

Rice/Round Lake Trails

Along the trail, you'll see green signs with black letters. These letters correspond with the information in this guide for further details.

Mowing

The prairie you see here, like many others on the refuge, is typically mowed every year to prevent some non-native prairie plants from flowering and going to seed. Queen Anne's Lace and Canada Thistle are the most prominent non-native plant in this patch of restored prairie, so mowing early in the summer prevents the plant from producing seeds that could spread to other areas of the refuge.

Tree Removal

In this prairie, you may notice several tree stumps. The trees that were here were Colorado Blue Spruce and Black Hills Spruce trees which are non-native to the area and carried a disease called needle caste, so they were removed. Rydell NWR is cutting down these trees in order to increase the size of a

prairie or to make way for the planting of native trees. These non-native trees also can become invasive and crowd out other native plants, not allowing them to grow.

Bluebird Houses



Since there has been an increase in competition among birds that nest in holes in trees and due to harmful effects of pesticides, the Eastern Bluebird (*Sialia sialis*) population declined greatly in the 60s and 70s. These birds usually like to nest in holes in trees but thanks to the addition of bluebird houses, there are more nesting sites for Eastern Bluebirds, so their population is increasing.

Cat Tail Maintenance

In front of the flag, you'll notice a water-control device attached to a culvert. This "stop-log" structure is used to control the depth of water in wetlands. If there are too many cattails crowding out other wetland vegetation, the water will be raised to flood them out. If there is not enough wetland vegetation, that water level can be

lowered to allow sunlight to reach the seeds of wild rice and other beneficial plants at the bottom of the lake.

Willow Control

The prairie you see here is periodically mowed to remove many of the young willow trees that grow. The willow trees compete with other native plants and wildflowers for space and light to grow. When too many of them start to crowd out other plants, they are mowed down. Now that the willow trees are being controlled, more wildflowers and native grasses will be able to grow and make the prairie look much more admirable with many blooming flowers.

Canada Thistle (*Cirsium arvense*)



Canada Thistle is an invasive species, native to southeastern Europe. This plant has a bad habit of crowding out wildflowers and grasses on the Refuge. It is controlled on the Refuge by being mowed down to allow space for native plants.

Prairie Restoration

The prairie you seen here is one that the refuge is trying to restore back to a native prairie by removing non-native species of plants, such as Leafy Spurge (*Euphorbia esula*) and Canada Thistle, and planting native grasses and wildflowers. This is an important management activity, because less than 1% of native prairie remains in Minnesota.

Wood Duck Houses



Wood Ducks (*Aix sponsa*), like Eastern Bluebirds, nest in holes in trees. Since these

nesting places are becoming scarce, about 45 Wood Duck houses have been set up around the refuge to provide them with more nesting opportunities. The number of wood ducks declined drastically in the late 1800s due to hunting and habitat loss. Today, hunting laws are in place to protect them and man-made houses help to increase their population.

Chemical Control

Chemical control in the form of herbicides is another technique used to control non-native species of plants around the refuge. In order to help native species of plants to grow, some of the invasive plants must be removed.

For further information on the animals and plants at Rydell NWR, books may be checked out in the visitor's center or purchased at the Gift Shop.



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RYDELL NATIONAL WILDLIFE REFUGE

Round Lake Trail Guide & Rice Lake Trail Guide

Theme: Habitat Management



Round Lake Trail (1 mile) winds through the refuge's largest wooded area; it shows many great examples of management, such as the ruffed grouse habitat and water levels.



Rice Lake Trail (0.5 miles) the trail got its name from the wild rice that fills the lake in late summer. It also goes past a prairie and one of the pine plantations on the refuge.