

East meets west, north meets south... six different plant communities converge along the Niobrara River on Fort Niobrara National Wildlife Refuge, thereby providing habitat for a rich and unusual diversity of wildlife.

Welcome to Fort Niobrara National Wildlife Refuge



This blue goose, designed by J.N. "Ding" Darling, has become the symbol of the National Wildlife Refuge System. Fort Niobrara National Wildlife Refuge (NWR) is 19,131 acres in size and is located in north-central Nebraska along the scenic Niobrara River. The Refuge, once a frontier military fort, supports an exceptional diversity of plants and wildlife representative of the northern Great Plains and geographic regions east, west, north, and south of here.

Fort Niobrara NWR is one of over 550 refuges in the National Wildlife Refuge System — a network of lands set aside and managed by the U.S. Fish and Wildlife Service specifically for wildlife. The Refuge System is a living heritage, conserving wildlife and habitat for people today and generations to come.

A History of the Landscape The land and water of Fort Niobrara NWR have sustained a rich diversity of wildlife for thousands of years. Fossils from more than 20 extinct mammal species, including the long-jawed mastodon, giant bison, and three-toed horse, have been unearthed on the Refuge. These animals roamed the area from 13 million years ago through the last ice age, about 12,000 years ago.

Two centuries ago, the Refuge and surrounding area was a sea of grass, unbroken except for wooded streams and rivers. Low rainfall, sandy soil, periodic fires, and high winds limited the establishment of trees and the growth of some grasses. Magnificent herds of bison and elk inhabited the area along with sharp-tailed grouse, prairie chickens, prairie dogs, wolves, mountain lions, grizzly bears, and other wildlife. Native Americans followed the bison herds, using them to meet their food, clothing, shelter, and spiritual needs.

Scenic landscape along the Niobrara River USFWS

As the nation's frontier moved westward in the late 1800s, market hunting and habitat loss caused once-plentiful wildlife to decline dramatically. Bison nearly became extinct. Native Americans were moved onto reservations. Fort Niobrara Military Reservation was established in 1879 to keep peace between the settlers and the Sioux Indians and to control cattle rustlers and horse thieves. The army closed the fort in 1906, but used it to supply fresh horses for the calvary until 1911.

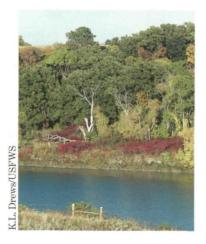
#### Refuge Establishment

In the early 1900s, President Theodore Roosevelt and private conservation organizations, such as the National Audubon Society and American Bison Society, were becoming increasingly concerned with the exploitation of wildlife and their habitats on the Great Plains and elsewhere. As a result, an Executive Order was signed on January 11. 1912, establishing Fort Niobrara as a "preserve and breeding ground for native birds." Later that year, the Refuge's purpose was expanded to include the conservation of bison and elk herds representative of those that once roamed the Great Plains.

Male sharptailed grouse displaying on their breeding ground in the spring



# A Diversity of Plants and Wildlife



Fort Niobrara NWR has a unique blend of topography, soils, and rock formations, along with differing

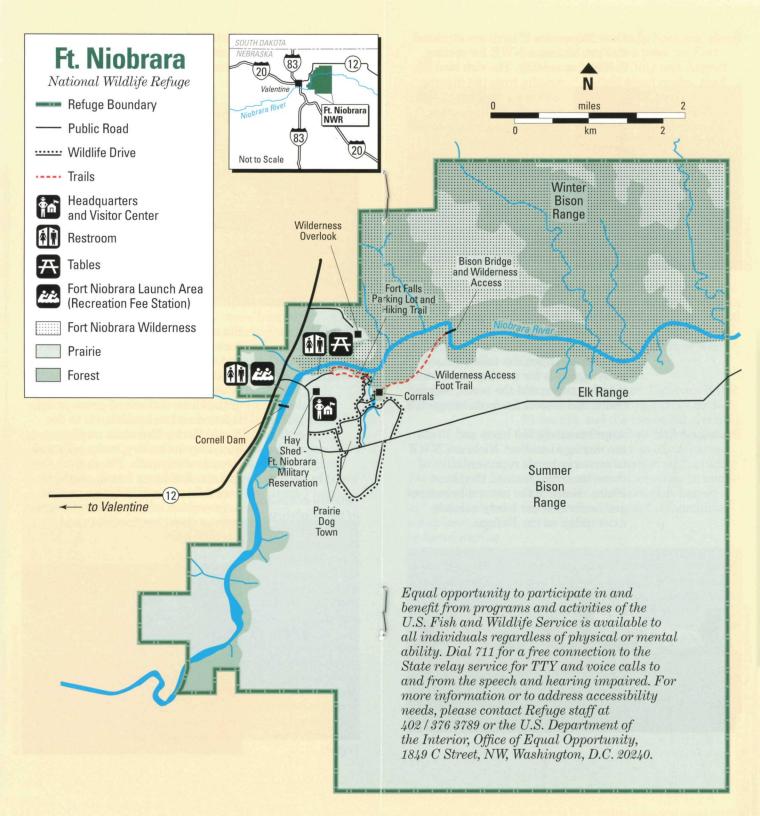
> exposures to sun, wind. and moisture. This mixture creates a wide variety of habitats that support an incredible diversity of plants and wildlife. The Niobrara River flows eastward across the Refuge for 9 miles, cutting deep canvons into the sandstone rocks that underlie the Sandhills Waterfalls occur where seeps and springs flow over layers of hard rock.

Plants

Six major plant communities converge along the Niobrara River and are situated according to their habitat needs and tolerances. Sandhill prairie grows atop sand dunes south of the river, and mixed-grass prairie is found on hard tablelands to the north. Rocky Mountain coniferous forest occurs on dry, rocky soils and steep eroding cliffs. Plants from the eastern deciduous forest, northern boreal forest, and tallgrass prairie communities inhabit water-rich areas such as the river floodplain and canyon walls.

Seventy-six miles of the Niobrara River, including the portion that flows through the Refuge, are included in the National Wild and Scenic Rivers System (above); nectarrich blossoms of the Rocky Mountain beeplant attract butterflies, bees, and other insects (right).





Over 230 species of birds are attracted to Fort Niobrara NWR for resting, feeding, or nesting. The rich bird life

results from the diverse habitats found here. Also. because the Refuge is near the geographic center of North America, it is crossed in many directions by migrating birds. Many songbird species, such as the golden-winged warbler, stop on the Refuge during their migration between wintering and breeding grounds. Others, such

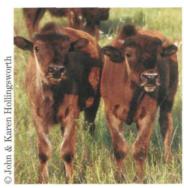
as wood ducks and grasshopper sparrows, come here to breed. Sharp-tailed grouse and greater prairie-chickens are year-round residents of Fort Niobrara NWR that depend upon the taller, denser native grasses for nesting and winter roosting cover, and the seeds, leaves, fruits, and insects for food.

Bison and Elk

Approximately 350 bison and 70 elk are managed on Fort Niobrara NWR to conserve herds representative of those that once roamed the Great Plains. Many of the natural behaviors and traits of these hardy animals exist today on the Refuge.



For example, the bison breeding season, or rut, takes place on Fort Niobrara NWR in July and August.



Adult bison males, aloof most of the year, drift among the cow-calf groups. The bulls bellow hoarsely, paw the earth, and chase and fight each other. Weighing around 2,000 pounds, bulls between 7 and 12 years of age usually dominate the courtship and breeding ritual. Calves are born the following spring.

Other Wildlife

In addition to the wildlife already mentioned, 48 other mammal species, 24 reptile and amphibian species, and several fish species are found on the Refuge in the complex mix of wet and dry habitats.

## Refuge Management

The rolling "pulip pulip" call of the upland sandpiper can be heard during the summer (top left); "Wapiti" is a Shawnee Indian word meaning "white deer" in reference to the bleached spring coat of elk (bottom left): these bison calves may live 20 years or more on the Refuge (top right).

Management of Fort Niobrara NWR focuses on conserving native birds, bison, elk, and the biological diversity of the area. Prescribed fire and planned periods of rest, or non-disturbance, are used in combination with grazing by bison and elk in an effort to mimic the historic processes that helped shape the native plant communities of the Refuge.

Bison are an ideal management "tool" because they range over large areas, eat and trample a variety of prairie plants, and turn the soil with their wallowing. This disturbance helps keep native prairie communities diverse and healthy. Refuge lands, however, can only support a certain number of bison. To keep the bison herd in balance with its food supply and meet the habitat requirements of other wildlife, many bison are sold at public auction or donated each fall.

#### Enjoying Your Visit

Fort Niobrara NWR is a great place to see, appreciate, and learn about wildlife and their habitats. The Refuge offers many opportunities for wildlife-dependent recreation, but please remember that the needs of wildlife come first. Some of the activities in which you can take part or the places you can visit include the following.

Headquarters and Visitor Center A visitor center, with informative displays and exhibits, a bookstore, and staff to answer your questions, is open 8:00 am to 4:30 pm daily from Memorial Day through Labor Day, and Monday through Friday during the rest of the year, except on Federal holidays.

Auto Tour Route, Observation Deck, and Nature Trail



Fort Niobrara Wilderness Area A 3½-mile, self-guided auto tour route starts near the visitor center and provides the opportunity to view bison, elk, prairie dogs, and other natural and historic points of interest. At stop number 13, an accessible observation deck overlooks the scenic Niobrara River corridor. An arduous, .9-mile nature trail descends from the overlook to the base of Fort Falls, and then continues to the river before circling back up to the top of the canyon.

The more adventurous visitor can enjoy the Fort Niobrara Wilderness Area on foot or by floating the Niobrara River. Allow 2-4 hours for a float trip through the Refuge. To help offset the costs of providing visitor services, a small fee is charged for each watercraft launching on Fort Niobrara NWR. Private outfitters in the area rent watercraft and provide shuttle services.

Special Activities

Visitors can "experience" refuge management each fall by watching the Bison Roundup and Auction. Special activities for children include Kid's Fishing Day and the Junior Ranger Program. Please contact the Refuge staff for information on these and other special activities that may be taking place during your visit.

## Refuge Regulations



Burrowing owl (left); black-tailed prairie dog (above).

To protect the wildlife, habitats, and historic resources of Fort Niobrara NWR and to make your visit more enjoyable, the following regulations are strictly enforced:

- The Refuge is open to the public during daylight hours only.
- Licensed vehicles are allowed to travel designated, graveled roadways.
- River floating on the Refuge is allowed downstream from Cornell Dam only. No more than five float tubes carrying a maximum of eight people may be tied together.
- Fishing is allowed on the Minnechaduza Creek and along the Niobrara River downstream from Cornell Dam. Collecting baitfish, frogs, and turtles is not allowed.
- Prohibited items and activities include alcoholic beverages, high volume radios, any device capable of shooting or directing a projectile or liquid at another person or wildlife, camping, open pit fires, hunting without a permit, and extreme sports such as ice climbing, rock climbing, and sport rappelling.
- Persons possessing, transporting, or carrying firearms on National Wildlife Refuge System lands must comply with all provisions of State and local law. Persons may only use (discharge) firearms in accordance with refuge regulations (50 CFR 27.42 and specific refuge regulations in 50 CFR Part 32). Carrying, possessing, or discharging of fireworks or explosives on national wildlife refuges is prohibited. The use or possession of air guns, spears, gigs, or other weapons on national wildlife refuges is prohibited.
- All government property, including natural, historic, and archaeological features, are protected by Federal law. Searching for or removal of objects of antiquity, plants, animals, rocks, antlers, or other objects is prohibited.

