CASE STUDY

Traditional innovation: A rancher's regenerative agriculture journey

TP Ranch, Montana
Northern Cheyenne Reservation

April Martin is a passionate advocate for people, community and cultural connection. Born and raised on the Northern Cheyenne Reservation, she has been dedicated to revitalizing her family's land, using regenerative agriculture techniques informed by cultural values and land stewardship practices passed down for generations.

Managing 580 acres of native grass pasture, 80 of which are leased, along with a 70-head cow-calf herd, April is committed to restoring soil health, improving biodiversity and achieving long-term financial sustainability.

> **"Regenerative agriculture, to me, is about caring for the land in a way that brings it back to health while respecting the traditions and knowledge passed down through my family."**

Overcoming challenges with regenerative solutions

April's interest in regenerative agriculture began in childhood, observing and respecting the land alongside her grandfather. This early connection to the land inspired her passion for sustainable ranching and her understanding of how healthy ecosystems support productive livestock.

Managing a ranch comes with financial and environmental hurdles. April's ranch has been impacted by encroaching invasive weeds, such as sulfur cinquefoil which has increasingly affected livestock over the past few decades. To manage these challenges, April has implemented regenerative practices like strategic bale grazing to reduce weed pressure, enriching the soil with organic matter, and evenly distributing manure to improve soil fertility. April is working to control cinquefoil without herbicides by using rotational grazing systems. These systems, which mimic natural grazing patterns of big game, help maximize pasture use. She also relies on soil testing to guide nutrient management decisions.

ABOUT TP RANCH

OWNER: April Martin

YEARS OF EXPERIENCE: 20

LIVESTOCK:

- 70 cow-calf pairs
- Seasonal retention of 20 heifers for herd replacement and genetic improvement
- Grazing 580 acres

FORAGES:

Managed grazing on 5 diverse pastures averaging 100 acres with native grasses supplemented by cover crops

ADAPTIVE GRAZING SYSTEM APPROACHES:

Managed bale grazing, seeding of native grasses, cover crops, soil sampling, forage sampling and strategic mineral placement

CONSERVATION GOALS:

Improve soil health, support biodiversity and increase resilience through regenerative practices

Like with many agricultural operations across the western United States, April must navigate rising property insurance and operational costs while remaining focused on implementing sustainable practices. The cost of temporary electric fencing and limited access to affordable financing have presented challenges, but April continues to seek ways to care for the land in alignment with her traditional values.

Measurable impact through regenerative strategies and partnerships

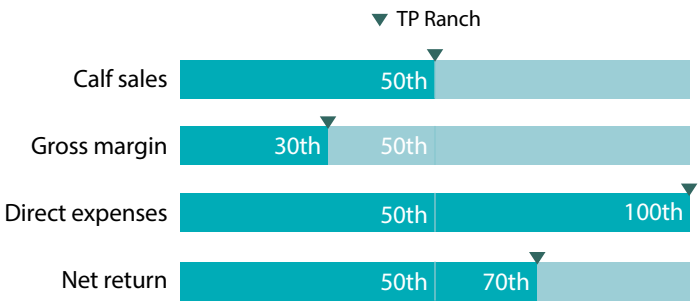
April has taken the initiative to seek external support and resources to enhance her regenerative practices. By connecting with the Intertribal Agriculture Council (IAC), she has gained access to valuable tools such as soil testing, financial planning resources and USDA technical assistance that have helped her make informed decisions about land management and operational costs. She is also exploring partnerships with tribal forestry programs to manage invasive species and mitigate wildfire risks.

These efforts have led to noticeable environmental improvements. Enhanced soil health is evident through increased earthworm activity and a rise in pollinator diversity. Soil tests conducted in 2024 show that organic matter levels on April's ranch exceed the typical average for her soil type. April has fostered a more resilient and balanced ecosystem, supporting long-term pasture productivity and biodiversity.

Compared to operations of similar size and type, April's ranch achieves strong financial returns per cow (Figures 1, 2).[1] While her income comes from fewer sources—primarily beef calves and cull sales—she has maintained a high net return per cow by keeping direct expenses lower than her peers. Her effective grazing strategy has substantially reduced feed costs to $26.23 per cow, far below the median cost of $601.40 for similar operations. As a result, April's net return per cow ranks in the 70th percentile among all similar operations.

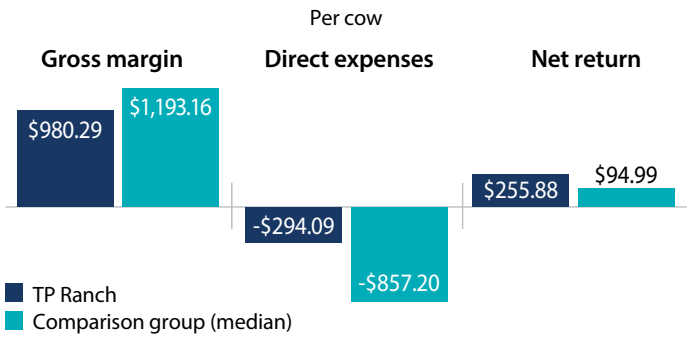
To further support her ranch's profitability, April is exploring diversified revenue streams, such as selling beef directly to consumers through a ranch-to-table approach and introducing niche products like grass-fed beef.

Figure 1: TP Ranch financial performance vs. similar operations (percentiles).



The highest performing operations for each metric are near the 100th percentile, while the lowest performing operations are near the 10th percentile. For direct expenses, the 100th percentile refers to operations that have the lowest expenses.

Figure 2: TP Ranch financial performance vs. similar operations (group median).



[1] Producers participating in the project are working with Farm Business Management instructors on financial record keeping, benchmarking and analysis. TP Ranch's whole farm financial metrics were compared to two benchmarks of similar ranches in Minnesota, North Dakota, and South Dakota in the FINBIN database: 1) Beef producers who have 75% of revenue from beef enterprises and farm less than 1000 acres. 2) Farms in the database with less than $500,000 of gross income. Cow-calf enterprises were compared to all beef cow calf producers in Minnesota, North Dakota, and South Dakota in the FINBIN database. The figures are based on data from 2023.

"I hope my work shows my daughters the importance of caring for the land and how all parts of the ecosystem—from grasses to livestock—are connected."

- April Martin