profiles in land and management: Benefits of Regenerative Ranching

# Pueblo of Santa Ana

Planned adaptive livestock grazing and riparian and forest restoration to support wildlife, healthy soil and vegetation communities, and resilient agriculture

> "Culturally speaking, the Pueblo of Santa Ana has always had conservation [as part of] our lifestyle." -governor Lawrence A <u>montoya</u>

Regenerative land management can serve a wide range of goals. For the Pueblo of Santa Ana, home to the indigenous Tamayame people, it has been the foundation for how to support the long-term health of the human and wildlife communities of the Pueblo. Through the use of extensive riparian restoration, forest management, wildlife reintroduction, ecological monitoring, and carefully planned livestock grazing, the Pueblo of Santa Ana has been able to steward its high-desert lands and diverse wildlife while increasing the economic productivity of tribal ranchers.

# THE RANCH

The Pueblo of Santa Ana is located in New Mexico's Sandoval County and encompasses approximately 79,000 acres of trust and reservation land. The land ranges in elevation from 5,000' to 6,200' and receives approximately 8.5" of rain each year. It is a diverse mixture of grasslands, woodlands, shrublands, and riparian areas surrounding the Rio Grande and Rio Jemez. Nearly 90 percent of the land has been set aside to conserve the ecological and cultural heritage of the Pueblo and support pronghorn, turkey, Rocky Mountain elk, mountain lion, mule deer, black bear, and bird species like Southwestern willow flycatchers and yellowbilled cuckoos. Approximately 900 tribal residents and three livestock grazing groups make their home and livelihood there as well.

# **REGENERATIVE PRACTICES**

In 1996, the Pueblo established the Santa Ana Department of Natural Resources (SADNR) to address resource management, land use, and climate change concerns. Since then, the SADNR has worked closely with the Natural Resources Conservation Service (NRCS), Bureau of Indian Affairs (BIA), United States Fish and Wildlife Service (USFWS), United States Environmental Protection Agency (US EPA), and others to invest more than 10 million dollars in land management on the Pueblo. These investments have included projects ranging from riparian restoration, wild turkey and pronghorn reintroduction, tree thinning and management, and wildlife and vegetation monitoring.

Livestock grazing also plays an important role on the Pueblo. Approximately 29,000 acres of the Pueblo is rangeland. In 2009, the SADNR began working with the NRCS, tribal government, and local ranchers to explore how best to support the health and resilience of the land, wildlife, and the three ranching groups operating there. The collaboration led to the creation of the Pueblo's first comprehensive grazing plan using a sophisticated model of forage production to determine optimal stocking rates in different climatic conditions on the arid and drought-prone land. The Pueblo and tribal grazing groups worked with the NRCS to receive funding for water and fencing infrastructure so they could subdivide the land into 14 paddocks to give plants in the grazed areas time to recover from grazing impacts and keep livestock from negatively impacting riparian areas and critical wildlife habitat.



60% INCREASE IN INTACT PLANTS

140 MONITORING POINTS

1,250 AVERAGE COW WEIGHT

108% grass cover increase

# HIGHLIGHTS

The planned grazing program on the Pueblo of Santa Ana is designed to leave 60% or more of the grazed plants intact to support optimal plant recovery, prevent overgrazing, and protect the soil.

There are 140 vegetation monitoring points to track and understand the effect of grazing management on the health and diversity of the Pueblo's plant communities.

Ty Menchego of the Simms Grazing Group on the Pueblo reports that since the implementation of their planned grazing program, forage production has improved and cattle performance has increased dramatically. In the past, the cows that went to auction weighed an average of 700-800 pounds, they now average 1,200-1,300 pounds. He has also seen conception rates climb steadily from less than 50% to more than 70% today.

Regenerative land management on the Pueblo has significantly improved the health of vegetation communities with some areas seeing grass canopy cover increase from 24% in 2000 to ~50% in 2013.

"Land management practices undertaken by the Pueblo have resulted in a healthier and more resilient rangeland that is able to weather the unique climate of the southwest."



#### **SEEING THE BENEFITS**

These practices have had significant and beneficial impacts on the land and the community of Santa Ana.

The planned grazing program, with adaptive stocking rates based on rainfall and soil/ vegetation profiles, has decreased bare ground, improved vegetation diversity, and bolstered the productivity of the Pueblo's rangelands. This approach has also significantly improved cattle health, performance, and conception rates while cutting feed costs for ranchers and improving collaboration between the tribal government and the grazing groups. As Ty Menchego of the Simms Grazing Group notes. "I wish we'd started this sooner... we used to get tons of rain and the grass just wouldn't grow. Now, if the rains come, I have pastures with grass up to my waist."

Regenerative land management has also had notable effects on wildlife, which plays an important aesthetic, cultural, and recreational role on the Pueblo. With the restoration of critical habitat, the establishment of a wildlife code and corridors, and the construction of wildlife water sources across the Pueblo, the SADNR has seen the diversity and abundance of wildlife increase dramatically. This has been important for both the health of the land and for the community that has been excited to see wildlife returning to the Pueblo and thriving around them.

While the important work of The Pueblo of Santa Ana is far from done, their results to date are an inspiring example of the effectiveness of regenerative management to bring together the economic, ecological, and social goals of a landscape and all its resident communities.



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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