

# MIDDLE NIOBRARA-SANDHILLS, *Nebraska*

GREAT PLAINS FLN

12 MILLION ACRES



Bison of the Niobrara Valley Preserve beginning to use regrowth on recently burned Sandhills Prairie © John Ortman/TNC

**T**HE MIDDLE NIOBRARA-SANDHILLS LANDSCAPE contains two distinctly different vegetation types presenting radically different fire challenges. The Middle Niobrara is a meeting ground for northern, eastern, and western forest types, central and northern mixed-grass prairie, and tallgrass prairie. The Sandhills, part of the central mixed-grass prairie, is one of the largest nearly unbroken blocks of native prairie in the United States. They are, however, being rapidly invaded by eastern red cedar, partly as a result of fire suppression.

After a gap of several years, fire returned to the 60,000-acre Niobrara Valley Preserve (NVP) in 2007, when 500 acres were burned. More than 3,000 acres were burned in 2008 with the help of inter-state Conservancy and federal agency participants. This two-week

#### COLLABORATIVE OBJECTIVES:

- Empower private land managers to apply fire safely and effectively.
- Reduce woody invasion of grasslands to protect ecological and economic values
- Decrease wildland fire hazards through the use of prescribed fire and fuels treatments
- Enhance fire department wildfire management through training, adoption of an incident-command system and improved communications

effort both provided training opportunities and allowed the NVP to burn larger, more complex units than local capacity would have permitted. The success of this pioneering capacity-sharing effort proves the concept can help bring fire-capacity needs and resources into balance.

The spring NVP burn season also permitted new techniques to be tested and refined, including use of temporary mineral lines in unstable soils, and prescriptions resulting in more intense and effective fires. These developments can be broadly applied to the landscape to make fire safer and more feasible.

#### COLLABORATIVE VISION STATEMENT:

The partnership will restore fire to the landscape, where appropriate and necessary, by empowering private land managers through training, capacity building, organization and demonstrations showing that fire can be both effective and safe.

**THE MIDDLE NIOBRARA-SANDHILLS** area is largely privately owned and the site has been active in the U.S. Fire Learning Network (FLN) since 2002. The main barriers to implementation include incompatible cultural attitudes toward fire, lack of funding for volunteer fire departments and a shortage of fire-trained staff. Coping with these diverse challenges and returning fire to the two ecosystems has proven difficult. However, the Network process has been embraced by local partners and has helped move stakeholders more quickly from the problem stage to the solution stage, their having arrived at a shared, feasible strategy.

Continued education with landowners will reinforce the understanding that prescribed fire is an important tool in the restoration of these riparian grasslands to a tallgrass and bur oak savanna state. In Nebraska, prescribed fire can prevent brush and trees from overtaking the prairie, prevent build up of dead vegetation that encourages weeds and retards new growth and improve habitat for prairie birds, mammals and butterflies.

The partnership emphasizes empowering landowners and managers to conduct fire collaboratively, in either formal or informal associations. Assistance has and will take the form of training and other technical assistance, improved access to equipment and strategic use of cost-share programs to demonstrate positive fire effects and create an initial critical mass of fire practitioners.



A member of the Southern Rockies Fire Use Module monitors a hot spot where the prairie meets the pines on the Niobrara Valley Preserve © Erick Stahlin/TNC

**PARTNERS:**

- Cherry County Emergency Management
- Middle Niobrara Natural Resources District
- National Park Service, Niobrara National Scenic River
- Natural Resources Conservation Service
- Nebraska Game and Parks Commission
- Nebraska State Forest Service
- Private landowners
- Sandhills Task Force
- The Nature Conservancy
- The Niobrara Council
- Upper Loup Natural Resources District
- USDA Agricultural Research Service
- USDA Forest Service, Nebraska
- National Forest-Bessey Ranger District
- U.S. Fish and Wildlife Service, Fort Niobrara National Wildlife Refuge
- Volunteer fire departments

**KEY SUCCESSES**

Team members jointly developed the **NIOBRARA NATIONAL SCENIC RIVER COMMUNITY FIRE PLAN** which provides for coordinated fire and fuels management within the project area.

**NUMEROUS PRIVATE-LAND FIRES** were conducted during spring 2008. Total acres burned exceeded all previous private-lands fire.

**THE NIOBRARA VALLEY PRESERVE** burned more than 3,000 acres in 2008 with the aid of inter-state capacity sharing. New methods and prescriptions were tested and refined.

**A NEW CORE GROUP** has been formed that will coordinate not only fire, but broader resource-conservation issues within the Middle Niobrara.

**2008-2009 PLANNED ACTIONS**

- Continue working with local landowners to increase implementation of prescribed fire.
- Build capacity and increase fire practitioners through training and other technical assistance.
- Improve access to equipment across the landscapes and ownerships.
- Use cost-share programs to demonstrate positive fire effects.
- Develop demonstration projects through prescribed burns completed with Volunteer Fire Departments.
- Host the Great Plains FLN workshop at the Niobrara Valley Preserve in October 2008 with an emphasis on local participation.

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