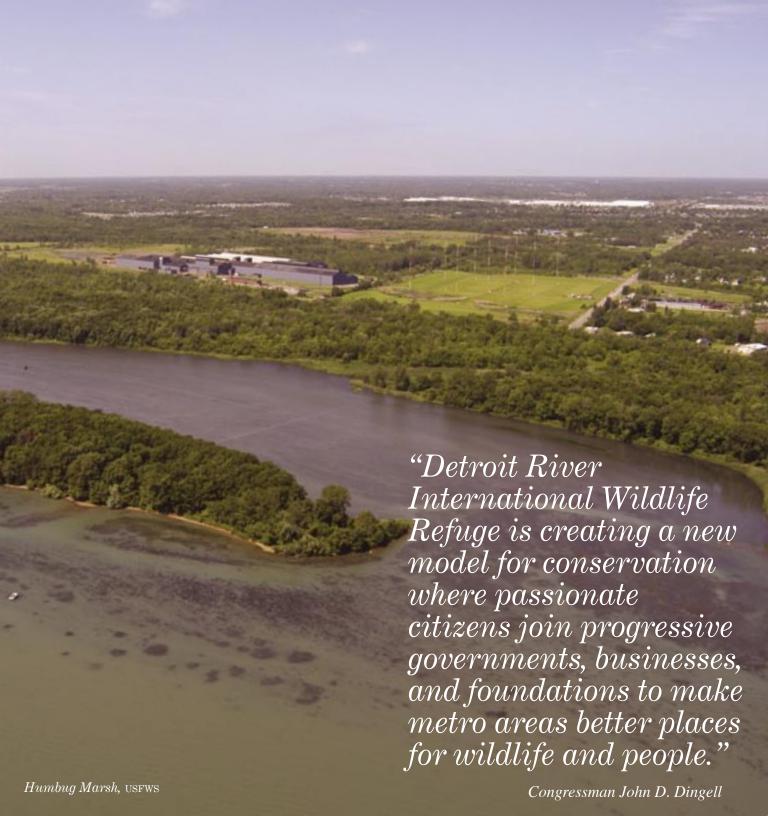
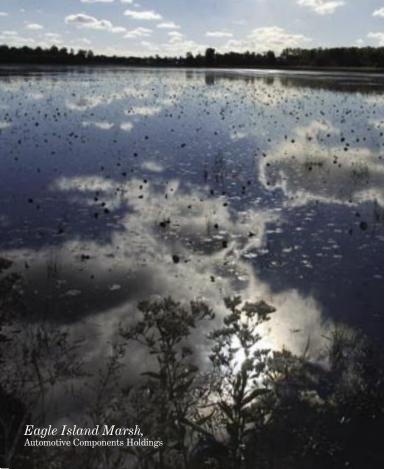
U.S. Fish & Wildlife Service **Detroit River International Wildlife Refuge Detroit River Large Lakes Research Center** 9311 Groh Road Grosse Ile, MI 48138 International Phone: (734) 692-7608 Fax: (734) 692-7603V/TTY users may reach Detroit River International Wildlife Refuge through the Federal Relay System at 1-800-877 8339 Wildlife Refuge U.S. Fish & Wildlife Service 1 800/344 WILD www.fws.gov Canvasback, ©Allen Chartier



Long known for industry and its environmental consequences, the Detroit area entered the 21st Century a changed region. More than thirty years of committed pollution prevention and conservation created waterways and shorelines that once again support wildlife and inspire people.

The Detroit River International Wildlife Refuge symbolizes the region's re-birth. The first of its kind in North America, it conserves more than 5,000 acres on the lower Detroit River and western shore of Lake Erie. The U.S. Fish and Wildlife Service, working with public and private organizations, manages the refuge to benefit wildlife and people. Visitors can hunt, fish, hike, and watch wildlife on the refuge.



U.S. Steel shoreline

Flying scaup, Ducks Unlimited





...and after! Nativescape



Located at the intersection of the Atlantic and Mississippi flyways, the Detroit River and western Lake Erie have been important to migratory birds for eons. Waterfowl traveling between summer and winter homes rely on the area's marshes for resting and refueling. Both the Detroit River and Lake Erie have long been important transportation routes for people and goods as well.

The Twentieth Century brought the automobile and steel industries to Detroit and, with them, environmental threats. By the 1960s and 1970s, most rivers and lakes in the area were polluted; the Detroit River and Lake Erie were no exceptions.

Thanks to dramatic pollution prevention and cleanup efforts, the area made one of the most impressive environmental recoveries in North America. Today, the Detroit River and western Lake Erie support healthy wildlife and fish populations, and people from around the world come to enjoy outdoor recreation. Marking this ecological comeback, Congress created the Detroit River International Wildlife Refuge in 2001 from lands that were part of Wyandotte National Wildlife Refuge - Grassy Island and Mamajuda Shoal. Additional parcels came through both purchases and cooperative agreements. The refuge is a unit of the National Wildlife Refuge System, a 96-million-acre network of Federal lands set aside for wildlife.



Sharp-shinned Hawk, usfws

A Wild Variety in a Civil Setting

Detroit River Refuge protects islands, coastal wetlands, shoals, and riverfront lands along 48 miles of the lower Detroit River and western Lake Erie. These habitats support 300 species of birds, including 30 species of waterfowl, 23 species of raptors, and 31 species of shorebirds, plus 117 kinds of fish...all within an urban area of six million people.



Wood duck, J. Mattsson, USFWS



Lesser yellowlegs, LeBlanc

More than three million waterfowl migrate through the Great Lakes area annually. American black ducks gather in the marshes of western Lake Erie before completing their fall journey south. Migrating canvasbacks rest and feed on beds of wild celery in the lower Detroit River. Wood ducks, mallards, and blue-winged teal nest in the area.

A wide variety of wading birds and shorebirds lives here during the summer months. Great blue herons and common egrets hunt in the shallows. Dunlins, spotted sandpipers, yellowlegs, and dowitchers probe the sands for tasty morsels. The Lake Erie shoreline has been named a Site of Regional Shorebird Importance in the Western Hemispheric Shorebird Reserve Network.



Bald eagles use the refuge year-round, plucking fish from the waters and perching on high, bare branches to eat and rest. There are several active bald eagle nests within the refuge boundary.



Red-winged blackbirds, tundra and trumpeter swans, American woodcock, common loons, belted kingfishers, and many species of songbirds call this area home during the spring and summer months. Ring-necked pheasants and bob-white quail are year-round residents.

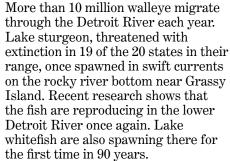
Photos from top:
Bald Eagles,
Trumpeter
Swan,
Ring-necked
Pheasant,
K. LeBlanc





14-lb walleye, J. Barta

Young lake sturgeon, USFWS







Painted turtle, K. Sommerer

The Detroit River and western Lake Erie have been noted for their variety of plants and animals in the North American Waterfowl Management Plan, the United Nations Convention on Biological Diversity, and the Biodiversity Investment Area Program of Environment Canada and the U.S. Environmental Protection Agency.



 $Before-and-after\ photos\ showing\ soft\ engineering\ techniques\ at\ DTE$'s River Rouge Power Plant, Nativescape

Closer to Nature

Like most national wildlife refuges, the Detroit River International Wildlife Refuge is actively managed to provide habitat for wildlife. Refuge staff work with industrial corporations, other government agencies, municipalities, and non-profit organizations to return grasslands, wetlands, and shorelines to healthy condition.

Staff and partners use soft engineering techniques to restore portions of the lower Detroit River and Lake Erie shorelines. By replacing concrete with natural materials, they stabilize the banks while improving wildlife habitat.



Dabbling for food,
K. Barr USFWS

Spraying noxious weeds, USFWS

Prescribed fire, Shallenberger, USFWS



Common terns benefit from habitat restoration, Bill McBride

Working with lake sturgeon, USFWS



Dikes and breakwaters on the Lake Erie shore let managers control water levels in some areas, mimicking natural cycles. Water is drained during the summer, allowing sunlight to reach underwater plants and promote growth. In the fall, deeper water provides migrating waterfowl with a place to rest and feed.



Non-native plants, such as common reed, purple loosestrife, and reed canary grass, spread into natural habitats, replacing native species important to wildlife. Refuge staff and partners fight the invaders using mowing, plowing, prescribed fire, water-level control, and chemical application. They control purple loosestrife with a beetle that eats the plant, but does not harm other vegetation.



Refuge staff and volunteers monitor populations of birds, fish, amphibians, reptiles, and insects on the refuge. By tracking numbers from year to year, managers can identify species that are declining and may need help.



A Group Effort

The Detroit River International Wildlife Refuge is a product of partnerships. The U.S. Fish and Wildlife Service manages refuge lands cooperatively, with public and private organizations. Partners in the United States include DTE Energy. International Transmission Company, Praxair, Huron Clinton Metropolitan Authority, Wayne County, The Nature Conservancy, BASF Corporation, General Motors Corporation, Ford Motor Company, Chrysler Corporation, Ducks Unlimited, and many more. In Canada, Environment Canada, Essex Region Conservation Authority, the City of Windsor, and others contribute to the refuge's mission.

The International Wildlife Refuge Alliance formed in 2005. This nonprofit coalition supports the Fish and Wildlife Service in its mission for the Detroit River International Wildlife Refuge. The Alliance fosters conservation on refuge lands, increases refuge visibility, and supports refuge projects. It has published Byways to Flyways, which features detailed descriptions of 27 sites across the Windsor-Detroit area known for their exceptional bird watching opportunities. The group partners in wildlife observation events, a "Paddle By Your Refuge" event, and stewardship projects like building a

wildlife observation deck. For info



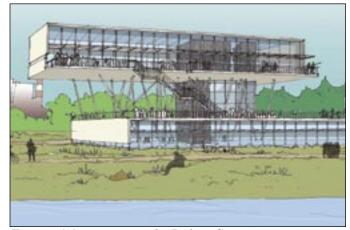
Paddle By Your Refuge kayak event, Janis Layne

Wildlife comes first!

Enjoying the Refuge

Wildlife comes first at the Detroit River International Wildlife Refuge. Human activities must be compatible with the needs of wildlife. Six recreational uses are encouraged:

- hunting,
- fishing,
- wildlife observation,
- photography,
- environmental education and
- interpretation.



 $Future\ visitor\ center\ at\ the\ Refuge\ Gateway,$ Hamilton Anderson Associates

The 410-acre Humbug Marsh Unit, the last mile of natural Detroit River shoreline on the U.S. mainland, has trails and an observation deck that offer excellent bird watching and hiking. Next to Humbug Marsh is the 44-acre Refuge Gateway, where the refuge headquarters and visitor center are being created in partnership with Wayne County, Huron Clinton Metropolitan Authority, the International Wildlife Refuge Alliance, Friends of the Detroit River, Detroit Audubon, Wayne County Community College, Michigan Sea Grant and others. The visitor center will provide educational and interpretive displays and programs, and will allow visitors to explore Humbug Marsh.



Almost three miles of trails at Lake Erie MetroPark take hikers along the Detroit River and Lake Erie shorelines





Youth duck hunt, Gibraltar Duck Hunters Association



Rising mallard, K. Barr. USFWS



Fishing, E. Hester, USFWS

Waterfowl hunting has been popular in the area for centuries. Many hunters use layout boats and large rafts of decoys to attract diving ducks on the open waters of the Detroit River and western Lake Erie. State law allows duck and goose hunting along the Detroit River and Lake Erie, as long as the hunter is standing in the water, shooting his or her gun away from the shoreline, and at least 450 feet from an occupied building. Pointe Mouillee State Game Area, owned and managed by the Michigan Department of Natural Resources and not part of the refuge, is open to hunting and has a boat launch.

Refuge waters are open to sport fishing, following State regulations. Pointe Mouillee State Game Area, Wayne County's Elizabeth Park, and Lake Erie MetroPark provide public access for both shoreline and boat fishing. Walleye, yellow perch, smallmouth bass, white bass, rockbass, and white perch are common.

Lake Erie Metro Park, Huron Clinton Metropolitan Authority

Your Cooperation Is Appreciated!

The refuge is open to the public on a limited basis and only during daylight hours. Contact the refuge manager for current public use opportunities.

Closed Area To protect wildlife and its habitat,

please follow these regulations: Grassy Island is closed to the public.

Boating Overnight mooring of watercraft

is not allowed. Boats left unattended

or moored in violation will be impounded at the owner's expense.

Camping The refuge is closed to camping.

Collecting Disturbance or collection of plants,

animals, minerals, and objects of

antiquity is not allowed.

Firearms Carrying, possessing, or discharging

firearms or any other weapon is not allowed, except by licensed hunters following Federal, State, and local regulations. Additional regulations

may apply.

Fires are not allowed.

Fireworks Possession or use of fireworks or

explosives is not allowed.

Fishing is allowed in designated

areas following Federal and State regulations. Additional regulations

may apply.

Group Events A special use permit is required to hold

organized group events.

Hunting Waterfowl hunting is allowed in

designated areas following Federal, State, and local regulations. Additional

regulations may apply.

Pets are allowed, but must be on a

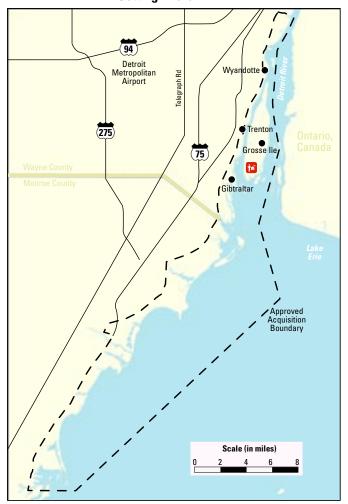
leash and under their owners' control

at all times.

Vehicles Off-road vehicles are not allowed.

Spotlighting Spotlighting wildlife is not allowed.

Getting There





To reach the refuge office at the Large Lakes Research Station in Grosse Ile, Michigan:

From I-75, take the West Road Exit (east) toward Trenton. Go east about one mile and turn right (south) onto Allen Road. Go south about 1.5 miles and turn left (east) onto Van Horn Road. Go east on Van Horn Road to West Jefferson and turn left (north). Go about 100 feet and turn right (east) at light onto Grosse Ile Parkway. Go to the stop light at Meridian Road and turn right (south). Go south on Meridian Road about two miles to the stop sign at Groh Road. Go through the intersection to the parking lot of the Large Lakes Research Station.