

A little care to clean, drain and dry recreational equipment can help prevent the introduction and spread of aquatic invasive species and eliminate the route for hitchhikers trying to make their way into Lakeville Lake and other area lakes

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Michigan is blessed with more than 11,000 inland lakes. The highest concentration of lakes in the Lower Peninsula is located right here in Oakland County. Addison Township's Lakeville Lake is roughly 460 acres of beautiful water wonderland known for its many recreational opportunities including better-than-average fishing for Largemouth Bass, Bullhead, Carp, Black Crappie, Northern Pike, and Pumpkinseed Sunfish.

There are so many lakes in Oakland County that it's easy to take them for granted and overlook the many benefits they offer. Lakes provide habitat for a diverse array of fish and wildlife species as well as countless opportunities for recreation, aesthetics, and economic value. Not surprisingly, these are many of the reasons why so many people choose to live on lakes. In fact, the estimated value of roughly 29,000 waterfront parcels in Oakland County in 2004 was a staggering \$10.6 billion. Countless others who don't live on a lake are also drawn to these precious assets. They reap many of the benefits lakes provide by visiting lakes with public access sites, including Lakeville Lake.

It is not surprising that area lakes are a critical component to local recreation and tourism. Currently, tourism remains a vital sector of Michigan's Economy. In 2011, tourism was a \$17.7 billion industry in Michigan, generating nearly \$1 billion in state tax revenue and supported 200,000 jobs. The importance of Michigan's tourism industry has seen impressive growth in recent years, and is projected to grow in the coming years.

Recently, Michigan State University's Dr. Sarah Nichols and the Resources and the Environment Implementation Committee conducted a study targeting tourism industry professionals to help inform the development of the 2012-2017 Michigan Tourism Strategic Plan. The study revealed the greatest threat to Michigan's tourism industry was the spread of aquatic and terrestrial invasive species. Importantly, Michigan has a great variety of native species, or those that have naturally evolved in Michigan and which have existed in the state prior to European settlement. On a local level, both terrestrial and aquatic invasive species (AIS) pose serious threats to the health and vitality of area lakes including Lakeville Lake.

What exactly is an invasive species? Michigan's AIS State Management Plan defines an invasive species as a species that is not native and whose introduction causes, or is likely to cause, economic or environmental harm or harm to human health. This includes organisms like zebra mussels, aggressive weeds, and fish diseases. Invasives tend to out-reproduce native species, and threaten natural areas. Once established in an area, invasive species can out-compete native species for limited resources such as food and habitat, alter and damage existing habitat, disturb the balance of aquatic food webs, impact water quality, and displace and in some cases prey directly upon native species. All told, invasives have cost the State millions in prevention and control each year, and have also been identified as serious threats to global and local biodiversity.

Undoubtedly you have likely heard about at least one AIS that has been wreaking havoc on the Great lakes and has subsequently found its way into hundreds of inland lakes in Michigan. The Zebra mussel (***Dreissena polymorpha***) might potentially be the poster child for AIS in Michigan. This species continues to cause tremendous ecological, economic, social and/or public health impacts. Unfortunately, Zebra mussels have drastically impacted lake ecosystems such as Lakeville Lake. Zebra mussels have also affected the ability to swim, boat and fish on local lakes, and enjoy lake aesthetics. These impacts have also been linked to decreasing property values and tourism.

Another common invasive, Eurasian watermilfoil (***Myriophyllum spicatum***), was likely unknowingly transported by watercraft visiting Lakeville Lake from another lake. Another AIS found in Lakeville Lake, for which it is currently undergoing treatment, is Starry Stonewort (***Nitellopsis obtusa***). Another troubling AIS

which has not yet been detected in Michigan is hydrilla (*Hydrilla verticillata*). If Hydrilla makes its way to Michigan, it could overwhelm waterways only after a few growing seasons, as it has in other states.

Early detection and rapid response is the key to minimizing the impacts of AIS. Also key is preventing their spread from one lake to another. Area lakes are at risk every time you or someone else moves a watercraft or recreational equipment from one lake to another. Boating happens to be the most popular recreational activity in the state, with roughly 900,000 registered boats in Michigan. This doesn't include out-of-state boats. Remember also that there are over 11,000 inland lakes in Michigan. If you include other recreational equipment such as jet skis, canoes and kayaks, the potential for AIS issues increases even further.

Stopping the spread or introduction of AIS seems like a daunting task. What can residents do to help prevent the spread of AIS? It's easy to remember— clean, drain, and dry all watercrafts and water equipment such as canoes, kayaks, fishing gear, etc. The Michigan Department of Natural Resources has committed to posting educational signage at all public access sites along inland lakes to help educate the public about these important steps. When you are at the lake, perhaps getting ready to launch your boat, share your knowledge with others about these important steps:

- **Inspect.** Remove all visible mud, plants, fish, or animals from all watercrafts (boats, jet skis, kayaks, canoes, etc.) and fishing equipment before transport to any waterway.
- **Wash.** Thoroughly wash boats, trailers and other water equipment with hot water (approximately 140-160 degrees F). No soap or chemicals are recommended. This can be accomplished by mobile or portable boat wash stations which are outfitted with pressure washers. These stations can also recover the water used in the rinsing process and reuse it for use in additional washings. The Michigan Mobile Boat Wash Project has a mobile boat wash station and is scheduling visits to public access sites across the state this summer to help raise awareness about aquatic hitchhikers. The Lakeville Lake Property Owners are partnering with the Michigan Mobile Boat Wash project to bring this trailer-mounted unit to Lakeville Lake's public access site located in Lakeville on Friday, August 15, 2014 from 12:00 to 5:00 pm.
- **Dry.** Be sure to allow ample time for anything that comes into contact with water to dry. Leave items out for several days before going to new waters.
- **Drain.** Be sure to empty water from equipment (boats, trailers, equipment, clothing, pets, etc.) before transporting. Take care to drain water away from the landing.
- **Dispose.** Be sure to discard unwanted fishing bait in the trash. Do not release plants, fish, or animal (species from indoor aquaria and outdoor water gardens) into a waterbody unless they came from that waterbody. It is illegal to empty live wells and bait buckets into water bodies. It is also illegal to transfer fish to water bodies other than where they were caught.
- **Identify.** Learn to recognize the appearance and characteristics of aquatic invasive species.

Remember, it is illegal to:

- Transport aquatic plants, zebra mussels, or other prohibited species on public roads.
- Launch a boat in Michigan that has aquatic plant material attached to the boat or its trailer. To learn more about what you can do to prevent the spread of AIS into and out of Lakeville Lake, consider stopping by to visit the mobile boat washing station on August 15 from 12 pm- 5 pm. Volunteers with the Lakeville Lake Property Owners will be assisting the Mobile Boat Wash project staff to provide the public with boater education informational material and giveaways.

For area lakes interested in scheduling a visit from the Mobile Boat Wash should contact Michigan State University's Dr. Jo Latimore (latimor1@msu.edu) or Michigan Department of Environmental Quality's Kevin Walters (waltersk3@michigan.gov).

To learn more about Michigan's Clean Boats Clean Waters Program, which trains volunteers to educate others on the steps to take to keep water equipment clean in order to prevent the introduction and spread of AIS, contact Beth Clawson (clawsonb@anr.msu.edu or 269-657-8213).

For the latest news on invasive species, visit:

[Michigan State University Extension web site:](#)

[Michigan Aquatic Invasive Species Management website:](#).

The [Michigan Boater's Guide to Selected Invasive Aquatic Plants](#) is a waterproof identification guide available from the [MSUE Bookstore](#) to help identify aquatic plants.