



# Development of the Renewal on the Standing Rock Sioux Reservation Project

By John R. Hendrickson, Linda Black Elk, and Timothy Faller

## On the Ground

- The Standing Rock Sioux Reservation comprises 2.3 million acres, primarily rangeland, straddling the North Dakota-South Dakota border.
- Natural resource management is economically and culturally important to the Standing Rock community.
- Respecting traditional ways of thinking and placing stakeholders and their needs at the center are key aspects of project development.
- Native Americans were the original natural resource managers on our rangelands, and their thoughts and expertise can provide guidance to rangeland managers now and in the future.

**Keywords:** Native American, resource management, culture-centered.

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The Standing Rock Sioux Reservation (Standing Rock) covers approximately 2.3 million acres straddling the North Dakota and South Dakota border. The current population of the reservation is estimated at 10,859,<sup>1</sup> and the unemployment rate is 63%.<sup>2</sup> Farming and ranching are the major economic activities on the reservation.<sup>1</sup> A strong natural resource base is critical for the economic well-being of both farming and ranching. However, the Standing Rock community also depends on natural resources for both cultural and medicinal purposes. For example, the prairie dog, although believed to be a nuisance by many ranchers, is considered a medicinal source for many native people (L. Black Elk, personal communication).

Discussions with community members indicated that unemployment; issues related to human nutrition, such as obesity and diabetes; and natural resource management were the major concerns for the Standing Rock community. However, state and federal research institutions have not previously had a strong background in working with Native American communities to resolve these types of issues. If stronger relationships could be achieved between the Native American community and the state and federal research institutions, then the Standing Rock Sioux Reservation would have several built-in advantages for addressing these three major issues. First, Sitting Bull Tribal College is a 1994 land grant college with a strong environmental science program. Second, by straddling the North Dakota–South Dakota border, the Standing Rock community can access two different state land grant institutions. Finally, the Northern Great Plains Research Laboratory, a US Department of Agriculture–Agriculture Research Service (USDA-ARS facility), is located approximately 1 hour from the northern border of the reservation. Each of these institutions can provide unique value to a collaborative effort, in both research and funding.

In 2008, discussions between the three authors raised the possibility of developing a natural meat enterprise on the Standing Rock Sioux Reservation to address the three major concerns of the Standing Rock community. In 2009, North Dakota State University, Sitting Bull Tribal College, and the Northern Great Plains Research Laboratory (USDA-ARS) received a Tribal College Research Grant funded by the National Institute of Food and Agriculture (NIFA) to (1) determine the degree of support from the Standing Rock community for a natural meat project and (2) develop baseline soil and vegetation information on a Native-owned private ranch in South Dakota. After talking circles with the elders in the community confirmed interest in the project, Sitting Bull Tribal College, North Dakota State University, South Dakota State University, and the Northern Great Plains Research Laboratory (USDA-ARS) received a \$5 million AFRI grant to develop the concept of a natural meat project on the reservation. A multidisciplinary team of soil, range, wildlife, and animal scientists along with communication scientists,

extension experts in food safety and preparation, and Native American change agents was assembled. The emphasis on natural resource management in this phase has brought focus on understanding the interactions between prairie dog and livestock herbivory on different ecologic sites and developing insights into prairie dog colony dynamics and colony impacts on grassland birds. Other team members have worked to enhance communication between Standing Rock community members and the project team and to provide food preparation and safety information to the Standing Rock community.

The process of this project was described at the 2015 Society for Range Management (SRM) annual meetings in Sacramento, California, in a symposium entitled “Renewal on the Standing Rock Reservation: Knowledge and Opportunities.” The discussion, at both the social–institutional level and the project–research level, is continued through the articles in this special issue of *Rangelands*.

Littlefield<sup>3</sup> has argued for a culture-centered approach when developing research projects with Native Americans. A culture-centered approach puts stakeholders and their needs at the center of the project.<sup>4</sup> This approach builds respect among all parties. Linda Black Elk discusses the importance of respecting other ways of approaching science in her article, and Layne Coppock presents the value of a participatory approach, in which researchers and change agents work closely with project beneficiaries. Institutions are often one of the change agents, and Gary Halvorson talks about developing meaningful partnerships with tribal colleges. Brewer et al. discuss the complex history of land tenure in reservations and the importance of strengthening Extension on Native American communities.

One suggested method to address issues such as unemployment, health problems, and natural resource degradation on the Standing Rock Community is developing a natural meat enterprise that is based on the reservation. For this enterprise to be successful, baseline information on the natural resource base and livestock production is needed. The Standing Rock community also places a strong emphasis on ensuring that livestock production is in concert with the natural resource base. The balance between production and wildlife is a focus of the next four articles of this issue. These articles focus on the use of ecologic sites as a tool for livestock and wildlife management (Hendrickson et al., this issue); the impact of short-term livestock exclusion on plant communities (Field et al., this issue); how the presence of prairie dogs influences beef cattle nutrition (Olson et al., this issue) and prairie dog colony expansion on different soil types (Geaumont et al., this issue).

Finally, the question is “What comes next?” Many Native American members of the Standing Rock community feel that once the research is over, they will be left without a viable product or a plan for the future. James Garrett provides the final article on the issues discussed by describing ways to provide for a sustainable food system for the Standing Rock community, including what the system may look like and future research directions.

Rangeland scientists have been working over a century to develop strategies for sustainably managing our rangelands. We have considered grazing, burning, reseeding, range improvements, and other strategies to enhance rangelands. Yet, in all of this research, the original natural resource managers, the Native American community, have often been overlooked, and their contributions, both actual and potential, are not considered. We hope that this issue of *Rangelands* will prompt researchers to re-evaluate this approach and be open to conducting research in conjunction with the Native American community. This research needs to implicitly include the Native American community at all stages, and the potential benefits for rangeland ecosystems are tremendous.

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