This trail comes from the Red River across the Cole Ford and goes into Canada, leaving the U.S. at the Hill of the Murdered Scout near Portal, North Dakota. This trail, on the left side of the road, appears as three tracks. They were made by horses dragging travois.



19 Sharp-tailed Grouse. Sharp-tailed grouse have a "dancing ground" here. This dancing is done by male birds to win the attention of females during the spring mating season. During the mating season, grouse are on the area for 2-3 hours after sunrise and sometimes during late afternoon. When they are active, the grouse can be heard a mile away on calm days. Check at headquarters for best times to see these birds.

The Scenic Trail has given you a sample of the rich history and wildlife habitats of J. Clark Salyer National Wildlife Refuge. We hope you enjoyed your stay and welcome you back in the future.

This is the last stop on the Scenic Trail. Continue west 4 miles to Highway #14. At that point, turn right 4 miles to Upham, or go left 17 miles to Towner.

## U.S. DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE





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## J. Clark Salyer

NATIONAL WILDLIFE REFUGE



## SCENIC TRAIL GUIDE

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WELCOME to J. Clark Salyer National Wildlife Refuge. This refuge was established in 1935 for the preservation and propagation of migratory waterfowl and other wildlife. It is nearly 59,000 acres in size, extending along the Souris River for 50 miles from east of Bantry to the Manitoba border. Originally called Lower Souris Refuge, it was renamed in 1968 in honor of J. Clark Salyer II, head of the National Wildlife Refuge System from 1934–1961.

This is the starting point for a 22-mile tour covering marshes, wooded river bottoms and sandhills of the refuge, ending north of Bantry of Highway 14. Check your gas supply before leaving, Upham is the nearest source of gas.

The name "Souris" is French for "mouse". Before 1800, French explorers found the Indians calling the stream "the mouse river" because of the great number of mice found in the meadows now within the refuge.

TRAIL OPEN 5:00 A.M. To 10:00 P.M. Daily

NUMBERED SIGNS ALONG THE ROUTE INDICATE THE POINTS OF INTEREST DESCRIBED BELOW:

1 Nursery. This tree nursery was established in 1935, and from it the Civilian Conservation Corps (C.C.C.) planted most of the trees now at headquarters.

This nursery and similar planted tree groves are valuable winter habitat for pheasants, deer and small animals as well as being attractive summer nesting areas for songbirds.

**2** Pool 326. To your left (east) is Pool 326, formed by a dam north of headquarters. The natural marsh that existed here was drained for farming in the early 1900's, but these farming operations failed. The dam impounded the water, thereby restoring the marsh. Water levels are controlled to stabilize marsh vegetation, prevent flooding of nesting areas and encourage growth of food-producing aquatic plants.

In the marsh is a nesting colony of Franklin's Gulls. They build nests of marsh plants in shallow water and lay two or three eggs. Farmers welcome these black-headed birds because they eat great numbers of grasshoppers, grubs, insects and mice.

To your right is a typical refuge wildlife cover patch. The patch was established by seeding a Dense Nesting Cover mixture of sweetclover, alfalfa and two types of wheatgrass on a former farm unit. These patches maintain good vigor and provide excellent wildlife cover for a period of 5-10 years after establishment. Some type of manipulation is then required to rejuvenate the cover. This is sometimes done by farming the areas for a few years before reseeding. Grain from the farming operation is used to keep ducks on the refuge during harvest season, attract ducks to banding sites, and as winter food for pheasants, partridge, grouse and deer.



**3** Marshland Wildlife. Turn left on the Upham-Willow City road. To your left in 326 Pool are small platforms in open water areas. Wild Canada geese nest on these platforms, which provide security against flooding and predators such as raccoons. There are over 100 of the artificial nests in refuge marshes. Several hundred goslings are produced annually on the refuge.

Different kinds of ducks may be seen in the road ditches ahead. Albino muskrats also have been seen along this stretch of road.

- 4 LeConte's Sparrow. Here is one of the few places in the midwest where LeConte's sparrow may be found. This small bird is of interest because it is so uncommon and difficult to see. It seeks meadows with tall grassy areas such as you see here.
- **5** Pool 320. This is an approach to 320 dike and water control structure. The dike extends southwest for nearly 3 miles, creating a pool and marsh of 4,300 acres. This is a good spot to observe ducks and many other water birds. You are encouraged to walk up on the dike and look out over the marsh. The islands are used by nesting Canada geese and many ducks. Gates on the control structure may be raised or lowered to achieve desired pool water levels. PLEASE REFRAIN FROM DRIVING ON THE DIKE OR GOING NEAR THE CONTROL STRUCTURE—IT IS A DANGEROUS PLACE.

Refuge dikes and the pools behind them are numbered (320, 326, etc.) to correspond with the number of river miles from where the Souris (Mouse) River enters North Dakota from Canada. There are 358 miles of river within the state, the last 75 being within this refuge.

Back on the main road you will cross the Freeman Bridge, named for a pioneer family in this area. Here is one of 13 public fishing areas on the refuge. You may also see diving ducks and cormorants, large black birds. Follow the main road ahead for 1½ miles and turn right at the "Scenic Trail" marker. This is a dry weather road only. Fire danger may be high so please be careful if you smoke.

6 "End of the Woods." Ahead of you the timber along the river ends. This area was a crossing well travelled by Indians, fur traders and explorers, all of whom knew it as "End of the Woods." In 1852, Charles Cavelier, a customs collector, camped here for 21 days. All that time, great herds of buffalo marched steadily to the northwest. About 40 Indian families lived here. Cavelier recorded that their hunters killed more than 400 buffalo in one chase during his stay.

Grazing units are located on both sides of the trail. Refuge neighbors have grazing privileges on 12,000 acres. Grazing by cattle is permitted early in the growing season to retard growth of grasses less valuable to wildlife, thereby encouraging growth of warm season native grasses of more value to wildlife.

**7** Dam 2. The road crosses a bridge near a low dam, called Dam #2, which floods the marsh to the left. Control of water levels is an essential part of marsh management.



- **8** River Oxbow. On your right is a river oxbow slough, a good place to see ducks. These water areas are formed when the meandering river changes its channel over the years, isolating an oxbow, or loop, in the river. This is habitat for tree-nesting ducks and their broods sometimes may be seen here. Across the slough is a round cone-shaped metal nesting box erected to attract tree-nesting ducks, such as hooded mergansers and wood ducks.
- **9** Water Control. Dam #1 crosses the river here. It was built in 1936 to divert water to the marsh on the left. The dam also maintains water levels in the river, filling old oxbows to the south. Water diverted at Dam #1 flows back into the river near Dam #2.
- 10 Pothole Development. Small ponds were dug along a creek channel here to improve the area for waterfowl nesting. These ponds simulate natural potholes in the prairies, so essential for waterfowl production.

Ranchers cut hay in the meadows ahead of you. Haying is regulated by limiting locations and cutting dates so waterfowl and other wildlife needs have first consideration.



11 Willow Creek. Here the woods follow Willow Creek, a name given the small stream by the Indians. Porcupine and deer are common here. Wood ducks sometimes may be seen along this wooded creek.

12 Twining Expedition. On September 8th and 9th, 1869, Captain W.J. Twining of the U.S. Engineers Corps camped near here. He was making a reconnaissance of northeastern North Dakota, including the Souris and Red River valleys.

Just ahead by the spruce trees is the Thompson Place, location of a farm home before establishment of the refuge. There is a well with good drinking water and picnic tables.

13 Lowland Meadows. Areas such as this are natural lowland meadows. In recent years, some of these areas have become overgrown with willow. Although willow is good for deer cover and food, it can become too dense. Control by infrequent mowing or burning may be needed to keep the area in its natural meadow type. In historic times, wild fire periodically swept this area, maintaining the natural ecologic communities.

14 Souris River. Here the trail crosses the Souris River on the Johnson Bridge. It is believed the Indians used a crossing about 100 feet to the right of the bridge. Beaver inhabit this part of the river. Look for red squirrels, wood ducks and hooded mergansers.

15 Early History. You are now leaving the river bottom and entering the sandhills. An early day cattle operation, the famous Stevens Ranch Company, had its headquarters located on the first sand ridge as you enter the sandhills. Texas longhorn cattle were

shipped here about 1900 but were not hardy enough to withstand the cold North Dakota winters. It is said these Texas herds furnished the foundation stock for nearly all the cattle produced in this area.

To the left about one-half mile is an Indian crossing. Two miles southeast is the Cole Ford, another famous crossing used by Sioux, Chippewa and Assiniboine Indians, fur traders, trappers, explorers and even cars in more recent years. The late historian Dana Wright said of it, "This was a well established rendezvous known to every plainsman on the northern prairies".



16 Sandhills. These tall sand ridges were a beach of glacial Lake Souris of the last ice age, about 10,000 years ago. They were formed by wind piling the loose sand into dunes at the edge of the lake. The sandhills are home for deer, sharptailed grouse, red squirrels, snowshoe hares, many songbirds and a few covotes.

You may park and walk into the sandhills. The view from the sand ridges is beautiful. Note the many grasses and forbs to be found here. The blue three-petaled spiderwort and prairie wild rose, state flower of North Dakota, are common. The tiny ball cactus may be seen if you look carefully. Watch for poison ivy, a creeping plant with three leaflets, found mainly beneath trees and shrubs. TAKE CARE NOT TO BECOME LOST.

17 Tower and Picnic Area. A side trail leads to the sandhills tower and picnic area. There is a well with good water and picnic tables. Again, watch for poison ivy. Please cooperate in keeping the picnic area clean. Waste barrels have been provided for your use. You can detour to the tower, but if you do, return to this point and continue to the Scenic Trail.

18 Historic Trail. Here you cross the Red River Hunters Trail, also used by Captain Twining in 1873.