Shiawassee National Wildlife Refuge 6975 Mower Road Saginaw, MI 48601 (989) 777-5930

Website address: http://www.fws.gov/midwest/shiawassee

Individuals with hearing impairments may reach the refuge through the Federal Information Relay System at (800) 877-8339 (V/TTY)



U.S. Fish & Wildlife Service

Shiawassee National Wildlife Refuge

Great Blue Heron, Steve Gasser

Over 10,000 years ago Shiawassee National Wildlife Refuge was blanketed by a large glacial lake that etched out the flat terrain and the area's nickname – The Flats. Today, it is one of the largest and most productive wetland ecosystems in Michigan.





Refuge Sunset, Myles Willard

Shiawassee National Wildlife Refuge (NWR) is one of over 550 refuges in the National Wildlife Refuge System, a network of U.S. lands and waters protected and managed for wildlife, habitat and people by the Department of Interior's U.S. Fish and Wildlife Service.

A Look Back at the Flats

Over 10,000 years ago, much of eastcentral Michigan, including the present-day Shiawassee National Wildlife Refuge, was covered by a large, glacial lake. You can still see the evidence of this ancient lakebed as you look across the landscape. The terrain is very flat, hence the reason why many people call this area "The Flats."

The first people came here approximately 5,000 years ago. This area was an attractive hunting and gathering area for many early cultures and later Native American tribes, like the Odawa and Ojibwa. Ducks and geese flocked to this vast area of wetlands and rivers. Other animals including otter, fisher, marten, elk, moose, and bear were also found here.

The Flats was thought of as a swampy wilderness area and received little human impact until the late 1800s when the lumber industry expanded into this area. Coal mining began in the early 1900s and lasted until the late 1930s. In 1903 farmers began converting the land for crops and by 1950, a system of pumps, drainage tile, ditches and dikes were in place, making this an extensive agricultural area.

Where Waters Meet

Shiawassee NWR was established in 1953 to restore and enhance this historically significant wetland area for migratory waterfowl. The refuge contains over 9,600 acres of bottomland-hardwood forests, marshes, pools, fields and croplands. Four rivers meet on the refuge – the Tittabawassee, Flint, Cass and Shiawassee.



1

The refuge headquarters, located at 6975 Mower Road, is open 7:30 a.m. to 4:00 p.m., Monday through Friday throughout the year; closed all federal holidays. Refuge visitors are welcome to stop by if they have questions or need assistance.

Rules and Regulations



Enjoy your visit, but remember protecting wildlife, plants and their habitats is our priority. Regulations exist for the welfare of wildlife, as well as for your safety. Please read and comply with the following list of regulations. *This list is not inclusive*.
Obey posted "Closed Area" and "Refuge Boundary" signs
Stay on established roads and trails
Boating is allowed only on navigable waterways flowing through the refuge

Trumpeter Swan and Bronze Copper, Kim LeBlanc





The following are prohibited!

- ■Possession of alcoholic beverages
- ■Dogs, horses and other pets
- Collecting, removing, or damaging artifacts, plants or animals, including insects
- Releasing animals of any kind
- Snowmobiles, ATVs, and other motorized vehicles within the refuge boundaries
- Boat access into the marsh and pool units of the refuge
- Overnight mooring of watercraft in all areas of refuge
- ■Camping
- ■Open fires
- Fireworks
- ■Spotlighting wildlife
- ■Littering

Sandhill Crane Colt, Ed DeVries, USFWS Hooded Merganser, Kim LeBlanc

The Public Is Welcome!

There are a number of activities the public can participate in throughout the year at Shiawassee NWR.

You and your students can explore the

refuge on your own or participate in a guided activity. Our Green Point Envi-

ronmental Learning Center, located at

3010 Maple Street in Saginaw, provides

Hiking trails, interpretive displays, and a wildlife viewing area provide numer-

a variety of environmental education

ous study sites. Visitors are welcome

to stop by, but groups need to schedule their visits in advance by contacting

The refuge maintains public trails that

area. These trails are open year round,

cess to the trails may be limited during

highlight the unique features of the

seven days a week, during daylight hours. Please note that hours and ac-

hunt periods and seasonal flooding.

The Woodland Trail, at Center and

Stroebel Roads, offers 4.5 miles of

trails through bottomland hardwood

forest. A large pile of shale and a rail-

road bed left over from the coal mining

period of the early 1900s are found on

this trail. Trail use may be limited due

to seasonal flooding and wet conditions.

programs for children and adults.

Green Point at (989) 759-1669.

Environmental Education



Program at Green Point, Joy Clark

Hiking



Common Yellowthroat, S. Gasser

Woodland Trail

Ferguson Bayou Trail



Bald Eagle, Kim LeBlanc

Cass River

The Ferguson Bayou Trail, at the west end of Curtis Road, has over 4.5 miles of trails. This National Recreation Trail follows dikes and provides views of croplands, sloughs, forest, fields, wetlands and pools. There are four observation decks - one in the parking lot and three along the trail. Two observation decks have spotting scopes, to offer you a closer look at ducks, geese, deer and other wildlife.

The Cass River Unit in Bridgeport near I-75 has about 2 miles of mowed trails that meander through upland forest and along the Cass River. Trail use may be limited due to seasonal flooding and wet conditions.

Green Point Environmental Learning Center

Bicycling



Cross-Country Skiing

Photography



There are two photo blinds availreserved in advance by contacting the





Volunteer

Portions of the refuge may be open to goose and deer hunting by special permit only. Details about the hunting programs are available by contacting the refuge headquarters or visiting the refuge website.

of highway M-13 and at the Cass River

allowed on navigable waterways flow-

ing through the refuge. Boat access

into the marsh and pool units of the

refuge is not allowed.

Unit in Bridgeport. Boat fishing is

Share your special talents and skills as you assist refuge staff. You could collect biological data, perform light maintenance, or help out with special events. If you are interested, contact the refuge volunteer coordinator.

Photos:

Bicyclists, T & J Reuther, Grefe Tower, Ed DeVries, USFWS, Good Fishing, Becky Goche, USFWS, Calling Geese, Ed Devries, USFWS

Green Point Environmental Learning Center in Saginaw offers over 2.5 miles of trails for hiking and cross-country skiing. Trail use may be limited due to seasonal flooding and wet conditions.

The Woodland and Ferguson Bayou Trails and the Cass River Unit are open to bicycles. Bicycles are not allowed at Green Point Environmental Learning Center.

Trails are not groomed, but most can accommodate skiers.

able along the Ferguson Bayou Trail. Both overlook wetlands areas. One lies within a closed area and must be refuge headquarters.

Fishing Bank fishing is allowed at designated spots along the Tittabawassee River at Green Point Environmental Learning Center and off the Woodland Trail. Bank fishing is also available at the boat launch on the Cass River off



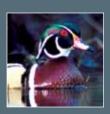




Important Bird Area

The refuge's diverse habitats and land management practices result in a great variety of wildlife species occurring here. Over 270 species of migratory birds, including raptors, shore and wading birds, and more than 100 songbird species visit the refuge annually. Shiawassee NWR is designated as a United State Important Bird Area for its global significance to migratory waterfowl. During peak populations in late October, up to 25,000 Canada geese and 40,000 ducks are present. See the refuge's bird brochure for more information.





Wildlife enthusiasts may see or hear muskrat, beaver, coyote, snapping and painted turtles, white-tailed deer, garter and fox snakes, leopard frogs, and a variety of insects and spiders. Patience and knowing where to look are key to seeing many of these creatures.



Wood Duck, Tom Kerr, USFWS Muskrat, J. Mattsson, USFWS





White-tailed Deer, Kim LeBlanc

Mallards, Kim LeBlanc



Short-eared Owl, Kim LeBlanc



Great Egrets, Kim LeBlanc

Wetland and Wildlife Management The large central portion of the refuge is composed of managed wetlands. Controlling the level of water in these areas is the refuge's most important wildlife management objective. Using dikes, pumps and gravity flow structures, the staff floods or drains these wetlands in order to achieve desirable conditions. A variety of wetland types are maintained including marshes, bottomland forests, wet meadows, and seasonally flooded impoundments. Each of these has its own distinct community of birds, plants and other life that depend upon it throughout the

Farming is another wildlife management tool you see used on parts of the refuge. Farmers harvest a portion of the crop, leaving the rest in the field for wildlife to use as a food source.



Northern Leopard Frog, Steve Gasser



Shiawassee NWR administers the Partners for Fish and Wildlife Program in the Saginaw Bay Watershed of central Lower Michigan. This program provides financial and technical assistance to help private landowners protect and restore wetlands, native grasslands, in-stream fishery and riparian corridor habitat. Since 1987, when the program was established, the PFW program has restored over 4,000 acres of wetlands, over 1,500 acres of uplands and improved over 60 miles of stream habitat in the watershed. Projects can be implemented on property owned by counties, townships, schools, non-profits, Tribes and private landowners. Technical assistance is also provided for management and planning activities in the five watersheds affecting the refuge. The National Policy and information on the Partners for Fish and Wildlife Act can be found at www. fws.gov/partners. For further information contact the Private Lands Biologist at the refuge.

Partners for Fish & Wildlife Mission: To efficiently achieve voluntary habitat restoration on private lands, through financial and technical assistance, for the benefit of Federal Trust Species

Satellite Refuge

Shiawassee NWR also manages the Michigan Islands NWR in Lake Huron, including the Charity Islands in Saginaw Bay and Thunder Bay and Scarecrow Islands in Thunder Bay.

