

▶ 2007



ANNUAL PROGRESS REPORT
OF THE
DETROIT RIVER INTERNATIONAL WILDLIFE REFUGE
AND THE INTERNATIONAL WILDLIFE REFUGE ALLIANCE



BUILDING OUR REFUGE | 2007

As a child growing up in Detroit I spent many memorable hours walking the shoreline of the Detroit River with my father. We hunted, fished, and explored the many unique habitats found right in our backyards. This is why I am so proud that we are building the Detroit River International Wildlife Refuge.

The Detroit River International Wildlife Refuge has proven to be a national leader in public-private partnerships as it continues to grow and expand.

As you read this report, you will learn about the many significant accomplishments that can only result from effective partnerships with corporations, individuals, nonprofit organizations and foundations. Indeed, it is only through these partnerships that the Refuge has been able to preserve and restore 5,100 acres of habitat, complete 26 shoreline restorations, and leverage over \$13 million in conservation projects - all in the first six years.

At the Refuge you can enjoy an exceptional outdoor experience as you watch hundreds of thousands of hawks fly over during the fall migration, tens of thousands of waterfowl stop and feed on wild celery, and thousands of fishermen pursue their passion in the "Walleye Capital of the World." What you are seeing is a new paradigm of conservation in action - one that is achieving results through innovative partnerships. I invite you to get involved with the Refuge and help leave a lasting legacy for generations to come.



With best wishes,

John D. Dingell
Member of Congress

INTRODUCTION

The region stretching south along 48 miles of Detroit River and Western Lake Erie shoreline is a major urban area, one of the world's greatest manufacturing centers, and the only international wildlife refuge in North America – the Detroit River International Wildlife Refuge (IWR). This region is also at the intersection of two major North American migratory bird flyways – the Atlantic and Mississippi. Over 300,000 diving ducks, 75,000 shorebirds, and hundreds of thousands of land birds and fall raptors frequent the area to rest, nest, and feed along the unique shoreline habitats, including many islands and marshes. Over 30 species of waterfowl, 23 species of raptors, 31 species of shorebirds, and 160 species of songbirds are found along or migrate through this corridor. In addition, 117 species of fish are found in or migrate through the Detroit River. This biodiversity and the diversity of habitats to support these biota have given



the region international acclaim. The Detroit River and western Lake Erie have been recognized for their biodiversity in the North American Waterfowl Management Plan, the United Nations Convention on Biological Diversity, the Western Hemispheric Shorebird Reserve Network, and the Biodiversity

Investment Area Program of Environment Canada and U.S. Environmental Protection Agency. And now this region has become a major source of community pride with its designation as North America's only International Wildlife Refuge.

Our Detroit River IWR story is that cooperative conservation initiatives are helping recreate gathering places for wildlife and people along the Detroit River and western Lake Erie, and that these unique conservation places are now a key factor in providing the quality of life so important in achieving competitive advantage for communities and businesses in the 21st century. Equally important is that cooperative conservation is helping provide an exceptional outdoor experience to almost 6 million people in the watershed. That, in turn, is helping develop the next generation of conservation stewards and sustainability entrepreneurs.

This annual report is a collaborative effort between the U.S. Fish and Wildlife Service (USFWS) and the International Wildlife Refuge Alliance or IWRA (i.e., a non-profit alliance of organizations that builds the capacity of the USFWS to deliver its mission for the Detroit River IWR). The purpose of this report is to document accomplishments during 2007, celebrate successes, and sustain the momentum for building North America's only International Wildlife Refuge. Key refuge accomplishments are divided into four categories: habitat conservation, research and monitoring, community engagement, and capacity building. Highlights of accomplishments are presented below for each category.

RECONNECTING CHILDREN WITH NATURE

Previous generations of kids played in woods, along rivers, and in wetlands. They were building tree houses, catching fish, and hunting frogs. All of this "nature-play" builds a sense of wonder and exploration, and enriches growth and development.

But during the past 30 years, more and more, children have been losing their connection



PHOTO CREDIT: U.S ENVIRONMENTAL PROTECTION AGENCY

to nature. Educators now recognize that children require nature. There is a growing body of scientific evidence that suggests if children are given early and ongoing positive exposure to nature, they thrive in intellectual, psychological, and physical ways that their "shut-in" peers do not.

By reducing stress, sharpening concentration, and stimulating creative problem solving, "nature-play" is also emerging as a promising therapy for attention-deficit disorder and other childhood maladies. Indeed, Richard Louv has argued compellingly in "Last Child in the Woods" that society needs a major effort to save our children from nature deficit disorder.

One of our goals is to reconnect children to the natural world. And that is precisely what we are doing. Our refuge has grown from about 300 acres to over 5,100 acres in the first six years. We are rapidly gaining a national reputation for our public-private partnerships for conservation and close-to-home, outdoor recreation and environmental education. Last year we built a wildlife observation deck in Humbug Marsh, complete with spotting scopes. Next year we will be building interpretive trails and an environmental education shelter in Humbug Marsh. We invite you to join us in these projects that will reconnect children with nature. We have a unique opportunity, through the refuge, to teach our children the importance of conserving fish and wildlife resources, and of living sustainably.

HABITAT CONSERVATION

COASTAL WETLANDS
AT THE MOUTH OF
SWAN CREEK

Photo credit: Steve Dushane, U.S. Fish and Wildlife Service

REFUGE GROWTH

Coastal Wetlands at Mouth of Swan Creek

In 2007, 65 acres of coastal wetlands and uplands at the mouth of Swan Creek in Monroe County were brought into the refuge with funds from the Migratory Bird Conservation Commission, the Land and Water Conservation Fund Program, and a North American Wetlands Conservation Act grant administered by Ducks Unlimited.

Lake Erie Metropark Cooperative Management Agreement

In 2007, 780 acres of unique wetlands and uplands were brought into the refuge through a cooperative management agreement with Huron-Clinton Metropolitan Authority. Lake Erie Metropark is one of the best places to watch hawks in North America.

Lady of the Lakes

In 2007, 49 acres of unique coastal wetlands and uplands were brought into the refuge through a cooperative management agreement with Consumers Energy. These unique habitats are located along one-half mile of Lake Erie in Monroe County.

Wetlands Restoration at Brancheau Unit

In 2007, funding was secured for a 40-acre wetland restoration at the Brancheau Unit in Monroe County. Refuge partners include: Ducks Unlimited, Waterfowl USA-Southwestern Lake Erie Chapter, Metropolitan Affairs Coalition, International Wildlife Refuge Alliance, and DTE Energy Green Team. Restoration will be completed in 2008.



Monroe County Ducks Unlimited

During 2007, the Monroe Chapter of Ducks Unlimited raised \$85,000 in new funding for conservation of Lake Erie wetlands, including the refuge. Pledges were announced from DTE Energy, Staelgraeve-Turner Electric, Monroe County Community Credit Union, Friendly Ford, Holcim, Inc., Dave Shefferly, Tracy Oberleiter, Dave Perry, Herb Krueger, and Richard Micka.

DTE Energy's Monroe Power Plant

During 2007, DTE Energy and USFWS restored two small former "walleye ponds" at the Monroe Power Plant to productive wetlands for waterfowl. The "walleye ponds" were no longer being used to rear walleye because of the improvements in the Lake Erie walleye fishery.

Wayne County's Elizabeth Park

During 2007, shoreline habitat was restored along the canal at Elizabeth Park with soil bioengineering techniques and native plantings. Partners included Wayne County Parks, IWRA, USFWS, Nativescape, Michigan Sea Grant, and volunteers. Work will be completed in 2008.

Wetlands Restoration at Refuge Gateway

During 2007, excavation of the innovative storm water retention basin began at the Refuge Gateway. This is part of "daylighting" Monguagon Creek that is restoring natural hydrology to Humbug Marsh. Work will be completed in 2008 by Wayne County Parks.

Black Lagoon Becomes Ellias Cove

On June 18, 2007, the City of Trenton and many partners celebrated the renaming of Black Lagoon to Ellias Cove. Following a \$9.3 million sediment remediation, shoreline habitat was restored. Over 100 people participated in the celebration.

Sturgeon Spawning Reef

In 2007, Canadian and U.S. funding was secured for pre-construction assessment necessary for building a sturgeon spawning reef off Fighting Island. Partners in the project include: Environment Canada, USFWS, Essex Region Conservation Authority, U.S. Geological Survey, Detroit River Canadian Cleanup, BASF Corporation, DTE Energy, IWRA, Landmark Engineers Inc., Michigan Department of Natural Resources, Michigan Wildlife Conservancy, and Michigan Sea Grant.



Student Work Days at Humbug Marsh

During 2007, garlic mustard and buckthorn, which are invasive plants, were removed at Humbug Marsh by local high school students.

Invasive Species Control in Humbug Marsh

During 2007, a two-year, Phragmites control project was initiated for Humbug Marsh and the Refuge Gateway. Partners include ITC, IVM Partners, and Downriver Mowing.

Volunteer Stewardship at Humbug Marsh

Volunteers helped remove non-native invasive shrubs from Humbug Marsh, gather sticks for an Eagle's nest framework, and begin rustic trail construction in the fall of 2007.

Wood Duck & Mallard Tubes

During 2007, wood duck boxes and mallard tubes were constructed and installed in Humbug Marsh by Gibraltar Duck Hunters Association, Downriver Chapter of Ducks Unlimited, Pointe Mouillee

Waterfowlers, and USFWS.

Blue Bird Boxes

During 2007, Blue bird boxes were built and installed at the Strong Unit by the Monroe Girl Scout Troop # 886.



Celebration of Ellias Cove, Trenton, MI

RESEARCH AND MONITORING

Indicator Project

In 2007, the USFWS, Environment Canada, U.S. Environmental Protection Agency, and many other partners completed the report entitled "State of the Strait: Status and Trends of Key Indicators." The full report is available at www.stateofthestrat.org.

Grassy Island

During 2007, USFWS and partners continued to work on completing the investigative phase for Grassy Island. Accomplishments included completing the public health consultation, performing biological surveys, and performing a screening level ecological risk assessment.



Lower Detroit River and Lake Erie Metropark

During 2007, lower Detroit River and Lake Erie Metropark were identified as Important Bird Areas (IBAs) that provide essential habitat for migratory birds. The IBA Program is a global initiative of BirdLife International and local partners to monitor IBAs for better bird conservation.





[Above] Russet-tipped Clubtail were found at Humbug Marsh. They are a species of special concern in Michigan.

[Left] Researchers with a Lake Sturgeon

Colonial Waterbird Surveys

In 2007, refuge staff and volunteers completed waterbird surveys as called for in the refuge's Comprehensive Conservation Plan.

Rockwood Christmas Bird Count

In 2007, the Rouge River Bird Observatory and Detroit Audubon added another year to the 31-year Rockwood Christmas Bird Count database.

Southeast Michigan Raptor Research

In 2007, funding was secured to help sustain and expand the important raptor monitoring at Lake Erie Metropark.

Breeding Bird Survey

During 2007, another breeding bird survey was completed in Humbug Marsh by the Rouge River Bird Observatory. In total, 76 species showed breeding evidence, including Yellow-breasted Chat and Black-billed and Yellow-billed Cuckoo.

Fisheries Survey

In 2007, USFWS continued to partner with the Michigan Department of Natural Resources and U.S. Geological Survey on fishery surveys.

Lake Sturgeon Research

During 2007, USFWS continued to collaborate on lake sturgeon research that is laying the foundation for construction of a sturgeon spawning reef off Fighting Island.

Dragon Fly Survey

During 2007, biologists from University of Michigan - Dearborn's Rouge River Bird Observatory expanded their efforts on dragonfly surveys. In Humbug Marsh they found the largest population of Russet-tipped Clubtails in the region and discovered the northern most record for Banded-Winged Dragonlets.

COMMUNITY ENGAGEMENT

Considerable efforts were expended in building, enhancing, and exploring our Refuge. Key examples include:

Wildlife Observation Deck

During 2007, a spectacular wildlife observation deck was constructed at Humbug Marsh. Funding was provided by Wild Birds Unlimited, Inc. *Pathways To Nature* Conservation Fund, in partnership with the National Fish & Wildlife Foundation. Other partners included: Michigan Sea Grant; AT&T Foundation; Praxair; Lincoln Park High School Agriscience Program; Stoneco of Michigan, Hoppert Farms, Snow's Nursery, MidAmerican Group, IVM Partners, Pheasants Forever, Davey Tree Service, Gibraltar Department of Public Works, ITC Holdings Corp., Monroe Fence, Metropolitan Affairs Coalition, Mans Lumber and Millwork, IWRA, Refuge volunteers, and the USFWS.

Kiosk Information Center

During 2007, a kiosk was also constructed by volunteers at Humbug Marsh. Funding was provided by Wild Birds Unlimited, Inc. *Pathways To Nature* Conservation Fund, in partnership with the National Fish & Wildlife Foundation. Other partners included: Michigan Sea Grant, AT&T Foundation, Praxair, DTE Energy's Trenton Channel



Photo credit: DTE Energy

Power Plant and Green Team, Michigan Regional Council of Carpenters – Local 687, Laborers' International Union of North America – Local 499, International Brotherhood of Electrical Workers – Local 17, U.W.U.A., Local 223 AFL-CIO, Mid-American Group, Metropolitan Affairs Coalition, Brand Scaffolding Services, Mans Lumber and Millwork, IWRA, and USFWS.

Greenway Trails

In 2007, over 90 posts and fencing were removed at Humbug Marsh at the corner of North Gibraltar Road and Jefferson Avenue. Partners included South Lyon Fence & Supply Company, Woodland Brush Specialties Services, ITC, and a local Boy Scout troop. Christine Hahn of MSU Extension helped mark dead ash trees for removal.

Public Programs

Over 1,500 people visited this spectacular natural area along the Detroit River during open houses or

a public program, including guided nature tours and a National Wildlife Refuge Week Celebration.

First-ever "Big Sit"

A dozen volunteers and 75 supporters helped with the Big Sit at Humbug Marsh. Participants counted 62 species in less than 24 hours on October 14th.

International Migratory Bird Day

On May 12, 2007, the Byways to Flyways bird driving tour map/brochure was released at a celebration at Humbug Marsh and at Pointe Pelee National Park in Leamington, Ontario. Partners included Hamilton Anderson Associates, IWRA, Michigan Sea Grant, Metropolitan Affairs Coalition, USFWS, Parks Canada, City of Windsor, Essex County Field Naturalists, Important Bird Areas of Canada, Michigan Department of Natural Resources, Michigan Important Bird Areas Program, Monroe County Planning Department, Huron-Clinton Metropolitan Authority, Rouge River Bird Observatory, Southeastern Michigan Raptor Research, Wild Birds Unlimited Stores, and Essex Region Conservation Authority. Funding was provided by Wild Birds Unlimited, Inc. *Pathways To Nature* Conservation Fund along with matching funds by DTE Energy.

Byways to Flyways

Received Merit Award

In 2007, Hamilton Anderson Associates and IWRA received the Merit Award for Research and Communication by Michigan Chapter of the American Society of Landscape Architects for the design and layout of the Byways to Flyways bird driving tour map.

Aquatic Invasive Species & Boating Forum

Detroit Free Press Outdoor Writer Eric Sharp spoke about the dangers of the invasion of Asian Carp to the Great Lakes. The August Forum was held in partnership with Friends of the Detroit River, IWRA, and USFWS.

Riverwalk at Dingell Park

In July, the City of Ecorse and Wayne County broke ground on a new riverwalk at Dingell Park overlooking the refuge's Mud Island.

FLW Outdoors "Chevy Open"

In July, one of the largest bass fishing tournaments in North America was held in the refuge, offering \$1.5 million in prize money. Local support was provided by Metropolitan Affairs Coalition, The Detroit Sports Commission, Detroit Metro Convention and Visitors Bureau, the City of Detroit, and the USFWS.



Photo credit: Rob Newell

Michigan Conservation Trail

In August, the Detroit River was honored with the first historical marker on the Michigan Conservation Trail. The marker celebrates the recovery of the Detroit River. Partners included Michigan Environmental Council, Michigan Department of History, Arts, and Libraries, Friends of the Detroit River, Wayne County Parks, IWRA, and the USFWS.



35th Anniversary Celebration of the U.S. Clean Water Act and the Canada-U.S. Great Lakes Water Quality Agreement:

On October 13, 2007, a 35th Anniversary celebration of the Clean Water Act and Great Lakes Water Quality Agreement was held at Ellias Cove where students released over 100 lake whitefish into the river symbolizing 35 years of progress and that Ellias Cove is now clean enough for whitefish. Congressman John Dingell, Canadian Member of Parliament Jeff Watson, and Canadian Consul General Robert Noble joined U.S. Geological Survey, USFWS, the City of Trenton, and over 100 people in this historic celebration.



Photo credit: U.S. Environmental Protection Agency

Annual Hawkfest

In September, more than 6,000 people attended the annual Hawkfest at Lake Erie Metro Park.

Paddle By Your Refuge

In 2007, the Paddle By Your Refuge committee received a Community Service award from Michigan Recreation and Parks Association for their 2006 event. In addition, another successful Paddle By Your Refuge was held in September 2007 that attracted nearly 400 paddlers. Partners included Riverside Kayak Connection, Black Parrot Paddling, Quiet World Sports, Metropolitan Affairs Coalition, City of Trenton, Wayne County Parks, Michigan Sea Grant, DTE Energy, Huron-Clinton Metropolitan Authority, Downriver Linked Greenways, and USFWS.

Annual Benefit Dinner

In 2007, the second annual Benefit Dinner was attended by 400 people that raised over \$100,000 to assist in growing the refuge. Major IWRA funding partners included ITC Holdings Corp., BASE, DTE Energy, GM, and Praxair.

Monroe County Lotus Tour

In July 2007, the third annual Lotus Tour was held in Monroe County sponsored by the Lotus Garden Club of Monroe, Michigan, with the support of the IWRA, DTE Energy Foundation, Consumers Energy, City & County of Monroe, USFWS, Monroe County Road Commission, Monroe Charter Township, Downtown Monroe Business Network, Monroe Public Schools, Monroe County Convention and Tourism Bureau, and the Community Foundation of Monroe County. The Monroe Public Schools Bus for Lake Erie Environmental Outreach Program (LEEOP) was stationed at DTE Energy Monroe Plant for visitors to see and a special presentation was given by Bruce Manny of the USGS Great Lakes Science Center.

Pointe Mouillee Waterfowl Festival

In September, over 9,000 people attended the annual Waterfowl Festival at Pointe Mouillee State Game Area.

Numerous Refuge presentations

Throughout 2007 numerous presentations were made to raise awareness and build support, including to Detroit Riverfront Conservancy, Southeast Michigan Council of Governments, Wyandotte Rotary, Trenton Kiwanis Club, Michigan Power Squadron, Downriver Retired Teachers Association, the International Heritage Development Conference, Metropolitan Affairs Coalition, and Southern Wayne County Chamber of Commerce.

CAPACITY BUILDING

One of the major goals of the USFWS is to build its capacity to deliver its mission for the Detroit River IWR. In addition, IWRA's mission is "to support the first International Wildlife Refuge in North America by working through partnerships to protect, conserve, and manage the refuge's wildlife and habitats, and to create exceptional conservation, recreational and educational experiences to develop the next generation of conservation stewards."

Both the refuge and IWRA have experienced growth in the past year. The Alliance hired a full-time executive director, Lisa Appel, in spring of 2007.

The 2007 board members included: Mr. Dick Micka (Chairperson), Ms. Anita Twardesky (Vice Chairperson), Ms. Andrea Kline (Secretary), Mr. Tim Bowman (Treasurer), Dr. Bruce Jones, Mr. Dick Whitwam, Ms. Mary Bohling, Mr. George Mans, Mr. Lloyd Semple, Ms. Molly Luempert-Coy, Mr. Randy Hicks, Dr. Jim Bull, Mr. Steve Sczytko, Ms. Yvette Pugh, Mr. Richard Tuzinsky, and Mr. Jack Liang.

During 2007, Greg Norwood of University of Michigan-Dearborn continued to provide support to the Canada-U.S. indicator project and helped with

wildlife surveys and guided tours at Humbug Marsh. Kay Morrison continued to serve as webmaster for the indicator project under support from the U.S. Environmental Protection Agency. Karen Koch, a new volunteer to the Refuge, copyedited the Detroit River Western Lake Erie Indicator Project, organized a meeting on hunting in the refuge, and assisted with the Alliance annual dinner and other events. Brian Lalande, a student from Michigan State University, assisted with an IWRA brochure and produced a piece of refuge art. Janaé Reneaud completed her Metropolitan Affairs Coalition-Detroit River IWR Fellowship and transitioned into a Student Temporary Employment Assignment with the refuge. With the help of many volunteers, the USFWS and IWRA were able to complete many other projects such as Humbug clean ups, invasive vegetation removal, and wood duck boxes at Humbug Marsh. Metropolitan Affairs Coalition continued to provide grant writing support for proposed projects common to the Greater Detroit American Heritage River Initiative and the Detroit River IWR. Finally, U.S. Environmental Protection Agency's Large Lakes Research Station continued to provide office space and support for staff.



Photo credit: Michael Sproul

Photo credit: Richard Baumer, Erie Marsh



Refuge Growth & Development

- Working with Monroe County to incorporate Plum Creek Bay into the refuge
- Pursuing high priority land acquisitions in Monroe and Wayne Counties
- Completing habitat restoration at Lagoona Beach Unit with funding from a North American Wetlands Conservation Act grant

Habitat Restoration

- Securing Phase 2 funding for construction of a sturgeon spawning reef off Fighting Island
- Assisting in a soft engineering project at the Monroe Power Plant

Community Outreach & Other Activities

- Updating refuge website
- Carrying out another IWRA fundraiser in Spring 2008
- Creating an IWRA website
- Assisting in the construction of a green marina with the City of Trenton with funding from USFWS's Boating Infrastructure Grant Program
- Securing necessary funding to complete the investigative phase of Grassy Island
- Expanding refuge educational/outreach activities, like guided tours of Humbug Marsh and interpretive programs
- Continuing to support established events such as FLW Outdoors Fishing Tournaments, the annual HawkFest, Paddle By Your Refuge, Pointe Mouillee Waterfowl Festival, and a Lotus Tour with the Lotus Garden Club

What's Next

The Detroit River IWR will continue to grow through public-private partnerships. Key priorities for 2008 include:

Refuge Gateway

- Establishing the capital campaign committee for the Refuge Gateway/Visitor Center project and securing the first major gift
- Securing funding for architectural and engineering work for the boat dock and fishing pier at the Refuge Gateway
- Completing the daylighting of Monguagon Creek at the Refuge Gateway
- Completing engineering drawings for restoring a natural shoreline at the Refuge Gateway

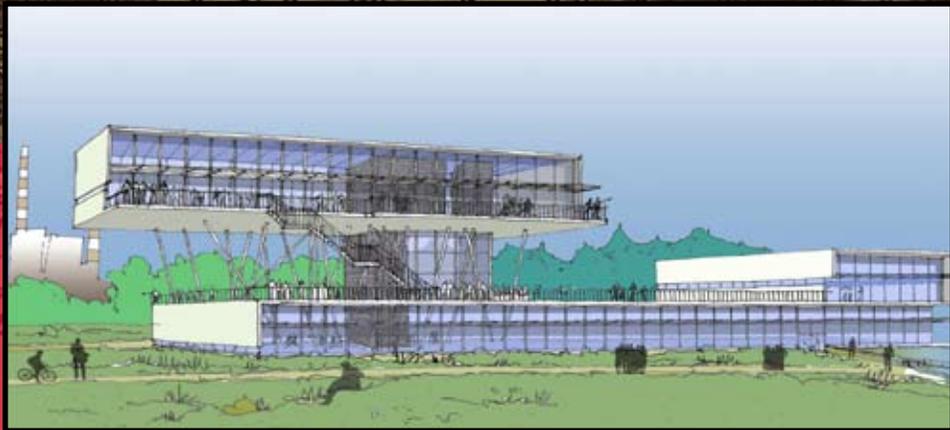
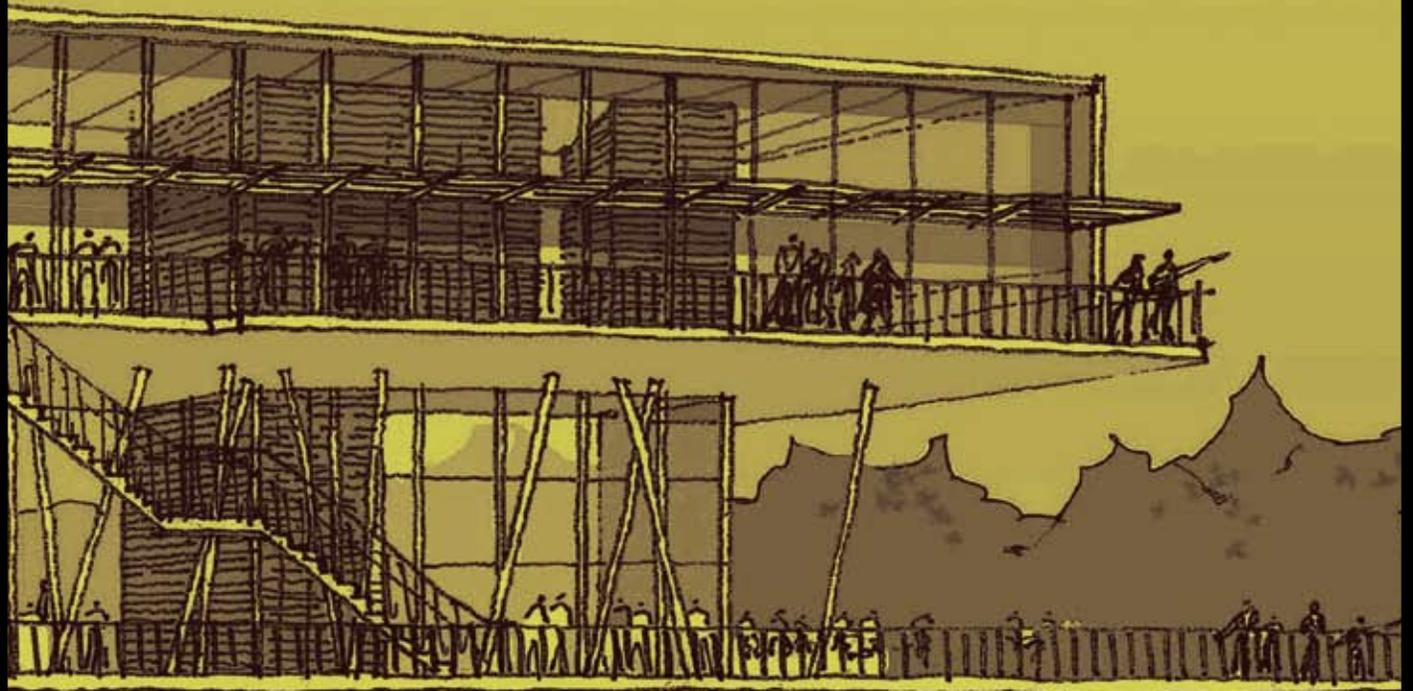
Humbug Marsh

- Constructing an environmental education shelter at Humbug Marsh
- Placing a bald eagle platform on a utility pole on Humbug Island
- Building trails in Humbug Marsh Unit with funding from U.S. Department of Transportation and the Community Foundation for Southeast Michigan
- Continuing invasive species management at Humbug Marsh

This report is dedicated to Mike Zielinski (1945 - 2008) - outstanding outdoor writer, conservationist, and friend of the Refuge.

Acknowledgements:

Many individuals, organizations, corporations, and agencies have contributed significantly to the accomplishments highlighted in this annual report and to building our IWR. Without this broad-based involvement and support the vision of a world-class refuge in the industrial heartland would not be possible. Special thanks are extended to Schade Design, Inc. for providing the design & layout, and DTE Energy for the printing of this annual report. We all should be very proud of what we are accomplishing.



U.S. Fish and Wildlife Service
International Wildlife Refuge Alliance

John Hartig, Refuge Manager
Detroit River International Wildlife Refuge
John_Hartig@fws.gov

For more information:
www.fws.gov/midwest/detroitriver/index.html

Lisa Appel, Executive Director
International Wildlife Refuge Alliance
lisa_appel@yahoo.com

