



## Case Study

### The First Certified Gold Signature Sanctuary in Ohio



Photo shows newly restored acreage and created wetlands in the foreground with the International Steel Group industrial site in the background providing a great contrast between the natural environment and industry.

About three years ago, Audubon International was invited to work with the Cleveland Metroparks on a new project that they were undertaking. Vern Hartenburg, Executive Director of Cleveland Metroparks (CMP), saw the opportunity to combine the expertise of the Metroparks staff with the technical expertise of Audubon International to produce another recreational facility that would also carry with it the recognition as a sustainable development through the Audubon International Gold Signature Program.

Based on their history, Audubon International was very interested in working with CMP. The Cleveland Metropolitan Park District was established in 1917 to provide open space for the people of Greater Cleveland, as well as to conserve and preserve the natural valleys and native biodiversity of Northeast Ohio for future generations. Today, after 90 years of "Conservation, Education and Recreation", Cleveland Metroparks consists of over 20,000 acres of protected land in 15 reservations (a.k.a. parks), 100 miles of parkways and Cleveland Metroparks Zoo. The park system lands are all within the Lake Erie watershed and include significant holding along three major rivers; The Chagrin River, Rocky River and Cuyahoga River. The Park District is commonly referred to as the "Emerald Necklace" because the reservations encircle the city of Cleveland like a green necklace. But not all land that is acquired by CMP is in ecologically prime condition. Such was the case with the Washington Golf Learning Center site.

The area called Washington Reservation is located in an urban setting along Washington Park Boulevard, between Fleet and Harvard Avenues in the Village of Newburgh Heights and the City of Cleveland. The land transferred to Cleveland Metroparks in 2003 via a 99-year no costs lease from the Cleveland Municipal School District and the City of Cleveland. It is 58 acres set on a former landfill used by the local steel mills to dispose of sand, slag and other by-products of the steel industry. Degraded yes, but dead – no.

Northeast Ohio receives birds from both the Mississippi and Atlantic Flyways and Lake Erie, only 5 miles to the north, is a significant obstacle to spring and fall migrating birds. The principal attribute of this degraded piece of property in a densely developed residential/industrial zoned community was that it served as an 'island of green' or a resting and refueling spot for birds crossing Lake Erie. WGLC is literally either the last (in northward

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migration) or the first in southward migration) refueling area before or after the crossing of Lake Erie. Even in its degraded state, sightings of wildlife such as deer and turkey indicate these species used this site as part of a travel or dispersal corridor to the Cuyahoga River Valley, one half mile to the west.

## Habitat Restoration was the Goal

Located less than 5 miles from the center of the City of Cleveland, the site's value was limited ecologically having become dominated by volunteer, non-native invasive plants species. But its value was as a vital refueling site for migrating birds. So it became the goal of Audubon International and the CMP staff to improve the site for migratory birds by restoring and creating habitat as well as to provide residents of the neighborhoods adjacent to this open-space with an opportunity for environmental education and recreational open-space opportunities in a park setting.

While most golf course designers are faced with the challenge of designing golf courses so as to impact as little as possible the quality of natural resources of the landscape, International Management Group (IMG) began with a site with few positive ecological attributes.

The challenge became to design, build and maintain a golf teaching facility at the same time seeking to restore quality wildlife habitat. Approximately 17 acres of existing vegetation were removed during construction. The principal wood species on the property was the cottonwood (*Populus deltoids*) mostly in the 4" to 10" inch diameter range. Because these trees were the only vertical element on the learning center site, only those that stood directly in a golf course clearing path were removed. The remaining vegetation provided corridors between holes. Even though many of the species were non-native, they could at least provide perching opportunities and a minimum of cover for wildlife. Landscaping with native trees, shrubs and ground covers will continue over the coming years as funds and native plantings become available.

## Creation of Wetland Complex

"One of the most important features of the site", says John Cardwell, Landscape Architect for Cleveland Metroparks, "its "environmental heart", is the 4.5 acre wetland complex consisting of three wetland cells which created 1.4 acres of open water, 2.5 acres of wet meadow, .4 acres of cattail marsh and .2 acres of wet forest." Several golf holes are located around the perimeter and most of the course's storm water runoff is routed through the wetlands. The entire golf course drainage system outlets into the wetland complex through a series of storm piping, vegetated swales, and overland flows. The #3 Cell was constructed to overflow during rain events creating an overland flow pattern toward cell#1 recharging the existing cattail marsh and wet meadow.



Swales serving as collectors helps to move water across the property and to recharge the wetlands.

Two primary swales serve as "collectors" for the course drainage. The first swale follows a drainage way through the site from east to west, crossing #8 fairway, extending behind #1 green to a new catch basin to the north of the driving range. This collects 60% of the site runoff including driving range practice areas, and holes #1, 8 and 9.

The second primary swale runs in a north/south orientation along the west side of #2 fairway, collecting runoff from holes #2,6 and 7. In Ohio, with over 90% of historic wetlands destroyed, creating habitat for waterfowl was very important.

## Education and First Tee

Another aspect of the project was the First Tee Program. Unlike other First Tee courses which provide a single golf hole “off to the side” for instruction, Cleveland Metroparks dedicated the entire 9 hole course to the First Tee program.

First Tee exposes students to a curriculum in “life skills” and nutrition education, leading the program beyond simply providing quality golf instruction. Using golf as a tool, a formal curriculum on life skills is taught by mentors, to help children, ages eight through eighteen years, to develop the character and life-enhancing values that improve their changes for productive participation in society. The Cleveland Chapter will be the first to provide comprehensive services in nutrition, exercise and fitness, in collaboration with the esteemed Rainbow Babies and children’s Hospital of University Hospital of Cleveland.”

To provide an all-weather durable surface for student golf instruction as weather or wear conditions warrant, the 150 square foot “TourTurf” artificial turf surfaces were provided and installed by FieldTurf on middle tees of each hole. The Tour Turf fibers are a UV-protected blend of polyethylene and polypropylene, filled with ground rubber and silica sand. “Nike Grind”, a recycled material formed from used athletic shoes through Nike’s “Re-Use-A-Shoe”, is part of the rubber mix.

To educate students and the general public about what has been accomplished on the property as well as to identify wildlife species, interpretive signs have been placed at strategic locations around the 9 holes.



Education Signage

Providing not only students with education about golf, signage placed strategically around the 9 holes provides information about the species that may be seen.

In addition, Cleveland Municipal School District Washington Park Horticulture Center is located on six acres within the property. The vocational education center has operated since 1977 and teaches over 250 students enrolled in “workforce development”; program from Cleveland’s South High School in horticultural based courses. Cleveland Metroparks anticipates the schools core curriculum will be expanded to include courses such as golf course design, landscape, design, arboriculture, and arboretum design. The entire project site will become an outdoor classroom, or “land laboratory” for the students.

## Certified Gold Signature Sanctuary

Now that it is completed, Washington Golf Learning Center includes a nine-hole par 28 golf course, 30 station driving range, short game practice acres, clubhouse, teaching facility, and a golf maintenance building. The golf course was designed by International Management Group (IMG), built by Mid-America Golf, financed by 1<sup>st</sup> Tee of Cleveland, and managed and maintained by Cleveland Metroparks.

Washington Golf Learning Center is a prime example of a successful ecologically focused, collaborative partnership between for-profit and not-for-profits groups: Cleveland Metroparks, 1<sup>st</sup> Tee of Cleveland, International Management Group (IMG), The Cleveland Municipal School District, the City of Cleveland, and Audubon International. On May 8, 2007, WGLC was certified as the first Gold Signature Sanctuary in Ohio and the first 9-hole Gold Signature Sanctuary in the world.

*“Each visitor to the site is surprised to discover a first class nine-hole golf course which boasts established wetlands, vegetation-lined fairways for bird habitat, and a view of the Cleveland skyline all set next door to urban infrastructure, heavy manufacturing and steel and aluminum mills.”*

John Cardwell  
Landscape Architect  
Cleveland Metroparks