



Pine Butte Guest Ranch

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1. Overview

The Pine Butte Guest Ranch has a truly broad environmental program. Our primary reason for being is to promote conservation through education and personal experience. On the one hand, Pine Butte is a traditional guest ranch, where our visitors can enjoy horseback rides, cookouts and camp stories. But, we are much more. We offer an exciting selection of natural history workshops – ranging from bird watching with famed ornithologist David Sibley to field courses on the habits and lore of the grizzly bear. These workshops get people out into an immense landscape that is truly rare for its host of native wildlife. We also have naturalists on staff through the season for guest hikes and questions.

Our environmental program is at work “behind the scenes” as well. For years, we’ve worked to make the ranch a sustainable operation, leaving the smallest environmental footprint possible. These efforts have included the deliberate selection of sustainable materials and products, increased efficiency in the use of resources such as water and energy, and a culture which encourages conservation. Much of this work has progressed informally and opportunistically. For example in 2000 wind and solar generators were installed to supply a portion of our electricity. In 2007, our efforts were formalized with the creation of a

comprehensive Sustainability Plan outlining goals and a path to further reduce the environmental footprint of the ranch. This plan has been guided by a carbon footprint assessment, or analysis of our greenhouse gas emissions. We also created a fund to support infrastructure investments outlined in the Sustainability Plan.

The Pine Butte Guest Ranch has been owned and operated by The Nature Conservancy in Montana, since 1987; however the Ranch has a much longer history. It has deep roots in the rural community of Montana since its establishment in the 1930's as a rustic retreat by the previous owners Kenneth and Alice Gleason. The Conservancy is a dynamic, international conservation organization with the mission to preserve plants, animals and natural communities by protecting the lands and waters they need to survive. Honoring a tradition of self-reliance, western living, and ranch vacation, as well as our mission, the Conservancy has focused the ranch programs to promote environmental conservation.

One of the Conservancy's larger organizational missions is the reduction of greenhouse gas emissions from all of our operations. This commitment reflects a recognition of the global threat posed by climate change to life on our planet. Efforts to reduce operation related greenhouse gas emissions have arisen organically throughout many Conservancy programs, with involvement from trustees, senior managers, science staff, office staff and others. At the ranch this focus has originated from both staff and guests with a commitment to good stewardship.

2. Program Establishment

Pine Butte Guest Ranch provides a unique opportunity for both environmental education and demonstration of sustainable practices. Each season, a series of natural history workshops are provided for our guests. They all draw on the rich natural environment of our location on the Rocky Mountain Front – one of the most biologically diverse places in the Rockies. Guests have the opportunity to study the habits and threats to the local grizzly bear population with wildlife scientists; we've offered birding workshops with famed ornithologist David Sibley as well as sessions on the history and use of native plants by native peoples. Expert workshop instructors are complemented by full time naturalists that coordinate and help teach these courses, along with daily outings throughout the season.

A sustainability ecologist guides the sustainable practices of the ranch operations and throughout the organization. The carbon footprint for the ranch was completed using tools created by the World Resources Institute and the associated Greenhouse Gas Protocol. The Sustainability Plan has been uniquely researched and designed for the ranch based on our particular activities and needs.

On a global level the Conservancy's initiative to address climate change challenges involves international forest protection, policy influence at all governmental levels, and landscape level protections guided by scientific research. It also realizes it has an obligation to find efficiencies in our use of resources and energy. In Montana we have integrated this commitment into our Strategic Plan, and envision the ranch as an organization-wide showcase for sustainability work at a local level

The Lee Barhaugh Good Energy Fund has underwritten many of our efforts over the past year. The fund was named in honor of the former ranch manager. Projects implemented over the last year include construction of a passive solar greenhouse, installation of three direct-solar hot water heating systems, installation of six efficient, low-emission wood furnaces, and the replacement of an expired SUV with a fuel-efficient car. We hope to soon be harvesting fire wood from the ranch using two draught horses – thanks to a generous donation. As important as these investments are, a culture of conservation in day to day practices is equally fundamental to the plan. The implementation of this plan is coordinated primarily through the sustainability ecologist and ranch manager, but all ranch staff and staff throughout the Montana Chapter are involved.

3. Goals and Benchmarking

Through deliberate implementation of the Sustainability Plan, Pine Butte Guest Ranch will:

- Minimize its contribution to green house gas emissions and the associated threats to ecological health and biological diversity.
- Demonstrate to guests, students, partners, community members and others ecological connections between people and ecosystems.
- Engage the support of donors and other partners.
- Experience long term cost reductions through honest, comprehensive accounting.
- Enhance the enjoyment and general well-being of staff and guests.
- Support the local economies and the development of conservation-friendly business and social activities.

Specific targets for reductions in energy and resource use, reductions in waste, and selection of renewable sources are outlined in our Sustainability Plan. Energy sources include electricity, gasoline, diesel, propane, and wood. Because the Ranch includes the many moving parts of buildings and grounds maintenance, kitchen and dining, vehicle travel, cabin living, horses and pasture, etc., quantifying our progress is complex. Annual carbon footprint monitoring of the Ranch allows us to quantifiably assess our work. The carbon footprint focuses on activities that are feasible to measure, like direct energy usage and sources, other resource usage, and waste production. We also offer ranch

guests the opportunity to offset their travel footprint through contribution to a Conservancy reforestation project.

Through the carbon footprint process, we can document long-term reductions in emissions at the Ranch. Success will also be measured and acknowledged in other ways. Success has already been illustrated by the interest and generosity of supporters through contributions to our Good Energy Fund, and through the eagerness of staff and visitors to implement changes in daily practice. Success will be measured in the number of guests, students and neighbors that we engage in our efforts, and in the questions and comments that they offer. Success will also be measured in the functionality, and attractiveness of conservation practices and sustainable infrastructure.

Pine Butte Guest Ranch is somewhat like an intimate village of guests and staff during the summer season, with all the necessities of daily living taking place next to operation activities, teaching and learning, and play. This dynamic is both a challenge and an opportunity for addressing conservation practices. An opportunity lies in the fact that because people are gathered, resources are shared, which lends itself to conservation. We will utilize both our quantitative and qualitative measures to refine and adjust our plan and the specific projects. Our successes and challenges will be shared within our organization, and to others, to further the sustainability efforts elsewhere.

4. Outcomes and Environmental Benefit

As a whole, the ranch program benefits the environment by reducing its physical impact on the environment; by educating the public on the importance of sustainable practices and environmental protection and by raising funds for conservation. The greenhouse gas emission reductions will mitigate our impact on global climate change. Also, through the purchase of products manufactured with ecological and social considerations, the ranch will be supporting businesses approaches that promote environmental health. In assessing the environmental impact of sustainable development as part of a greater ecological education focus, we can see that education is an investment in present and future environmental stewardship.

Our efforts to date have been received well within the Conservancy, with our guests and within the community. A quantitative update of our progress will be available early in 2009 after completing another carbon footprint for calendar year 2008. This will be used to evolve and refine the goals and strategies outlined in the Sustainability Plan.

Guests travelling to PBGR can offset their unavoidable travel footprint directly by contributing to the carbon offset program mentioned above. Beyond that, travelers footprints during their vacations will be limited by the infrastructure and

practices integrated into ranch operations. This can be quantified with our periodic footprint assessments.

One of the motivations for our sustainability program is to create a showcase to promote these practices and to share our knowledge with others who would like to duplicate them whether at home or in business. Although the Guest Ranch differs from other companies and organizations in many ways, many of our resource conservation and renewable energy projects are widely applicable elsewhere.

5. Relevance to Traveler or Travel Industry

Many people seek meaning in their travels by combining rest and recreation with learning, or a deeper interaction with the places they visit. Today's travelers are also more conscious of their environmental footprint, and if they can honor this understanding during their travels, the enjoyment of the experience will be enhanced. Vacationing "lightly" is another way a person can feel good about their holiday.

Genuine environmental considerations affect the travel industry by elevating the standards that travelers can seek and expect. Expectations and desires from clients offer feedback that elevates the environmental performance of the industry. Our efforts at Pine Butte Guest Ranch, when accumulated with the many environmental programs elsewhere, will ideally contribute to significant environmental benefits from the industry as a whole.

6. Real-World Examples

One source of pride at Pine Butte Guest Ranch is the dining. Our guests and staff complement their days out in the mountains and prairies with great food back at the lodge. Over the years, produce and herbs from the ranch's garden have contributed to these meals, and the freshness, nutritional value, and great taste of garden produce has not been lost on many people. Our natural beef and pork are raised by local ranch families, and we are consistently seeking-out other foods that support the local economy and sustainable agriculture.

We have invested in a passive solar greenhouse to substantially increase our capacity for on-site food production. This greenhouse is a permanent structure upon an insulated foundation that has been custom built for the site and designed to function year-round through challenging north-central Montana winters. The passive solar design minimizes the need for supplemental energy to heat and cool the greenhouse. The supplemental energy that is necessary is supplied by the solar and wind electric generator that pre-existed on the ranch. Now in its first winter, the greenhouse will increase the on-site food production capabilities of the ranch by hundreds of pounds annually. Each pound of food

we grow and eat on the ranch is a pound that does not need to be transported from elsewhere.

During parts of the year when our food production exceeds our immediate ranch needs, we trade produce to a local market for credit, or donate it to the local food bank. This participation in the local food network is another way we contribute to and engage with the local community. The greenhouse is tangible way to engage student groups in exploring ecology, energy, and economy. It is another way Pine Butte Guest Ranch provides direct connection between our guests, their travels, the local environment, and broader conservation.