This portfolio of signs along the Dianne Nora Nature Trail tells the story of the cultural and natural history of the Nygren Wetland Preserve.

The Nygren Wetland Preserve encompasses 721 acres at the confluence of the Rock and Pecatonica rivers. The Natural Land Institute used a gift from Carl and Myrna Nygren to help purchase this area in 2000. The preserve features prairie, wetland and savanna ecosystems and many of the plant and animal species unique to these habitats. Contributions from members and partners helped restore the land for native plants and animals.

The 2.5-mile Dianne Nora Nature Trail is open for self-guided tours sunrise to sunset. The signs along the trail were made possible by grants from the Smith Charitable Foundation and the County of Winnebago, Scott Christiansen, Chairman.

Thank you to David Olson and Mark Blassage for permission to use their photos, to Nancy Williamson, Nancy Ellison, and Joan Williamson for designing and producing the signs, Jill Kennay for overseeing the whole project, Sue Merchant for editing the text on the signs, NLI’s Education Committee for their guidance, and Jerry Paulson and Judith Barnard for helping to make the project happen.

The Nygren Wetland Preserve is private property owned by the Natural Land Institute, a private not-for-profit conservation organization founded in 1958. Our mission is to create an enduring legacy of natural land in northern Illinois for people, plants and animals. We do this by preserving forests, prairies, and wetlands for native plants and animals, restoring habitat for wildlife, protecting rivers and streams for fish and other aquatic species, educating people about their part in nature, and providing opportunities to enjoy natural areas to enrich the lives of residents of northern Illinois.
The Nygren Wetland Preserve

The Natural Land Institute has undertaken an extensive program to recreate the ecological function and scenic beauty of this preserve to mimic its appearance in the early 1800s. The goal has been to restore the native vegetative communities and create a permanent refuge for wildlife.

The first step in the process was to survey and evaluate the land, gaining vital information for a comprehensive restoration plan. Historic and current information related to soils, hydrology, public land survey records, seed bank analysis, floral records, wildlife records and all other relevant information was collected. Plans were formulated for individual areas.

Flooding is a seasonal occurrence at the confluence of the Pecatonica and Rock rivers, and the wetlands that surround these rivers have for years provided the space for spring floodwaters to overflow their banks and spread across the land.

This aerial photo was taken during the 1993 spring season and you can see the Nygren Wetland Preserve maintenance shed in the upper part of the photo.

This area is a restored wetland. It functions as a natural water filter because wetland plants act like purifiers by taking up excess nutrients and pollutants, producing better water quality. The Nygren Wetland Preserve also functions as a floodplain, storing water during periods of flooding. Providing adequate connection between rivers and their floodplains helps lessen the possibility of flood damage.

1933 Aerial - Carl and Myrna Nygren Wetland Preserve

Pre-settlement and Historic Features

NLI staff & volunteers plant wetland "plugs"

Friends take a break.

Whooping Cranes (white) & Sandhill Cranes (gray)

Bald Eagle

Giant Swallowtail

Compass Plant

Crane photo by Mark Blassage Photography. Bald Eagle and background Oxbow Lake photo by David C. Olson Photography.
Natural Land Institute staff and volunteers planted oak, hickory and walnut seedlings throughout 20 acres here to reestablish an oak savanna. Savannas are transitional zones between prairie and forest, where canopy cover is less than 30%. In the absence of fire, savannas will succeed into forests.

Changes to the landscape during the past 150 years have altered the cycle of fires in our protected natural areas. Today, trained ecologists set controlled fires to recreate the natural process that has allowed native grasses and wildflowers to rejuvenate and flourish for thousands of years. The “prescribed burns” are carefully watched and kept under control.

Parts of the prairies and woodlands at the Nygren Wetland Preserve are burned every few years, usually in the spring or fall, to clear out encroaching brush and weeds. Fire helps to eliminate many woody non-native plants that are not adapted to fire like the deep-rooted native plants.
Over the years the wetlands were drained by digging channels, trees were removed and parts of the Raccoon Creek were straightened to drain surface water off the wet prairie lowlands more quickly. Eventually, farm fields replaced the forest, prairie, and wetlands. Today less than 10% of the wetlands present in Illinois in the 1800’s remain.

**Wetlands...**

- Improve water quality by absorbing and filtering out pollutants and sediments from the water
- Store floodwaters
- Provide wildlife habitat – many migratory birds and other wildlife depend upon wetlands for survival
- Support biodiversity – wetlands support more living things per acre than other ecosystems
- Provide open space – enjoy the expansive vistas in Nygren Wetland Preserve
- Create recreational opportunities – birdwatching, hiking and cross-country skiing are a few of the activities that people can enjoy here at Nygren Wetland Preserve

Wetlands have been under appreciated for the past 200 years. Sometimes known as “swampland,” wetlands were considered a natural force to be reckoned with.

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**Wetlands are those areas between deep water and dry land. Wetlands may hold standing water all year long or for only a few weeks in the rainy season. Here at Nygren Preserve, the wetlands are usually dry in the summer. Regardless of how long it is wet, to be known as a wetland, it must be an area where the soil was formed under standing water and the plants are adapted to living in water.**

**Great sighting opportunities for birdwatchers and photographers come with peak spring and fall migration here at the Nygren Preserve.**

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**Channels were dug through this wetland in an attempt to drain it for farming. The channel you can see from this trail was dug to drain to the west through Raccoon Creek.**

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**NDC is proud of the volunteers who have served so diligently to restore this wetland to a functional and attractive ecosystem and habitat. These working wetlands are the jewels of the Preserve.**

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**Eastern Kingbird**

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**Northern Shoveler**

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**Yellow-crowned Night Heron** and its nest are aided by artesian well.
In 2004, Natural Land Institute (NLI) started an ambitious natural areas restoration plan – the first of its kind in the region. Volunteers and staff worked tirelessly to allow Raccoon Creek to flow freely through the 721-acre Nygren Wetland Preserve.

Restored and improved natural habitat are the resulting benefits. Today, Raccoon Creek flows at a slower speed and over a longer length. The restoration work has resulted in the stabilization of eroding banks, increased aquatic habitat diversity, and improved water quality.

NLI’s restoration project combined historical research with current restoration practice. Hundreds of people worked to make this creek restoration a reality. Before you stands a modern recreation of what homesteaders saw in the early 1800s.
Bottomland Forest

NLI is restoring this bottomland forest. This unique habitat changes constantly. During spring, heavy rains flood and saturate the soils. By the end of the summer the same area is often dry. A cycle of flooding and dryness repeats itself throughout the year. Even the tiniest of roots are highly adapted to extreme water level changes.

A bottomland forest is a forest habitat within a river floodplain. Specialized plant and animal species thrive here because of adaptations to the extreme water level changes. Ducks and shorebirds depend upon the natural wooded wetland and slough complex of the bottomland forest to provide critical habitat for nesting food and protection. Migratory forest birds use the area for both nesting and stops during migration.

Importance of bottomland forests:
- Unique ecology and habitat in northern Illinois
- Filter sediment during flood events thus protecting neighboring streams from sedimentation
- Absorb huge amounts of water to control flooding
- Provide habitat for young fish, insects, crayfish and worms
- Support 2-5 times more species than an upland forest
- Provide food, water and shelter for a variety of species throughout the year
- Provide critical habitat to sustain shorebirds, dabbling ducks and migratory forest birds
The Nygren Wetland Preserve provides a healthy ecosystem for many plants and animals. The river otter returned to this area in 2004. This playful mammal depends upon clear water, abundant crustaceans and plant life, and sheltered areas for raising its young. The presence of river otter indicates that the wetland restoration activities are increasing the quality of water and habitat.

**Wetlands are important to people too! Wetlands . . .**
- improve water quality by absorbing and filtering pollutants and sediments from the water
- store huge quantities of floodwater from the Rock and Pecatonica rivers and Raccoon Creek
- provide a great place to see wildlife in their habitat
- support more living things per acre than any other ecosystem
- create recreational opportunities in bird watching, hiking and cross-country skiing here at Nygren Wetland Preserve

Gaze across the watery landscape. Notice slight differences in the amount of water and types of vegetation. Different plants and animals thrive in different areas of the wetlands.

**Mussels** are bivalves that live on the bottom of streams. They continuously pump water through their bodies. Because they are filter-feeders, mussels clean the water and are indicators of a high-quality ecosystem. River otters eat mussels. The river otter is at the top of this aquatic food chain. Thanks to Natural Land Institute’s restoration efforts, the Nygren Wetland will provide high-quality water, high-quality habitat and high-quality aquatic food chains for years to come.
You are walking along the remains of a railroad bed. In the 1850s, thoughts of a railroad caused excitement among the locals. Everyone believed a railroad would tame the wilderness by bringing goods and services to this remote area.

In 1853, the town of Rockton approved $50,000 worth of bonds to build a railroad. Work began on the Racine and Mississippi Railroad (R&M RR) shortly thereafter. Construction of this railroad line was an engineering feat. Surveyors slogged through woodlands, prairies and wetlands while living in this isolated wilderness. Then railroad crews, hundreds of hard working men, labored in brigades inching across the prairie to lay railroad tracks.

October 28, 1856, the first train of passenger cars arrived in Rockton. The Racine & Mississippi railroad established communication with the outside world. In addition to passengers, train cars hauled lumber and grain. A great fire-bellching ironhorse replaced the simple horse and wagon.

Over the years, different rail companies used these tracks. The R&M RR was replaced by the Western and Union Railroad in 1868. Later the Western and Union RR became part of the Chicago, Milwaukee and St. Paul RR. Upon the completion of its Pacific extension, around 1910, this same railroad became known as the Chicago, Milwaukee, St. Paul and Pacific railroad. The tracks remained used by the Chicago, Milwaukee, St. Paul and Pacific railroad until 1980, when the tracks were officially abandoned.

In 2000 this walking path replaced the tracks, completing the circle from wilderness to train and back again to wilderness.

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*“Every other day after our work was done, we would have to locate the new camp the pickman and cook had made... I now know something of the hardships of pioneer life; for I have walked through miles of swamp and on more than one occasion have had to swim streams when the ice was breaking. I have been three months at a time without having all my clothes dry on me at one time. When we got into camp at night we were ready to eat our supper and lay down and sleep.”*

Excerpt from recollections of John Brink, Govt. Surveyor, 1830s (published in the Milwaukee Sentinel, Jan 29, 1899)
The oxbow lake behind you formed in successive stages. As the Pecatonica River meanders through its broad floodplain, stream bank erosion occurs at all outside corners of the riverbank. This continuous wearing away of the soil gradually allows the river to short-cut its course, creating a deserted "loop channel" or lake. The term "oxbow lake" was made up years ago and named for the U-shaped piece of wood which was placed under and around the neck of an ox.

This large bur oak tree is a symbol of the Nature Conservancy, and it is one of the largest at the preserve. It might be the oldest, but the size of a tree depends on growing conditions and does not always reveal age.

South of the signature oak is the Honor Oak Grove. Trees can be planted here in honor of loved ones.
The Nygren Wetland Preserve provides excellent habitat for many animal species. Forty-five species of mammals and more than 180 species of birds choose the preserve as both home and a resting spot during migration. A premier birding site, the Nygren Wetland offers a wide expanse of land, providing ideal habitat that ensures adequate food, water, shelter and safety to raise young. Grab your bird list and wander the trails early morning and late afternoon throughout the seasons.

Different habitats attract different bird species. In the grasslands, watch for Dickcissels, American Kestrels and Eastern Bluebirds. In the trees, listen for the calls of the Great Horned Owl, Rose-breasted Grosbeak and American Redstart. Sandhill Crane chicks hatch in the wetlands, where you might also catch a glimpse of Blue-winged Teal, Great Blue Herons, Marsh Wrens, Short-eared Owls and Whooping Cranes. Warblers, hawks, egrets, Tundra Swans and American White Pelicans are migratory and frequent this area within the Mississippi migration flyway in the spring and fall.

For centuries, this land has served as a gift for people. Today this wild habitat provides respite from our busy modern car-oriented lifestyle. Each day, throughout the seasons, is new. Surround yourself in simple solitude. Whatever the season, this land lives. Enjoy visiting Nygren Wetland Preserve throughout the year. A new adventure awaits every time.
Archaeology

Nygren Wetland’s Past

Native Americans lived in this area, although probably not continuously, as far back as the Paleo-Indian period dating to approximately 10,000 B.C. Archaeologists have found numerous artifacts indicating human activity across the Nygren Preserve. Artifacts found at the Nygren Wetland include the base of a Paleo period Clovis point and engraver (pictured below), projectile points, remains of ceramic vessels, and axesheads. Site types includes campsites, tool production areas, and mound groups. Many of these artifacts are now at the Logan Museum of Anthropology at Beloit College, Beloit, Wisconsin.

Indigenous tribes, such as the Fox and Sauk (Meskwaki Nation), Potawatomi, and Ho-Chunk, called this land home. They moved in and out of the area along the clear waters. The waters gave them food such as freshwater mussels, crayfish and fish. The land and water provided for all of their needs.

After the Black Hawk War of 1832, the U.S. government opened this area to white settlers. Indigenous people lost claim to the area. Early white settlers included Colonel William Talcott and his son Thomas B. Talcott.

William’s journal documents an arduous cross-country journey. He describes his first view of this area: “We came to a small creek meandering through a fine slip [sic] of bottom prairie which looked like the bed of some ancient river that was very large.”

The Colonel filed a land claim and built the first cabin near the confluence of Raccoon Creek and Pecatonica River.
Bringing Back the Prairie

Look out across this 56-acre prairie. What you see is the result of NLI’s efforts to restore this land to what it looked like in the late 1800s. Staff and volunteers hand-collected seeds, raised seedlings and planted the deep-rooted prairie species throughout the preserve. Diverse native plants attract a wide variety of insects, rodents, small mammals and birds. The prairie now has twelve species of native grasses and 75 species of flowering plants.

In the past, naturally occurring fires often burned the prairie landscape during dry periods. Today, controlled burns are essential to the rejuvenation of the prairie landscape.

Fire.

- breaks hardened coatings of some prairie seeds
- creates charred blackened areas prime for sprouting prairie seeds
- kills off non-native species encroaching into prairie areas
- replenishes soils with needed nutrients

Today’s prairie restoration also needs fire. Controlled prairie burns, led by trained prairie ecologists, guarantee healthy prairie landscapes for many generations to come. In turn, the prairie animals dependent upon this habitat will also thrive so that people like you can visit and enjoy the wildlife of Nygren Preserve.
The Natural Land Institute Appreciates . . .

Carl and Myrna Nygren
A generous gift from Carl Nygren of Rockford, Illinois, left to the Natural Land Institute in his will, initiated the acquisition and restoration of the preserve in 2000. Carl asked NLI to protect wetlands in Winnebago County because he was concerned about the loss of habitat for wildlife, particularly for birds and migrating waterfowl. This beautiful land along the Pecatonica and Rock rivers is named for Carl and his wife, Myrna.

George Fell

The Dianne Nora Nature Trail was established in memory of Dianne Nora by a generous gift from her family. It is a 2.5-mile trail around the wetland open for birding, hiking, jogging and cross-country skiing that offers many opportunities to see wildlife and experience the beauty and solitude of the Nygren Wetland Preserve.

Volunteers have been integral in the restoration and ongoing management of the Nygren Wetland Preserve, from planting seedlings to helping with controlled burns. If you are interested in volunteering or would like information about other NLI projects, please contact the Natural Land Institute at 815/964-6666 or www.naturalland.org.