

# **The Heart Mountain Grassbank: A Case Study**

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It's still dark outside at 6 a.m. when Maria Sonett, project director of the Heart Mountain Grassbank in northern Wyoming, sleepily pulls on her worn cowboy boots and runs a comb through her hair. After drinking a quick cup of hot tea in the kitchen, she walks out in the cool, wet grass to catch her blue roan mare, Daylight. The mother cows in the pasture hear the horseback rider approaching and they begin to calling to their calves; wise to the ways of herding, they know they're going to be moved to another pasture. It's the beginning of another day on the grassbank.

## **Grassbanking: A Promising Conservation Tool**

Originally coined and trademarked by The Malpai Borderlands Group in southeastern Arizona in 1994, a grassbank is a conservation tool that can improve ecological conditions, maintain open space, and sustain economic viability of landowners and communities. Grassbanks on private or public land offer alternate forage to ranchers whose home range (or grazing allotment) is undergoing restoration or conservation activities.

By definition, a grassbank operates on the concept of *quid pro quo*, i.e., livestock forage values can be exchanged for conservation benefits. Conservation benefits can include: open space protection, endangered species protection, and/or ecological rehabilitation (rangeland improvements, prescribed burns, invasive species control, woodland thinning).<sup>1</sup> While the term "grassbank" itself is relatively new, the practice of reserving parcels of grazing land for rest by land managers is not. What distinguishes grassbanks from other practices (swing allotments, forage reserves) is the exchange of grazing for conservation benefits.

Interest in grassbanks has been on the upswing in the past ten years as state and federal land management agencies, private landowners, and interest groups seek innovative conservation tools in land management planning. As the population of the country increases – and there is a demographic shift to areas in the western U.S. – large, intact landscapes are under threat of development. Since 1994, there has been significant interest (and investment) in grassbanks as a tool that has the potential to address a number of ecological issues.<sup>2</sup>

The Heart Mountain Grassbank, located near Cody, Wyoming, provides temporary alternate forage for local ranchers whose herds would be displaced by conservation efforts on public and private lands. Owned and managed by the Wyoming Chapter of The Nature Conservancy (TNC), the 600-acre grassbank links common goals and interests, creating unlikely alliances among conservationists, ranchers, and public land managers, who have historically not been on the same side of the fence. Multiple ecological,

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<sup>1</sup> [http://www.compatibleventures.us/grassbank\\_faq.html](http://www.compatibleventures.us/grassbank_faq.html)

<sup>2</sup> The most publicized grassbanks are: Malpai Borderlands-Gray Ranch Grassbank, Arizona; Valle Grande Grassbank, New Mexico; Vina Plains Lassen Foothills Grassbank, California; Rocky Mountain Front Grassbank, Montana; and Matador Ranch Grassbank, Montana.

economic, and social goals are being met through partnerships of federal, state, and non-governmental organizations in a “lucky confluence of needs.”

## **The Landscape, the Ecosystem, and Heart Mountain Ranch**

The Greater Yellowstone Ecosystem (GYE) is the region surrounding Yellowstone National Park and is approximately the size of New Hampshire and Vermont combined. Encompassing parts of Wyoming, Idaho, and Montana, the GYE has been described as the last, large, nearly intact ecosystem in the northern temperate zone of the earth. (Reese 1984; Keiter and Boyce 1991). In the context of conservation planning for this region, TNC identified the Eastern Absarokas Landscape (an area on the eastern edge of the GYE) as critical for maintaining the viability and connectedness of the region.<sup>3</sup>

Located in north-central Wyoming, the Heart Mountain Ranch is part of the Eastern Absarokas Landscape, an area of about three million acres. Public land accounts for 76% of the Eastern Absarokas Landscape; private lands, mostly in the form of working ranches, represent 24%. TNC’s Eastern Absarokas Landscape Conservation Plan identified three top threats to conservation targets: exurban development, altered fire regime, and incompatible grazing practices.<sup>4</sup>



A vital component of the Eastern Absarokas Landscape is the USDA Shoshone National Forest, located west of the Heart Mountain Ranch. Stretching from the Montana state line south to the city of Lander, the national forest consists of 2.5 million acres in northern

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<sup>3</sup> The Nature Conservancy. Wyoming Chapter. Heart Mountain Business Plan. December, 2002. pg. 6

<sup>4</sup> Ibid. pg. 6.

Wyoming, representing about 45% of the public land.<sup>5</sup> Grazing allotments on the forest are tied to working ranches – private deeded land that is held in large, unfragmented areas that are frequently adjacent to public land. The Forest’s ten-year *Vegetation and Fire Plan* calls for fuel-reduction burns on rangeland and forests. These burns would, in effect, displace ten grazing allotments from 1-3 years.

In conversations with local communities – and federal land management agencies – TNC staff became aware of a significant barrier to large scale conservation treatments on public lands including the Shoshone National Forest: there was no alternate source of grazing for local permit holders whose grazing allotments had been targeted for conservation practices. The high cost of displacement from grazing allotments was thus a disincentive to many ranchers to participate in conservation efforts such as prescribed burns, vegetation restoration, and invasive species control.

For a rancher operating on a marginal basis, increased costs, such as finding alternate forage, can be the proverbial straw that breaks the camel’s back. If ranchers are forced to sell for financial reasons and the property is subdivided, the result is a net loss of open space and habitat fragmentation. There is another economic component to the equation: ranching and agriculture represent about 30% of the state of Wyoming’s gross domestic product. On a local level, preserving and protecting the ranching heritage (and lifestyle) creates value for the area’s tourism, which at present contributes about \$150 million per year to the local economy.

## **The Partnership: From Vision to Reality**

In 2001, TNC staff pulled together a small group of stakeholders, including the USDA Forest Service, Bureau of Land Management (BLM), Wyoming Game and Fish, landowners, TNC Board members, and others to explore the possibility of using the irrigated pasture on Heart Mountain as a grassbank. The group formed a subcommittee to develop a mission statement and operating protocols. Working under the principles of Coordinated Resource Management (CRM), the organizational meetings were an open process and were for the most part facilitated by a TNC staff member.<sup>6</sup> A selection committee was appointed to review applications from permit holders who wished to use the grassbank.

TNC leased out a portion (600 acres) of the irrigated pastureland on the Heart Mountain Ranch later in 2001 as a trial project with the Forest Service and BLM as partners. In the first season, three ranching families utilized the available 1,700 Animal Unit Months (AUMs) on the irrigated pastures, moving their cattle from Forest Service allotments while restoration treatment (prescribed burning and rest) were implemented.

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<sup>5</sup> Bureau of Land Management (BLM) manages about 21% of the public land in the Eastern Absarokas Landscape.

<sup>6</sup> Coordinated Resource Management (CRM) is a volunteer, consensus-based process used in resource planning that involves multiple agencies and a diversity of public and private landowners. ([http://www.rangelands.org/education\\_crm.shtml](http://www.rangelands.org/education_crm.shtml))

Ranchers using the Heart Mountain Grassbank paid \$5/AUM that first year. (In 2005 the grazing fee is \$15/AUM). For this fee, the cattle are moved in a high-intensity, short duration rotation in an irrigated, fenced pasture. TNC ranch managers Maria Sonett and Skip Eastman assume the responsibility of managing the grassbank, tending to numerous tasks. These include irrigation, fertilization, soil management, noxious weed management, fencing, surface water management, protection of riparian areas, and rotating the cattle. If the forage was leased by TNC at full market value, the cost would be considerably higher.<sup>7</sup>

Willing landowners who are interested in participating in the Heart Mountain Grassbank submit a proposal to the Heart Mountain Advisory Group, a diverse stakeholder group tasked with advising TNC on funding, marketing, participant selection, management and monitoring. A subcommittee of the Advisory Group makes a decision determined by a number of criteria. These criteria are based on the value of conservation benefits offered in exchange for the grassbank forage.

The partnership between the federal land management agencies, landowners, and TNC has the potential to facilitate restoration of more than 115,000 acres of public land and potentially reduce the risk of habitat fragmentation of 55,000 acres of private land by maintaining viable ranches.

## **Primary Stakeholders**

A key element that is common to successful partnerships is the inclusion of all key players affected by the issues being addressed. Major partners in the Heart Mountain Grassbank include:

- Cody (Wyoming) Chamber of Commerce
- BLM/Cody District
- Draper Museum of Natural History
- Natural Resources Conservation Service
- Park County (Wyoming) Commissioners
- Private landowners
- Rocky Mountain Elk Foundation
- University of Montana Boone and Crockett Conservation Program
- Shoshone National Forest/Wapiti District
- Wapiti Ridge Coordinated Resource Management
- Wyoming Game and Fish.

On a larger scale, Heart Mountain Grassbank is linked to the National Grassbank Network (NGN), an umbrella organization that acts as a resource to support grassbank projects on public and private lands. NGN is an informal network of ranchers, government employees, natural resource managers, conservation professionals, and

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<sup>7</sup> The difference between the full market value (which roughly equals the cost of production of forage per AUM) and the fee charged to the ranchers is the monetary value placed on the conservation benefits of the restoration treatments on the allotments.

others who share an interest in communicating information about innovative rangeland conservation tools.<sup>8</sup> NGN was initiated in 2003 with resources from the USDA Forest Service Cooperative Forestry program.<sup>9</sup>

## **Impressive Achievements to Date**

Heart Mountain Grassbank, a self-proclaimed “work in progress,” operated as a demonstration project for the first three years, using a collaborative approach with diverse stakeholders to develop an evaluation and monitoring plan and establish standards and guidelines for participant selection. To date, the grassbank has facilitated rest of about 5,100 acres of elk winter range for a three-year period, an area that had not been rested in almost 50 years. In 2004, the Heart Mountain Ranch received 365 cow-calf pairs from the Sage Creek grazing allotment northeast of Cody where BLM wanted to implement 3,600 acres of sage grouse habitat improvement using prescribed fire and mechanical treatment

Using Heart Mountain Ranch as an educational venue, TNC staff members showcase the grassbank as a demonstration project to interested landowners, grassbank practitioners, community leaders, government agencies, researchers, and educational institutions. Participants in field trips range from elementary school children to students of Range and Agriculture at a nearby community college. One community project involved a TNC staff member working with local third graders on an art project; the artwork has been reproduced on TNC note cards. Newsletters, brochures, and feature articles in printed and electronic media highlight the grassbank to a broader audience.

Heart Mountain Grassbank actively networks with other grassbank practitioners about best practices, lessons learned, and scientific information through NGN. In 2005, project director Maria Sonnet was a presenter at the Society of Range Management annual meeting in Ft. Worth, partially supported by NGN. The development of the NGN website in 2005 was supported by USDA Cooperative Forestry, NRCS and BLM. Now that the website is up and running, it is managed by a standing committee of the Society for Range Management. The website has a list serve of over 2,000 and provides up to date information to anyone who wants to receive or share information.

## **Fostering Progress: Key Elements of Success**

Successful partnerships exhibit many common characteristics, and Heart Mountain Grassbank is no exception. Based on interviews with key stakeholders, several elements were key to fostering the partnership’s progress, including: committed leadership, fortuitous timing, and an existing relationship based on joint problem-solving.

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<sup>8</sup> [www.grassbank.net](http://www.grassbank.net)

<sup>9</sup> NGN partners are: The Malpai Borderland Group; National Resources Conservation Service (NRCS); BLM; TNC; USDA Forest Service; American Farm Bureau; Stephanie Gripne, University of Montana; Quivira Coalition; Partners for Grassland Stewardship; and, individual resource managers.

## 1) Leadership

Individuals interviewed for this case analysis identified the leadership and innovative thinking of TNC staff as a critical factor in the Heart Mountain Grassbank's success, specifically mentioning the role of Laura Bell, Absarokas Program Director. A well known and respected member of the community, Ms. Bell initiated the dialogue with various stakeholders to explore the possibility of a grassbank. As the champion of the project, she is credited with having the vision (and the leadership skills) to make the project what it is today.

## 2) Timing

One person interviewed said: “[Heart Mountain Grassbank] was one of those right place, right time, right people kind of things.” The issue was relevant: the need for alternate forage had risen to the top of priorities for landowners and public land management agencies. With the purchase of Heart Mountain Ranch, TNC was positioned to provide a necessary resource; at the same time, it could work toward meeting the organization's conservation objectives on a large scale. “I hate to use this cliché,” one individual commented, “but it was a win-win situation.”

## 3) History of Working Together

Resource agencies and federal land management agencies involved in the Heart Mountain Grassbank had a history of working collaboratively together to joint problem-solve. From their experiences with the CRM process to address natural resource management issues, the stakeholders were acquainted with an open, facilitated process where decisions were made by consensus and everyone had ownership in the process. Guiding principles such as developing management objectives, monitoring progress, and working as a team was the norm. This understanding is underscored by the statement by one of the federal partners: “We've all worked together on other issues; there wasn't any of this my-resource-is-the-priority stuff. There wasn't any turf protection.”

## **Ongoing Challenges**

According to stakeholders, challenges facing the Heart Mountain Grassbank include securing funds and demonstrating both the conservation and economic values of grassbanking.

Securing funds for the annual operating costs of the Heart Mountain Grassbank remain a challenge. As a business, the grassbank is losing money. TNC assumed financial responsibility from the beginning and has not received financial support from participating state or federal agencies. While the Wyoming Chapter of TNC provided some financial assistance to help allay operating costs for three years, there has been no financial support from the national TNC organization. In order to proceed with the project, the grassbank will need to find funding through grants, contributions, or other sources.

Measuring conservation benefits and demonstrating associated economic values has proven difficult but may be key to converting skeptics. Researchers (ecologists, economists, and social scientists) are currently addressing issues related to grassbanking, for example, how to determine a conservation value to habitat improvement for a threatened and endangered species. The concept of equal value of benefit for equal value of forage is not only a philosophy, but is also a legal requirement of a tax-exempt organization that is operated for charitable and public purposes.<sup>10</sup> (Of all the grassbanks in the nation, Heart Mountain Grassbank is the only one that is owned by a non-profit organization--and it supports public land management activities.) The jury's still out on whether grassbanking is an economically viable conservation tool.

3) The grassbank concept is held in question as the national debate continues about the legitimacy of livestock grazing, in general, on public lands. Some critics of grassbanks view grazing as fundamentally incompatible with sound ecosystem management. By extension, grassbanks are viewed as a temporary safety net that allows ranchers to ultimately continue an unsustainable practice on their own lands.

## **Next Steps**

Key stakeholders interviewed for this case study anticipate future efforts to expand the grassbank to other parts of the ranch, address other resource needs such as watershed restoration, and search for innovative ways to use other land for grassbanking.

Building on the success of previous years, TNC is expanding the grassbank to other parts of Heart Mountain Ranch. In 2005, 150 cow-calf pairs are utilizing forage on native range on the ranch's upper portion. About 1,200 acres are also leased on the north side of Heart Mountain, bringing the total number of cow-calf pairs this season to 535. Looking further down the road, TNC now has a ten-year lease on the upper portion of Heart Mountain with a landowner who has chosen to waive his term grazing permit on the Shoshone National Forest. The allotment provides critical winter range for bighorn sheep and elk in the North Fork Valley, and is located in an area that is experiencing exurban development.

TNC is also looking for opportunities to leverage the success of the Heart Mountain Grassbank and expand the practice to other resource areas. One potential project may involve partnering with Wyoming Stockgrowers, Rocky Mountain Elk Foundation, and landowners to jointly find grants, purchase conservation easements, and use grassbanking as a tool for watershed restoration.

A new source of grassbanks for Shoshone National Forest is allotments permitted to ranchers who no longer desire to manage their operations for maximum livestock production. Often under-utilized, these allotments can be used by other permit holders when their designated allotment is unavailable because of natural conditions, or when

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<sup>10</sup> Grassbanks: Bartering for Conservation. Gripne, Stephanie Lynn. Society for Range Management. Rangelands. Pg. 26.

restoration treatment is part of the management plan. The Shoshone National Forest uses a Memorandum of Understanding and Non-Use Agreement that allows the permit holders to *not* stock the allotment, thus creating a miniature grassbank.

## **Conclusion**

As a creative, community-based partnership among multiple stakeholders, the Heart Mountain Grassbank represents an important learning laboratory for testing new approaches to conservation, collaboration, and partnership in the American West. The grassbank is a promising development for ranching communities striving to address community needs while, at the same time, significantly improving the ecological health of forests and rangelands.

The partnership has achieved considerable success in its earlier years, thanks to committed leadership, collaborative process, and good timing. The effort has also benefited from networking opportunities provided by the National Grassbank Network. NGN, like other formal and informal partnership networks, provides grassbank practitioners a vital venue for sharing resources, information, and experience.

Future challenges for Heart Mountain Ranch include securing sustainable funding and establishing the value of grassbanking as a conservation approach. Nevertheless, grassbanks like this one are on the rise as stakeholders in Western communities look for ways to find and achieve a new common vision for their rural landscapes.

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