

# HYDRILLA IN INDIANA: FREQUENTLY ASKED QUESTIONS

## ***HAS HYDRILLA BEEN FOUND IN INDIANA?***

Hydrilla was discovered in Lake Manitou during a routine aquatic plant survey conducted by the Division of Fish and Wildlife in August 2006. Lake Manitou is a 735 acre natural lake in Rochester, Indiana (Fulton County). At the time of discovery, hydrilla had never been confirmed in a body of water in the Midwest. When found, the plant was scattered throughout a large portion of the northern basin of Lake Manitou indicating it had probably been present for a few years.

## ***HAS HYDRILLA BEEN FOUND IN WATERS BESIDES LAKE MANITOU SINCE THEN?***

Since the discovery of hydrilla at Manitou, the Division of Fish and Wildlife has made a special effort to survey a large number of lakes within a 60 mile radius around Manitou in an effort to determine if the plant is present elsewhere. To date, hydrilla has not been detected at any other bodies of water. Annual surveys will continue in an effort to detect this troublesome species at an early stage of invasion.

## ***HOW DID HYDRILLA GET INTO LAKE MANITOU?***

While it will probably never be known for certain, there are two likely explanations. Hydrilla may have made it to Lake Manitou through the transfer of plant fragments on aquatic equipment from another infested water. The lake contains monoecious hydrilla which is the form usually found in northern states. In this region of the country, monoecious hydrilla is reported from North Carolina and up the east coast to Maine. Dioecious hydrilla is very prevalent in the southern states. Both forms of hydrilla are exotic to the United States; the species is native to Asia, Africa, and Australia. Therefore, the form of hydrilla found in Lake Manitou may have come from watercraft that visited an infested east coast waterway and transferred plant fragments to Lake Manitou.

Another possible explanation is that this species was accidentally introduced as a contaminant in intentionally planted aquatic plants. Wild collected or cultured aquatic plants from areas where monoecious hydrilla occurs could have accidentally contained hydrilla tubers in the sediment or hydrilla fragments hitchhiking with potted plants. This method of introduction was implicated in a hydrilla population in a small private farm pond in Northern Wisconsin approximately a year after the discovery in Manitou.

## ***WHAT MAKES HYDRILLA SUCH A THREAT TO INDIANA WATERS?***

There are many characteristics of hydrilla that make it such a dangerous invasive species. Hydrilla can grow in far lower light conditions than other submersed aquatic plants. This low



*Hydrilla found at Lake Manitou*

light tolerance allows hydrilla to colonize deeper water that has traditionally been weed-free. Under optimal growing conditions, hydrilla can grow an inch a day which allows it to quickly grow to the surface. Hydrilla can reproduce by four different methods: seeds, fragmentation, turions, and tubers. Seeds are a very minor form of the plants reproduction. Fragmentation is a method of long distance dispersal. Just a half inch sprig of hydrilla transferred to another body of water can form a new population. Turions are dormant buds that form on the stems of the plant and then drop to the sediment. Tubers form on the roots. Turions are fairly short lived, but tubers can remain dormant in the sediment for a few years before germinating. If left unchecked hydrilla can displace native aquatic plants, change the ecosystem, reduce recreational opportunities, impact water quality, and cause property values to drop. For all of these reasons, hydrilla has been declared a federal noxious aquatic plant.

***WHAT STEPS HAVE BEEN TAKEN TO PREVENT THE SPREAD OF HYDRILLA FROM LAKE MANITOU TO OTHER LAKES VIA WATERCRAFT?***

Due to the ease of spread by plant fragments, coupled with the ecological, recreational, and economic damage this plant can cause, there was a clear need to act quickly to stop the potential spread of this plant. Shortly after the discovery of hydrilla in Manitou access restrictions were imposed to limit the movement of watercraft on and off of the lake. For nearly two years all public and private launch ramps were cabled and locked to prevent unsupervised launch and recovery of watercraft. As a result of effective hydrilla controls being performed, access restrictions were eased in late June of 2008. Periodic access restrictions will continue in late spring and early summer when there is a reasonable risk that hydrilla can be moved from the lake on watercraft or trailers. Restrictions will relax when the threat of movement is minimal. As long as hydrilla tubers are known to exist in the sediments, periodic closures can be expected. Local media sources will be used to announce access restrictions and relaxations. DNR regrets restricting any water recreational activities but in this situation it is warranted.

***WHO WILL ENFORCE USER RESTRICTIONS IMPOSED ON LAKE MANITOU?***

Conservation Officers with the DNR will be the main enforcement authority. For the Lake Manitou hydrilla containment plan to be successful each individual must watch for illegal watercraft launching during closed periods. If a violation is observed, citizens should immediately contact a Conservation Officer through the North Region Law Enforcement headquarters at 765-473-8092 or through the Fulton County Sheriff's Office.

***WHAT IS BEING DONE TO ELIMINATE HYDRILLA FROM LAKE MANITOU?***

A small treatment was performed within just a few weeks of discovery to reduce hydrilla biomass in the most heavily infested areas. An aggressive eradication plan using aquatic herbicides was initiated at the beginning of the 2007 growing season. As a result of intensive controls, by the end of the 2008 season



*Lake Manitou hydrilla tubers, some of which have sprouted.*

hydrilla tuber abundance has been reduced by 93% compared to pre-treatment levels. Controls and intensive surveys will continue until hydrilla is eliminated. To read in-depth information on the Lake Manitou hydrilla eradication project, please go to <http://www.in.gov/dnr/fishwild/3303.htm> and scroll down to the Lake Manitou reports.

***WHAT PREVENTS HYDRILLA FROM BEING INTRODUCED INTENTIONALLY INTO AQUARIUMS, WATER GARDENS, LAKES, OR PONDS?***

Hydrilla is a federal noxious plant (<http://plants.usda.gov/java/noxious?rptType=Federal>). As a result of this designation, the plant may not be shipped to the United States or be present in interstate movement without proper federal permits. Indiana recently adopted a rule preventing the sale, possession, and movement of hydrilla in the state. Full administrative rule language can be viewed at <http://www.in.gov/legislative/iac/20070606-IR-312070186PRA.xml.html>

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