Upper Mississippi River National Wildlife & Fish Refuge 51 E. Fourth St. Room 101 Winona, MN 55987

Hearing impaired persons may contact Upper Miss through the Federal Relay Number at 1 800/877 8339.

U.S. Fish & Wildlife Service 1 800/344 WILD http://www.fws.gov/



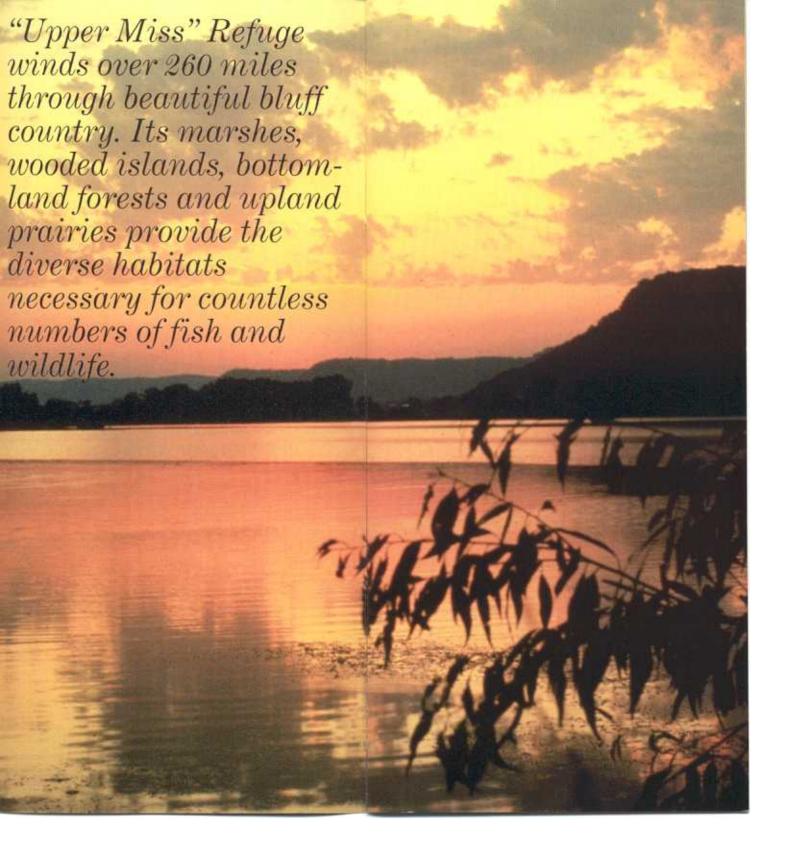




Upper Mississippi River

National Wildlife & Fish Refuge







Will Dilg USFWS Photo



Posting Refuge Boundary Signs USFWS Photo

"Upper Miss" Established in 1924

This magnificent river valley, carved out long ago by the melting of glaciers. caught the attention of Will Dilg in the early 1920s. Dilg was a sports writer and an avid bass fisherman who enjoyed the backwaters of the Mississippi River. When he discovered there were plans to drain thousands of acres of backwaters he urged the newly formed Izaak Walton League to take action. At the League's urging, Congress established the Upper Mississippi River National Wildlife and Fish Refuge on June 7, 1924. The first refuge designated for both wildlife and fish. Today, over 233,000 acres of wooded islands, marshes and backwaters comprise the Upper Miss refuge.



A River Shaped by Dams

The Upper Mississippi was a free-flowing river until a series of locks and dams were constructed in the 1930s. The navigation pools which were created by the dams provide a dependable 9-foot navigation channel for commercial barge traffic. The pools typically contain three major ecological zones: the braided stream, central and open water, defining the refuge's habitat and wildlife.

Braided Stream Zone

The braided stream zone is found in the upper portion of each pool, where narrow cuts and channels snake between islands of floodplain forests. This zone resembles the river prior to lock and dam construction. Here you might see wood ducks, woodpeckers or an elusive river otter.

Braided Stream Zone, USFWS Photo





The central zone, in the middle of each pool, is where shallow water lies over old hay meadows and the stumps of trees cut before the locks and dams were built. This zone supports the best marsh habitat and is the haunt of dabbling ducks, muskrats, bass and panfish.

Open Water Zone

The open water zone, just upstream of each lock and dam, is the deep, open water where canvasbacks and other diving ducks can be found.

Redhead Duck J. Mattsson. **USFWS**

Over time, these navigation pools have aged, and habitats have deteriorated. Sediment is filling valuable backwaters, islands are eroding, and vegetation is disappearing from the river. The U.S. Fish and Wildlife Service. along with the public and other state and federal agencies, explore ways to restore river habitats.

Habitat Restoration

One method of restoring river habitats is through the Environmental Management Program (EMP), a partnership between the U.S. Fish and Wildlife

Monitoring & Observation



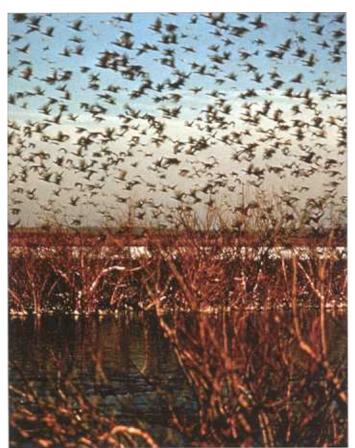
Volunteer Birder Watching Birds **USFWS Photo**

Service, the U.S. Army Corps of Engineers, state natural resource departments and others. Thousands of acres of fish and wildlife habitat have already been restored by constructing dikes to control water levels and by rebuilding and protecting islands from erosion.

Wildlife Management Tools

Many techniques are used by refuge staff to monitor wildlife. From aircraft, biologists check the nesting success of bald eagles, great blue herons and egrets and count waterfowl during migration. Wood ducks are captured and banded to learn about migration and population trends. Special studies look for answers to where tundra swans feed, when raptors migrate south or what habitats are used by turtles, snakes and secretive marsh birds. Volunteer "birders" document movement and habitat use of migrating and nesting songbirds of the floodplain forests and prairies. Fire is used in the prairies to set back woody vegetation. Efforts are made to control exotic plants and animals that destroy or displace native species.





"Upper Miss" lies within a globally important flyway with nearly 300 species of birds observed. USFWS Photo



Resting Tundra Swans USFWS Photo

Birding

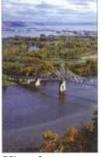
Spring and fall migration is spectacular on the refuge. Millions of songbirds, including warblers, vireos, thrushes and sparrows use the Mississippi River corridor as their migration route. Thousands of tundra swans rest and feed here from October until freeze-up, while hundreds of thousands of diving ducks including canvasbacks, redheads, lesser scaup, ringnecks, buffleheads and ruddy ducks use the open pool areas. Mallards, wigeon, gadwalls, teal and other dabbling ducks gather in the shallow backwaters. Due to the loss of wetlands throughout the Upper Midwest. the Upper Mississippi River represents some of the only migrational habitat left for many of these species.

The Underwater Story



For the angler, refuge waters teem with crappies, walleye, northern pike, sauger, bass, perch, sunfish and catfish. Unusual fish like the lake sturgeon, paddlefish and American eel, also reside here. In addition, the Upper Mississippi River is home to 44 species of fresh water mussels, including an endangered species, the Higgin's Eye.

Exploring "Upper Miss"



View from
Mt. Hosmer

USFWS Photo

Exploring
Tranquil
Backwaters.
USFWS Photo

The refuge provides many opportunities to hunt, fish, camp, watch wildlife or enjoy a lazy afternoon. There are observation decks, pull-offs, canoe trails and bike trails to help you observe the natural wonders of the Upper Miss. Although boating provides the most intimate look at this river refuge, many visitors enjoy viewing the refuge's wild and scenic beauty from blufftop overlooks in state and local parks bordering the refuge. River banks offer visitors a place to see a variety of wildlife - from muskrats and beavers, to turtles and frogs. Turkeys and white-tailed deer are abundant in the timbered areas.



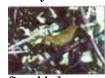
Environmental Education on Upper Miss



Bald Eagles



Waterfowl



Songbirds

Great Blue Heron



With advance notice, educational programs are available to organized groups throughout the year. The Ingersoll Wetlands Learning Center, located in the Savanna District in Illinois and the La Crosse District Office in Wisconsin, both house a visitor center, classroom facility and are connected to extensive bike trail systems. At the Mc Gregor District Office in Iowa, small groups can tour the facility and then explore the refuge on a loop hiking trail, located just a short drive from the office. The Winona District conducts its environmental education activities on the refuge or in the classroom.

Wildlife Calendar **Spring**

Hundreds of bald eagles can be seen during migration. A once rare sight to see, the bald eagles have rebounded. In1972 there was only one nesting pair of bald eagles on the refuge, now nearly a hundred pairs nest each year.

During the peak of migration thousands of canvasbacks, common mergansers, goldeneyes, mallards, shovelers, blue-wing teal, and coots gather on the refuge.

The peak of songbird migration is in mid-May when more than 150 species can be seen.

Summer

Great blue herons nest in rookeries in the flooded timbered areas on the refuge. Some of these contain over 1,000 nests and include great egrets and double-crested cormorants.

Photos from top: Bald Eagle, By Golly Creek Photography Canvasback, Yellow Warbler, USFWS Photos, Great Blue Heron, By Golly Creek Photography



Environmental Education Program, By Golly Creek Photography

American White Pelicans

It's a spectacular sight to see the American white pelicans feeding in formation or soaring over the refuge.

The Virginia rail is the most common

rocks clicking together. Sora rails are

marsh bird. Its call sounds like two

Marsh Birds



Frogs and Toads

the laugher of the marsh. It's not likely that you will see them but you may hear them in the early morning or late night in the marsh. Ten species of frogs and toads sing from April to August. Listen for them

Fall

The fall colors are the backdrop for thousands of waterfowl migrating back to their wintering grounds. During peak fall migration thousands of scaups, mallards, and canvasbacks gather on the refuge. Migrating tundra swans grace the refuge through freeze-up.

in the evenings at the marsh.



Wintering bald eagles congregate in the open water by the locks and dams.

Photos from top Green Frog, Fall Migration. USFWS Photos

