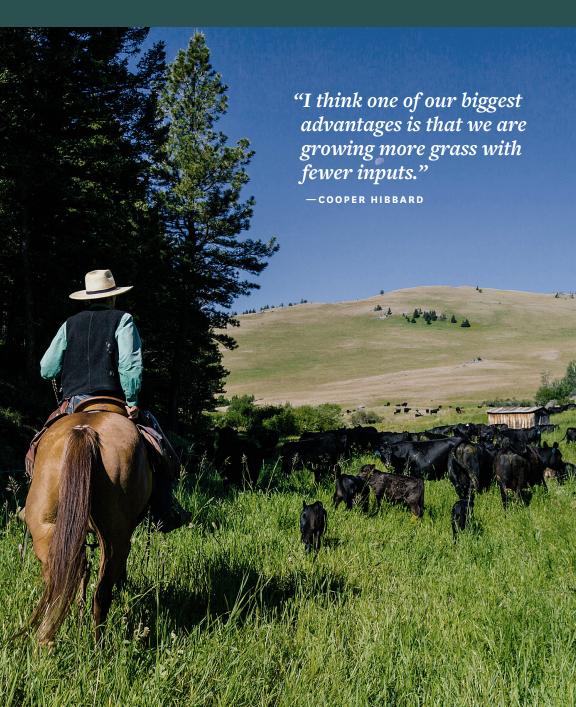
Sieben Live Stock Company

Adaptive planned grazing, no-till hay production, and low-stress animal handling to improve land, animal, and soil health and increase profitability



The Sieben Live Stock Company in Adel, Montana has been owned and operated by the Hibbard family for over a century. The Hibbards have a strong commitment to land stewardship and economic sustainability and have tested and implemented a variety of regenerative practices including adaptive planned grazing and no-till hay farming to improve the health of their soil, increase forage quantity and quality, and reduce animal feed and healthcare costs.

THE RANCH

In 1868, Henry Sieben began the Sieben Live Stock Company near Helena, Montana. For five generations the company has been owned by the Hibbard Family (descendants of Henry Sieben's daughter) who have ranched sheep and cattle with a strong commitment to stewarding and improving the land. Today, the ranch is managed by Chase Hibbard and his nephew, Cooper Hibbard, as well as a team of full-time and seasonal employees. Their management is guided by the Hibbard Family's constitution that states, "We are stewards first, owners second. Stewardship implies a nurturing of the asset for a purpose greater than the individuals who have control of the asset. Owners have a responsibility to add value to the land for the sake of the land. In this sense, the ranch lays as much claim to us as we do to it."

The Sieben Live Stock Company faces many of the same challenges it did in the 1800s. High elevation, short growing seasons, limited access to water, and bitterly cold and long winters are among the obstacles that the Hibbards deal with as they manage 1600 cow/calf pairs, 1300 yearlings, and 60 ewes.

REGENERATIVE PRACTICES

The Hibbard's commitment to regenerative management has been a critical tool in developing a thriving and sustainable ranching business. In addition to traveling the world to learn about innovative ranching practices in Patagonia, Australia, and beyond, the Hibbards have also attended numerous workshops and programs on ranch management from groups and individuals including the Ranching for Profit School, the Savory Institute, and Dr. Nicole Masters to bring home the best ideas for their operation.

Today, the ranch uses a number of regenerative practices to improve its ecological and economic performance. To enhance animal health and reduce supplemental feed costs, the Hibbards switched in 2002 from calving in March to calving in June and July when the feed for nursing mother cows is more plentiful and the weather milder for newborn calves. Additionally, they began using low-stress livestock handling and herding dogs in recent years to help them move livestock during the winter.

In 2015, the Sieben Live Stock Company started practicing adaptive planned livestock grazing with 1-day grazing patterns in the Winter and Spring (and as often as possible during the rest of the

HIGHLIGHTS

60%
INCREASE IN
HAY PRODUCTION

450%

\$200,000 SAVINGS IN FEED COSTS

The Hibbards have experimented with no-till hay production with an 8 species seed mix and found it eliminated the need for herbicides and fertilizer, cut hay production costs from \$47 to \$32 per acre, and increased yields ~60%.

With planned adaptive grazing, the Sieben Live Stock Company has observed a nearly 450% increase in forage production in some fields.

Improved forage quantity/quality and utilization have reduced winter supplemental feed costs by ~\$1,800/day, totaling nearly ~\$200,000 saved annually.



"We like to test things before we start using them across the whole ranch. For some of these practices, the jury is still out, but it should be... we need to stay skeptical"

—cooper hibbard

year) in order to increase the density and uniformity of livestock impact and extend field recovery times to 12 to 24 months to promote healthy soil and diverse vegetation communities. The Hibbards are also currently running trials with no-till, multi-species hay-farming practices to reduce damage from plowing and improve soil cover and microbiological health.

SEEING THE BENEFITS

The benefits of these regenerative practices have materialized quickly at Sieben Live Stock Company. Implementing planned adaptive grazing has had a big impact on the land and business. The ranch has a series of monitoring sites and on some of these sites, bare soil has decreased from baselines of 22 percent and eight percent to two percent and zero percent respectively, even during a drought. With more frequent herd moves and longer recovery periods, forage production has increased by nearly 450 percent in some fields along with significant increases in wild populations of deer, antelope, birds, and elk as well. Planned grazing has had a big impact on their bottom line too; increased forage production and improved utilization from high-density grazing have reduced supplemental feed costs by nearly \$1,850 per day during the winter months.

Planned grazing in the spring and low-stress animal handling with herding dogs have resulted in improved livestock health and lower costs for treatments and medications. At first, calf pneumonia rates increased with Spring calving but ultimately fell rapidly

from 21 to 1.7 percent as the ranch began moving and exercising the calves with low-stress handling. The health improvements have been especially important as the company receives a premium of \$60-\$120 per animal for livestock certified at Global Animal Partnership (GAP) level 4.

The Hibbard's trials with no-till hay farming using an eight species plant mix show improved quantity, quality, and cost over traditional hay production methods. Though the new mix has higher seed costs (~\$32 per acre), it generates an average of two tons of hay per acre without fertilizer or herbicide and produces a nutritious and diverse feed for their livestock. Further, the regrowth in these fields provides approximately 35 animal days per acre of additional grazing. Conversely, the monoculture barley they once grew for hay grows an average of just 1.6 tons per acre and requires chemicals and labor (for tillage) that pushed total costs to nearly \$47 per acre.

The Sieben Live Stock Company is committed to finding, testing, and implementing the best practices it can to ensure the long-term health of their land, animals, and family business. Their openness to new ideas and careful monitoring are critical ingredients for growing an operation that will succeed for generations to come.



The Profiles in Land and Management Series features the work of innovative ranchers and land managers who are achieving economic and ecological benefits on working lands.

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