

ILLINOIS RIVER: NON-NATIVE SPECIES THREATS

In addition to the man-induced or naturally occurring changes and/or stresses to the Illinois River basin, there is a growing threat to fish, wildlife and other living resources from the introduction of nonnative animal or plant species into the basin by well-meaning, but unformed, persons or by unintentional releases.

Zebra mussels are one of the prolific invaders from Europe that have proven to be remarkably at home in U.S. and Canadian waters since their arrival in the Great Lakes. Their practice of attaching to hard substrates threatens native mussels. Zebra's were first collected in the Illinois Waterway in 1989 and exploded in the next decade. Since then however, zebra mussels have significantly declined and sightings have been reduced to near zero in most locations on the Illinois & Mississippi Rivers.

The most immediate biological impact will be to native mussels and clams (including the fingernail clams) as many of the first zebra's collected were attached to native mussels. The weight of so many hitch hikers prevents the native mussels from opening their valves and siphoning, which ultimately results in starvation and suffocation.

According to the National Park Service and the U.S. Fish and Wildlife Service, "zebra mussels have caused nearly complete extirpation of native mussels where they have invaded the Lake Erie Basin." Resource managers believe that the same risk exists in the Upper Mississippi River Basin.

Exotic weeds are also a rapidly growing threat to the natural ecology of the Illinois River basin. The most serious wildland weeds are replacing diverse native vegetation of wetlands and forests with a near monoculture of aggressive alien plants.

Purple loosestrife is the principal problem in open sunny wetlands like fens and marshes, while tall hedge leads the problem list in bogs and other wooded wetlands. The most serious and rapidly spreading problem weed now is garlic mustard which is invading all types of forests and replacing our beautiful and diverse woodland wildflowers.

Garlic mustard is especially bad along the Des Plaines, Illinois, Mackinaw and Sangamon Rivers. It is found throughout the basin but is just now invading the Kankakee-Iroquois system. The full effect of loss of vegetation diversity on our wildlife is as yet unknown. However, the loss to insects, many of which depend on specific native host plants for survival, is surely great.

While nature preserve and park managers may be able to save small remnants of native terrestrial vegetation by intensive management the outlook for most wildlands in the basin is bleak. Unless we begin to manage private lands for nature conservation, the basin may one day soon be a giant weed patch with only a scattering of parks and preserves to remind us of the natural beauty and diversity that once abounded here.

Exotic weeds are severe problems because they have been introduced into America without the diseases and insect pests that control their numbers in the land of their origin. Exotic aquatic weeds are not as severe a problem in the rivers and streams and natural lakes of the basin because most of their waters are so turbid that few aquatic plants can grow there. The glacial lakes of the upper Fox River and the relatively clear waters of the Kankakee River are exceptions. The biggest problem in the glacial lakes is spike water milfoil while curly pondweed and others can be a problem there as well as in some of the quieter waters of the Kankakee and other streams.