

THE MICHIGAN RIPARIAN

SPRING 2023 | VOLUME 59 | NUMBER 2



DUCK LAKE

CURRENT EVENTS AND
"CATCHING UP"

HERBICIDE TREATMENTS:
ARE THEY LINKED TO
FISH KILLS?

CRYSTAL LAKE MAKES
PROGRESS CONTROLLING
INVASIVE WATERMILFOIL

DUCK LAKE

FIGHTING FOR THE FUTURE OF A U.P. LAKE

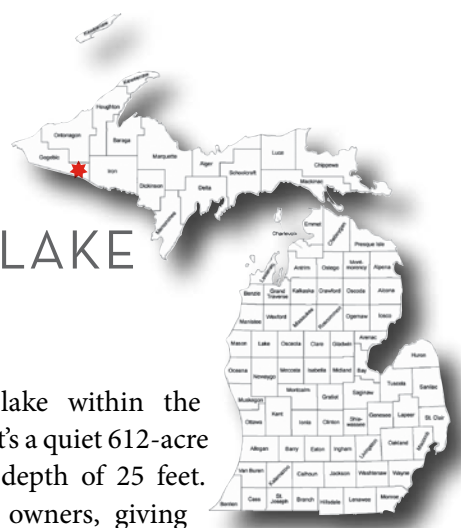
CORINNE DUERKOP | DUCK LAKE RIPARIANS' ASSOCIATION

Walk into any gift shop near Michigan lake towns and you're likely to find a cute sign touting the proverb "If you're lucky enough to live by water, you're lucky enough". Michigan contains more than 11,000 lakes and ponds, and a person in Michigan is never more than six miles from a natural water source. Those cute signs sell because people in Michigan identify with the message; we love our lakes! Every homeowner expects home and yard maintenance, but the good fortune of living on water brings an additional responsibility for the stewardship of the water on the property. In an ideal world, this obligation is shared by all homeowners on a lake.

In the last 75 years or so, fresh waters in the United States have been greatly impacted by Eurasian watermilfoil (EWM), the invasive plant that has matted and clogged so many lakes and ponds. The tiny town of Watersmeet in Michigan's Upper Peninsula has not been immune. Watersmeet has an official population of 1,336, a number that doubles in the summer when cabin-owners and visitors flock to the area. Watersmeet Township, with an amazing 302 lakes and 241 miles of trout streams, is situated within the 1.5 million acre Ottawa National Forest. The area is a huge draw for outdoor enthusiasts, as well as a popular retirement destination.

Duck Lake is one lake within the Watersmeet Township. It's a quiet 612-acre lake with a maximum depth of 25 feet. There are 95 property owners, giving everyone a little elbow room. The one public boat landing is owned by the Michigan Department of Natural Resources and there are no resorts or businesses on the lake. Duck Lake's battle with EWM began in 2005, when the invasive species was first identified there.

Nine concerned residents formed a milfoil committee to find a way forward. Longtime resident, Joe LoMastro, chaired that committee and continues to do so today. "It was difficult and time-consuming in the beginning," he said. "We were basically on our own. There were very few resources to advise us and none to fund us." Some committee members visited a lake with a EWM infestation so severe, the devastation was apparent to the naked eye. It was a sobering sight. A meeting was held for all property owners to inform and educate them about the EWM problem. Without intervention, it was explained, the way all residents use the lake for fishing and recreation would be severely impacted and property values would be negatively affected. All property owners were asked to donate a dollar



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per foot of frontage to help address and fund a solution to the problem. The first application of herbicide was done by a licensed applicator in late 2005. Duck Lake's fight against EWM had officially begun.

A larger coalition of township lakes was formed which eventually became the ISCCW (Invasive Species Control Coalition of Watersmeet). The original goal of this group was to help protect all lakes and waterways in the township, and it has become a tremendous asset for the area.

The next summer (2006), the milfoil committee divided Duck Lake into 16 sections, and each section was assigned a volunteer who agreed to monitor their area for EWM. These 16 residents became the "milfoil watchers". They agreed to spend a couple of hours once or twice a month to look for EWM and were trained to distinguish it from northern milfoil, which is native to Duck Lake. Each team was equipped with tools for the job. They soon learned that sunny, calm days were the best days to do their observations. They used their own fishing boats (and still do) to zigzag through the water, covering every foot of their section out to 12 feet. Where EWM was detected, watchers placed a buoy. They would then send a group email to all the milfoil watchers to report where they had looked, how long they had looked, and what they found. All data was recorded by one property owner.

In the beginning, the watchers' hardest task was distinguishing the beneficial northern milfoil from EWM, but after 18 years on the job most watchers no longer have trouble identifying EWM. "Once a milfoil watcher, always a milfoil watcher," says Kathy Floriano, who has been heavily involved in the project from the beginning. "When we're on the water, our eyes are always scanning for EWM. A pontoon ride is never just a ride; a happy hour cruise isn't just for fun. We're always on alert for EWM when we're on the lake."

At the end of 2006, volunteers discovered they could pull EWM plants by hand, and that was a major game-changer. The milfoil committee paid for a volunteer to be trained as a scuba diver and hand-pulling became the preferred method of removing the offensive plants. In the early years, a regular fishing boat carried the diver from one spot to another. The diving equipment (BCD vest, air tank, weight belt, mask, and flippers) made it extremely difficult for him to safely get in and out of the boat. Sometimes it was more prudent to drag him to shallow water so he could remove his gear, climb back in the boat, and motor to another EWM spot,



then put on all the diving gear again and repeat the process. This was awkward to say the least and very time consuming.

Kathy Floriano remembers thinking, "I didn't foresee spending my retirement like this. We were constantly involved with the fight against milfoil." Retirees—especially those living in a water wonderland—often figure they've paid their dues by volunteering in professional and community organizations when they were younger and working. The focus in retirement is generally towards relaxation without the responsibilities of former times. But enough people on

“ The key to Duck Lake's successful journey has always been teamwork. ”

the lake rose to the occasion and in 2009, the lake's formerly inactive association regrouped and formed a new lake association (Duck Lake Riparians) to fight the common enemy EWM.

A second major game-changer came in 2010, when a generous resident noted how difficult it was for the diver to



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work out of a fishing boat. “It was painful to watch!” he said. So he purchased, modified, and donated an old pontoon boat that was christened The Milfoiler. Another resident donated a heavy-duty dive ladder and others chipped in to purchase a motor. With more room to operate on a flat surface, and on a larger boat, more people became involved, and—as with any project where many hands make light work—people had fun and derived satisfaction from being part of the project. They also became more educated about EWM. When the Milfoiler

was unable to survive a second winter in storage, the benefactor said, “No problem!” and provided a replacement: a bigger and better pontoon boat he again modified for the diving crew. This generous “can-do” thinking became contagious as more people found ways to help.

In 2020, resident John Larsen volunteered to share the task of diving for EWM, and he saw a way to streamline the process. Over that winter, he devised a chairlift to move the diver up and down from the Mifoiler. Using old garage-door tracks and rollers, pulleys, and angle iron from a bed frame, he welded everything together. He worked with his fellow diver, Jim Floriano, and the two tweaked the invention several times with the end result being a chairlift that can be raised and lowered with a battery-operated winch and a remote control. This addition to the Milfoiler completely changed the diving process.

A typical diving expedition begins on a sunny day with little wind, usually in the morning. The ideal crew includes a driver for the Milfoiler, a diver, and two crew members to net the EWM and watch for fragments.

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The Milfoiler moves to a buoyed spot which is then marked with GPS. The crew tries to get a visual of the plant and surveys the surrounding area to look for any additional plants. They lower the diver and position the boat downwind to watch for any fragments. The diver pulls the EWM in that location. If he feels it's a clean pull, he removes the buoy. If there's any concern that some plants may have been missed, he leaves the buoy in place to be rechecked on a future dive. This keeps the number of buoys on the lake to a minimum, which is important. In the early years, it was discovered that jet skiers were using the buoys (and there were a lot on the lake in the beginning) as a slalom course, which could fragment the EWM and exacerbate the spread of the invasive species.

Each year at the end of the milfoil season (usually September), the milfoil committee meets to decide whether an herbicide treatment the following spring is warranted or not. While no one ever gets excited about putting herbicides in a lake, at times it's necessary and there are few alternatives for dealing with invasive species. Herbicides have come to be viewed as chemotherapy for the lake. The decision is based on data collected during the summer. If treatment is deemed to be necessary, spot treatments are done as needed

History of Herbicide Treatments in Duck Lake

Year	Acres Treated
2005	1.5
2006	4.5
2007	9.7
2008	4.9
2009	4.9
2010	9.5
2011	4.1
2012	4
2013	none
2014	9.5
2015	none
2016	none
2017	4.9
2018	none
2019	none
2020	none
2021	none
2022	none

by a licensed applicator and usually involve smaller areas, less than half an acre in size. With proficiency in locating EWM along with the refining of the diving process, Duck Lake has been able to turn the tables on herbicide treatments, only treating twice in the last ten years.

Also at the end of each summer, a letter is sent to all property owners to summarize the season, documenting the hours spent looking for EWM, the number of dives and hours involved, the current status of the battle with EWM, the financial situation, and whether an herbicide treatment is recommended for the next year.

“The key to Duck Lake’s successful journey has always been teamwork,” said John Larsen. “We couldn’t have accomplished any of this without our team of dedicated milfoil watchers. They are our first line of defense.” Duck Lake’s second line of defense is the diving team following up with the removal of EWM once it’s been located. They’re the ones who don the cumbersome gear and jump into sometimes very cold water when they’d rather be sitting on their dock with a drink in hand, watching the loons and ducks go by.

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Duck Lake's battle with EWM has been a story of cooperation, determination, initiative, education, and ingenuity sprinkled with generous donations of time, energy, and money. It's been 18 years of ups and downs, and trial and error. The property owners have worked together (not always an easy task) for a common cause, and have managed to protect this valuable resource they share and love and call home. Their cause continues. They can be proud—very proud—of what they've done for Duck Lake and for the generations to follow.

AN INVITATION FROM THE DUCK LAKE RIPARIANS ASSOCIATION

If you find your lake in a similar situation dealing with EWM, you're welcome to contact us. We've taken many small groups from other lakes on the Milfoiler to learn how to look for EWM and to observe our diving process. When the group has been large, we've put them on other pontoons to come along. No two lakes are exactly alike, but we're happy to share what we've learned in the past 18 years as we continue to battle Eurasian watermilfoil on the lake we love so much. Contact us at ducklakeriparians.org.

NOTES FROM THE ISCCW PRESIDENT DENISE FAUNTLEROY ISCCW THEN AND NOW

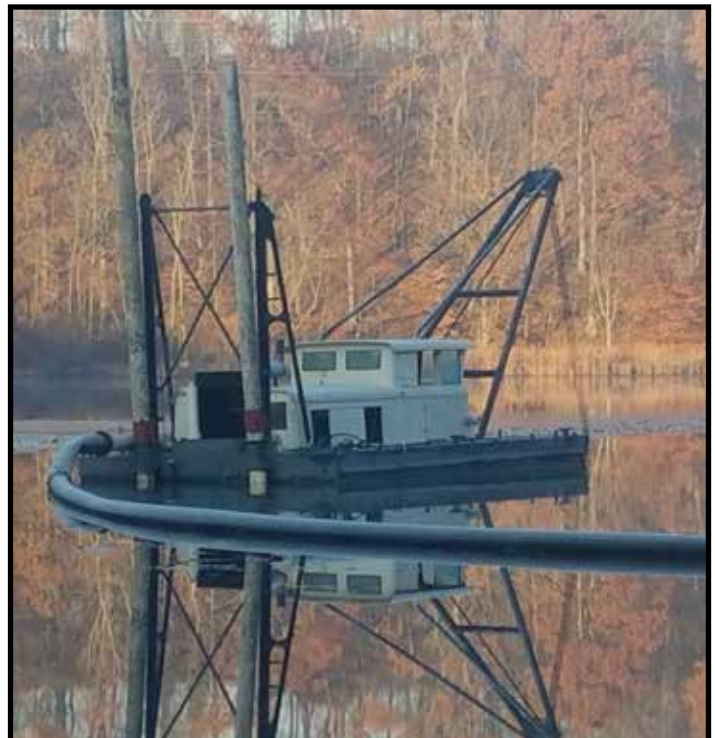
In 2005, Watersmeet Township received a grant from the National Fish & Wildlife Foundation, which was to be used for education, lake surveys, and control efforts related to aquatic nuisance species. A steering committee was formed to administer the funds. Employees were hired to monitor boat landings and distribute pamphlets to educate the public. In addition, several lake associations were granted much-needed matching funds to help defray the costs of herbicide treatments. In 2007, that committee was reorganized into an independent 501(c)(3) not-for-profit organization called the Invasive Species Control Coalition of Watersmeet (ISCCW), also called "Watersmeet lakeguards". The new organization enabled township residents to expand their efforts and utilize more resources.

Today the ISCCW operates five boat washing rigs from early May to mid-October, employs an education director, and receives funding from many sources including

Watersmeet Township, the United States Forest Service, the Lac Vieux Desert Band of Lake Superior Chippewa Indians, and generous private citizens and businesses who value the outreach and work done by the ISCCW. For more information, go to isccw.org.

ISCCW AND DUCK LAKE WORKING TOGETHER

The Duck Lake Riparian Association has set the gold standard for rapid response to EWM. They have made long-term commitments to educating membership, monitoring Duck Lake, marking new locations of EWM, and quickly reporting to their all-volunteer dive team for response in real time. This has allowed Duck Lake to keep removal of EWM as herbicide-free as possible throughout the last ten years. ISCCW has financially supported Duck Lake when the occasional herbicide treatment was necessary. They have consistently and tirelessly supported the objectives of ISCCW and have been willing to share their knowledge with other lake associations. We couldn't ask for a better group to partner with! *R*



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