



Dedicated to the Preservation and Protection  
of Michigan's Inland Lakes and Streams

## Michigan Lake and Stream Associations Newsletter for June 2015

### Popularity of Wake Enhancing Boats Causing Increased Damage to Waterfront Property and Natural Areas on Michigan Waters

by Scott Brown  
ML&SA Executive Director

Michigan Lake and Stream Associations has received an increasing number of phone calls and e-mails in the past two summers from lakefront property owners expressing concern about the collateral damage rendered to docks, boats and natural shorelines by wake enhancing boats operating on Michigan's inland lakes. Wake boarding and surfing has increased in popularity in recent years and with it has come a boom in sales of wake enhancing boats designed to create large, high energy waves. Nationwide, sales of boats used for wake surfing and similar watersports increased by 14.6% last year. Increased sales of wake enhancing boats in the past couple of years has helped revive the ski-boat industry following the Great Recession, according to Jay Povlin, Vice-President of Sales and Marketing for Vonore, Tennessee-based MasterCraft.



Modern wake enhancing boats are designed with variable ballast systems which allows users to pump water into and out of ballast tanks from the surrounding water. Increasing the volume of ballast water drastically increases the boat's displacement which consequently enlarges the wake produced. The potential for damage to docks and moored boats as well as the probability of shoreline erosion increases with the wake boat displacement, hull size, overall weight, and speed. In addition, the operation of wake enhancing boats may also create choppy and/or unpredictable conditions that are hazardous to small water craft such a kayaks and light weight fishing boats.

Ballast laden wake enhancing boats are capable of producing wave heights, frequencies and durations that dramatically exceed those produced on inland lakes during even the most intense summer thunderstorms and/or high winds.

The increasing negative impact resulting from the operation of wake enhancing boats on inland lake fish and wildlife habitat, water quality and on personal shoreline property strongly suggests that the operation of these boats on Michigan inland waters may require increased state regulation in the near future.

In the interim, Michigan Lake and Stream Associations recommends the following operating guidelines which are intended to help minimize lakefront property damage and the ecological impact of wake boats. Wake enhancing boat operators should be advised to:

- ◆ Reduce their operating speed within 300 feet of shore;
- ◆ Not add ballast water or other extra weight to their boats;
- ◆ Not operate their boats near sandy areas, wetlands or lakefront residences;
- ◆ Avoid turning their boats in tight circles (tight circles increase wave height and frequency);
- ◆ Avoid operating their wake boats in shallow water and/or near natural shorelines

## Protecting Michigan's inland lakes: Lake and Wetland Protection Tools for Local Government



Michigan has 11,000 inland lakes and over 1,850 units of government who share a role in keeping those lakes clean for future generations. Four workshops will be held in Michigan during the summer of 2015 to help local officials and concerned citizens understand the benefits of inland lakes to communities, the regulations that govern them, and the opportunities for enhancing protection at the local level.

Workshop dates and locations:

- ◆ **July 21: Franklin Twp. Hall, 3922 Monroe Rd. (M-50), Tipton (Lenawee County)**
- ◆ **August 3: Kensington Metropark Farm Center, 2128 W. Buno Rd., Milford (Oakland County)**
- ◆ **August 6: North Central Michigan College Library Conference Center, 1515 Howard St., Petoskey (Emmet County)**
- ◆ **August 10: Van Buren Conference Center, 490 S. Paw Paw St., Lawrence (Van Buren County)**

Each workshop will be held from 9 a.m. until 4 p.m. and lunch will be provided. The fee is \$20 per person and registration is required 10 days prior to each workshop. Topics will include: the importance of inland lakes and wetlands, what you can do at the local level, natural features setbacks, existing legal framework, and how to get started in your community.

The workshops are funded in part with an EPA Wetlands Program Development Grant and are hosted by the Van Buren Conservation District with support from the Department of Environmental Quality, Michigan Lake and Stream Associations, Tip of the Mitt Watershed Council, Southwest Michigan Planning Commission, and MSU Extension.

For more information or to register, visit [www.VanBurenCD.org](http://www.VanBurenCD.org) or contact Erin Fuller at 269-657-4030 x112 or [erin.fuller@mi.nacdnet.net](mailto:erin.fuller@mi.nacdnet.net).

To download a workshop brochure and registration form, [click here](#)

## Studying and Supporting the Region's Sport Fishing Industry

“Muskie and northern pike are the largest predatory fishes in this region, making them high-profile fisheries,” - Joe Nohner, MSU Ph.D. candidate



As one of the most highly prized game fish in the Upper Midwest, muskellunge (also known as muskies) and northern pike help support a \$20 billion sport fishing industry. Facing declines in natural reproduction, a team of scientists, including a Michigan State University inland fisheries researcher, has developed a list of research and management needs to help keep the fish — and the industry — thriving.

“Muskie and northern pike are the largest predatory fishes in this region, making them high-profile fisheries,” explained [Joe Nohner](#), doctoral student in fisheries at the MSU Center for Systems Integration and Sustainability. “By supporting strong pike and muskellunge populations, we can provide better fishing opportunities and a strong recreational fishing industry.”

Working with scientists from across the region, Nohner helped prioritize research and management needs for muskie and northern pike, including:

- ◆ identifying and conserving the fishes’ spawning habitats
- ◆ improving knowledge and management of the effects of fishing on trophy-sized fish
- ◆ understanding how stocking and fishing influence the genetic makeup of these fish populations

According to Nohner, most of the past research and management programs have focused on adult fish and protection from overfishing. While managers and anglers focus on adult fish populations, some fisheries have been undercut by declining natural reproduction. Fish populations have been kept up through stocking, so in many areas the fishery isn’t self-sustaining.

“We believe we need a more holistic approach to managing these fishes,” Nohner said. “We want to include genetics, habitat needs at all life stages, and include the effects of humans in the equation. It’s somewhat daunting, but new technologies will help us meet the challenge.”

Nohner has started tackling part of the challenge himself, creating a computer mapping technique to predict the location of muskie spawning habitats.

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## **...Region's Sport Fishing Industry**

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By studying 28 lakes in northern Wisconsin, he and his colleague found that muskies preferred spawning in bays with moderately sloping lake bottoms and that the fish also preferred not to spawn along shorelines with houses or other development.

Lakes with more development are less likely to be muskie spawning habitats," Nohner said. "Fisheries managers, county commissioners and lakeshore property owners may have to consider where development is located and how that will affect the fish.

"We found that muskie spawning site selection may be more complex than previously thought," he continued. "There is not just one particular characteristic that makes the fish gravitate to an area for spawning. There seem to be several factors that affect the location, which is why we need a modelling program to help identify those critical habitats."

The paper "[Muskellunge and Northern Pike Ecology and Management: Important Issues and Research Needs](#)" was published in the June 2015 issue of Fisheries. Besides Nohner, other authors are Derek Crane, John Farrell and Kevin Kapuscinski, of the State University of New York-Syracuse; Loren Miller, of the Minnesota Department of Natural Resources; James Diana, of the University of Michigan; and John Casselman, of Queen's University.

The paper "[Muskellunge spawning site selection in northern Wisconsin and a GIS-based predictive model](#)" was published in the February 2015 issue of the North American Journal of Fisheries Management. Nohner and Diana are the authors. The research was funded by the Wisconsin Department of Natural Resources, the Musky Clubs Alliance of Wisconsin, the University of Michigan and the Alvan Macauley Fellowship.

## *Hydrilla verticillata* - Status of “the perfect aquatic weed” in and around the Great Lakes basin

While none found in Michigan, federal, state and local agencies  
do battle in the greater Buffalo, New York area

Posted on **May 29, 2015** by [Mark Breederland](#), Michigan State University Extension, Michigan Sea Grant



In August, 2006, the [invasive plant Hydrilla verticillata](#) was confirmed in a lake less than an hour's drive from Michigan southern border, nearby, but outside of the Great Lakes drainage basin. [Michigan Sea Grant](#) and [MSU Extension](#) educators had begun in 2004 leading a statewide effort, in conjunction with the [Michigan Department of Environmental Quality](#), to encourage waterfront property owners, boaters, anglers and swimmers to search the state's inland lakes to make sure the weed had not infested bodies of water in Michigan. Sea Grant also asked recreational users to take precautions against potentially transporting hydrilla and other aquatic invasive species on their boat trailers and other gear. The good news is that no hydrilla was ever confirmed in Michigan and, after costly, drastic multi-year measures in treating Lake Manitou (near Rochester, Indiana, just 55 miles south of the Michigan border near U.S. 131), Indiana officials announced in 2009 that the problem was under control; they however, kept strictly enforced boating rules in place before and after boating on this lake.

Now, almost a decade later, the battle against this damaging weed continues inside the Great Lakes basin in the Tonawanda, New York area, near Buffalo. The weed was discovered by the [U.S. Fish and Wildlife Service](#) growing in the Erie Canal in 2012. The “Tonawanda Creek section” is a 15 mile stretch of the canal which empties into the Niagara River, one of the connecting channels of the Great Lakes system, and the hydrilla beds are listed as patchy and limited to the shallow shoreline areas outside the main navigational channel. On May 27, 2015, the US Army Corps of Engineers announced a [public meeting](#) to describe the hydrilla plant, present results of the 2014 treatment, provide a schedule and identify treatment areas for the 2015 field season.

Why is hydrilla the perfect aquatic weed? It is called perfect because it has many adaptive qualities and many methods of reproducing itself. The adaptive qualities allow it to outcompete and greatly diminish populations of native species. It can grow in low-light areas. It absorbs carbon from the water more efficiently than other plants. It is very tolerant to both standing and flowing water and can also grow up to an inch per day. Finally, its reproductive abilities make it particularly threatening. The tubers that grow from the roots can persist, in a viable state, in the lake bottom for several years. It can also reproduce through flowers, fragments and turions (cone-shaped growths) on its stalks.

The efforts in New York are hugely important, as this is a connected system into the Great Lakes and then potentially into Michigan. The Corps of Engineers has been working with the New York State Canal Corporation, New York State Department of Environmental Conservation, U.S. Fish and Wildlife Service, Ecology and Environment, Inc., and others to address and manage the excessive growth of this invasive plant.

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## *Hydrilla verticillata*....

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Environmental Conservation, U.S. Fish and Wildlife Service, Ecology and Environment, Inc., and others to address and manage the excessive growth of this invasive plant.

While the “Michigan Hydrilla Hunt” campaign officially ceased several years ago, these materials may well be updated and readied for future education and outreach in order to prevent this most serious economic and environmental weed from gaining a foothold within Michigan.

Background information and a specimen identification card are available through the [Michigan Sea Grant website](#).

It is illegal to possess hydrilla in Michigan (**except** to send it in for identification) or to take the plant across state lines. Michigan residents and visitors can help prevent the spread of hydrilla by properly cleaning watercraft or other water recreation gear. More information on invasive species prevention practices is available at [www.protectyourwaters.net](http://www.protectyourwaters.net).

Michigan Sea Grant is a collaborative program of Michigan State University and the University of Michigan, conducting Great Lakes research, education and outreach. It is one of over 30 Sea Grant programs in coastal states supported by the National Sea Grant College Program of the National Oceanic and Atmospheric Administration (NOAA). For additional information about Michigan Sea Grant, visit [www.miseagrant.umich.edu](http://www.miseagrant.umich.edu).

This article was published by [Michigan State University Extension](#). For more information, visit <http://www.msue.msu.edu>. To have a digest of information delivered straight to your email inbox, visit <http://bit.ly/MSUENews>. To contact an expert in your area, visit <http://expert.msue.msu.edu>, or call 888-MSUE4MI (888-678-3464).



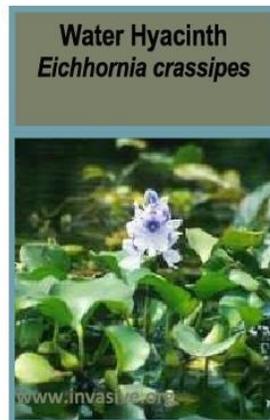
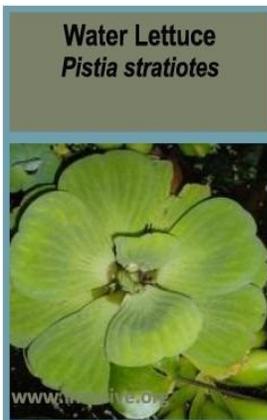
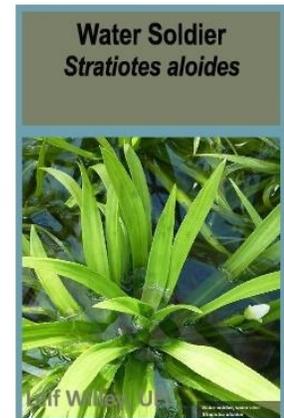
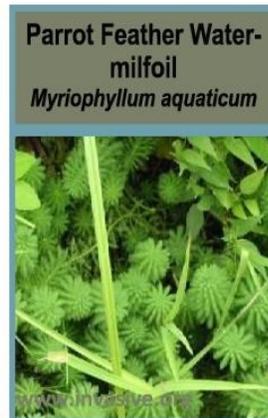
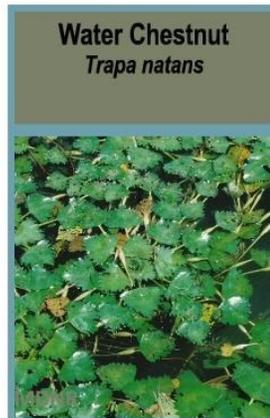


# MDNR's Least Wanted Aquatic Invasive Plants



Michigan Department of Natural Resources and Michigan Natural Features Inventory are collaborating on the implementation of an Early Detection Rapid Response Program, which seeks to locate and eradicate occurrences of the following species:

***Be on the lookout for these invasive species!***



**If you have seen any of these aquatic invaders, note their location and contact:**

Michigan DNR Wildlife Division Invasive Species Program  
Phone: (517) 641- 4903 ext. 260  
[www.mi.gov/invasivespecies](http://www.mi.gov/invasivespecies)

Questions about other aquatic invasive plants? Contact the DEQ Aquatic Nuisance Control Program at 517-284-5593, [www.mi.gov/anc](http://www.mi.gov/anc)

# 2015 Clean Boats, Clean Waters: Volunteer Leader Training

*Clean, Drain, Dry: Sharing the message*

MICHIGAN STATE UNIVERSITY | Extension

**CLEAN BOATS  
CLEAN WATERS**



## Stay informed and be involved

Clean Boats, Clean Waters program volunteers at your lake can make a big difference by helping to prevent the spread of unwanted aquatic invasive species. Volunteers share up-to-date information with visiting boaters about how to inspect and clean their watercraft and equipment, and how to manage invasive species if found.

A CBCW volunteer is caring, informed and passionate about maintaining the water quality of their lake. They want to share that passion with others through sharing their knowledge and by reporting what they find to program organizers to be entered in a state wide database tracking the location of aquatic invasive species.

### AQUATIC INVASIVE SPECIES (AIS) OF CONCERN IN MICHIGAN

Invasive aquatic species are non-native plants, animals and pathogens whose introduction causes, or is likely to cause harm to the environment, economy or to human health. AIS can reduce or eliminate native species and recreational opportunities. AIS also can negatively impact real estate prices and the over-all economy.

Species of concern include:

- Eurasian Water Milfoil
- Curly-leaf Pondweed
- Purple Loosestrife
- Rusty Crayfish
- Zebra Mussel
- Quagga Mussel
- Spiny Water flea
- Hydrilla

### 2015 Training Locations

February 12, 5:30pm

Van Buren Conference Ctr.  
490 So. Paw Paw Street  
Lawrence, MI 49064

May 23 9am

Cass County Extension  
120 N Broadway St Ste 209  
Cassopolis, MI 49031

March 12, 3pm

Oakland County Extension  
1200 N. Telegraph Road #26 E  
Pontiac, MI 48341

June 11 6pm

Northwest MI Hort Station  
6686 South Center Hwy.  
Traverse City, MI 49684

April 11, 10am

Dahlem Center  
7117 So. Jackson Rd  
Jackson MI 49201

July 9, time 10am

Chippewa Tribal Ctr.  
2186 Shunk Rd  
Sault St. Marie, MI 49783

### Clean Boats, Clean Waters (CBCW) Training

Name: \_\_\_\_\_

Lake/Organization: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Training Date & Location \_\_\_\_\_ →

**PLEASE PRINT ALL INFORMATION CLEARLY**

**Contact Beth Clawson at [clawsonb@anr.msu.edu](mailto:clawsonb@anr.msu.edu) or 269-657-8213**

*Michigan State University is an equal opportunity employer*

### Register and pay ON-LINE at

<http://events.anr.msu.edu/cbcw>

OR complete and return this form with \$50 payment in the form of check or money order, made payable to

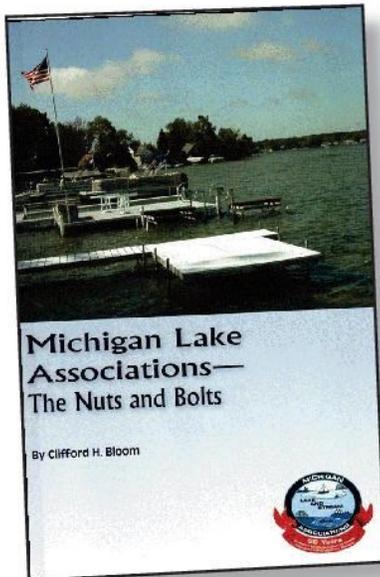
**Michigan State University**

mail to

**2015 CBCW Training  
MSU Extension  
219 Paw Paw St. Ste 201  
Paw Paw, MI 49079**

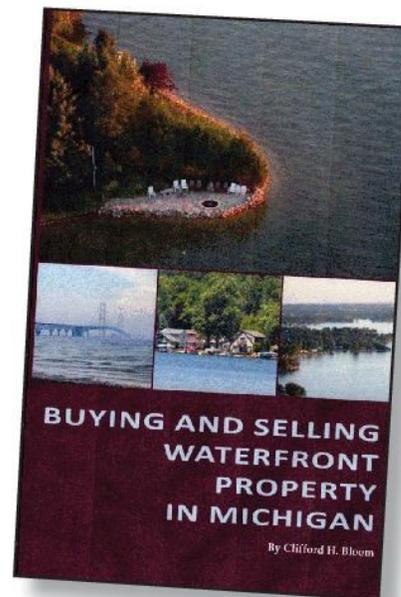
- \_\_\_\_ Lawrence Conf. Ctr.-Feb 12
- \_\_\_\_ Oakland County-Mar 12
- \_\_\_\_ Dahlem Center-Apr 11
- \_\_\_\_ Cass County Ext.-May 23
- \_\_\_\_ NW MI Hort. Station-Jun 11
- \_\_\_\_ Chippewa Tribal Ctr.-Jul 9

**TWO BOOKS WRITTEN BY CLIFFORD H. BLOOM AND PUBLISHED BY  
ML&SA TO BENEFIT LAKEFRONT PROPERTY OWNERS IN MICHIGAN!**



Are you and your lakefront neighbors pondering the creation of a lake association? Would you like to improve an existing lake association? Are you wondering about the legal ramifications of forming a lake association in Michigan? If so, this book will provide you with every detail and answer every question you may have regarding lake associations!

**Nuts and Bolts**  
**Price \$15.50 plus S/H**  
**(Quantity discounts available)**



Considering the sale of an existing lakefront property? Are you looking to buy lakefront property in Michigan? Do you understand the legal ramifications and common pitfalls that you may confront? The purchase of this book could save you tens of thousands of dollars and/or the grief and headache of regretting your lakefront property transaction decisions.

**Buying and Selling Waterfront Property**  
**\$20 plus S/H**  
**(Quantity discounts available)**

**To purchase these books, contact ML&SA Central Office Manager  
 Sharon Wagner at [swagner@mlswa.org](mailto:swagner@mlswa.org) or visit our website at [www.mymlsa.org](http://www.mymlsa.org)**

Waterfront Book       Nuts and Bolts

Name (please print): \_\_\_\_\_

Address: \_\_\_\_\_

Street or P.O. Box Number \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip Code \_\_\_\_\_

Email address: \_\_\_\_\_

Telephone number: \_\_\_\_\_

Please select:

**Waterfront Book**  
 \_\_\_ 1 book @ \$20.00 ea.  
 plus \$6.00 S/H = \$26.00

**Nuts and Bolts Book**  
 \_\_\_ 1 book @ \$15.50  
 plus \$5.00 S/H= \$20.50



# MICHIGAN WATERFRONT ALLIANCE

P.O. Box 369  
Fenton, Michigan 48430-0369



## **WE LOBBY TO PROTECT MICHIGAN'S LAKE AND STREAMS. THAT'S WHAT WE DO.**

We are asking you to join or renew your membership to Michigan Waterfront Alliance (MWA). By doing so, you can help in a statewide effort to protect Michigan's lakes and streams. MWA lobbies state government on a wide variety of issues that affect our water resources, such as road-end access, funding for the state's permitting system, marina regulations, septic upgrade regulations, phosphorus fertilizers, and much more.

You know how it works. When the legislature is pushed to weaken water resource protection measures, they will do just that—unless we speak out to protect our lakes and streams. It is difficult for one person or one lake association to carry the burden of protecting 11,000 lakes. And though we'd like to think that right will always prevail, one lone voice is not enough to get the attention of the leaders in state government. That is why we must join together to make our collective voice heard in Lansing. These efforts were utilized in getting legislation passed, this year, to restrict use of phosphorus fertilizer on turf.

To get our message out, we retain professional lobbyists who are skilled and experienced in issue advocacy. While this expertise is very effective, it is also costly. As such, we ask you to join or renew your individual membership for \$50, Lake Association membership for \$100 or your Corporation membership for \$200 per year.

Please note the line "MWA Legal Assistance Fund" on the enclosed return envelope and form. After costly filing on two (2) Amicus Briefs (Appellate court and Supreme Court) and direct mail fundraising campaigns (to Lake Charlevoix residents), MWA incurred a total cost of over \$3000 on just this one case regarding the loss of riparian rights by court action. The MWA Board of Directors voted, last December, to create a MWA Legal Assistance Fund to provide the funds to support significant legal cases relevant to the mission of MWA. Funds will be disbursed in a manner consistent with MWA bylaws.

We need to build this Legal Assistance Fund as soon as possible. **Please be as generous as you can.**

Your past understanding and support has been appreciated and necessary in order to continue a professional campaign for water resource protection.

*Please send back the application below plus give a copy to a like minded neighbor or friend.*

Sincerely,  
MWA Board of Directors

### **Michigan Waterfront Alliance Membership Application**

(January '15 ML)

Annual Dues: Individual Membership - **\$50.00** Lake Associations - **\$100.00** Corporations - **\$200.00**

**Please print:**

Name \_\_\_\_\_ Date \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

County \_\_\_\_\_ Phone \_\_\_\_\_

E-mail \_\_\_\_\_

Township \_\_\_\_\_ Lake / Stream Association \_\_\_\_\_

Make checks payable to: **Michigan Waterfront Alliance**

**Send dues and contributions to:**

**Michigan Waterfront Alliance**

**PO Box 369**

**Fenton, MI 48430**

**[www.mwai.org](http://www.mwai.org)**

Individual Member (\$50):	_____
Lake Association (\$100):	_____
Corporation (\$200):	_____
Legal Assistance Fund:	_____
Other donation:	_____

SPRING  
2015



# THE MICHIGAN RIPARIAN

Vol. 50 No. 2

[www.mi-riparian.org](http://www.mi-riparian.org)

RIPARIAN (ri-'pair-ee-en) adj. Relating to or living or located on the bank of a natural watercourse, such as a river, or of a lake or a tidewater.

DEVOTED TO THE MANAGEMENT AND WISE USE OF MICHIGAN'S LAKES AND STREAMS Published Quarterly

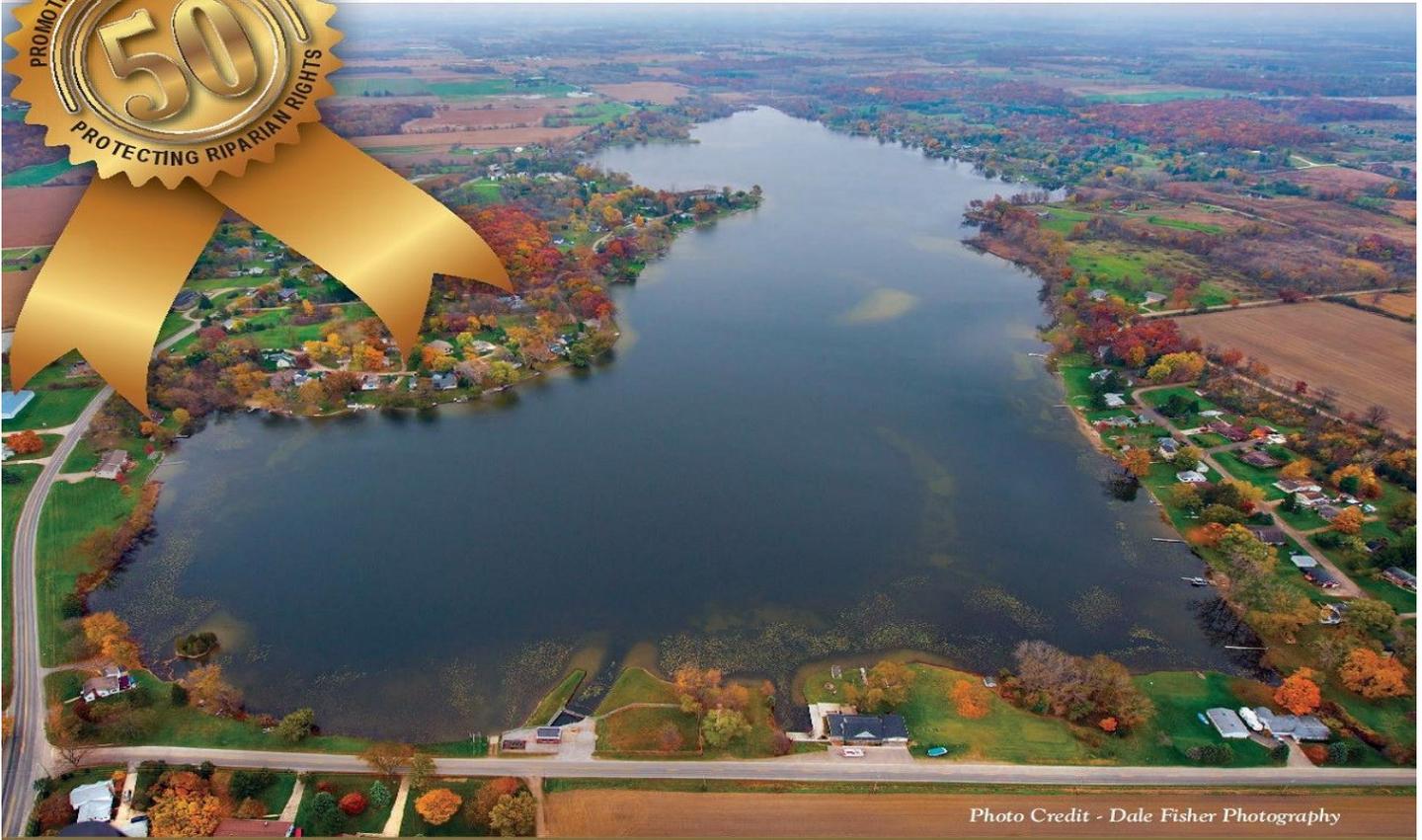


Photo Credit - Dale Fisher Photography

## Pleasant LAKE

Pleasant Lake is a 205 acre spring fed lake located in Washtenaw County. Pleasant Lake is approximately 1 ¼ miles long and has a maximum depth of 36 feet. It spans over 18,000 feet of shoreline and has a drainage basin of 692 acres and waters drain to the Huron River Watershed. It is an all sports lake with excellent fishing for bluegills, large and smallmouth bass, perch and crappie.

“For fifty years, **The Michigan Riparian Magazine** has served as our state’s only quarterly publication dedicated to the unique issues and interests of those fortunate enough to reside on waterfront properties. The magazine’s historical archive portrays a rich chronicle detailing the life and times of the people, politics, science and issues that have defined Michigan’s storied waterfronts for half a century.”

To subscribe to this unique and affordable publication dedicated to Michigan’s freshwater resources, visit

[www.mi-riparian.org](http://www.mi-riparian.org)



# Michigan Lake & Stream Associations



E - Newsletter

[www.mymlsa.org](http://www.mymlsa.org)

June 2015



Please lend your support to the  
**Michigan Loon Preservation Association...**

The [Michigan Loon Preservation Association](http://www.michiganloons.com) is a non-profit organization whose mission is to preserve the



Common Loon as a breeding bird in Michigan through public education, research, and the protection and management of loons and their habitat.

[www.michiganloons.com](http://www.michiganloons.com)



*Freshwater Future is a powerful resource investing in people and communities, ensuring the healthy future of our Great Lakes waters.*

[www.freshwaterfuture.org](http://www.freshwaterfuture.org)

## Michigan Inland Lakes Partnership

“Promoting collaboration to advance stewardship of Michigan's inland lakes.”



To learn more about the Partnership, visit  
[www.michiganlakes.msue.msu.edu](http://www.michiganlakes.msue.msu.edu)

## Michigan Natural Shoreline Partnership



“Promoting Natural Shoreline Landscaping to Protect Michigan’s Inland Lakes”

To learn more, [click here...](#)

## Michigan Chapter, North American Lake Management Society

“The **Michigan Chapter of the North American Lake Management Society (McNALMS)** is a group of professionals, practitioners, and interested citizens, who care about the preservation and wise management of Michigan lakes.” For more info visit -

[www.mcnalms.org](http://www.mcnalms.org)  
for more information

## Lake Charlevoix Association Lake Guardian Program

“The **Lake Charlevoix Association Lake Guardian Program**, is designed to educate homeowners and contractors on “lake-friendly” approaches to lawn care and landscaping within the Lake Charlevoix watershed, and to encourage their use.” To learn more about the Lake Charlevoix Lake Guardian program, point your internet browser toward

[www.lakecharlevoix.org/lake-guardian-program/](http://www.lakecharlevoix.org/lake-guardian-program/)