

Upper Souris

National Wildlife Refuge

Trails



Welcome to Upper Souris National Wildlife Refuge



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

Welcome to Upper Souris National Wildlife Refuge (NWR). Upper Souris NWR was established in 1935 as a refuge and breeding ground for migratory birds and other wildlife. The Refuge contains 32,084 acres and extends for over 35 miles along the beautiful Souris River Valley.

Upper Souris NWR is a special place for wildlife and people. As a national wildlife refuge, it is a place where the needs of wildlife come first. Be advised that certain activities are not permitted because they are unsafe, unlawful, or not consistent with Refuge goals and purposes. For a list of Refuge regulations, please pick up a general brochure from the Refuge headquarters or one of the kiosks.

The Refuge is open to visitors from 5:00 am to 10:00 pm. Pets are welcome when they are walked on a short leash. Remember that flowers, grasses, and trees support all kinds of wildlife – leave them as you found them.

For your enjoyment, we have developed several different trails – a self-guided scenic drive, five nature trails, and two canoe trails on the Souris River. Information on the nature trails and the canoe trails may be found following the description of the Prairie-Marsh Scenic Drive.

Prairie-Marsh Scenic Drive



Follow the signs at the west end of Lake Darling Dam to find the Prairie-Marsh Scenic Drive entrance road. The scenic drive begins 1 mile south of the dam. There is a gate at the entrance to the drive; this gate is located south of the intersection of County Roads 6 and 11 (*see map*).

The scenic drive is open to vehicles whenever the entrance gate is open. The scenic drive closes at the start of the State deer gun season and reopens the following spring as conditions allow. When the gate is closed outside of the State deer gun season, all visitors may park at the gate and walk, bike, or cross-country ski the scenic drive.

Numbered signs along the scenic drive correspond to the following points of interest. You are welcome to get out of your car and walk the coulees, roads, and prairie-covered hills in the immediate vicinity of the scenic drive.

1. Pelican Nature Trail

This trail offers a ½-mile interpretive hike to the Pool A Spillway. American white pelicans, Canada geese, blue-winged teal, mallards, deer, muskrat, and mink are often seen in this area. Wildlife are wary of strange noises and unexpected visitors – look carefully and be patient. This is a great place to watch wading birds, such as great blue herons feeding on minnows, and frogs in shallow water. You are welcome to use the photo blind at the end of the trail to “hide” and let the wildlife come to you.



2. Wildlife Food

As you drive this trail, see if you can identify the fruit-bearing bushes.



Juneberries ripen in early July, producing bluish-red berries that look like small blueberries. In mid- to late summer, you can see chokecherries, which are shiny, bluish-black berries and a favored food of wildlife. Native Americans dried

chokecherries and ground them to use in pemmican, or mincemeat. In the fall, hawthorn and buffalo berry shrubs yield clusters of reddish fruit. Hawthorn berries look like small apples.

3. Green Ash

The rows of trees in the long, narrow valley, or “coulee,” below are green ash. They were planted in the late

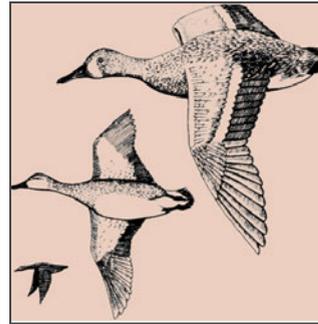


1930s by the Civilian Conservation Corps (CCC). Green ash is a very adaptable hardwood that is extremely resistant to hot and cold temperatures. Native Americans used green ash wood to make bows. Early European American

settlers found this hardwood especially useful for hammer and axe handles. Green ash is often planted in windbreaks which catch blowing snow. The snow gradually melts and provides an increased supply of moisture for plants.

4. Viewing Area

The CCC was activated by President Franklin D. Roosevelt in 1933 to

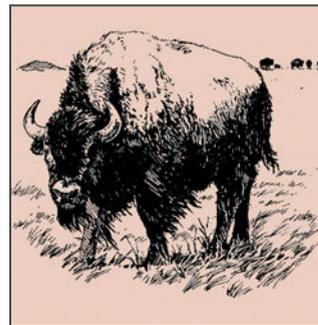


alleviate widespread unemployment. Young men in the CCC worked on forest and conservation projects. The historic site of CCC Camp Maurek is located on the far side of the Souris River valley.

The dikes, nesting island, and water control structures in the marshes below were CCC projects to improve habitat for migratory waterfowl. Water control structures are used to raise and lower water levels. Water level management encourages the growth of food-producing aquatic plants and attracts a variety of marsh birds. Careful maintenance of water levels also stabilizes marsh vegetation and prevents flooding of nesting sites. Lowered water levels attract shorebirds that feed along the mudflat edges and shallow water.

5. Grazing

Historically, native grasses developed and flourished as a result of grazing and fire. Several hundred years



ago, bison grazed vegetation to the ground before moving on. This type of grazing stimulated new growth of native grasses and wild flowers. To mimic bison grazing, the Refuge staff use cattle to graze the prairie every 2-4 years.

6. *Native Grasses and Burning*



When you get out of your car to view the native grasses, listen to the wind

rustling through the prairie. The wind sweeps unhindered, rolling the grasses into wave after wave of undulating motion.

Historically, the prairies often burned following a lightning storm. This was good for the grasses

because fire removes dead plant material and adds nutrients to the soil. To mimic the lightning fires, the Refuge staff periodically burn prairie grasses in the spring or late summer. The rejuvenated grasses provide good protective cover for upland nesting ducks, such as mallards, gadwalls, and teal. Without this protective cover, raccoons, red foxes, skunks, and other predators find and destroy duck eggs and ducklings, severely limiting reproduction.

7. *Coulees*



French fur traders in the 1800s called these long, narrow valleys with low drainage areas “coulees.” The

coulees are frequented by numerous birds and animals that seek food and shelter, especially in the winter, when cold winds sweep across the rolling native prairie. The coulees provide excellent travel lanes for wildlife.

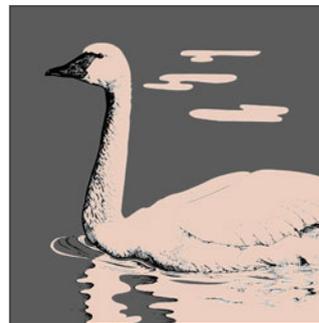
8. *Cottonwood Nature Trail*



This trail is named for the large number of cottonwood trees planted in the late 1930s by the CCC. Dead or alive, cottonwood trees have a valuable place in nature. Hawks, owls, and songbirds use the trees as perches, and northern flickers and woodpeckers use them as homes and dining areas.

Cottonwood Trail consists of two mowed grass loops. The first loop is ½-mile long and features a scenic overlook with a bench. The second loop is 1 mile long and continues from the overlook area west through the coulee and around the surrounding ridges.

9. *Creeping Shoreline*

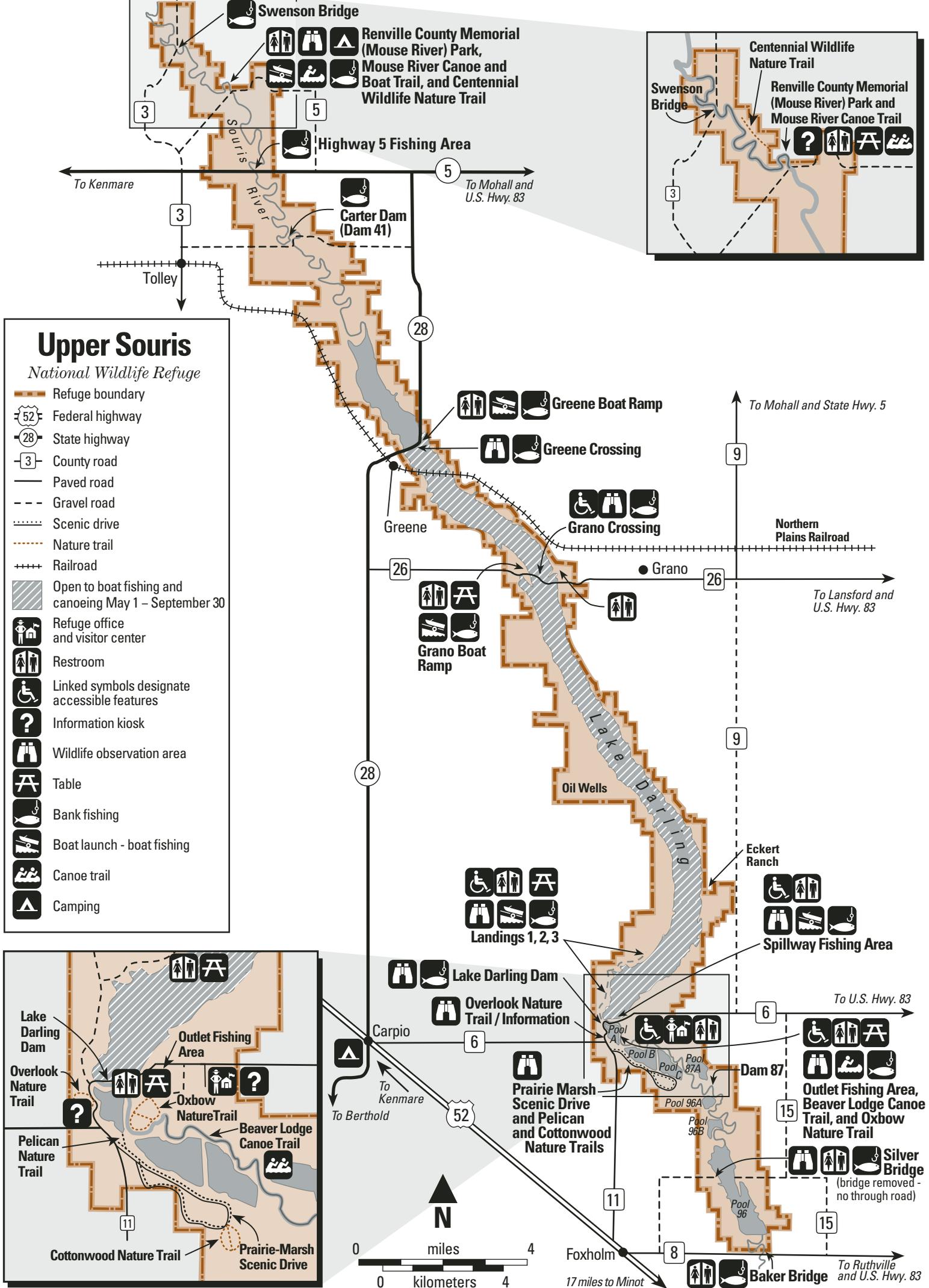


Underwater plants in the center of this pool are slowly filling this marsh! As plants die, they decay. The decayed

material falls to the marsh bottom and forms a mat called “humus.” Humus provides larger plants, such as bulrushes and cattails, with a place to become anchored. In addition, grasses, such as the tall plume-topped plants called phragmites growing

along the shore, will gradually occupy the fertile drying humus left behind by the aquatic plants.

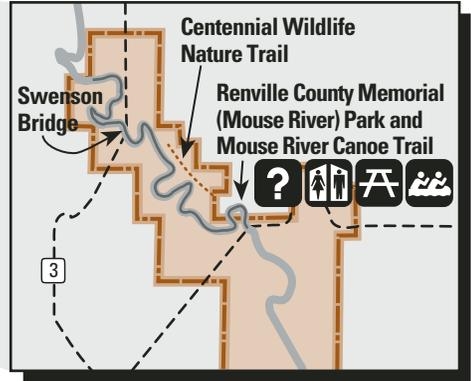
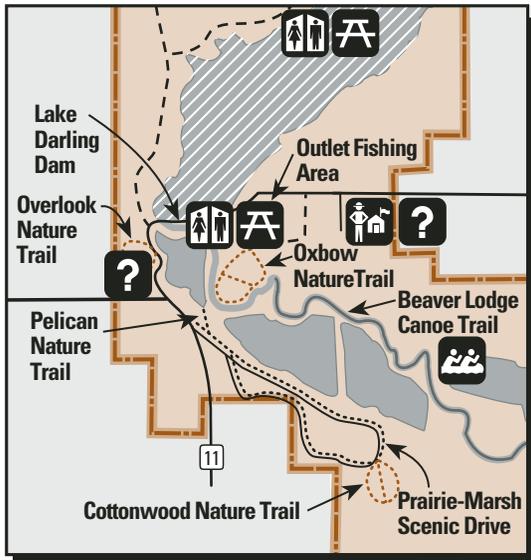
The process described above is called plant succession. As a result of succession, the shoreline of a marsh moves toward the center of the water, eventually filling in the marsh.



Upper Souris

National Wildlife Refuge

- Refuge boundary
- Federal highway
- State highway
- County road
- Paved road
- Gravel road
- Scenic drive
- Nature trail
- Railroad
- Open to boat fishing and canoeing May 1 - September 30
- Refuge office and visitor center
- Restroom
- Linked symbols designate accessible features
- Information kiosk
- Wildlife observation area
- Table
- Bank fishing
- Boat launch - boat fishing
- Canoe trail
- Camping



To Kenmare

To Berthold

To Mohall and U.S. Hwy. 83

To Mohall and State Hwy. 5

Northern Plains Railroad

To Lansford and U.S. Hwy. 83

To U.S. Hwy. 83

To Ruthville and U.S. Hwy. 83

17 miles to Minot

To maintain this area as a marsh, the vegetation must be managed. Periodically, the marsh bottom is allowed to dry, the vegetation is mowed, burned, or disked, and the marsh is reflooded. This sets back the succession process and promotes a mix of aquatic plants and open water that benefits wildlife.

10. Biological Weed Control



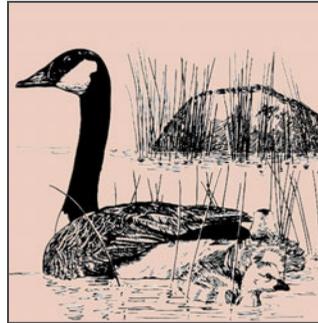
Leafy spurge, a 3-foot tall invasive greenish-yellow weed, can invade grasslands and reduce the diversity of plant life by crowding out desirable plants. Spraying with herbicides has not stopped its spread, and spraying has the potential to contaminate surface and underground water. A more ecologically sound approach to controlling this weed involves the introduction of flea beetles that feed exclusively on the plant and eventually kill it. Every year, Refuge staff collect flea beetles from thriving colonies and move them to new patches of leafy spurge. Over time, the flea beetles will control this weed without damaging desirable plants.

11. Duck's Dining Room



This marsh is a duck's dining room. A hen may bring her ducklings here for their first meal. With necks outstretched, the ducklings skitter across the water in pursuit of mosquitoes and water insects. Gradually, plant seeds replace animal matter as the duck's major

12. Alternative Nesting Sites



food. When the water is drawn down to expose the mudflats, many types of long-legged shorebirds can also be seen feeding along the water's edge.

Nesting sites for Canada geese were once scarce at Upper Souris NWR.

Nesting females prefer a site that is protected from predators and surrounded by water. Muskrat houses are preferred by the geese but are limited in numbers based on the muskrat population. In an effort to provide additional high quality nesting sites, nesting islands have been built and nesting "tubs" have been installed throughout Refuge wetlands. Research has indicated that nesting islands and tubs increase nesting success. Nesting islands have natural vegetation while the tubs are filled with material such as flax straw to attract the nesting female. When the goslings hatch, a short jump to the water will place them in their natural environment.

This is the last stop on the scenic drive. Further along the road there is two-way traffic. Please drive carefully. We hope you enjoyed your visit. We encourage you to return during different seasons to experience new sights and sounds.

Nature Trails



Five nature trails are available at Upper Souris NWR. Only hiking, snowshoeing, and cross country skiing are permitted. Motorized vehicles, bicycles, and horses are not permitted. Take only photographs and memories. Leave only footprints. Enjoy your walk.

Oxbow Nature Trail

A trailhead map of this nature trail is located at the Outlet Fishing Area. Your walk along this trail will take you on either a ½-mile or a 1-mile journey through prime river bottom habitat of the Souris River. The river bottom habitat is comprised of woodlands, grassland edges, and a river oxbow. An oxbow is the remains of an old river channel formed when a river cuts a new route through the land and isolates the old river bend from the new channel.

This trail is accessible, except during wet weather, and benches are available along the route. Interpretive signs are provided to increase your enjoyment of this area.

Overlook Nature Trail

This trail begins at the information kiosk located southwest of the Lake Darling Dam. This mowed grass trail winds over the prairie grass-covered hills where a spectacular panoramic view of the Souris River valley will unfold before you. Bring your binoculars, sit on a bench, and watch the many types of waterbirds moving in and out of the marsh below you.

Pelican Nature Trail

For a trail description, see the information in Stop 1 of the Prairie-Marsh Scenic Drive description.

Cottonwood Nature Trail

For a trail description, see the information in Stop 8 of the Prairie-Marsh Scenic Drive description.

Centennial Wildlife Nature Trail

This trail is located at the north end of Renville County Memorial (Mouse River) Park. The mowed grass trail meanders through bottomland grasslands. The trail offers good bird watching opportunities. The trail length will depend upon how wet the meadows are, but it will be from 2 to 2½ miles round-trip.

Canoe Trails



The two canoe trails and Lake Darling from the dam north to the Highway 28 crossing are open May 1 to Sept 30. Please observe all safe boating regulations, and remember that high winds and large waves can occur at anytime.

When canoeing on the Souris River, look for colorful wood ducks and hooded mergansers. Both of these species nest in tree cavities. Nesting boxes have been mounted on trees to provide alternative nest sites. Also, look for beaver lodges along the river bank. Large mounds of sticks, mud, and vegetation identify these homes which may house up to six beavers. The lodges have underwater entrances. As fall approaches, beavers store caches of sticks next to the lodge and feed on the bark during the winter.

Beaver Lodge Canoe Trail

Only non-motorized watercraft are allowed on this trail. The 3-mile (6 miles round-trip) trail begins at the parking lot located southeast of the Outlet Fishing Area. The first part of the trail involves paddling through three ponds (Goose Pen Ponds) and a short section of cattails to get to the Souris River. The cattail opening is poorly defined – look for a narrow opening. When you reach the downstream dam that blocks the river, you need to turn around and return to the starting point. No take-out facilities are available at this downstream point. Boat fishing is allowed, but swimming is not permitted.

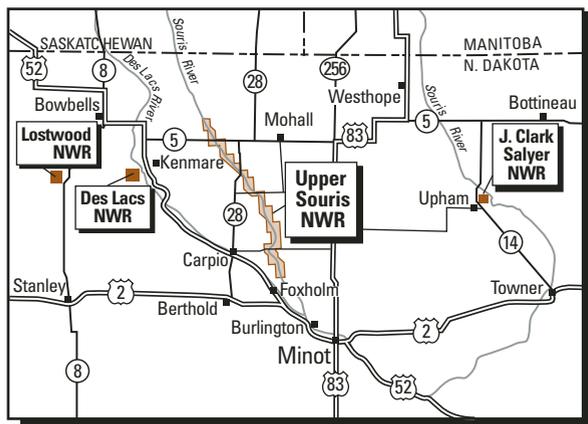
Mouse River Park Canoe Trail

Only canoes and small boats with motors are permitted on this trail. This 5-mile (10 miles round trip) trail begins at the boat ramp in Mouse River Park and extends upstream (north) to the Refuge boundary. No take-out facilities are available at the north end of the trail – you must return to the beginning of the route or to Swenson Bridge to take-out. Swenson Bridge, located 4 miles upstream from the park, offers a crossing where canoes can be taken out or launched from the County Road 3 right-of-way. Boat fishing is allowed, but swimming is not permitted.

Refuge Office and Visitor Center



The Refuge headquarters and visitor center is located southeast of Lake Darling Dam and is open from 8:00 am to 4:30 pm, Monday through Friday, except on Federal holidays. To reach the Refuge headquarters, take Highway 52 to 1 mile northwest of Foxholm, then north 7 miles on County Road 11. The Refuge headquarters can also be reached by traveling 18 miles north of Minot on Highway 83, then west 12 miles on County Road 6. Visit the other national wildlife refuges in this area including J. Clark Salyer NWR, Des Lacs NWR, and Lostwood NWR.



Climate Change

A growing body of scientific evidence has linked accelerating climate change with observed changes in fish and wildlife, their populations, their migratory patterns, and their habitats. But, if we act now, the damaging effects of climate change can be reduced. The U.S. Fish and Wildlife Service is implementing a partnership driven and science-based strategic plan for addressing the impacts of climate change. To find out more and learn how you can help, go to <http://www.fws.gov/home/climatechange/>.

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 / 468 5467, or the U.S. Department of the Interior, Office of Equal Opportunity, 1849 C Street, NW, Washington, D.C. 20240.

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For Refuge Information
1 800 / 344 WILD

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