

U.S. Fish & Wildlife Service

Audubon

*National Wildlife
Refuge*

Auto Tour Guide



Welcome



This goose, designed by J.N. "Ding" Darling, is the symbol of the National Wildlife Refuge System.

Audubon National Wildlife Refuge (NWR) was established in 1956 to replace wildlife habitat that was lost when the Garrison Dam and Reservoir was constructed on the Missouri River. The Refuge is 14,735 acres in size and provides habitat for 246 bird, 34 mammal, 5 reptile, 4 amphibian, and 37 fish species. The Refuge is one of over 560 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.

You are invited to enjoy the sights and sounds of the prairie grasslands and wetlands by traveling the auto tour route along the scenic south shoreline of Lake Audubon. The rolling hills, prairie pothole wetlands, and Lake Audubon itself all provide spectacular opportunities to view waterfowl, songbirds, resident wildlife, scenic vistas, and more. Wildlife can be observed almost anytime, but the best viewing times are during early morning or in the evening.

About the Auto Tour Route

The 8.6-mile gravel auto tour route begins near the office and visitor center and travels through mixed-grass prairie and wetland habitats along Lake Audubon. Eleven interpretive signs along the route correspond to the map and numbered paragraphs in this brochure. At each location, you are welcome to pull your vehicle over to the side of the road and enjoy the sights and sounds of the Refuge. When you reach the end of the route, turn west and drive 3 miles to Highway 83.

The speed limit is 20 mph, and decreases to 10 mph on curves. The auto tour route is open year-round,

but conditions may vary depending on precipitation amounts or snow that blocks the route. Refuge staff do not clear snow from the route. For your safety and to minimize disturbance to wildlife and habitat, please keep your vehicle on the auto tour route at all times.

Wildlife Habitat



Pasque flower

Audubon National Wildlife Refuge provides wildlife with a diversity of habitats, from the water and islands of Lake Audubon to prairie wetlands, native prairie, and planted grasslands. These habitats provide the food, water, shelter, and space required to support the needs of many species of wildlife. Refuge staff strive to fulfill the needs of wildlife by carefully managing the Refuge habitats.

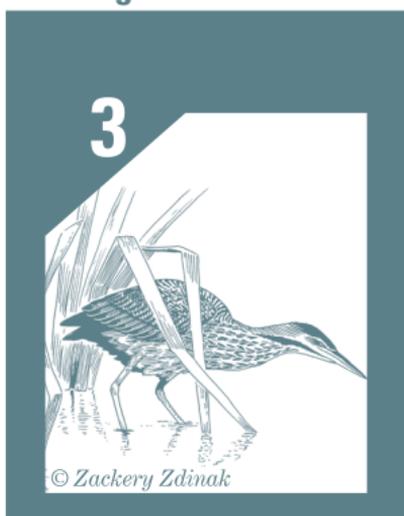
The Mixed Grass Prairie



Upland sandpiper

Over 10,000 years ago, the leading edge of the Wisconsin glacier moved across this region, depositing rock, gravel, and soil in an area that is now called the Missouri Coteau. The mixed grass prairie plants that grow here provide valuable habitat for many grassland-dependent bird species, such as the northern pintail, upland sandpiper, American bittern, grasshopper sparrow, and northern harrier. The prairie pothole wetlands of this area also boast some of the highest densities of nesting ducks in North America.

Creating Wetland Habitat



*American
bittern*

Several dikes have been constructed in shallow water close to the shoreline of Lake Audubon. The purpose of these dikes is to create habitat that functions more like a wetland than the open-water lake. The quiet wetland waters provide places where birds can find adequate food and raise their young. Emergent plants such as cattails and bulrush begin to grow along the perimeter, and submergent plants such as sago

pondweed grow just beneath the water surface. These plants provide habitat for aquatic insects to reproduce and grow, and a variety of birds are attracted to these areas where they can dabble, dive, or probe in the mud to find high protein meals.

Historic Visitors



*John James
Audubon*

On October 26, 1804, the 44 members of the Lewis and Clark Expedition arrived at the Mandan Indian villages, located approximately 20 miles southeast of here. The expedition members constructed Fort Mandan, their winter home, on the north bank of the Missouri River across from the villages. The Corps of Discovery left Fort Mandan on April 6, 1805, destined to reach the Pacific Ocean.

On their return to Fort Mandan from the Pacific Ocean, the Lewis and Clark Expedition found most of the Fort burned, with only a few pickets standing next to the river. On August 13, 1806, they camped a few miles west of here at the mouth of Myre Creek (now called Snake Creek). Their campsite is now under the waters of Lake Sakakawea.

Artist and naturalist John James Audubon spent the summer of 1843 at Fort Union, near present day Williston, North Dakota, collecting and sketching northern plains wildlife. In 1967, what was Snake Creek National Wildlife Refuge was renamed as Audubon National Wildlife Refuge, to commemorate his 1843 visit and to honor his biological and artistic achievements.

Restoring Natives



Sideoats grama

Prior to the establishment of the Refuge, much of the upland areas were used for crop production. Today, many of these fields have been seeded to native grasses such as green needle, sideoats grama, blue grama, and big bluestem. Although it is virtually impossible to duplicate native prairie due to the variety and complexity of plant and soil life, the planted native grasses and wildflowers provide habitat for a great variety of insects, migratory birds, and resident wildlife.

Habitat Management



Bison

Historically, prairie grasslands evolved with grazing bison and wildfires. Today, wildlife managers utilize cattle and controlled fire to mimic the action of bison and wildfires to improve Refuge grasslands for wildlife.

Livestock grazing, by local ranchers, is used to increase the growth and vigor of the prairie grasses. Successful habitat management involves careful timing of grazing with the plant's annual growth cycle, consideration of how often the plants are grazed, the number and type of animals used, and length of the grazing season.

Fire is an important part of prairie grassland restoration and maintenance. Prescribed burning is used to achieve similar benefits to what wildfires historically provided on the prairie. Fire helps reduce the number of trees and shrubs that grow in the grasslands and recycles nutrients which results in lush new growth preferred by grazing animals.

These two management techniques help reduce invasive, non-native plants such as smooth brome grass, Kentucky bluegrass, crested wheatgrass, and wormwood, while increasing native grasses and wildflowers such as green needlegrass, blue grama, big bluestem, and purple coneflower.

Nesting Sanctuaries



Mallard

The many islands of Lake Audubon are hilltops that remained after the water held by the Garrison Dam flooded this area. These islands are sanctuaries for many types of nesting birds, including waterfowl, shorebirds, and songbirds. Many birds also use Lake Audubon as a refueling area during spring and fall migration. To avoid disturbance to these birds, public use

activities, except for ice fishing and special tours, are not allowed on the refuge portion of Lake Audubon.

To learn more about the island sanctuaries and wetland habitat, drive ahead approximately ¼-mile and park your vehicle in the pull-off on the right side of the road. Take time to read the interpretive panels and enjoy the scenic view of Lake Audubon.

Prairie Potholes



American wigeon

Audubon NWR is located in the Prairie Pothole Region, which is known for its rolling hills and millions of small depressions or potholes.

Three main types of wetlands occur here, and they are classified according to the length of time they hold water – temporary, seasonal, and semi-permanent. Many of the wetlands are seasonal and hold water for only a few months during the year.

Wetlands, along with their plant communities, change as they go through wet and dry cycles. The wildlife species that use these wetlands for food and shelter also varies as the water depth and plants change. For example, ducks often pair up on temporary and seasonal wetlands because they are isolated and nutrient-rich. When these wetlands become dry, the ducks move to semi-permanent wetlands to raise their young. The numerous aquatic insects found in the wetlands provide food for ducks, shorebirds, grebes, and many other wildlife species.

Colonial Nesting Birds



Double-crested cormorants

A colony consists of a group of birds that nest together in the same place and at the same time, communicating and raising their young in close proximity to one another. On clear, calm, summer evenings, the noisy squawks of young birds can be heard across the waters of Lake Audubon.

The sound comes from the northeast, where double-crested cormorants, California gulls, and ring-billed gulls have established a nesting colony on an island.

Cormorants build a stick nest, lay 3-5 pale blue eggs, and incubate them for approximately 27 days. Gulls build their nests of dried grasses, moss, and feathers, lay 2-3 eggs that are tan, with dark brown and gray splotches. Both the male and female gulls incubate the eggs – 21 days for ring-billed gulls and 25 days for California gulls.

Large numbers of cormorants and gulls can be seen during the spring and summer seasons, circling in the air above the island. Much of this activity is the parents flying to and from the nest as they provide food for their hungry young.

Native Prairie



Little bluestem

Early pioneers called it a ‘Sea of Grass’ – mile after mile of uninterrupted grasslands that waved in the summer winds like waves on the sea. Today, large expanses of native prairie are only a memory in the minds of ‘old-timers’; however, small remnants of native prairie grasslands do remain. Look to the west and you will see hundreds of acres of native prairie. Let your imagination expand this area a thousand-

fold, and you can visualize the awesome breadth of the open prairies that greeted and awed early settlers.

Native prairie supports a great variety of wildlife, and the decline of many native wildlife species, including Baird’s sparrows and burrowing owls, can be traced to the loss or misuse of native prairie.

Return of the Giant

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Canada Geese

Historically, giant Canada geese nested on the North Dakota prairies. One of the earliest recorded observations of these nesting Canada geese was by Lewis and Clark, who reported seeing them nesting in the tops of lofty cottonwood trees, probably using old hawk or eagle nests. However, by the mid-1930s, giant Canada geese had almost been eliminated from this area due to habitat destruction and over-hunting.

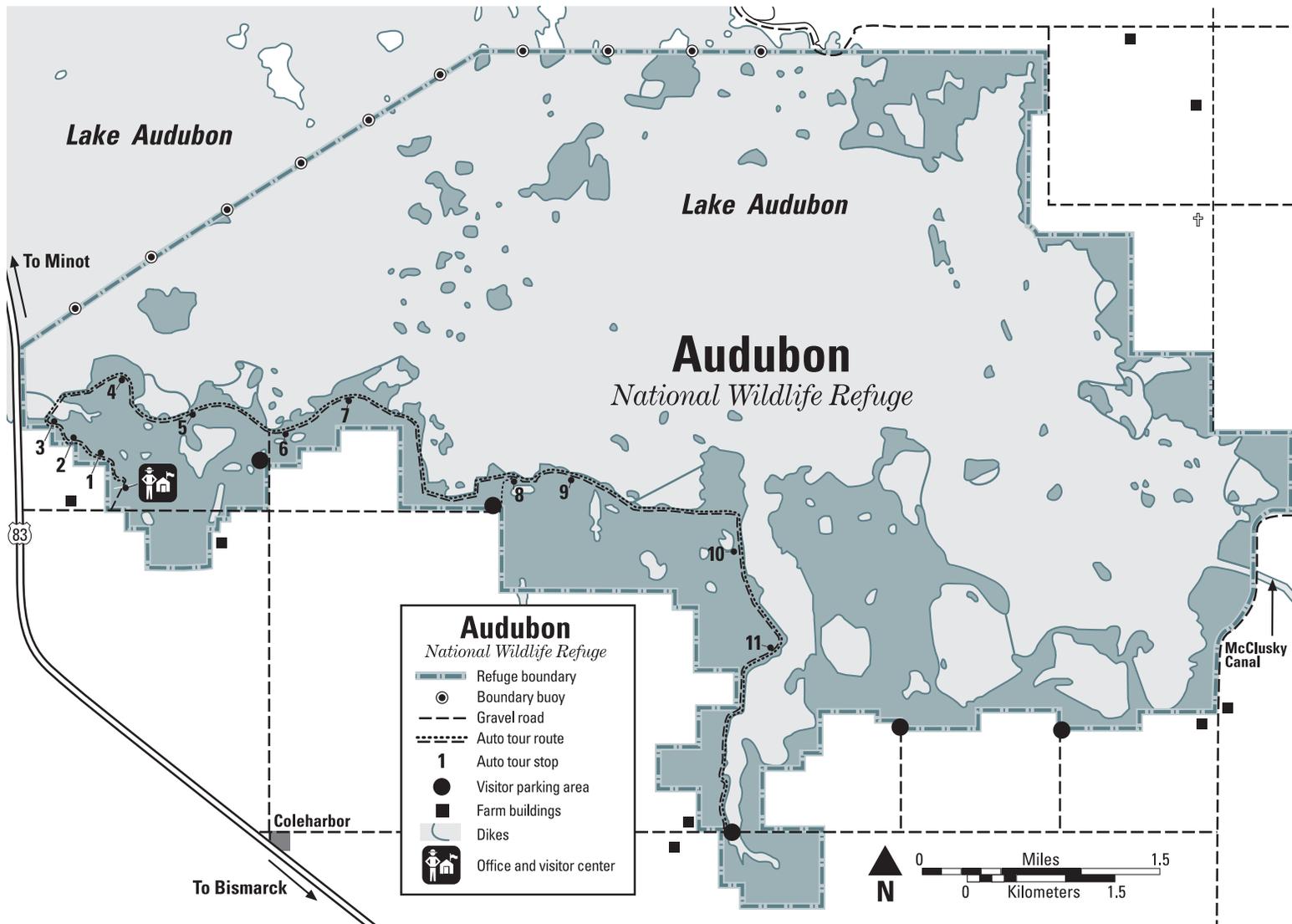
In 1958, a captive flock of giant Canada geese was established at the Refuge. Adults were held flightless in pens while their young were allowed to fly free and intermingle with wild, migrating geese. The free-flying young returned to their Refuge birthplace to nest in the wild. By the early 1970s, the captive flock was no longer needed, as a wild flock of nesting giant Canada geese was firmly established.

This is the last interpretive stop on the tour. To reach U.S. Highway 83, continue driving south on the auto tour route for 1½ miles. Turn right on the gravel road and travel west 3 miles. We hope you enjoyed your visit and will come again.

If you have any questions, comments, or desire additional information, please stop at the Office and Visitor Center, which is open from 8:00 am – 4:30 pm, Monday through Friday, except Federal holidays.

Accessibility Information

Equal opportunity to participate in and benefit from programs and activities of the U.S. Fish and Wildlife Service is available to all individuals regardless of physical or mental ability. Dial 711 for a free connection to the State relay service for TTY and voice calls to and from the speech and hearing impaired. For more information or to address accessibility needs, please contact the Refuge staff at 701 / 442 5474, or the U.S. Department of the Interior, Office of Equal Opportunity, 1849 C Street, NW, Washington, DC 20240.



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For Refuge Information
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