

The Niobrara River is known for its beauty, its biological significance, and as a supurb canoeing river. One of the few Great Plains rivers, the Niobrara remains free flowing and undammed. In 1991, a 70-mile section of the Niobrara River east of Valentine, Nebraska, was designated a national scenic river—a unit of a system of rivers that warrant special protection and recognition. The 25-mile portion from Fort Niobrara National Wildlife Refuge, near Valentine, downstream to Rocky Ford, is the most frequently canoed section.

Management of the Niobrara is coordinated by the National Park Service, with cooperation from the U.S. Fish and Wildlife Service, Nebraska Parks and Game Department, and local government and private organizations. All are committed to preserving this valuable resource. Recreational users are asked to assist with this mission, to minimize impact on the river and its shorelands, and to respect the property rights of the landowners. The Niobrara will remain a treasure to be cherished by future generations through the good stewardship of landowners and careful use by river visitors.

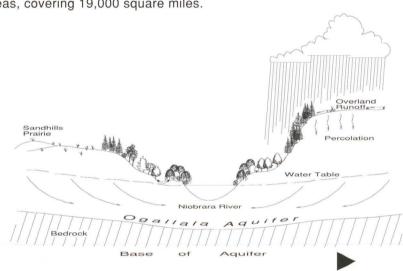
### Water in the Plains

The Niobrara River begins in the plains of Wyoming and flows 300 miles to its confluence with the Missouri River in northeastern Nebraska. Springs feed the Niobrara as it flows through a section of the Great Plains once referred to as "the great American desert."

The Great Plains are a remnant of a large alluvial plain that extended eastward from the Rocky Mountains. On some of the older high plains deposits, sand dunes were created when uplifting of large areas occurred, followed by extensive erosion. The Sandhills of Nebraska are the largest of these dune areas, covering 19,000 square miles.

A large deposit of water, called the Ogallala aquifer, lies underground. A product of millions of years of precipitation, this water saturates the sand and rock layers. In some areas water at or near the surface creates lakes, wetlands, or lush meadows. In the Niobrara Valley the river has cut into the plains as much as 300 feet, allowing water from the aquifer to seep out of valley walls and flow into the Niobrara River.

Waterfalls occur where water flowing to the Niobrara runs over erosion resistant rock. The falls are created as the water continues over the more erodible material. Along the westernmost 30 miles of the scenic river there are more than 90 waterfalls. Some drop directly into the Niobrara. Others occur on streams that flow into the river. The highest is Smith Falls, at Smith Falls State Park. It drops nearly 70 feet from a rock ledge, then flows several hundred yards to the Niobrara River.



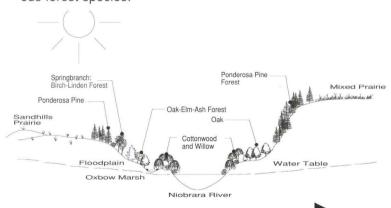
## River Biology

The 100th Meridian is the accepted dividing line where the humid eastern and dry western air masses meet. This geographic boundary, used to differentiate east from west, cuts through the middle of the river corridor.

The Niobrara Valley is known by biologists as an area where numerous plants and animals reach the limits of their range. Eastern, northern, and western species all can be found along the slopes and in the valleys of the Niobrara. The cross section below shows how varying exposure to sun, wind, and moisture affect plant distribution in the valley.

**Eastern forest** species that reach their western limits along the Niobrara are bur oak, American elm, black walnut, green ash, basswood, and hackberry. This area is identified as the western range limit of 83 eastern deciduous forest species.

Forty-two species, representative of the **northern or boreal** forests, reach their range limits in the valley. Species such as paper birch, quaking and bigtooth aspen, ferns, and club mosses are found on cool north-facing slopes.



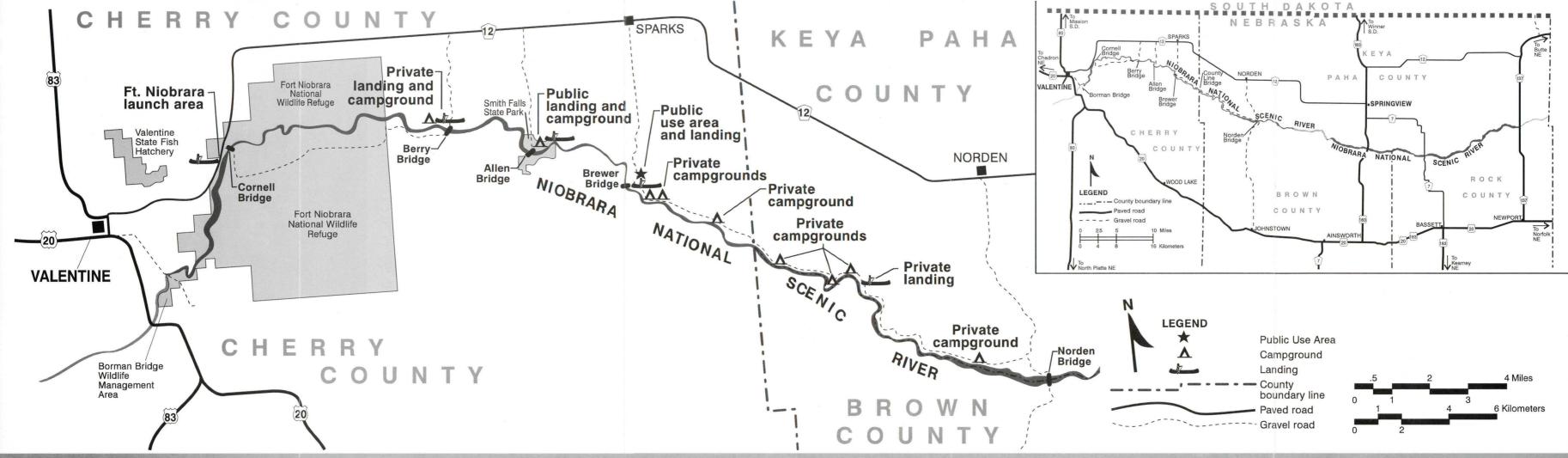
Western Rocky Mountain species reaching their range limit in the valley are ponderosa pine, serviceberry, and horizontal juniper. In all, over 47 western species reach their eastern limits along the Niobrara. Most are found at the higher elevations of the valley.

The Niobrara Valley is a zone of hybridization for some bird species. Here the eastern and western habitats of **buntings**, **orioles**, **and flickers** overlap. Inter-species mixing occurs, causing interesting variations within the different species.

## Sandhills Ranching

Ranching is the predominant commercial land use in the sandhills region. Many ranches along the Niobrara River have been in the same family since the late 1800s. The ranchers first settled along the river and soon realized that the grasslands farther from the river that supported bison would also support cattle. By 1879 ranches existed throughout the region. The ranchers' stewardship of the land has been important in preserving the scenic qualities of the Niobrara River.





#### **ABOUT YOUR VISIT**

The Niobrara is a relatively "friendly" river but the natural environment can present hazards anywhere. The following guidelines and safety hints will help make your visit safe and enjoyable:

#### **GUIDELINES:**

- Private lands border the river in most areas. Respect private property rights. Do not trespass.
- Respect the rights of others who have come to enjoy a peaceful river experience. Do not participate in rowdy, loud, or disorderly behavior.
- ◆ Fishing and hunting licenses are required, as is landowner permission to hunt on private land. State fishing and hunting regulations apply within the boundary of the scenic river. Hunting is not allowed at Fort Niobrara Wildlife Refuge.

- All watercraft must be equipped with a U.S. Coast Guard approved personal flotation device (PFD) for each person aboard.
- Alcohol is not allowed on the river within Fort Niobrara Refuge or Smith Falls State Park.
- Do not litter. Carry out what you carry in. Secure your belongings in the canoe in case of upset.

#### SAFETY HINTS:

- If capsized, stay upstream from the canoe. The river current pushing against the canoe can trap and hold you under water
- If you tip over it will most likely be in shallow water. If floating in deep water, point your feet downstream and ahead of you
   —the current will soon carry you to shallow water.

- Wear shoes that can get wet. It may be necessary to get out of the canoe to push off or land. Sharp objects in the water can cut bare feet.
- On summer afternoons, thunderstorms and/or wind storms are possible. If one occurs, get to shore and wait it out on dry land
- Be aware of land-based hazards: poison ivy, rattlesnakes, and ticks.
- Do not dive or jump into the river from cliffs, bridges, or anywhere else. The Niobrara is shallow and full of rocks.
- While inner tubing, navigate rapids feet first to maintain control.
  Do not connect tubes to make giant rafts. They obstruct passage for others and are hazardous in narrow chutes.

#### ADDITIONAL INFORMATION:

Canoe and tube outfitters are available locally. Check local telephone listings for contact numbers or call Valentine Chamber of Commerce at 1-800-658-4024.

Private campgrounds are found along the first 30 miles of the scenic river, between Fort Niobrara Wildlife Refuge and Norden Bridge. Camp only in designated areas.

Motels, restaurants, stores, and other services are located in nearby towns

Entrance and campground fees are charged at Smith Falls State Park.

# The National Park Service welcomes your questions and comments:



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