



Naperville Habitat Restoration

Naperville Park District, DuPage County

The problem

According to Sue Omanson, Community Development Manager for Naperville Park District, Pioneer Park encompassed a field of buckthorn, teasel, garlic mustard, and reed canary grass: invasive species that had to be managed with large amounts of herbicides which eventually flowed into the DuPage River.

The solution

In 2007, the district developed a 5-year restoration and management plan to turn twelve acres of the degraded natural area into oak woodland, prairie, and wetland to bring back biodiversity, beautify the park, provide environmental education and stewardship opportunities, and improve the water quality of the river.

Before European settlement, the prevailing landscape in northeastern Illinois was open prairie, tracts of oak savannas with characteristic grasses and forbs (herbaceous flowering plants), and forested areas along our north-south running streams such as the DuPage River. The plants thrived on harsh local conditions and provided many natural benefits, but were displaced in many areas by non-native plants familiar to those who first farmed and developed our urban areas (Northeastern Illinois Planning Commission, 2004). Restoring these plants can reap numerous benefits, including improved water quality, reduced long-term maintenance costs, a healthy habitat that attracts native fauna, improved stormwater management, reduced soil erosion along stream banks, conservation education, and enhanced opportunities for passive recreation such as bird watching.

The Process

The Naperville Park District was doing extensive work to enhance Pioneer Park – constructing a canoe launch, extending an existing trail, and creating a trail head near the new parking lot. It was turning into a great passive recreation area in the middle of three natural environments – prairie, woodland, and wetlands. But invasive species were dominating the native plants and the parks department decided that their regular maintenance with herbicides was not effective enough, and was only adding pollutants to the water. The district applied for and received a Conservation 2000 grant from the Illinois Department of Natural Resources (IDNR), to develop a restoration and management plan, and to restore the natural areas on site.

One of the first challenges the district faced was managing costs. When initial bids for the work came in higher than anticipated, the Park District responded by spreading the project over several years, and working with park staff and volunteers to accomplish some of the tasks at a lower cost. They decided on an initial restoration of 1 acre of prairie, 2 acres of woodland, and a small area of wetland.

This \$62,000 restoration phase was partially paid for by the \$31,000 Conservation 2000 grant from IDNR, with the balance coming from the district's capital and operating funds. The district hired a contractor to begin the restoration process and train staff and volunteers to help remove invasive

Overview

Pioneer Park is a community park along the west branch of the DuPage River. It is predominately a natural area used for passive recreation, such as picnicking, bicycling, and observing nature.

The 26 acres of open space include three types of habitat, including prairie, woodland, and wetland. Each habitat supports a variety of plants and animals and is important to the ecology of the DuPage River watershed.

Over the years, Pioneer Park habitats have been invaded by non-native species, such as buckthorn, teasel, and reed canary grass, leading to a loss of plant and animal diversity. A multi-year process to restore the natural habitat was developed by the parks district.

CMAP Resources

- [Ecosystem Restoration Strategy Paper](#)
- [Parks and Open Lands Strategy Paper](#)
- [Urban Forestry Strategy Paper](#)
- [GO TO 2040 Recommendation to Expand & Improve Parks and Open Space](#)

for more information

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species and plants inappropriate to the native landscapes, and to plant native grasses and forbs, wild flowers and oak saplings.

In 2009, the Park District paid approximately \$10,000 for the contractor to maintain the restoration through prescribed burns, mowing, herbiciding, invasive removals, and planting. Annual maintenance will continue with the assistance of an ecological contractor as needed. The restoration of the woodland and prairie areas is about two-thirds complete.

In 2010, the contractor began training park staff and volunteers to monitor the native and invasive species at the site. If the district can obtain grant assistance, they plan to expand the restoration to include more of the wetland areas.

Community Concerns

Omanson said a big challenge was managing the reaction of the community. Early steps in the restoration involved removing invasive trees and shrubs, which dramatically changed the appearance of the wooded area and concerned neighbors. Residents were not pleased to see plants, shrubs, and trees cut down and hauled out of their neighborhood park. They didn't realize that the plants and trees being removed were invasive species and were bad for the park. The district wrote letters to residents, posted information on their website, held community meetings, and put educational signs in the park to explain the benefits of healthy woodland. Now, some of the neighbors who had been skeptical of the project have expressed their appreciation of the restored park.

Three years into Naperville Park District's native habitat restoration along the West Branch of the DuPage River, the transformed Pioneer Park attracts compliments, as well as some volunteer labor, from some of those same residents.

Outcomes

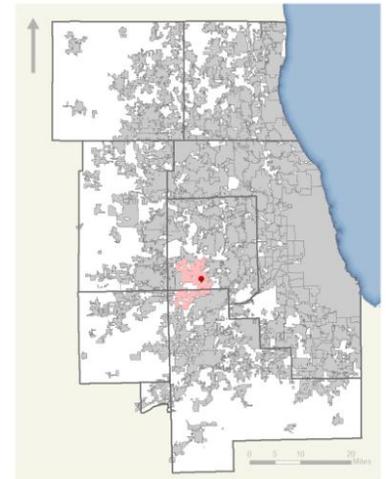
It took some time, but into the third year of restoration, progress is now visible in Pioneer Park. The oak woodland has been cleared of invasive trees and shrubs, allowing sunlight to penetrate to the ground. Ephemerals bloom in the spring, adding color and variety to the understory. The continued growth of the native plants in the prairie and woodland will allow park staff to rely less on herbicides and more on mowing and controlled burns to control the invasives. This reduced use of herbicides and the filtering of stormwater by the native plants will help improve the water quality of the DuPage River.

Omanson said volunteers from the community have learned firsthand how to identify invasives such as garlic mustard. A group of local high school students assisted in weeding the prairie for two consecutive years, and learned from an on-site demonstration by their ecological contractor how to distinguish native prairie from invasive plants.

Lessons learned

Omanson says that groups interested in native habitat restoration should invest time up front in planning and obtaining an accurate cost estimate. "Also, choose a location that is accessible to volunteers and to visitors, so that you can involve the community in your project. It's worth the time and money to create a long-term plan for restoration that can guide each step in the process. We recommend using a professional ecological contractor for planning and for the initial stages of the project, and then for training staff and volunteers to do ongoing maintenance."

Location Map:



Additional Resources

- [Information about Conservation-2000 and other IDNR programs and resources](#)
- [Grants for natural area preservation from the Illinois Clean Energy Community Foundation](#)
- [A blueprint for saving and restoring the prairies, savannas, woodlands, and wetlands of the Chicago region \(PDF\)](#)
- [Natural history of the Chicago region \(PDF\)](#)
- [Resources for local governments on natural landscaping, sustainable development, and conservation design](#)
- [Northeastern Illinois Planning Commission, \(2004\). Sourcebook on Natural Landscaping for Local Officials. Chicago: USEPA.](#)