

U.S. Fish & Wildlife Service

Rice Lake

National Wildlife Refuge



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This is Rice Lake
National Wildlife
Refuge.*



Bog Scene at Rice Lake
C. Lapp, USFWS



Rice Lake National Wildlife Refuge is located in Aitkin County in east-central Minnesota, about 5 miles south of the community of McGregor. It was established in 1935 to preserve its valuable habitat for waterfowl. The most important resource of this 18,300 acre refuge is Rice Lake itself, a shallow, 4500 acre wild rice-producing lake.

The refuge continues its important wildlife management role today. Its human history and variety of wildlands and wildlife makes it a fine place to visit, study, and enjoy the outdoors.

Water is the Key to Wildlife

Abundant natural food, particularly wild rice, has attracted man and wildlife to Rice Lake for centuries. Thousands of migrating waterfowl feed and rest on the lake and the surrounding marshes and bogs.

Chippewa (Ojibwe) Indians continue to harvest wild rice from the lake. Resident wildlife populations flourish. Water is the key to the area's productivity. Rainfall and snowmelt, held behind glacial moraines on a flat glacial plain, trap sediment and rotting vegetation. Year after year, the muck gets deeper and vegetation grows more abundant.

Except for the small harvest of plants and animals that is removed and a small amount of nutrient that is washed down the river, Rice Lake Refuge is predominantly an "energy collector." The sun's energy, in the form of decaying plants and animals, accumulates and is stored in the bogs and marshes.



A Landscape Shaped by Water

The dominant refuge surface features were formed by glaciers over 10,000 years ago. A system of moraines, or glacial ridges, in the shape of a huge horseshoe, surrounds the area on three sides with the open end to the northeast. One set of ridges has formed Rice Lake itself. The Rice River bisects and drains the refuge, flowing from the southeast corner to the northwest, and ultimately empties into the Mississippi River 20 miles west of the refuge.

The land's natural water drainage toward the south has been blocked by the moraines. This wet area is slowly filling in with sediment and vegetation, becoming a floating or muskeg-like bog—a natural haven for wildlife.

Refuge bog lands are flat expanses of poorly-drained organic soils, known as peat. They support a dense,

spongy mixture of flowering plants, grasses, low shrubs, and small stands of black spruce, balsam fir, and tamarack. Shallow lakes with marshy shorelines dot this landscape. The lakes are slowly being taken over by encroaching bog.

Scattered islands and glacial ridges rise above the surrounding bog and are covered with timber and other upland plants. The refuge lies within the transition zone between the coniferous forests of northern Minnesota and the deciduous hardwood forests typical of the southern portion of the state. Historically, white pine was the predominant upland tree species, but logging resulted in replacement of pine with quaking aspen, red and sugar maples, paper birch, basswood, and red oak. Lowland forest stands are characterized by tamarack, black spruce, black ash, balsam fir, and white cedar.

*Sedge Meadow
Tamarac Bog,*
J. & K. Hollingsworth





C. Lapp, USFWS

Unique Natural Features

Glacial material consisting of rocks, gravel, sand, and clay covers the area's bedrock in layers ranging from 50 to 300 feet thick.

Peat is formed from successive layers of partly decomposed vegetable matter, mostly sphagnum moss. The peat makes bog soil acidic and tints bog waters a clear amber color.

A muskeg or floating bog is created in a poorly drained lake that is slowly filling in with vegetation. Dense collections of floating plants at the lake's margin offer a seedbed for more vegetation. Soon a floating mat forms that builds sediment on the lake bottom, paving the way for other water-tolerant plants and shrubs. A floating bog mat will eventually cover the water's surface and, over a long period of time, turn what was once a lake into a lowland forest.



Human History

Refuge history centers around Rice Lake and its large beds of wild rice—a staple food for early Indians and wildlife. Woodland Indians lived in this area from 1000 B.C. to 1700 A.D. Recording their presence are various artifacts and earthen burial mounds. Those people were probably ancestors of the Sioux, who later occupied this area.



J & K Hollingsworth

Indian village sites and seasonal encampments were in repeated use on the shore of Rice Lake. Each fall, Indians would gather here to harvest and prepare wild rice for storage, which would last until the next year's ricing season.

In the mid-1700s, Chippewa Indians moved into this region from the east. This led to sporadic warfare with the Sioux, who were expelled from Minnesota by the U.S. Government in 1862. The Chippewas then occupied the old Sioux villages and burial sites and continued the intensive wild rice harvesting from the lake.



Railroads opened the region for settlement and logging of red and white pine in the 1870s. Iron ore mining on a nearby range brought a railway line through the center of what is now the refuge. This abandoned railroad bed is now used as the main entrance road into the refuge.

D. Heffernan, USFWS



Waterfowl

Rice Lake's Wildlife Residents

One purpose of the refuge is to provide habitat for migratory birds, with special emphasis on waterfowl. Wild rice and wild celery beds in Rice Lake are especially attractive to migrating ducks and geese. Water levels of Rice Lake are manipulated to benefit wild rice production. The leaflet *Wild Rice*, available at the refuge office, explains how wild rice grows and is harvested, and its importance to waterfowl and people.



Croplands with green browse and a small amount of unharvested small grains provide food for Canada geese and snow geese, as well as deer, sandhill cranes, sharp-tailed grouse, and other important wildlife species.



An established Canada goose flock, which started at the refuge in 1958, now migrates south in the fall and returns in the spring to nest on the refuge and surrounding area. Refuge grasslands, a remnant of past farming, are maintained for waterfowl nesting sites, as well as habitat for other grassland species that now reside in the area.



Wood duck production is supported by timber management practices which preserve cavity-prone trees for this tree-nesting species. The refuge's principal nesting species of ducks are mallard, blue-winged teal, wigeon, and wood duck.



Rice Lake National Wildlife Refuge plays an important role in the management of the ring-necked duck. About one quarter of the continental harvest of this duck occurs in Minnesota, and Rice Lake supports one of the largest concentrations of migrating ring-necks in the state. Up to 70,000 ring-necked ducks can be found on Rice Lake during fall migration.

Birds



Mammals



Reptiles

Fish

Diverse Habitat = Diverse Wildlife!

The presence of a variety of habitat types and the refuge's habitat management practices result in many other wildlife species living here. Nearly two dozen species of hawks and owls frequent the area. Bald eagles are often seen, sometimes in large numbers, during spring and fall migrations, and two active nests are known to exist on the refuge. Sharp-tailed and ruffed grouse are found in varying numbers. A *Refuge Bird List*, available from the refuge office, contains more information for observers of bird life.

White-tailed deer and black bear are wildlife viewing favorites, and the sighting of a gray wolf is a possibility. Smaller mammals include mink, muskrat, beaver, otter, fisher, raccoon, porcupine, skunk, badger, weasel, and several species of squirrels. The *Refuge Mammal List* includes a brief description of some of the more common mammals a visitor might see.

Reptiles and amphibians include several frog species, common toads, painted and snapping turtles, garter and green snakes, and salamanders.

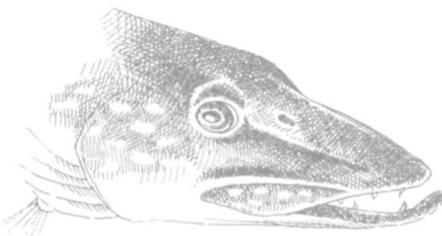
Rice Lake is a natural spawning area for northern pike, suckers, and buffalofish, which enter the lake from the Rice River in the spring. Other fish found on the refuge include yellow perch, walleye, crappie, black bullhead, bowfin, and eelpout.

Photos Opposite Page:
Sharp-tail Grouse,
J. Mattson, USFWS

Gosling,
B. Angus, USFWS

Drake Woodduck
J. Mattson, USFWS

Ring-neck Duck
J. Mattson, USFWS





Wildlife Viewing

A 9.5 mile self-guided auto tour, with an accompanying brochure, is available to those with limited time to spend on the refuge or during inclement weather. The auto tour is generally open during daylight hours from May through November. Evening drives often result in sightings of deer, beaver, porcupine, raccoons, ducks, and many other types of wildlife. The trails are open to snowshoeing and cross-country skiing during winter.

Hiking Trails

Seven miles of hiking trails, ranging in length from 3/4 - 2-1/2 miles, are available and are excellent for observing wildlife. Most originate at Mandy Lake and take you through a variety of habitats, such as deciduous and coniferous woods, grasslands, and wetlands. A *Hiking Trails Brochure* is available at Mandy Lake and at the refuge office.

Fishing

Fishing is popular at the refuge in an easily accessible area along the Rice River at the bridge. The location is posted with "Public Fishing Area" signs, and *Fishing Leaflets* are available at the refuge office. The fishing season extends from May through November each year. Northern pike dominate the daily catch. Mandy Lake and Twin Lakes are also open to fishing, but success is usually well below that on the river. An accessible floating pier is also available at Mandy Lake. Boats without motors or with electric motors are allowed on these waters.

Hunting

Deer and small game hunting is available in designated areas marked with "Public Hunting Area" signs. *Hunting Leaflets*, showing areas open to hunting and describing special regulations, are available at some parking lots and at the refuge office.

Ricing



Ricers,
L. Dundas, USFWS

Local Ojibwe Indians harvest a portion of the wild rice crop from Rice Lake each year. The harvest, using traditional Indian methods, usually begins in early September and may last a month.

Visiting Rice Lake Refuge

Rice Lake Refuge is open only during daylight hours. Restrooms are provided on the refuge, but no drinking water is available. Picnic tables near Twin Lakes and Mandy Lake are provided if you plan on spending some time enjoying the refuge. Camping and open fires are prohibited. Remember to keep pets on a leash. Swimming, horseback riding, traveling by off-road vehicles or snowmobiles, or collecting of any plants, animals, and artifacts are also prohibited.

Refuge visitors are urged to contact the refuge office for current information and regulations.

Prohibited Activities

Nearby Accommodations

Motel accommodations are available in McGregor. Public campgrounds are available at Savannah-Portage State Park and near Big Sandy Lake Dam, both located north of the refuge and within a 30 minute drive. Private campgrounds are also available.

For More Information

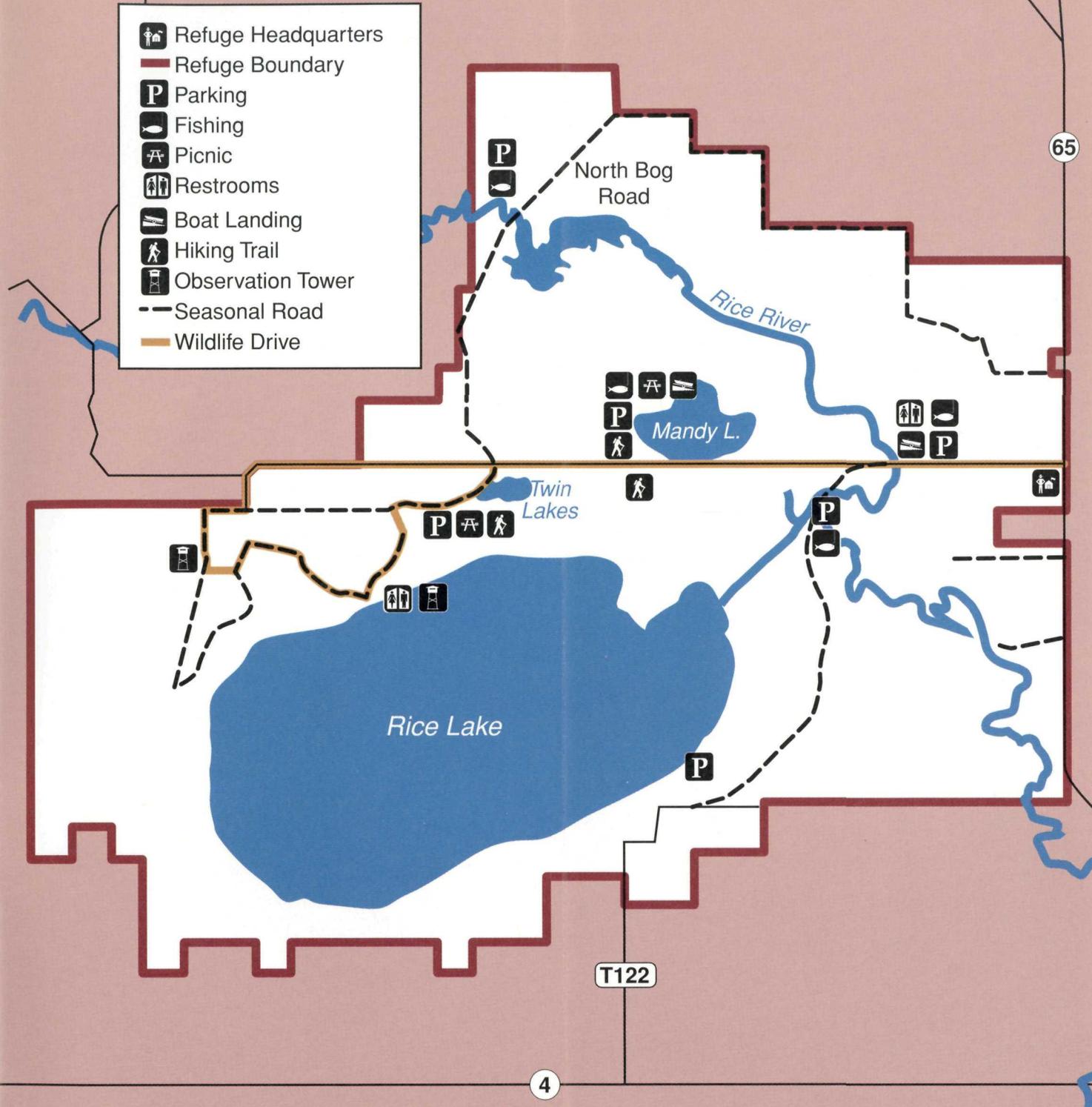
Refuge Manager
Rice Lake National Wildlife Refuge
Route 2, Box 67
McGregor, Minnesota 55760
Phone: 218/768 2402
TTY users may reach Rice Lake through Minnesota's State Relay Service at 1 800/627 3529 (V/TTY)

Hours of Operation

Office hours are 8:00 am to 4:30 pm
Monday through Friday



Rice Lake National Wildlife Refuge



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Rice Lake

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U.S. Fish and Wildlife Service
1 800/344 WILD
<http://www.fws.gov>



Photos Opposite Page:
Sandhill Crane,
J. Mattson, USFWS

White-tailed Buck,
J. Jave, USFWS

Photo Above:
Eagle Perched at Sunset,
D. Menke, USFWS

Ring-neck Ducks
J. Mattson, USFWS