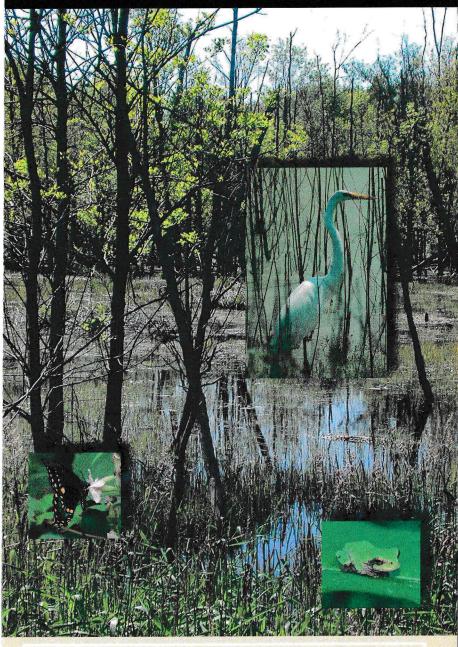
# Great Marsh Restoration At Indiana Dunes National Lakeshore





After 100 long years, waterfowl have returned to the Great Marsh. Today, great egrets roost in treetops, blue-winged teal nest in marshes, and Great Blue Heron wade in the waters.

### The Great Marsh's Comeback

Since 1998, the national lakeshore has been restoring the 500 acre Derby Ditch section of the Great Marsh to resemble its pre-industrial state. Once restoration



Great egret

is completed, the marsh's water depth will range from saturated soils to two feet of water at the edge of modified roadbeds. The Great Marsh will also include plant community types, each with a diversity of native plant species, which were observed more than a century ago by Europeans and American Indians.





tree swallows, and rusty blackbirds rest during migration. Green herons stalk the shoreline while baby beaver play in the channels. Once again, the Great Marsh abounds in diverse animal activity.

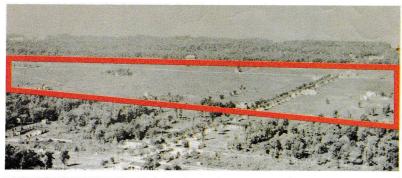


## The Great Marsh long ago

More than a century ago, hundreds of geese, ducks, and wading birds congregated in the "Great Marsh" that stretched 12 miles from Burns Harbor, Indiana, east almost to Michigan City, Indiana. Native flowers, grasses, and sedges thrived in the marsh's fens, sedge meadows, and wet prairies. Pristine sand dunes towered over the wetland's northern and southern boundaries. The diversity of birds, plants, and habitats signified a healthy ecosystem.

### The Great Marsh's Downfall

During the past century, the impact of farming, ditching, and the construction of roads, levees, factories, and houses has reduced the Great Marsh's size to only 10 miles long and an average of 0.5 miles wide.





As time progresses from 1938 (image on left) to 1969 (image on right), additional roads and ditching cause further changes in the Great Marsh's vegetation. Derby Ditch is located inside the red lines on the above maps.

The ditching subdivided the Great Marsh's single contiguous watershed that flowed into Lake Michigan into three watersheds. The ditch building also partially drained the marsh, making it drier. As a result, nonnative plants, such as common reed, hybrid cattail, and reed canary grass, moved in alongside fast-growing trees such as green ash, cottonwood, and silver maple. These altered plant communities, along with the changed hydrology, reduced habitat for waterfowl, and other wetland-dependent animals. This transformation symbolized declining habitat health.

### **Restoring the Great Marsh**

The Great Marsh is the largest interdunal wetland on the Lake Michigan shoreline. Indiana Dunes National Lakeshore is restoring the marsh to:

- Increase native plant and animal diversity;
- Provide an irreplaceable, migratory rest stop for birds near Lake Michigan's southern tip;
- Provide recreational opportunities for hikers, birders, botanizers, and wildlife watchers;
- Protect rare species by controlling non-native, aggressive plant species, and creating high quality plant and animal habitat;
- Protect the beaches and improve Lake Michigan's water quality for swimming by intercepting runoff and releasing water gradually;
- Enhance educational opportunities for students and the public as they learn about the National Park Service's preservation mission and Northwest Indiana's rich natural heritage; and
- Leave a natural resource legacy for future generations.

### **Restoration Activities**

The national lakeshore restores the wetland's health by:

- > Plugging culverts,
- > Placing soil into ditches,
- > Constructing spillways and levees,
- > Propagating and planting native plants,
- > Collecting and scattering native seeds,
- > Growing native plants in greenhouses, and
- > Removing non-native plants and trees.



National lakeshore employee plants native plants.

#### **Visit the Great Marsh**

Hike the Cowles Bog trail, walk or drive along Beverly Drive, or stroll along the old cement road off the small parking lot at Beverly Drive and East State Park Road. Or observe the restoration of Derby Ditch Great Marsh at the intersection of Broadway Road and Beverly Drive, in Beverly Shores.

### Volunteer

Indiana Dunes National Lakeshore invites students to become *Caretakers of the Dunes*. Participants in this service learning program for grades 4 through 12 assist park staff with restoring the Great Marsh. The Indiana Dunes Environmental Learning Center offers a similar curriculum-based program for high school students—*DuneSCOPES*.

Volunteers from area scouting groups, the Hoosier Boys Town, and employees from local businesses are also helping restore the Great Marsh. Please contact the national lakeshore if you or your organization would like to participate in our *Volunteers in Parks* program and assist us with this restoration project.



A national lakeshore employee helps students restore the Great Marsh during a curriculum-based education program.

#### For More Information

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