation Award Recipient

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#### Introduction

The Livingston Ranch in Stratton, Colorado is an excellent example of how good range management practices can transform rangeland from unhealthy and unproductive to lush and profitable. The ranch was the 2019 Leopold Conservation Award winner in Colorado, an award that recognizes extraordinary achievement in conservation in farming, ranching, and forestry. Through hard work and patience, owners Mike and Julie Livingston have turned unhealthy rangeland into a thriving, sustainable ranch.

# The Beginning

Mike and Julie Livingston started leasing land north of Stratton for their ranch in 1992, and bought 10,000 acres of land in 2003, while still leasing 2000 acres. The land had been overgrazed for years before, with continuous grazing and stocking rates double or triple what the land could sustain. Erosion was severe in dry land fields and pastures. There would also be a lot of flooding with little rain because the water would just run off instead of being absorbed into the soil. The Livingston's reduced their stocking rates every year, and the rangeland slowly improved into better condition, but animal performance got worse every year. The situation got worse in 2008 when they had to shut down their irrigation wells due to a multi-state lawsuit. It was at that point that Mike and Julie Livingston knew that something had to change.

### **Management Practices Change**

In 2009, Mike and Julie attended the Ranching for Profit School, a program that teaches ranchers about the best range management practices, as well as how to reduce costs and increase profit. The Ranching for Profit School opened their eyes to concepts like no-till farming, cover crops, and prescribed grazing. Soon after attending Ranching for Profit School, the Livingston's put the concepts they had learned into practice. They planted cool-season grasses throughout the ranch, switched to "no-till" on cropland, and planted cover crops when the fields were fallow and the soil wasn't being used. The Livingston's built over 100 miles of new fence and turned 36 large pastures into 136 smaller pastures, which are about 140-145 acres each. They replaced watering systems for their stock tanks with over 100,000 feet of new pipeline, and placed their stock tanks at the corners of pastures. That way, each tank could serve three or four pastures, which maximized the available water. With help from the Natural Resources Conservation Service, the Livingston's implemented a better prescribed grazing system. They rotated their cattle more frequently, going from every two weeks to every 3-5 days, and they also reserve a few pastures for first-time heifers during calving season. Now, the Livingston's rotate three herds of 300-400 cow-calf pairs on 130 pastures. They also rotate a herd of yearling steers on the outskirts of the ranch. A few years after implementing prescribed grazing, the Livingston's switched to a stress-free method to move their cattle from pasture to pasture. Instead of pushing the cattle into the new pasture with horses or ATVs, they use an old pickup with a feed bunk attached to it. The bunk has salt and minerals in it, and the cattle just follow the pickup to the next pasture. The new method was less stressful for both the cattle and the Livingston's.

# **Land Improvement**

After implementing these new conservation practices, the land on the Livingston Ranch began to rebound. The rangeland grass grew much thicker, and there was much more litter instead of bare ground. Since the grass was thicker and there was more grass cover, rainwater was absorbed into the soil, and flooding was reduced tremendously. The same happened in the Livingston's fields of corn, wheat, and milo. Crop residue that was left behind with no-till practices helped the soil absorb much more rainwater, so the Livingston's didn't need irrigation. Now, their dry land fields are some of the most productive in Kit Carson County. In the rangeland, the grass was also became much more diverse, with more decreasers and coolseason grasses. Since decreasers are generally the most palatable for cattle, the cattle would eat more and gain weight faster, and with more cool-season grasses, the grazing season would be longer. Because the land was in good condition, the Livingston's were able to increase cattle numbers, and, therefore, increase profit.

Land management was not the only topic the Livingston's learned about at Ranching for Profit School. They also learned about how to manage their finances and labor. They learned how to invest their capital money right, and reduce overhead costs. All those better money and land management practices increased the efficiency and effectiveness of the ranch, which led to increased profits.

# **Increased Profit**

One of the most important ways that the Livingston's have increased their profit is changing their calving season from March to May. When calving was in March, the calves

would eat silage for two months instead of grazing on pasture. By changing the calving season to May when the pastures become more productive and nutritious, the Livingston's would save labor and fuel costs from making and transporting silage for the calves to eat for two months, which, in turn, reduced overhead costs. The Livingston's now sell smaller calves in October, but sell smaller calves at a higher price/lb. Therefore, having smaller calves to sell does not reduce profit. Then, from mid-October to February, the cattle that were not sold would graze corn stalks. Due to increasing profit, the Livingston's were able to increase their cattle numbers from 400 head of cattle in 2003 to 1000 cows, 400 heifers, 500 steers, and 61 bulls in 2019, bringing their total cattle number to nearly 2000 head. The Livingston's were also able to expand their ranch from 10,000 acres in 2003 to 17,000 in 2019.

# Wildlife Impact

The Livingston Ranch's transformation has not only benefitted the Livingston's and their cattle, but also the wildlife in the area. When the Livingston's bought the ranch, it was not suitable for wildlife because there was not enough grass for the animals to eat. Now, there is much more grass available, and only 4 out of 136 pastures are grazed at any specific time, and that leaves plenty of habitat for the wildlife. The ranch is now a habitat for deer, bobcats, turkeys, pheasants, and other birds. The deer population on the ranch has increased enough that the Livingston's host trophy hunts on the property.

# **Reasons for Improvement**

The Livingston Ranch has undergone a huge transformation for many reasons.

Prescribed grazing has helped the rangeland rebound and become more diverse and

productive. Since the grass is growing more abundantly, the ranch is able to maximize its available water and reduce runoff and erosion. No-till practices and cover crops have helped the cropland absorb more water and become very productive without the use of irrigation. Reducing overhead costs by calving in May instead of March has increased profit for the Livingston's tremendously. The Livingston Ranch is a tremendous example of conservation that all ranchers could learn from.

#### Conclusion

For Mike and Julie Livingston, transforming their ranch from overgrazed and unproductive to a Leopold Conservation Award winner was not easy. It took years of hard work, but paid off huge dividends. The ranch shows how good range management practices can improve the land for the rancher, the cattle, and the wildlife. The Livingston's were willing to change their practices to get a different result, and that is why the ranch has become so successful. Once again, all ranchers could learn a lot from the Livingston Ranch.

#### **Works Cited**

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