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The Michigan Riparian

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FROM THE PUBLISHER



Summer STARTS WITH A BANG!

What a beautiful way to kick off the summer with amazing weather! Memorial Day weekend was so hot, it felt more like the end of July and not the end of May. I hope with the arrival of the early summer weather, summer will seem longer and will not quickly fly by.

Our front cover piece is on Clear Lake in St. Joseph County. You will thoroughly enjoy reading about their lake's rich history and will take away much from their successful management of the challenges of Canadian geese, invasive weeds and raising money for their association. They share the key to their success with you, and we are grateful to get an inside look.

This issue of *The Michigan Riparian* magazine includes some highlights and awards that took place this spring at MLSA's 57th Annual Conference at Crystal Mountain Resort. Did you know Michigan Lake and Stream Associations has a new name? You can read all about it on page 38. You will notice the new logo, look and name throughout this issue and all future issues of *The Riparian* magazine.

Read the latest on Zequanox on page 33. If you have ever wondered how the DNR makes decisions regarding boating access sites, see page 25. The Dead River in Marquette County has some great tales to tell. See page 19 for more.

The 3rd leg of the Michigan Inland Lakes Convention will be held in Grand Rapids this fall. The theme is "Working Together for Healthy Lakes". More information about this is on page 36.

Cliff Bloom tackles two popular topics: difficulty with bottomland ownership on page 42 and what to do if you live on a lake with a sand bar overpopulated with people and boats. Page 17 covers that all too common lake scene.

Enjoy your lake this summer and make sure you send us your photos, stories and ideas how you did just that.

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Clear Lake

By Mary Dechow, Clear Lake Improvement Association Secretary



If you live in Nebraska, you'll be lucky to ever get a chance to fish for bluegill on an inland lake. Or ski over the clear glass water. Living in Kansas? Good luck at finding a place where you can kayak out from home to watch the sun throw its magical colors across the water's surface. Watch the swans from your pontoon boat, while enjoying your morning coffee? That would probably never happen if you live in many states.

The residents at Clear Lake try not to take these things for granted. Here in the west central part of St. Joseph County, they try to take life a little bit slower and enjoy the peaceful moments on this lake. And a very

active lake association works hard to help maintain the quality of the lake, so generations to come can also enjoy this slice of paradise.

On the surface, Clear Lake is not unique. But if you look a little deeper, you'll discover a lake board that's dedicated to making sure this lake always lives up to its name. There's a level of commitment that pulls neighbors together to get things done. And a level of communication that helps everyone along the nearly four miles of shoreline understand the importance of managing the water, the weeds, the fish and the fun.

Clear Lake, like the 19 other lakes over 100 acres in St. Joseph County, was formed by the glaciers. The early settlers in the area were Native Americans, first the Miami Tribe and later the Potawatomi, who fished, hunted and farmed nearby.

Around 1860, the Pierce family built what was likely the first home on the lake, located on their 120 acres that boarded Clear Lake on the east and Corey Lake on the west. The third generation of Pierces often shared stories of Indians living in the area. Other long-time riparians still tell of finding arrowheads in their yards 100 years later.

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Clear Lake

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This 1925 picture is the Seibert family enjoying a picnic on the shores of Clear Lake. Rev. Dr. and Mrs. John Seibert began spending much of the summer here in 1920 when they constructed a rough cabin that included a kitchen, living room, two bedrooms and a porch. Their granddaughter and great grandson still own homes on Clear Lake.



It didn't cost money to have fun back in 1919. Here the Seibert clan, including Sarah Hooker's grandparents, join together to brush their teeth outside a Clear Lake cottage owned by family friends.

TRUE GROWTH BEGINS

It was shortly after the turn of the century that Clear Lake and the other lakes in the area saw their true growth. Certainly the location, just north of Chicago Highway (US 12), encouraged people to stop nearby. But the railroads were likely a bigger contributor to the growth. Trains would bring passengers from Chicago, making stops at Corey and Fabius Stations, all within a short buggy ride of the area lakes. While popular lodges and a large YMCA camp lured people to nearby 630-acre Corey Lake, it was camping and fishing boats that made Clear Lake, at 240 acres, a popular vacation spot.

In 1913, Chicago residents William Thomas and Mae Delihant purchased land that touched Clear Lake to the south and Long Lake to the north. They began building their lifelong dream of a country estate with riding stables for their children and friends. The Delihants lived in a small home built around 1900, but around 1920 they purchased a fabulous new home through the Sears, Roebuck & Co. catalogue. According to local lore, the new Delihant home was shipped by rail car to Corey Station, where the 30,000 pieces and parts were off-loaded from two box cars onto horse-drawn wagons for delivery to Delihant Hill. The four bedroom home took an estimated 350 hours to construct. Their riding academy became a go-to spot for Chicago residents and certainly aided in the growth of the area.

Sarah Hooker is Clear Lake's longest historian. Her grandparents first visited friends here in 1919. The trip from Chicago took an entire day, including streetcar and train transfers, plus a ride on a horse-drawn cart from the Fabius Station to Clear Lake. They fell in love with the location, bought property and built their own rough cabin the following year. Sarah's mom spent her summers on Clear Lake, and her parents brought little Sarah up when she was just three weeks old. Eventually she started spending her entire summers at Clear Lake; and, years later, she and her husband, Pastor Robert Hooker, would retire to their Clear Lake home.

"For years cottages had only kerosene lamps for light," Sarah wrote in a 2010 article for the Clear Lake newsletter. "There were no electric lines. Well water was pumped by hand. Each cottage had its own outdoor privy." Family fun was swimming (in a wool swimsuit), catching frogs and turtles, and fishing. The area where they lived became known as "Lutheran Hill" because it was settled by so many Lutheran ministers from the Chicago area. Today Sarah and her son, Ron, continue to own homes on Clear Lake, as do the families of many of Sarah's early playmates.

Another long-time lake resident was Mildred (Kuratko) Wallach. Her parents, in 1941, purchased Plantz Landing which included a house, four cottages, a small store and 18 fishing boats. The neighbor, Mrs. Ohlin, had 22 boats, and LaChance Landing on the north end of the lake also rented boats. The rate: 50 cents a day. Bass season opened on June 25th and the boats were reserved weeks ahead. A shotgun blast marked the opening, and within minutes the lake would

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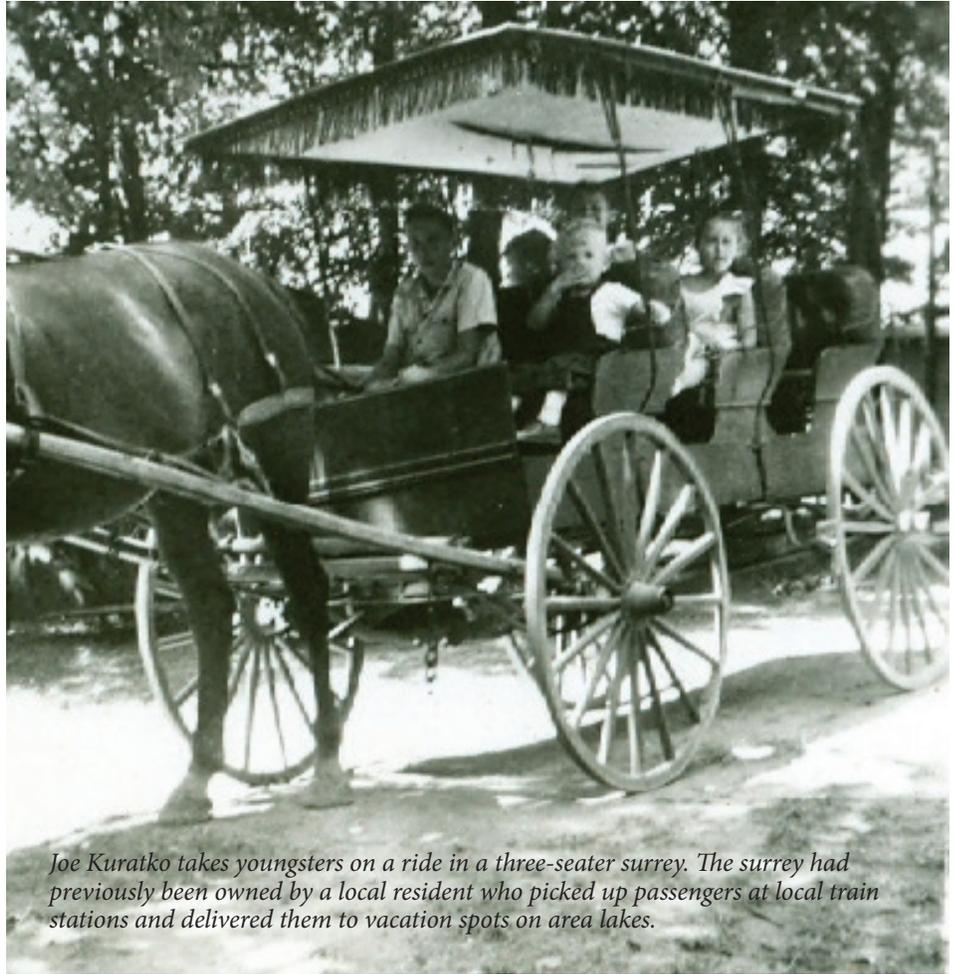
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be crowded with boats. Bass were so plentiful back then that the limit was easily met, and boats could be rented as many as three times that day.

Mildred's daughters would recount when they moved to their grandparents' Clear Lake home in the 60's, the only lights they'd see on winter nights were from the Pierce farm to the west and the Delihant home to the north.

That is certainly different today. Many of the same family names still appear on deeds: Wharton, Jordan, Fair-Dechow, Everts-Groves, Smidt-Keber-Veldman, Glodek, Trusina, Toggler, Wheat, Mast. The list of families with over 40 years on Clear Lake is endless. But many of the former cottages are gone, replaced by larger, year-round homes or updated with additions to accommodate more kids and grandchildren and indoor plumbing.

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Joe Kuratko takes youngsters on a ride in a three-seater surrey. The surrey had previously been owned by a local resident who picked up passengers at local train stations and delivered them to vacation spots on area lakes.



A winter day on Clear Lake might include a ride in the sleigh.



Bert & Fanny Platz lived on Clear Lake's southeast corner starting around 1890. They built this small grocery store and added gas pumps when it became evident that horses were being replaced by horseless carriages. Joe & Ann Kuratko purchased the house, rental cottages and gas station in 1941. It was difficult to obtain gasoline and supplies due to the rationing during the war years, so the store was closed.

Larry on his pontoon boat with his family during the 2016 Independence Day boat parade.



(Continued from page 7)



Larry Campbell has served as board president for 10 years. His wife, Jane, has also served on the board. His leadership is also reflected in the Three Rivers community.

Last year he received the Rotary Heroes "Goodwill Beacon" award for his leadership in a Rotary program begun in 1994 help the community of Libertad Belize.

“If we maintain our lakes, we're also maintaining our investments in property and resources for future generations.”

Clear Lake

CLEAR LAKE IMPROVEMENT ASSOCIATION

The Clear Lake Improvement Association (CLIA) was first formed in the early 1950s out of concern regarding water levels and a plan to pump water from nearby Long Lake to Clear Lake. That early board was disbanded by the late 1960s then restarted by the mid 70's to discuss the issue of stunted fish in the lake. The board didn't just stick with fishing but was soon involved in many aspects of the lake, including weed control and lake level management.

Some of the board members today are the next generation of those first organizers. A member of the Fair family (now represented by Mary Fair Dechow, board secretary) has served on the board since the 60's: first Mary's dad, Dwight Fair, then later her brother, Charley Fair, and for 20 years her husband, Dave. Board president Larry Campbell has been CLIA president since 2008. His involvement began when the lake board reassembled in the 70's, shortly after he moved to Clear Lake. He and his wife, Jane, have nearly 20 years of service on the board.

Many other board members have been Clear Lake property owners for decades, including treasurer, Bev Rockrohr and director Jim Barr, whose parents owned cottages on Clear Lake. The Clear Lake Improvement Association board also has new names as they work to attract a newer, younger crowd to carry the organization into the future.

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Larry & Jane, both former educators before retirement, have made numerous trips to Belize to help build new school facilities, including a trip last year. (At left) Larry is pictured on the right front, while Jane is to the left of the sign, during a 2017 trip to Belize. A library at the school was named after the Campbells, while a computer lab at the school was named after Lois and Steve Weed. Steve is a CLIA board member.



“We have been fortunate to have a very active board,” says Larry. “Our 11 officers and directors are busy from spring to winter coordinating programs that help to maintain the quality of our lake and activities that encourage neighborhood atmosphere.” Seven of the board members live full-time on Clear Lake.

CLIA works on many of the same issues today as those that brought the members together 60 plus years ago: water quality, lake level management, weed control and invasive species. The goal is to instill in everyone the importance of maintaining the water, the shore, the fishery and the lifestyle.

“Seventy-five percent of our riparians are members of the association,” says Larry. “Our dues are only \$25 a year, but it’s not unusual for us to get donations of \$100 or more to help support our activities. Last year we had over \$10,000 in donations, which enabled us to put on spectacular July 4th fireworks, host an annual picnic and a fishing contest with prizes, remove the geese from our lake, and set money aside for fish stocking. The generosity of our members reinforces for us, the board, and the notion that our lake residents like what we’re doing and want us to continue in the direction we’ve set. If we maintain our lake, we’re also maintaining our investments in property and resources for future generations”.

Communication is a key element in CLIA’s strategy. It starts when people first buy here. “We try to get our residents aware and interested in the association from the time they buy on our lake,” says Bev Rockrohr, long-time association treasurer. Within weeks of a sold sign going up, Bev sends out a welcome letter to the new owner’s home address. “The welcome letter lets us make sure they know about activities, plus we send a membership form, a copy of our newsletter, and usually a reminder regarding our no-wake rules.”

The latter is very important to the board and most residents. Clear Lake is no-wake from 7:30 pm till 11 am, established through a township ordinance in the 60’s after the CLIA board passed petitions asking for the restriction.

“The board back then was concerned about the increased number of boats,” says Larry. “They wanted to make sure there was a time for fishing, too.” Sometimes the no-wake

restriction is met with dismay by new residents, but soon most also agree there’s nothing better than watching the sunset without the sounds of jet skis passing by. “We have a growing group of kayakers on our lake, and one of the most popular things to do is to kayak out after 7:30 and enjoy a glass of wine while waiting for the sunset. Without the no-wake rule, that would be almost impossible.” Break no-wake on Clear Lake, and chances are pretty good that someone will call the St. Joseph County Marine Patrol, which keeps a boat in the township for at least 40 hours a week.

After the initial mailing, a board member will stop by to visit the new owners, dropping off a Clear Lake keychain and book that includes articles on the history of the lake and important information on everything from contacts for building and waterfront permits to the watershed and weed control.

MANAGEMENT OF INVASIVE WEEDS

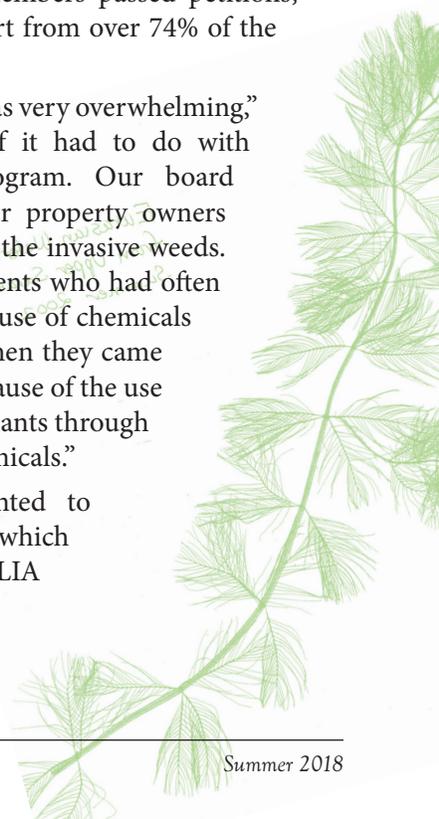
Like every lake, weeds are a constant challenge. Clear Lake has not been immune to the problems of invasive species. The first Eurasian Watermilfoil was discovered in Clear Lake in the 1990’s and the membership discussed the possibility of using Fluridone to eradicate the invasive weed. But the treatment was new, and reports from some lakes were not good – the uncontrolled treatments were killing off too many of the non-invasive weeds. Instead, the board decided to begin a voluntary weed treatment program. Coordinated by the board, riparians had the opportunity to contract for treatments in front of their homes, paying a per foot cost.

For many years, the volunteer program sufficed. Eventually the milfoil got a stronghold; and, in 2012, the board decided to pursue a Special Assessment District (SAD) to fund full-lake weed control. Board members passed petitions, gathering signatures of support from over 74% of the property owners.

“The support for the SAD was very overwhelming,” says Larry. “I think a lot of it had to do with communication on the program. Our board members made sure that our property owners understood the problem with the invasive weeds. We had a couple of lake residents who had often voiced concern regarding the use of chemicals in the lake. It really helped when they came out in support of the SAD because of the use of Fluridone, which kills the plants through photosynthesis instead of chemicals.”

The petitions were presented to the Fabius Township Board, which agreed to form the SAD. A CLIA subcommittee secured bids and selected PLM out of

(Continued on page 10)



Clear Lake

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Caledonia to manage the weed treatment program. The first year Clear Lake was treated with Fluridone (Sonar). The milfoil was not eradicated, but little remained. The following three years alternative, less expensive, chemicals were used to kill off invasive weeds and manage weeds in some areas where they were impeding lake activities and presenting a hazard.

In 2017, Fluridone was again used to treat Eurasian Watermilfoil. While very effective in some areas, testing in the fall showed that the milfoil remaining was hybridized and not responsive to Fluridone. An alternative treatment will be used this summer.

The CLIA board also looked at other options for weed control, and two years ago decided to get more proactive in efforts to stop the spread of Purple Loosestrife, an invasive plant that forms dense monocultures and eventually replaces the native plants. Patches of Purple Loosestrife appeared first in two undeveloped wetland areas of the lake. The Fabius Township Environmental and Wetlands Protection Advisory

In July 2016, CLIA purchased around a dozen potted loosestrife plants containing beetle from the Kalamazoo Nature Center. Pots were also purchased by the camp and some individuals. Boy Scout Troop #407 volunteered to place the pots and monitor the success of the beetles.

Board members and the Wetlands Committee believe the beetles have helped slow the growth of the loosestrife, but more beetles are needed to get ahead of the growth. Additional beetles were purchased this year.

CONTROLLING THE FLOW OF THE WATER

Clear Lake is located near seven other township lakes. While you can't traverse from one to the next, the water does flow through most, eventually passing into the St. Joseph River to the south. Long Lake, to the north, has no natural outlet. In the early 1950's, a pump was installed in Long Lake when they had water levels nearly three feet over their legal limit. Water is pumped from Long to Clear Lake, then flows through a drain to Mud Lake. From Mud Lake, it travels to Kaiser Lake, then to Corey Lake, then on to the St. Joseph River.

The original pump was rarely used, due in part to very low water levels in the 60's. By the mid-70's, lake levels in the area were high; and residents on Long Lake requested that the pump be returned to service. Soon Clear Lake was experiencing its own water issue, with the pump's capacity exceeding the drain's natural flow of water to Mud Lake. The CLIA membership attempted to stop the pumping, concerned over the damage to seawalls and landscape and the quality of the water that was going into Clear Lake. They lost a lawsuit but gained in a more cooperative effort to maintain the lake levels.

Today, Association Director Terry Donovan monitors the lake level from the gauge at the drain located near his home. Director Jim Barr works closely with the St. Joseph County Drain Commissioner, Jeff Wenzel, to coordinate the pumping from Long Lake.

"It's a careful balance," says Jim Barr. "Especially since we can't control everything that impacts our water

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Board member Ryan Carris at the annual meeting.



Around a dozen Purple Loosestrife plants with beetles were placed in areas where the loosestrife is most prevalent. Scouts from Centreville Troop #407 helped, including David Weed and his sons, Elliott and Aticus (son and grandsons of Lois and Steve Weed of Clear Lake). In the picture above, Dave gets some help from his son at the north end of Clear Lake.

Committee and management from Garezers, a Latvian camp on Long Lake with a small location (Atbalsis) on Clear Lake, approached the board regarding the possibility of securing *Galerucella Calmariensis* beetles, which eat the loosestrife. The beetles move from plant to plant, destroying the plants and eventually dying off themselves when all the food source is gone.



levels, including the rain.” This spring, for instance, Long Lake was 21 inches above legal limit after the spring thaw, while Clear Lake was 9 inches above. Long Lake pumped for almost a week, and residents of Clear started noticing more beach erosion and movement of riffraff. The pump was stopped, and Clear Lake’s level was down to 7 ½ inches before it was restarted. The monitoring and controlled pumping will continue through the summer or until warm days and evaporation take Long Lake’s level closer to their legal limit.

CANADIAN GOOSE MANAGEMENT

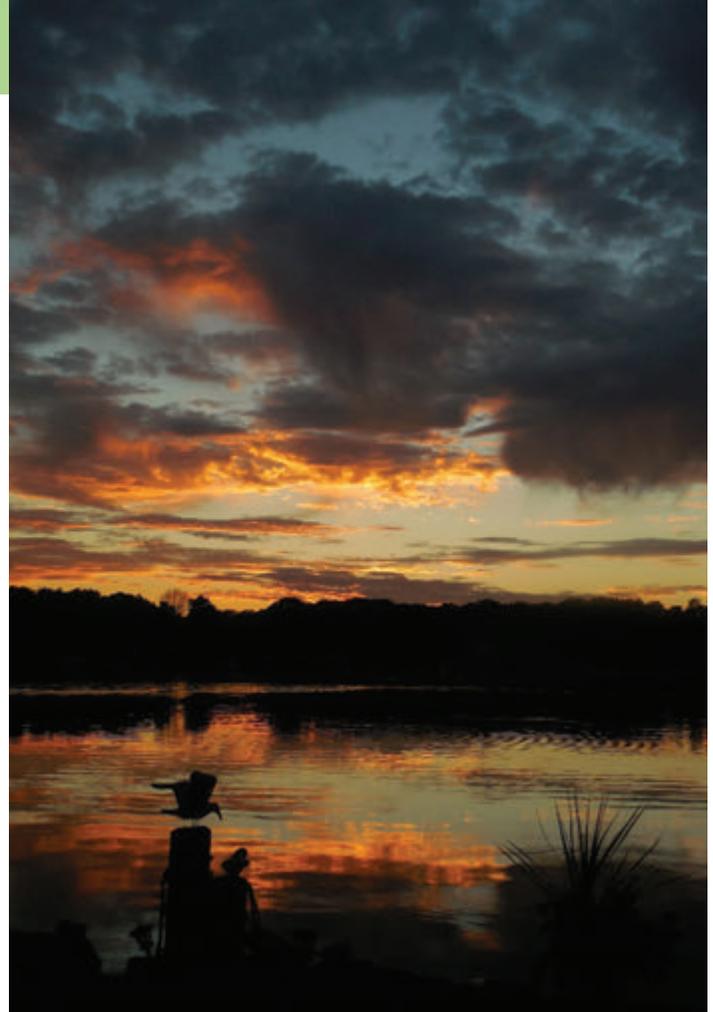
Prior to the 1990’s, there were few, if any, Canadian Geese on Clear Lake, though they had been reintroduced in the state some 30 years prior. Soon, however, they found this southwest corner. While some people love to watch the geese, others complained about the large amount of goose poop left on their sandy beach and expressed concern regarding the water quality.

Residents asked if the association could help; and, in 2011, the board asked the Township for permission to conduct a goose relocation program, similar to one already in place at nearby Pleasant Lake. They approved a one-year program, and Goose Busters out of Holly, Michigan was hired to remove the geese. Later that year, Board members passed petitions to continue the program, gathering signatures from over 70% of the riparians. In addition to removal, the government approval requires the retrieval of eggs from any nests located on the lake, an effort that involves a couple pontoon boats and a couple brave kayakers who are willing to take a sometimes muddy trip into the weediest spots on the lake.

“Almost all our board, and a few other volunteers, have attended the USDA training sessions and actively help us in either finding and removing the goose eggs, or rounding up the geese for removal from the lake,” says Association President Larry Campbell. “Goose Busters does a wonderful job of capturing the geese and keeping the little ones separate so they aren’t injured in the process.” The captured geese are relocated to a designed refuge area, along with those generally picked up the same day at nearby Pleasant Lake and in Three Rivers at Skidmore Park.

“The idea is that eventually we’ll have no geese, but that’s only going to happen in the ideal world where not a single goose flies over and decides we’re the perfect place to take up residence,” Larry says. While it is anticipated there will always be geese on Clear Lake, the control methods have enabled people to enjoy their beach without the poop.

(Continued on page 13)




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Clear Lake

(Continued from page 11)

ACTIVITIES TO KEEP THE SUMMER FUN

The Clear Lake Improvement Association offers lake residents a variety of activities through the summer. The board starts their activities in March with the first meeting of year. In April, not long after the annual roadside clean up, board members will usually be seen on the lake for the first step of the goose removal – the search for eggs. April and May are the busiest months for monitoring the drain, which includes cleaning the debris and occasionally working with the Drain Commissioner to take care of beaver and muskrat issues. Representatives from PLM will be on the lake to access the weed treatment needs for the coming year.

On Memorial Day weekend, the 11 board members do their annual door-to-door campaign, hand delivering the Clear Lake Improvement Association Newsletter and reminding residents to join the association. That also provides the board with an opportunity to get feedback and suggestions.

A favorite activity is the June fishing contest, always held the weekend that the Michigan DNR allows fishing without a license.

“Our lake has always been known as a pretty good fishing lake and the fishing contest brings out a big group of kids and adults,” says Larry. Everyone who tries to catch a fish receives a medal. The winner for the biggest fish – most often a bass – gets an engraved plaque. The activities also include a picnic and a sandcastle building contest. We have a member who cooks bluegill filets for the picnic. It brings out the crowd and it always a fun event to start the summer.”

In 1997, a former board member suggested CLIA take up a collection to put on an Independence Day fireworks show.

Board members
Bev Rockrohr
(left) and Herb
Feinman (right)
with lake resident
Megan Strohacker at
the fishing contest.



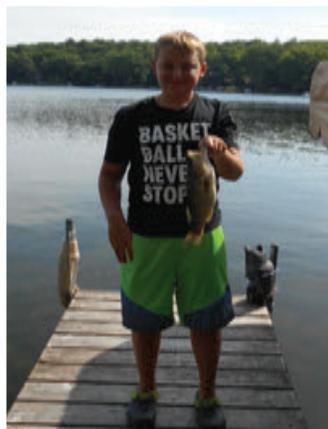
The response was overwhelming. Today, \$6,000 is budgeted annually – all completely from donations – to cover the cost of the spectacular display. The fireworks are shot from the beach at Atbalsis, where there is a long stretch of natural shoreline. Hundreds of boats will anchor on the north end of the lake, enjoying the pre-show serenade of patriotic songs from the home of a board member nearby. CLIA also sponsors the first of two boat parades over the July 4th holiday. Typically, over 25 families will decorate their boats for the parade around the lake.

The CLIA annual meeting is held in August. In addition to the annual business, speakers include representatives from the St. Joseph County Marine Patrol, the Drain Commissioner, PLM representatives, or other special guests. Lake resident, Loretta Rogalny, organizes a silent auction fundraiser. In two years it has raised \$600 for the St. Joseph County Dive Rescue Team. Last year, representatives from the Fabius Park Fire Department attended the annual meeting. As a result, CLIA and individual members also donated over \$2,750 to help purchase a quick response boat for rescue situations in this area of St. Joseph County.

(Continued on page 14)



Steve and Jaci Cowling are always the most popular people at the Fishing Contest, because they cook up bluegill fillets for everyone to enjoy.



Nathan Grennes shows off this 14” bass that tied for the top prize in the fishing contest.



The first Barge Party was held in 2017 over Labor Day weekend. The evening event attracted a lot of families who had an opportunity to share a snack while getting to know the neighbors around the lake. The CLIA plans to host the event again this year.

MSU Boat Wash Demo

A mobile boat wash demonstration was conducted in 2017 at the Clear Lake Department of Natural Resources landing. Washing the boats was an opportunity to teach everyone the importance of the Clean, Drain, and Dry steps to prevent the spread of aquatic hitchhikers that could be harmful to our lakes. The mobile unit heats the water to 140 degrees, which kills weeds, zebra mussels, etc. Pictured above left is



Nick Young, one of the Michigan State University aquatic invasive outreach interns, washing a boat for a fisherman from Topeka, Indiana. Picture above right, are Clarissa Crist (the other intern) and Nick, plus Beth Clawson (3rd from left) from the Clean Boats program. To the right are board members Tom Starr & Steve Weed, Long Lake Board member Nancy Henderson and her granddaughter, Eva.

Clear Lake

(Continued from page 13)

The Clear Lake Improvement Association rounds out the year with a Venetian boat parade over Labor Day, plus a Barge Party, where residents lash boats together and share a snack or beverage. Finally, on Labor Day morning, the Flotilla of Non-Motorized Boats encourages everyone to make at least one last trip on that kayak, canoe, paddleboat or paddle board before putting the toys away for the long winter season.

Last year, in a continued effort to educate residents and boaters using the state DNR access on the issue of invasive species, CLIA hosted a one-day mobile boat wash and educational tent at the landing. Michigan State University students washed boats and they, along with Beth Clawson, handed out information on the Clean Boats Clean Water program.

For those who like to read – and need an excuse to get together year round – the lake book club (known as the Literary Ladies of the Lake) meets monthly. Membership ranges from a dozen in the winter to as many as 18 in the summer when the group meets on pontoon boats on the lake.

The Clear Lake Association Newsletter is published six times a year, March to October: 10-16 pages of stories about the lake's people, activities

and history. The Township Wetlands committee regularly shares articles on how to maintain a lake-friendly lawn and protect our natural habitat. Mary Dechow, Board secretary and newsletter editor, also uses email throughout the year to keep everyone apprised of activities and news. Loretta Rogalny manages a Facebook page set up for Clear and Long lakes. And the Clear Lake Board is working on a web site to aid in communicating with members.

“We believe we have a unique lake and association,” says Larry. “Maybe we’re really no different than all the others. We certainly have some of the same problems. We struggle to get new members on our board and rejoice when someone under age 50 is willing to be an officer. We go out of our way to make sure our board members have the resources available to help them thoroughly research the latest on issues from weed treatments to invasive species.” All board members get a subscription to *The Michigan Riparian*. A board member and spouse always attend the spring Michigan Lake & Stream Associations annual conference, and members also frequently attend regional conferences. CLIA also gives all new residents a one-year subscription to the *Riparian*, and this year they added it as a check-off box on the membership form.

“We believe in being proactive,” says Larry. “We’re fortunate that we have the team, the energy and the resources to stay ahead of issues and find good solutions to problems. Clear Lake isn’t perfect. But I can tell you that a lot of the people here say they’ve never known a better slice of paradise.”

(Continued on page 15)



Literary Ladies of the Lake

Latvian Camp Brings Cultural Diversity to Clear Lake Area



Situated north of Clear Lake, on the east shoreline of Long Lake, is an over 350-acre camp that is the base for a large Latvian community in the area.

The former Girl Scout camp was purchased in 1965 by Latvian congregations from the Midwest and established to provide summer educational experiences that would maintain the Latvian culture. It was named Garezers, meaning “Long Lake.” Garezers is the biggest Latvian center in the United States.

Many Latvian people came to the United States after World War II when it became clear that Soviet Union forces had occupied Eastern Europe. Often the families spent time in displaced persons camps in Germany, waiting for the opportunity to immigrate to the United States. Some of the largest communities of Latvians were established in the Midwest – Chicago, Milwaukee, Indianapolis, Cleveland, Kalamazoo and Detroit.

Dr. Aivars Zeps and his wife, Mara, were involved in the establishment of Garezers. They soon began purchasing property on Clear Lake and neighboring woodlands and established Atbalsis (Echo Lodge), on the north end of Clear Lake. After Aivars’ passing a few years ago, a large portion of his 300 acres of land and property was given to the camp. Atbalsis today offers a lodge, cabins and campgrounds for use by families, and is often the site of cultural celebrations and weddings.

Over 300 young people will attend camp each summer, from pre-schoolers to high school age. The older campers — generally around 100 — live in dorms and cabins. They attend classes in the mornings and have time for lake activities, sports and arts in the afternoons. Summer high school is six weeks long. The younger kids have shortened days, but like the older campers, they are required to speak the Latvian language while on the campgrounds. There is also a week-long family camp.

While much of the camp is geared around young people – from classes to the annual volleyball tournament which attracts participants from around the world – often the families will spend a large part of the summer in the area. Many homes on both Long Lake and Clear Lake are owned by families of Latvian descent. Often the residents are the first group of “kids” who attended camp in the 60s and are now married and settling here with their own families.

The emphasis of the education has always been to maintain the Latvian culture, explains Garezers board of directors

member Mara Kore. The camp’s mission statement well defines their purpose: “Garezers prospers as a meeting place for Latvians of all ages, to raise and educate Latvian youth, to strengthen the Latvian language, culture and spiritual values, to promote the Latvian way of life and develop links with Latvia.”

“This is very much a multi-generational center,” says Mara. “We are very family oriented. Garezers is THE place to meet. Every city has its church and its hall, but there are no other places where you can stay for an extended period of time. The camp has helped us keep our culture alive.”

Latvia regained its independence from USSR in 1991 and many Latvian families now travel back to their home country. That, however, has not lessened the need for the camp, explains Mara. “It has made us stronger,” she says, adding that now many of their staff will come from Latvia. Garezers has long been the tie that has bound together the Midwest Latvian families.

The camp’s influence has had a positive environmental impact on the Clear Lake area. Mara Kore serves as chairperson for the Fabius Township Environmental and Wetlands Protection Advisory Committee. The camp has used USDA and EQIP grants for invasive management on their property.

Clear Lake residents have been fortunate that the Zeps saw to maintain the rural nature of Atbalsis property through the years and that the staff at Garezers continues to do the same. The acreage is a refuge for a vast amount of wildlife, both in and out of the water. *R.*



Dr. Jo Latimore of MSU Recognized by ML&SA for a Decade of Outstanding Support to the MiCorps Cooperative Lakes Monitoring Program at 57th Annual Banquet

By Scott Brown, MLSA Executive Director



Presented to exceptional individuals whose unwavering dedication to the task of preserving and protecting Michigan's vast treasure of high quality inland lakes personify the mission and goals of our now fifty seven year old citizen stewardship focused organization, ML&SA is proud to announce that the 2018 recipient of our rarely bequeathed "Spirit of ML&SA" award is Dr. Jo Latimore of the Michigan State University Department of Fisheries and Wildlife. Now in her 11th year of service to the MiCorps Cooperative Lakes Monitoring Program, Dr. Latimore continues to astonish with her unmatched work ethic, knowledge, leadership skills, and superlative ability to communicate complex scientific and technical concepts to the inland lake water quality monitoring citizen volunteers who form the core of the collaborative partnership-based program. On behalf of the officers, directors, staff, and membership of ML&SA, thank you Dr. Jo for your outstanding service! We look forward to another decade of working with you to help protect our magnificent freshwater gems! *R*

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Twixt the Water and the Land

SHALLOW WATER PARTY SPOTS ON INLAND LAKES.

One of the most difficult problems that riparians on inland lakes face is owning a lakefront property with a shallow area or sandbar in the lake located close to the shore where numerous boats and people congregate during the summer to sunbathe, party and recreate. Some of those situations become a public nuisance, complete with drunkenness, loud and boisterous behavior and even worse. Unfortunately, there does not seem to be any easy or even effective “fix” to the problem.

Apart from riparian rights issues, police officers can write tickets or arrest boaters for behavior that is illegal under state law. Illegal behavior can include reckless or careless boating, disturbing the peace, public drunkenness, nudity and assault. Of course, there are two problems that still arise. First, the police are not always around and often times, the violators are long gone by the time the police arrive. Second, if a police officer does not witness someone engaging in otherwise illegal behavior, simply mooring a boat on the lake bottomlands of a riparian without permission is considered only a civil issue (like a boundary line dispute), for which the police will usually not become involved. On occasion, some diligent police officers will order crowds of boats to disperse based on a general concern about public nuisance, safety and being a hazard to navigability.

Many riparians over the years have told me that they are simply mystified how they can own the bottomlands under an inland lake but that boaters can still moor on those private bottomlands without permission in large groups for hours on end. Unfortunately, the Michigan common or civil law in the area is not entirely clear. As a general proposition, a riparian property owner on a natural inland lake in Michigan almost always owns the bottomlands under the water to the center of the lake. Only that riparian can install and use a dock, engage in permanent or seasonal boat mooring, maintain a swim raft and engage in similar uses and activities on the bottomlands that they own. It is clearly illegal for another to engage in any of those activities on your lake bottomlands without your permission. However, long ago, the Michigan appellate courts also declared an exception to the rule that no one can use the lake bottomlands of a riparian property owner on an inland lake without permission. The courts have indicated that a boater can temporarily moor or anchor on the bottomlands of another without permission for

By Clifford H. Bloom, Esq.
Bloom Sluggett, PC
Grand Rapids, Michigan
www.BloomSluggett.com



navigability, which would include fishing and seeking refuge from a storm. See *Swartz v Sherston*, 299 Mich 423; 300 NW 148 (1941); *Hilt v Weber*, 252 Mich 198; 233 NW 159 (1930); *Hall v Wantz*, 336 Mich 112; 57 NW2d 462 (1953). However, the Michigan appellate courts have not specifically addressed whether the following can occur on the bottomlands of a riparian without permission:

- (1) Wading or walking on the bottomlands under the lake.
- (2) Anchoring for long periods of time for purposes of lounging on a boat, swimming, partying, etc.
- (3) Tying and anchoring a number of boats together for partying.

The only way for riparians to address these issues would be for one or more riparians to join together in a lawsuit against the boaters who engage in such activities without permission. Unfortunately, however, there are at least three obstacles to such a lawsuit. First, such lawsuits can be expensive and time-consuming. Second, that type of lawsuit has to be directed against a particular person or group of specific individuals; such a lawsuit cannot be directed against the general public. Typically, there are different groups of violators on different days and over time. Finally, even if the riparian or riparians win the lawsuit, police officers cannot issue tickets based on a civil court order. A riparian who successfully wins such a lawsuit would still have to file a motion to have any person who violates the court order be found to be in contempt of court.

(Continued on page 28)

ASK THE EXPERTS

If you have a question about water related issues, riparian rights, and/or lakes and streams, etc., let us know by email or snail mail.

*Email: swagner@mlswa.org
Mail: The Michigan Riparian
300 N. State St., Suite A,
Stanton, MI 48888*

Question: What is a marina?

Answer: Unfortunately, there is no single definition for what constitutes a “marina” in Michigan. Instead, the word marina can mean at least five different types of facilities or uses, depending upon the context.

A possible lay person’s definition of marina is “an area or facility for the group mooring of noncommercial boats and pleasure craft.” However, that definition is not necessarily the same as for government purposes, deed restrictions and other matters.

Under Michigan statute, MCL 324.30101(j), a marina is “a facility that is owned or operated by a person, extends into or over an inland lake or stream, and offers service to the public or members of the marina for docking, loading, or other servicing or recreational watercraft.” If a marina meets that definition, a marina cannot be installed or expanded without the appropriate approval and permit from the State of Michigan. Furthermore, the United States Army Corps of Engineers also has its own definition of what constitutes a marina for purposes of an installation on the Great Lakes.

Local municipal ordinances (whether a city, village, or township is involved) often also have a different definition of a marina for purposes of the local zoning ordinance or other regulatory ordinances. Unfortunately, those definitions are not always clear or comprehensive.

Finally, some properties are subject to binding deed restrictions, covenants or plat restrictions which sometimes define a regulated marina differently than state or federal authorities.

Based on the above, when it comes to defining what constitutes a marina, nothing should be taken for granted.

Clifford H. Bloom, Esq.
Bloom Sluggett, PC, Grand Rapids, Michigan

* * * * *

Our experts include our riparian attorney, a biologist, a limnologist, an engineer, a college professor and a state agency official. They look forward to responding to your question.

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Michigan's Water Wonderland

The Dead River

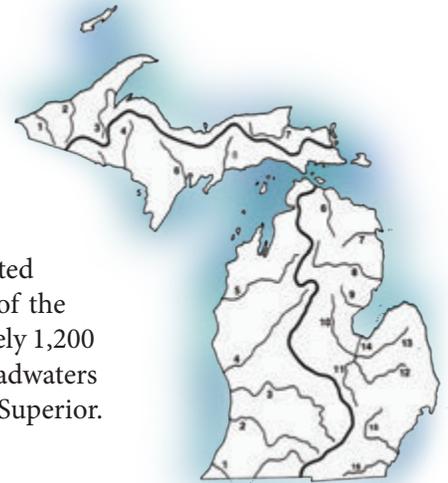
By: Tony Groves,
Water Resources Practice Leader, Progressive AE

This article explores one of Michigan's extraordinary water resources, the Dead River in the Upper Peninsula. Unlike the Lower Peninsula where waters drain east or west, waters in the Upper Peninsula tend to drain north and south. Much of the southern portion of the Upper Peninsula drains to Lakes Michigan and Huron while much of the northern portion of the peninsula drains to Lake Superior.

The Dead River is the largest river in Marquette County flowing to Lake Superior. From its headwaters in the high-grounds in the western part of the county, the river flows forty plus miles before discharging to Presque Isle Harbor and Lake Superior at the city of Marquette. The exact origin of the name "Dead River" is unclear. On early French maps, the river is named "Rivière des Morts" or in English, "River of the Dead." On Michigan's original land survey maps from the mid-1800s, the river is called both the Nekomenon River and the Dead River. Although speculative, the unflattering name "Dead River" may be related to the presence of tannins in the river which impart an almost black or "dead" appearance to the water. The original land survey maps depict the Dead River as free-flowing with numerous feeder streams along its course. Recent archeological digs in the area have unearthed pre-historic artifacts dating back to the last ice age.

Hydroelectric facilities of some sort have existed on the Dead River for over a century. Today, the Dead River is impounded by five dams. The Silver Lake Dam is the furthest upstream and, moving downstream, other dams include the Hoist, McClure, Forestville, and Tourist Park Dams. The biggest of the dams, the Hoist, creates the largest impoundment

on the river, the 2,700-acre Dead River Storage Basin. Submersed and protruding tree stumps throughout the basins and strewn along shore are testament to the low-lying forested areas that existed prior to the construction of the dams. There is approximately 1,200 feet of fall between the headwaters of the Dead River and Lake Superior.



Michigan Major Drainage Divides and Rivers.

(Continued on page 20)



Hoist Dam — Dead River Storage Basin



Dead River - Original Land Survey (1845)

Michigan's Water Wonderland

The Dead River *(Continued from page 19)*

The Dead River is fed by several cold-water trout streams which, absent deadfall or an occasional beaver dam, flow largely unimpeded through boreal forests and expansive ravines. The beauty and tranquility of the region inspired local fly-fisherman, attorney, judge and author John Volker to write several books (under the pen name Robert Traver) including *Trout Madness* and *Anatomy of a Fisherman*. Unlike its cold-water tributary streams, the impounded lower stretches of the Dead River are more conducive to cool-water fishes such as pike, walleye, and smallmouth bass.

A discussion about the Dead River would be not be complete without mentioning the weather. The climate in the region is strongly influenced by Lake Superior. Winters are long and cold. Due to the fact that Lake Superior rarely freezes over, lake effect snow persists throughout much of the winter. Average annual snowfall in the region is approximately 150 inches. The proximity of Lake Superior results in cold springs, cool summers and relatively warm falls, as heat is released from Lake Superior.

The Dead River has a watershed or drainage area of approximately 100,300 acres or 157 square miles. Swedish, Norwegian, and Finnish immigration to the area in the nineteenth century helped fuel burgeoning mining and



Dead River Sauna

lumber industries and played an important role in the historical development of the watershed. Remnant mines and lumber camps are common throughout the area. Mining and lumbering activities in the watershed have largely given way to hunting, fishing, blueberry-picking and other recreational pursuits.

The Dead River watershed is heavily forested. Much of the land around Silver Lake is undeveloped and accessible only by antiquated logging roads. Some of the most remote portions of the watershed lack electrical service. Numerous homes and seasonal camps have been built along the shores of the Dead River Storage and McClure Basins. Saunas along the basin shorelines bear witness to the many Scandinavians that settled the area. The lower watershed in and around the

(Continued on page 21)



Abandoned Mine Shaft, Ishpeming, Michigan

DEAD RIVER FACTS AND FIGURES

- Location — Marquette County, Michigan
- Total length — 45 miles
- Watershed area — 100,300 acres or 157 square miles
- Number of named tributaries — 18
- Headwater elevation — 1,814 feet above sea level
- Total fall (headwater to Lake Superior) — 1,212 feet

Area of Impoundments

- Silver Lake — 1,425 acres
- Dead River Storage Basin — 2,738 acres
- McClure Basin — 104 acres
- Forestville Reservoir — 83 acres
- Tourist Park Reservoir — 110 acres

Height of Dams

- Silver Lake — 30 feet
- Hoist (Dead River Storage Basin) Dam - 63 feet
- McClure Basin Dam - 51 feet
- Forestville Reservoir Dam - 62 feet
- Tourist Park Reservoir Dam — 33 feet

City of Marquette is largely urbanized. However, much of the watershed remains sparsely populated, notwithstanding the numerous deer and fishing camps scattered throughout the region.

One of the most striking features of the Dead River watershed is its topography. Near-vertical rock outcroppings exist in the northern portion of the watershed and, in terms of elevation, some of the high grounds in the Dead River watershed are more than 1,800 feet above sea level.

Hydroelectric facilities on the Dead River are licensed by the Federal Energy Regulatory Commission (FERC). The three upper reservoirs (Silver Lake, Dead River Storage Basin and the McClure Basin) are within FERC's Dead River Project, and the two lower reservoirs (Forestville and Tourist Park) are within FERC's Marquette project. The FERC licenses contain requirements for minimum flow releases, temperature maximums, minimum dissolved oxygen levels, monitoring and a variety of other provisions. The Silver Lake dam is used to store spring runoff to augment downstream flows later in the year. The water level in Silver Lake is typically drawn down each fall to accommodate the spring snow melt. One consequence of power generation on the Dead River is that periodic water level fluctuations have caused extensive shoreline erosion.

In May of 2003, disaster struck the Dead River. Frozen ground and unusually heavy rainfall conspired to dramatically raise the water level in the Silver Lake Basin. On May 14, a portion of the Silver Lake dam gave way and an estimated 9 billion gallons of water were released downstream. An incident report at the time prepared by FERC described what happened:

Late in the afternoon on Wednesday, May 14, 2003, high and turbid flows were observed in the Dead River several miles downstream of the remote Silver Lake Basin in Marquette County, Michigan. An operator was dispatched to the site and found that a fuse plug embankment, a feature of the project that is designed to fail sacrificially to prevent failure of more critical project works, had activated. The fuse plug embankment was entirely eroded away and erosion had progressed well into the discharge channel bottom and side slopes. The dam owner activated the emergency action plan and steps to protect downstream lives and property were initiated. During the subsequent 24-hour period, over 1700 residents were evacuated, several local road bridges and an abandoned railroad bridge were damaged or washed out, the City of Marquette's Tourist Park dam near the mouth of the Dead River was overtopped and failed, the Presque Isle coal-fired power plant was shut down due to flooding, and two

(Continued on page 22)

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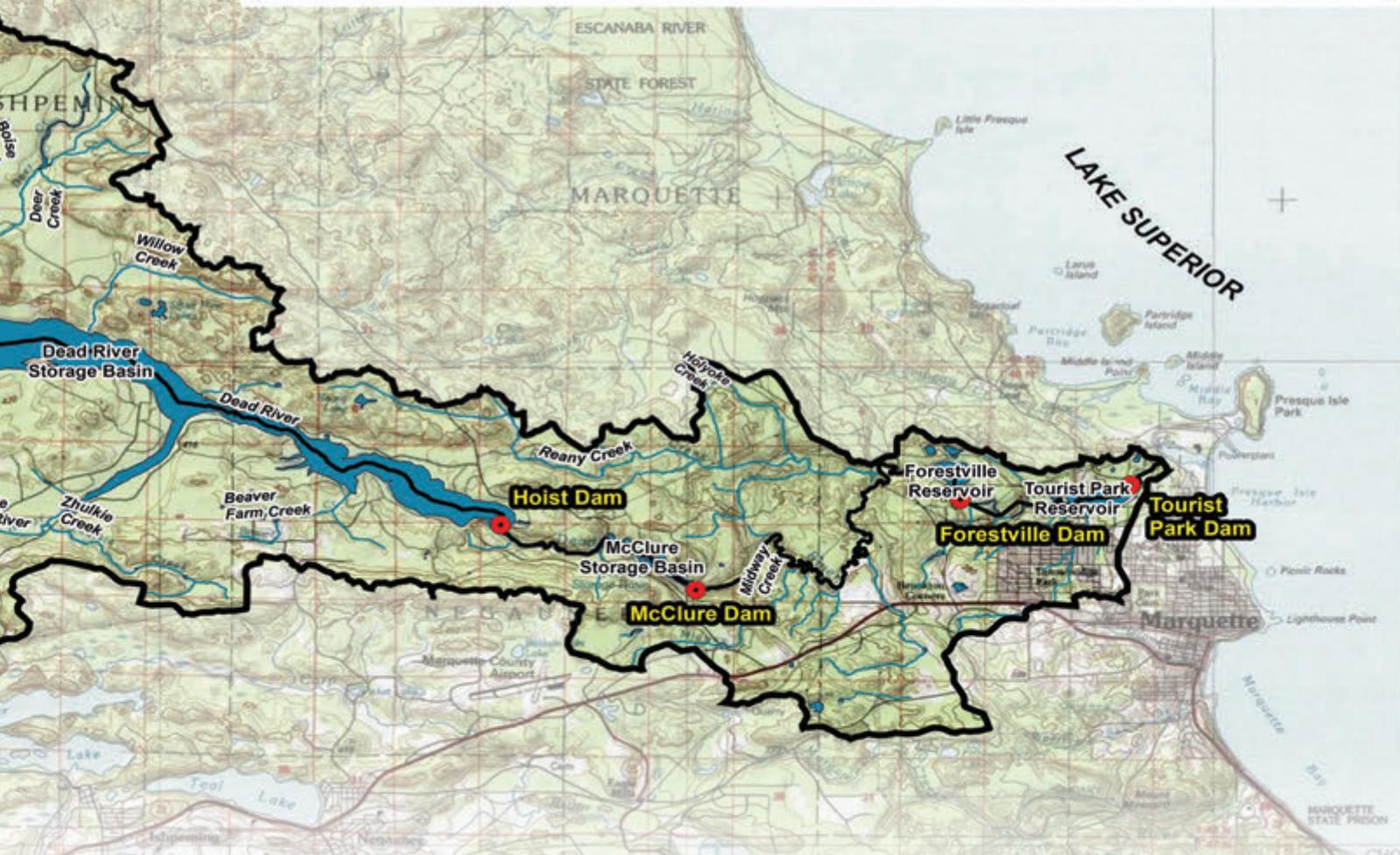
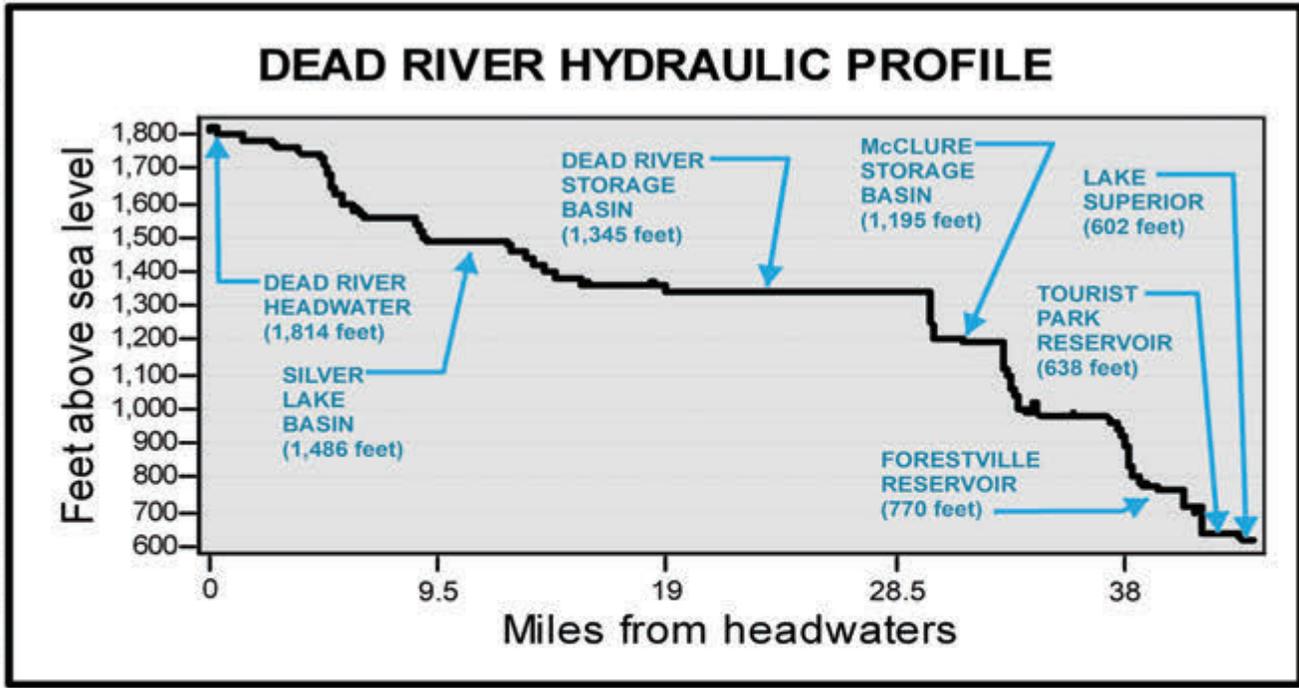


Michigan's Water Wonderland The Dead River *(Continued from page 21)*

mines that rely on electric power from the power plant were shut down. There was extensive erosion of the river banks and significant impacts to the Dead River fishery. No loss of life or personal injuries occurred.

As the flood waters surged, television coverage of the event showed boats that had been uplifted from their moorings being carried by floodwaters over the Hoist dam. Sediment and debris were strewn throughout Presque Isle Harbor in

Lake Superior. The incident caused an estimated \$100 million in damages. Rapid implementation of an Emergency Action Plan was credited with preventing loss of life. Ironically, the fuse plug portion of the dam that failed was constructed in 2002 to increase the hydraulic capacity of the dam to be able to safely pass extreme flood flows. The dam at Silver Lake has since been repaired and a multi-faceted restoration project undertaken to remediate infrastructure damage



and to restore the river corridor and associated wetland and floodplain areas damaged by the flood. Natural river channel design techniques were employed in an attempt to restore the natural functionality and stability of the river stretches impacted by the flood.

With its varied fish, land and water resources, the Dead River is a truly unique ecosystem. The story of the Dead River is one of countless stories that can be told about Michigan's

rich water heritage. Water has played an integral role in many of Michigan's historical transformations, and the same will undoubtedly hold true as we move to the future. Michigan is truly a water wonderland! *R*

MLSA launches new website to find your local water resources!

By Alisha Davidson, PhD MLSA Research and Development Coordinator

We know it can be difficult to find (and find contact information for) organizations such as local lake associations, drain commissioners, DEQ/DNR offices, land conservancies, and watershed councils. In an effort to assist members in finding answers to their water-related questions and concerns, and getting more involved in water resource management, MLSA has developed the Michigan Directory of Lake Organizations. This directory allows members to search by a variety of fields, including county, lake, and type of organization and can be found at:

<http://www.mylsa.org/organization-directory/>

This directory is obviously not complete; we are almost certainly missing organizations. We are therefore asking members for their help – please search in your area and look for organizations such as lake associations we might be missing. For every organization you provide, you will be entered to win a year's subscription to *The Michigan Riparian* magazine. Winners will be drawn on Labor Day weekend. Please email Alisha Davidson at alishad@mlswa.org with new entries and/or feedback on the directory.



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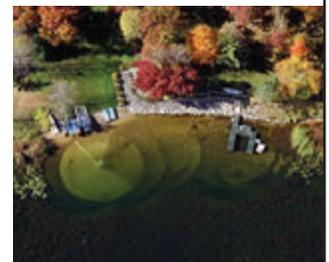
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DNR boating access sites: From CONCEPT to CONSTRUCTION

By the Michigan Department of Natural Resources,
Parks and Recreation Division

When you're known as the Great Lakes State, water is a pretty big part of your identity. Beyond the Great Lakes, though, Michigan is home to an abundance of water resources, including 11,000 inland lakes and tens of thousands of miles of rivers. No matter where you live in Michigan, you're never more than five miles from a river, lake or stream or 85 miles away from a Great Lake, and that means everyone in Michigan has fairly easy access to the largest freshwater resource in the world.

Michigan's waters are managed, in part, through the public trust doctrine. This means that the state of Michigan manages and protects our surface water on behalf of residents, who have the right to responsibly boat, fish, hunt, swim and otherwise enjoy these public waters.

The Michigan Department of Natural Resources is responsible for providing access to public water bodies on a statewide scale, often complementing facilities provided by local units of government. The DNR offers that access at state parks, harbors, wildlife game areas and boating access sites. These boating access sites provide places to launch and retrieve watercraft and include designated areas for maneuvering and parking. Sometimes, the sites are host to other facilities, like piers or restrooms.

State-owned boating access sites are managed through the DNR's Waterways Program, which was developed through state law and is housed within the

A boating access site provides a place to launch and retrieve boats and includes areas for maneuvering and parking.

DNR Parks and Recreation Division. Program staff work with the **Michigan State Waterways Commission** on initiatives related to the acquisition, construction, operation and maintenance of boating access sites.

There are approximately 1,100 DNR boating access sites throughout the state, and no two sites were planned or constructed in exactly the same way. Understandably, people often have questions about how the DNR develops these sites. Below are answers to some of the most common questions.

WHAT DOES THE DNR CONSIDER WHEN LOOKING AT PROPERTY TO USE AS A BOATING ACCESS SITE?

"This might be the number-one question the DNR gets when it comes to boating access sites," said Jordan Byelich, Waterways Development Program Manager for the department.

"When we evaluate the potential for a property to become a public boating access site, we need to gather data and information to help us decide the next steps. In addition to our own team of people, we work with partners, such as local municipalities or other state agencies, as well as the public," said Byelich.

Recreational considerations are one of the first factors to come into play. Byelich said the DNR looks at the potential for activities related to the boating access site. What are the recreational needs in the region? Has the public asked for additional boating access in the area? The DNR works with local municipalities, lake associations, neighbors and other interested parties to gain a better perspective to these questions.

(Continued on page 26)

DNR boating access sites

(Continued from page 25)

“We’ll ask about the property’s characteristics – the land’s size, shape, proximity to a public road system and available water frontage,” he said. “We also look at the water body type, size, shape and depth. Is there a connection to other navigable waterways? Are there other public boating access sites on the water and, if so, where are they in relation to the proposed property?”

The DNR also collects data about the presence of wetlands, endangered species, and cultural or historical landmarks in the area that could be affected by boating access site construction. Information about fishing-related conditions is included, like whether fish spawning occurs naturally or if the water body is stocked. Data and statistics about a proposed site’s land and water can be requested from the Michigan Natural Features Inventory, the Michigan Department of Environmental Quality, and/or the U.S. Army Corps of Engineers.

Once an initial study is completed, the DNR can better assess the need for a boating access site. If there is a need and the land is suitable, the department would move toward purchasing the property. The DNR also may conduct a feasibility study to provide a more in-depth look at the site and how construction could proceed.

WHAT’S INVOLVED IN A FEASIBILITY STUDY? HOW DOES THAT HELP THE DNR TO BUILD A BOATING ACCESS SITE?

A feasibility study provides a thorough analysis of the land and water at a proposed location; however, not all sites will require such a comprehensive property review. When the DNR has additional questions not answered by the initial data collection, staff may work with a professional consulting firm to conduct a feasibility study.

The type of data that could be collected and analyzed includes:

- ◆ Lake use and trends.
- ◆ Surveys to analyze the slope and structure of the land and lake bottom.
- ◆ Soil analysis to determine types.
- ◆ Water quality parameters, such as phosphorus, dissolved oxygen and chlorophyll levels.
- ◆ Existing shoreline processes, such as wave, wind and ice action.
- ◆ The presence of aquatic invasive species.
- ◆ Planning and zoning requirements to ensure that all regulations, ordinances and permitting considerations are understood.
- ◆ Input from partners and the public.

This information is used to better understand the land, the water and the community around a proposed boating access site, and that feeds directly into the decision-making process. Following the feasibility study, the DNR will carefully consider the boating access site’s post-construction maintenance, operations and management needs, especially in relation to other DNR facilities in the area. All boating access sites are developed and landscaped while considering the needs of the surrounding neighborhood, and these details are planned before construction even begins.

HOW DOES THE DNR PAY FOR DEVELOPMENT OF A BOATING ACCESS SITE?

The DNR generally locates available property in one of three ways: 1) By word of mouth, 2) Through a landowner directly approaching the DNR, or 3) With staff actively researching local real estate listings. The land purchase may be funded through the Michigan State Waterways Fund, the Michigan Natural Resources Trust Fund, federal grants or land donations. In every case, land acquisitions have one thing in common – a willing seller.

The development of boating access sites, from design to construction, typically is paid for through the Michigan State Waterways Fund. The Waterways Program also administers a grant program that provides funding to local units of government to develop or improve public boating access sites and harbors. That grant program is supported by watercraft registration fees, the state marine fuel tax and facility user fees.

HOW DOES THE DNR LIMIT THE THREAT OF AQUATIC INVASIVE SPECIES?

While it’s true that boating is one of many avenues that can lead to the spread of aquatic invasives, there also are many actions that

(Continued on page 27)

“ There are approximately 1,100 DNR boating access sites throughout the state, and no two sites were planned or constructed in exactly the same way. ”

HELP STOP AQUATIC HITCHHIKERS!

Avoid spreading aquatic invasive species.
Recommended Actions:

- ✓ **CLEAN** boats, trailers and equipment
- ✓ **DRAIN** live wells, bilges and all water
- ✓ **DRY** boats and equipment
- ✓ **DISPOSE** of unwanted bait in the trash

IT'S THE LAW
Violation of the law is a state civil infraction. Violators may be subject to fines.

- Do not launch a watercraft or place a trailer in the water if aquatic plants are attached.
- Do not release unused bait into the water.
- Do not transport water over land in bilges and live wells.

www.mi.gov/InvasiveSpecies

DEQ DNR Michigan Department of AGRICULTURE & Rural Development

DNR boating access sites have signage reminding boaters to clean, drain, and dry their watercraft and dispose of bait to help prevent the spread of invasive species.

can lower that risk. The fall 2017 edition of *The Michigan Riparian* offered an article detailing steps the DNR, Department of Environmental Quality, and Department of Agriculture and Rural Development have taken to prevent, detect and control invasive species. Actions for boating access sites may include:

1. Decontaminating equipment that will be used in the construction of a boating access site. By thoroughly cleaning equipment before arriving at the site and disposing of any mud, seeds or plant fragments, the chance of introducing or spreading invasive species from other areas of the state is reduced.

2. Restoring vegetation to the land and shoreline after construction. Invasive species tend to be the first to colonize an area after the habitat has been disturbed. Once construction of the boating access site is completed, the land and shoreline are replanted, in part, to decrease the chance of invasive plants taking over.

3. Providing signage near the launching area. It is illegal for anyone to launch a boat with an aquatic plant attached to it. DNR boating access sites have signage reminding boaters to clean,

drain and dry their watercraft to help prevent the spread of aquatic invasive species.

4. Collaborating with local groups to offer boat-washing stations. The DNR has partnered with local groups to install boat washes at popular boating access sites. In addition, the state hosts an annual Landing Blitz to promote the importance of cleaning boats. The state also supports Michigan State University's mobile boat-wash program.

5. Promoting education and outreach campaigns. There are several national campaigns the state has adopted, including "Stop Aquatic Hitchhikers," "Clean, Drain, Dry" and "Play, Clean, Go." The state's Invasive Species Program also develops its own outreach materials, including brochures, rack cards and other products that carry these messages.

6. Administering the Michigan Invasive Species Grant Program. Since 2014, the state has provided more than \$14 million through a comprehensive grant program aimed at preventing, detecting and controlling both aquatic and terrestrial invasive species. Learn more about funded projects at www.michigan.gov/invasivespecies.

HOW OFTEN ARE NEW BOATING ACCESS SITES CONSIDERED AND BUILT?

The DNR considers opportunities for public boating access sites as they present themselves, or as local communities request increased access to public water bodies.

Nine new sites have been built across the Great Lakes, inland lakes and rivers over the last decade, running the gamut of simple carry-down sites for canoes and kayaks to more complex sites that can accommodate motor boats and trailers as well. People often are surprised by that small number, but it's important to note that most program resources are directed toward the upgrading, operation, and maintenance of existing boating access sites, not the creation of new ones.

Byelich again pointed to the DNR's approach to evaluating a great deal of data and other factors when it comes to boating access site development.

"Yes, we're thorough, and the evaluation process can be long, but it has to be," he said. "This is important work, because the public waters of Michigan belong to you, your friends, your family and every citizen. Quality public boating access sites make it possible for more people to connect to the water in ways they likely couldn't otherwise."

For more information about the Michigan's boating access sites, contact Christina Baugher at baugherc@michigan.gov or 517-284-5835. 

Learn more about boating resources at the DNR website www.michigan.gov/boating.

Twixt the Water and the Land

(Continued from page 17)

Theoretically, a local municipality (a township, city or village) could draft an ordinance to cover such problems. However, such an ordinance would be difficult to draft and enforce. For instance, what would the ordinance say? That three or more boats cannot be tied together for partying? That a boat cannot be moored or anchored on the bottomlands of another without permission for more than two hours for swimming, sunbathing and partying? That a boater cannot temporarily moor or anchor a boat on the bottomlands of another without permission except for purposes of fishing or seeking refuge in a storm? To date, I am not aware of any municipality that has enacted such an ordinance. About the only ordinance that might be practical would be an ordinance that prohibits anchoring or mooring on the bottomlands of another without permission for any purpose (except during an emergency) within X feet (for example, 300 feet) of the shore. Of course, such an ordinance would likely face severe public opposition, including from fishermen and many boaters.

This continues to be a frustrating matter for many riparians.

LEGAL DEVELOPMENTS REGARDING ADVERSE POSSESSION AND PRESCRIPTIVE EASEMENTS.

In the past, I have authored several articles on adverse possession and prescriptive easements for this magazine (including the summer 2011, summer 2013 and spring 2014 issues of the magazine). Given the significant public opposition to those common law doctrines, it is surprising that the Michigan Legislature has not either abolished adverse possession and prescriptive easements altogether or severely restricted them.

Few people would disagree with the application of adverse possession where an old farm house has been located a few feet onto the neighbor's property for over a century or where a property owner has used a private road to access their otherwise landlocked parcel for decades without a recorded easement and is protected by the doctrine of prescriptive easement. Unfortunately, however, many property owners in Michigan use adverse possession or the prescriptive easement doctrine to simply "grab" more land without having to pay for it.

What are some of the possible ways that the Michigan Legislature could reform the common law doctrines of adverse possession and prescriptive easement by legislation without abolishing them in needed situations? The following are some possible legislative reforms:

- A. Extend the limitation time period from 15 years to 20 or 25 years.
- B. If someone prevails on an adverse possession or prescriptive easement claim, require that the court involved determine the value of the property interest obtained and make the prevailing party pay for the land taken by adverse possession or permanently burdened by a prescriptive easement.
- C. Make it clear that someone cannot claim adverse possession or a prescriptive easement against a neighbor with whom they are friends. Too often, a friendly neighbor implicitly allows their friend to use their property for more than 15 years and then is betrayed by the supposed friend claiming some of the land by adverse possession or by prescription.
- D. Make it an element or requirement of proving adverse possession or a prescriptive easement that the property or easement involved is reasonably necessary.

The Michigan Supreme Court recently confirmed several legal issues regarding adverse possession and prescriptive easements in the case of *Marlette Auto Wash, LLC v VanDyke SC Properties, LLC*, ____Mich____(2018). The Michigan Supreme Court clarified:

- (1) That a property owner can still prevail in an adverse possession or prescriptive easement lawsuit (as can their successors) even if they did not know they were accruing an adverse possession or prescriptive easement claim during the 15-year time period involved.
- (2.) Even if someone obtains property by adverse possession or a permanent easement via prescription, they can (under some circumstances) lose the land or easement obtained if it is not used by them for 15 years or more after they gained the right.

Lay people should be aware that the areas of adverse possession and prescriptive easements are fraught with factual and legal difficulties. *R.*

Haven Hill- Treasure within a Treasure

Excerpts from the Michigan Wildlife Council
website: hereformioutdoors.org

Michigan Wildlife Council's website highlights a beautiful conservation area located in Oakland County. The best part? It is funded by hunting and fishing licenses, not taxpayers.

While much of southern Michigan has experienced extensive development and urban sprawl in the last century, dedicated conservation efforts made by both public and private organizations have paid off.

The Michigan Wildlife Council was created in 2013 to increase public knowledge of the importance of wildlife management and conservation, as well as the positive impact fishing and hunting have on Michigan's wildlife and natural resources.

Michigan is able to pay for these types of conservation efforts through the sale of fishing and hunting licenses and our state's wildlife conservation is paid for by a portion of the sale of outdoor equipment.

Haven Hill is located within Highland Recreation Area in Oakland County. The 721-acre preserve is rich with historic and natural wonders, making it a unique destination amid the hustle and bustle of southeast Michigan. Furthermore, Highland Recreation Area has trails for mountain bikers, horseback riding and cross-country skiing.

"The people who know Haven Hill Natural Area love it and work to conserve it," said William Althoff, Highland Recreation Area park supervisor.

Largely undisturbed for the past 85 years, the Haven Hill Natural Area has retained much of its natural character, as well as some unusual plants and wildlife.

That preservation began nearly a century ago with Edsel Ford, the only child of Henry Ford. Edsel Ford began purchasing parcels of the hilly land in Highland and White Lake townships in 1923 to create a retreat just a short drive from Detroit. Haven Hill Estate became the Ford family's country home and included a lodge, riding stables and barn as well as a swimming pool, tennis courts, horseback riding trails and more than 2,400 acres of rolling forest.

Three years after Edsel Ford's death in 1943, his wife, Eleanor, sold the estate to Michigan's park system and it eventually became the Highland Recreation Area.

"To this day, Highland Recreation Area doesn't allow development in much of our land in order to keep it the natural haven that it's always been," Althoff said.



Thanks to careful management, Haven Hill Natural Area remains the natural retreat Edsel Ford once envisioned and still boasts incredible biological diversity. 

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Frequently, lake associations, the press, educational institutions and others request permission to reprint an article from *The Michigan Riparian* magazine in a newsletter, newspaper, or other publication. In general, *The Michigan Riparian* magazine is relatively liberal in granting permission for such reprints. However, no such reprint can be done without the expressed prior written permission of the magazine.

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ML&SA 57th Annual Conference an Unequivocal Success

By Scott Brown, MLSA Executive Director

Photo Credits: Randy Cook



If it is possible to measure the overall success of a conference by enthusiasm, the number of positive comments received from participants, and the degree of constructive interaction that takes place between appreciative audiences and conference presenters, then we are happy to report that the Michigan Lake and Stream Associations (ML&SA) 57th Annual Conference was an unequivocal success. The officers, directors, and staff of ML&SA were pleased to recently welcome 250 guests. Held at the Crystal Mountain Resort near scenic Thompsonville on Friday and Saturday, April 20th and 21st, this year's conference was organized around a theme of "preserving your freshwater gem, the essentials of lake stewardship" and anchored by four outstanding keynote speakers. On behalf of ML&SA I would like to extend a very special thanks to all who devoted time, energy, and resources to attend our annual conference.

Without the perennial support of our dedicated members, our annual conferences would not be possible. AND...if you didn't attend this year's conference, we encourage you to make plans to attend next year!

On behalf of our organization and myself, I would also like to express our appreciation to Beth Cook, our conference coordinator, for her dedication and hard work in pursuit of excellence in every aspect of our annual conference! We would also like to give a particularly loud shout-out to Restorative Lake Sciences and Applied Biochemists for their co-sponsorship contributions. A heart-felt thank you to each of the four outstanding keynote speakers, our break-out session and workshop presenters, and to each of the commercial and non-profit exhibitors who devoted considerable time and effort to making our conference a great success! And last, but not least, thanks to the hard working managers and staff of Crystal Mountain Resort for their professionalism and pro-active approach in helping to assure the conference's success!

The opening plenary session kicked off Friday morning with the introduction of keynote speaker, Grenetta Thomassey. She is the Watershed Policy Director for the Petoskey-based Tip of the Mitt Watershed Council. She presented a detailed overview of the mission and critical role of the organization in helping to ensure the health, vitality, and sustainability of a region graced with "the most important, diverse, and pristine water resources on earth". Created in 1979, the primary mission of Tip of the Mitt Watershed Council is to protect the vast water resources of Antrim, Charlevoix, Cheboygan, and Emmet counties located in northwest lower Michigan. It is important for readers to know that Tip of the Mitt Watershed Council has played a major leadership role in nearly every significant freshwater related conservation issue ranging from fracking to unsustainable commercial exploitation of freshwater resources in Michigan and the Laurentian Great Lakes region for almost 40 years. Ms. Thomassey emphasized the importance of lake associations in water conservation and concluded by fielding questions from the audience.

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“ Preserving
your Freshwater Gem,
the Essentials of
Lake Stewardship ”

(Continued from page 30)

Our opening plenary session continued with a keynote presentation by Vicki Springstead, who has served as Chair of the Higgins Lake Foundation for the past 11 years. The Foundation is a dynamic, pro-active grass roots organization dedicated to “promoting ecologically sound projects and practices for the protection of Higgins Lake and the surrounding watershed”. Representing one of Michigan’s most successful inland lake stewardship organizations, Vicki described the intensive efforts of the Higgins Lake Foundation in organizing and implementing a highly successful public awareness and fund raising campaign resulting in the construction of two Higgins Lake-based public boat launch wash stations which help prevent the spread of invasive plant species and the acquisition of a Diver Assisted Suction Harvesting (DASH) equipped boat. Emphasizing the importance of building and maintaining the support of the local community and building sustainable collaborative partnerships, Vicki discussed the importance of Roscommon region businesses and institutions, including the Rotary Club, Chamber of Commerce, Historical Society, the library board, and the Higgins Lake Boat Club, in making major contributions to the overall long-term success of the projects undertaken by the Higgins Lake Foundation. Ms. Springstead concluded her presentation by effectively answering a myriad of good questions from members of the audience.

Friday afternoon’s three breakout sessions included a presentation by ML&SA Director, Paul Sniadecki on the role of voluntary lake associations in initiating and sustaining inland lake stewardship efforts; inland lake ecology presented by aquatic ecologist Patty Hoch-Melluish of Kieser & Associates; and participants explored the vast contributions of Michigan’s inland lakes to our local, regional, and state economies from this author. All of the sessions were well attended and the educational value of each session was enhanced with great Q and A.

Following Friday evening’s banquet, keynote speaker State Senator Rebekah Warren was warmly welcomed.

An ardent champion for the protection and sustainable use of Michigan’s vast treasure of freshwater resources, Senator Warren was first elected to the

State Senator
Rebekah Warren

Michigan House of Representatives in 2006 where she represented the 53rd District for four years. Now in her second term as State Senator for the 18th District, she continues to dedicate significant time and energy working to support natural resource conservation initiatives in the Michigan state legislature. Describing the immense challenge of passing conservation water resource protection laws, Senator Warren stressed the critical role of organizations such as Michigan Lake and Stream Associations in working to preserve our legacy of high quality freshwater resources for future generations. Senator Warren also remarked that she is a strong advocate for the Michigan Clean Water Corps (MiCorps) Cooperative Lakes Monitoring Program, emphasizing that the entire tiny budget of the highly successful collaborative partnership-based DEQ program falls within a mathematical “rounding error” of an annual state budget that will likely exceed 56 billion dollars in the coming fiscal year. We’d like to extend a hearty ML&SA thank you to State Senator Warren for investing the time and effort to make the long trek “up-north” to participate in our 57th annual conference!

Charged with managerial oversight of 103 state parks, recreation areas, scenic sites, and historic state parks that encompass 306,148 acres of recreational land that are visited by an amazing 25 million people annually, plus 19 state harbors located on the Great Lakes and connected waterways and an additional 1,100 public boating access sites situated throughout the state, the Chief of DNR Parks and Recreation Division is a very busy man. Needless to say, we were honored when Chief Ron Olson agreed to serve as a keynote speaker at our 57th annual banquet. Opening his remarks with an overview of the mission, goals, and challenges faced by the DNR Parks and Recreation Division, Chief Olson emphasized that long-term success in effectively managing Michigan’s numerous state parks, recreation areas, harbors, and public boating access sites is increasingly dependent upon forming unique collaborative partnerships with statewide organizations such as Michigan Lake and Stream Associations and the Michigan Waterfront Alliance. The Chief also suggested



MDNR Parks and
Recreation Chief,
Ron Olson

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Pro-Active Upper Long Lake Residents Ron Cousineau and Mike West Recognized as 2018 ML&SA "Riparians of the Year"

By Scott Brown, MLSA Executive Director



Mike West (Left) and Ron Cousineau (Right)

For over a decade Michigan Lake and Stream Associations has presented an annual award to individuals who have effectively demonstrated that the citizen stakeholders of freshwater resources have the ability to "take matters in to their own hands". Now known as the "Richard "Dick" Morey Michigan Inland Lakes Riparian of the Year" award in honor of our President and good friend who passed away in late January, the annual recognition is bequeathed upon individuals who consistently demonstrate "outstanding leadership, teamwork, and dedication in preserving and protecting Michigan's freshwater heritage for future generations". The officers, directors, staff and membership of Michigan Lake and Stream Associations are pleased to announce that Ron Cousineau and Mike West of Oakland County's Upper Long Lake are this year's winners of the award. Presented to the pair at our recent 57th annual banquet held at Crystal Mountain Resort on Friday, April 20th, this year's "Riparian of the Year" award was given to both Ron and Mike in recognition of their ingenuity and hard work in devising an effective non-chemical strategy for controlling the invasive phragmites that had become prevalent on large segments of their lake's near shore areas. On behalf of ML&SA, congratulations Mike and Ron! *R*

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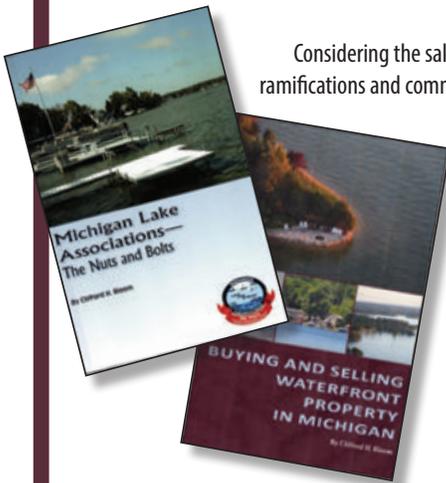
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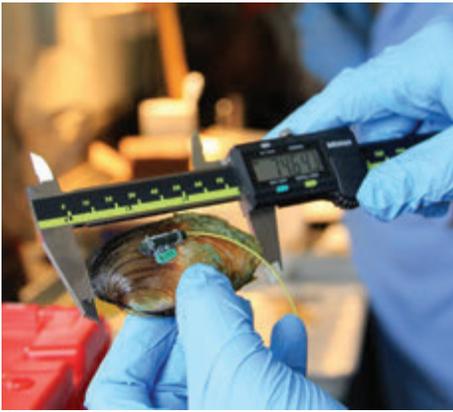
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Pioneering an Environmentally Compatible Control for Zebra and Quagga Mussels

By Matt Claucherty, Former Monitoring and Research Coordinator
Tip of the Mitt Watershed Council

For decades, water lovers of all types have watched, powerless, as invasive zebra and quagga mussels have taken over aquatic ecosystems across the Great Lakes Basin. Anglers bemoan violent fluctuations in fish populations spurred by food chain shifts linked to the mussel's filter feeding. Beachgoers suffer foot injuries as shells wash ashore and foul beaches. Birders witness increased fall die-offs of waterfowl from avian botulism, a paralytic condition thought to originate in nutrient-enriched benthic environments driven by the mussels. Shoreline infrastructure, whether it be metal sheet pilings, water intake pipes, or other equipment, is often encrusted with zebra mussels, creating a maintenance nightmare for shoreline industry.

One lesser known effect of the proliferation of zebra and quagga mussels is the near-elimination of native mussels (many know them simply as "clams") from the region's inland lakes. Zebra and quagga mussels compete with native mussels for the same food source: phytoplankton suspended in the water column. In lakes where zebra and quagga mussels have taken hold, monitoring efforts have documented plummeting phytoplankton concentrations. Indeed,

our waters have become clearer, but not in a healthy way. Think of the increased clarity as sterility; there isn't much life left. To add insult to injury, zebra mussels often encrust native mussels, taking root by the dozens upon a single native mussel shell, thus inhibiting essential movement and life functions. These two factors, in combination with habitat loss, have resulted in a vast reduction in native mussels across the Great Lakes Region.

Among the economic and ecologic turmoil of a large-scale infestation, a glimmer of hope lies in a clever solution: a bio-based control measure that selectively eliminates zebra and quagga mussels from the lake environment. In the 1990's, researchers from the New York State Museum tested over 500 strains of bacteria for action against zebra and quagga mussels. One strain of *Pseudomonas fluorescens*, a common soil bacterium often found living in symbiosis with plant roots, fit the bill. Marrone Bio Innovations (a California-based organic pesticide company) purchased the technology and patented it under the trade name Zequanox. After much preliminary testing, Zequanox was approved by the US Environmental Protection Agency in 2012 for use in infrastructure such as water intake pipes or cooling systems.

In 2014, an environmental restoration label was approved, allowing Zequanox to be used in the natural environment.

The Zequanox product is an off-white powder that consists of dehydrated *P. fluorescens* bacteria. Since the bacteria are dead (for nothing lives without water), there is no concern of growth of introduced bacteria within a lake. The powder is mixed with lake water and injected above the lake's bottom, where zebra and quagga mussels filter feed on the material just as they would their natural food source. Within 7-20 days, Zequanox causes the digestive system of the mussels to fail, and the mussels die. A large body of past laboratory work confirms that other aquatic organisms such as native mussels, invertebrates, fish, birds, mammals, and plants are unlikely to be harmed by Zequanox. Furthermore, Zequanox is biodegradable and quickly dissipates within the aquatic environment.

In a recent research project, funded by the Environmental Protection Agency's Great Lakes Restoration Initiative, Zequanox was used to treat three acres of open-water lake bottom in Round Lake, near Petoskey in Emmet County. The Lake has a dwindling population of native mussels, many of

(Continued on page 34)

Pioneering an Environmentally Compatible Control for Zebra and Quagga Mussels

(Continued from page 33)

which are encrusted with a heavy load of zebra mussels. The study, as the first large-scale open water use of Zequanox, will evaluate its effectiveness at rehabilitating threatened native mussel populations. In addition to native mussels, a wide range of environmental parameters will be evaluated. Algal species composition, insect emergence, and water quality measurements such as dissolved oxygen and nutrient concentrations were quantified before and after Zequanox treatments to identify any non-target impacts or water quality degradation brought about by Zequanox use.

The level of detail and wide breadth of work required participation from experts across many fields of aquatic study. Researchers from the University of Michigan Biological Station, Michigan Natural Features Inventory, and United States Geologic Survey partnered with Tip of the Mitt Watershed Council to carry out the study. While the study is still underway, some preliminary conclusions can be drawn. No immediate water quality degradation occurred, with dissolved oxygen levels remaining high throughout treatment areas. Close observation from multiple teams of researchers confirmed that no aquatic life was injured during or immediately after treatments. Ongoing lab work will evaluate every family of insect, species of algae, and type of zooplankton for possible vulnerability to Zequanox. Applying Zequanox to open water has presented its own challenges, with mixing of lake water diminishing treatment concentrations, which could lead to reduced effectiveness.

The current research efforts aim to bring Zequanox to the forefront of invasive species control, putting another tool in the toolkit of lake managers. While complete elimination of zebra and quagga mussels may not be a realistic goal, many other management activities are possible. Zequanox could be used as a rapid response measure for new infestations, or as a safety net around boat launches of uninfested lakes. Zequanox may be used in the future to help restore native mussel populations that would otherwise succumb to competition from zebra and quagga mussels. These visions and more depend upon the proven safety and efficacy of this promising new treatment technology. Full study results, as well as videos and webinars, will be available at www.watershedcouncil.org in early 2019.



TIP OF THE MITT WATERSHED COUNCIL: *The Tip of the Mitt Watershed Council speaks for Northern Michigan's waters. We are dedicated to protecting our lakes, streams, wetlands, and groundwater through respected advocacy, innovative education, technically sound water quality monitoring, thorough research, and restoration actions. We achieve our mission by empowering others and we believe in the capacity to make a positive difference. We work locally, regionally and throughout the Great Lakes Basin to achieve our goals. The Watershed Council's service area includes the water resources in Antrim, Charlevoix, Cheboygan, and Emmet Counties. We are dedicated to preserving the heritage of Northern Michigan - a tradition built around our magnificent waters. *

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ML&SA 57th Annual Conference

an Unequivocal Success *(Continued from page 31)*

that the greatest challenge confronting water resource management agencies and natural resource stewardship organizations in Michigan is finding creative ways to effectively reduce the spread of exotic aquatic invasive species. Chief Olson made particular reference to the inland lake public boating access site aquatic invasive species prevention focused task force that was recently formed by the DNR Parks and Recreation Division, and the Michigan Waterfront Alliance, a now twenty year old non-profit organization dedicated to the protection and preservation of Michigan's inland lakes, and waterfront (riparian) property right. Thank you, Chief Ron Olson, for taking time out of your hyper-busy schedule to make a significant contribution to the success of our conference!

Our post-banquet agenda was highlighted again this year by Attorney Cliff Bloom's popular riparian rights and water law Q and A session. An over-capacity crowd of lakefront property owners filled the room to avail themselves of expert riparian and water law advice from the noted Grand Rapids-based attorney.

Anchored by four great opportunities to improve the ability of lakefront property owners to be good stewards of their respective lakes, as well as time to kick-off the day with a hearty breakfast and an opportunity to chat with the myriad of representatives supporting our commercial and non-profit exhibitors, the Saturday morning segment of the ML&SA 57th annual conference represented a continuation of the enthusiasm that we witnessed on Friday. For those interested in

learning more about the aquatic plant communities that help stabilize our inland lake ecosystems,

and provide critical habitat for the fish we love to catch, Dr. Jo Latimore and Erick Elgin of Michigan State University Extension conducted a seminar on enabling lakefront property owners to reliably identify both native and invasive aquatic plants. Supported by an interactive "hands on" approach, the always popular event hosted a near capacity Saturday morning contingent of participants. Conference attendees were also provided with a great opportunity to learn about the Michigan Shoreland Stewards Program from Julia Kirkwood, Michigan Natural Shoreline Partnership facilitator and a staff member within the MDEQ Water Resources Division Non-point Source Program. The Michigan Shoreland Stewards Program provides recognition for lakefront property owners who are working to protect their respective inland lakes using best management practices. Conference attendees also had the unique opportunity to learn about the process of evaluating the efficacy and value of their respective voluntary lake associations from Dr. Stacy Daniels, engineer, and President Pro Tem of the Benzie County River Improvement Company. In two jam-packed sessions, Cliff Bloom of the Grand Rapids firm Bloom Sluggett, PC was also on hand to present an annual review of the latest court decisions affecting Michigan riparian and water law.

The Saturday afternoon segment focused much needed attention on three major issues confronting the health and sustainability of Michigan's inland lakes. ML&SA Board member and owner/president of Restorative Lake Sciences, Dr. Jennifer Jermalowicz-Jones explored the use of flumioxazin, a broad spectrum herbicide that is widely used in the agricultural industry, for controlling nuisance level growth of Starry stonewort. Capable of creating dense meadows that prevent the emergence and growth of native aquatic plant communities, the invasive charophyte is rapidly spreading throughout Laurentian Great Lakes region inland lakes and has become particularly prevalent in southern Michigan inland lakes. Dr. Jermalowicz-Jones reports that the initial results of her study suggest that the agent may serve as an effective agent in the now 40-year battle to effectively control rapid growth of the invasive member of the Characeae family. The AIS control workshop was rounded out by a presentation from Ron Cousineau and Mike West of Upper Long Lake in Oakland County on their successful efforts to control invasive phragmites. Mike and Ron discussed



Wayne Swallow of SiLotions LLC



Julia Kirkwood

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MICHIGAN INLAND LAKES CONVENTION 2018: Learning and Discussion for the Sake of Our Lakes

By: Alicia Symanski and Max Becker
Northwestern Michigan College, Water Studies Institute



Photo Credit: Alicia Symanski

Now in its third installment, the Michigan Inland Lakes Convention is preparing to host researchers, water managers, local leaders, resource professionals, and students that share a love for Michigan's 11,000+ inland lakes over two informative days. The theme for this year's event is *Working Together for Healthy Lakes*, and attendees should expect to find their lake-centered inquiries addressed over a diverse series of presentations, discussions, workshops, and day trips to local sites. Scientists, students, managers, policy experts, conservationists, anglers, riparian owners, recreational users, and all lovers of lakes are encouraged to attend. The 2018 Convention will be held October 4th-5th at the Crowne Plaza Hotel in Grand Rapids, a centralized location that will make this year's convention more accessible than ever.

Michiganders and visitors who spend time on or near the 11,000+ inland lakes in the state share a deep and common love for the water. The

immense success of the two previous Michigan Inland Lake Conventions (2014 and 2016) is generating high levels of excitement about this year's event, where over 200 attendees are expected. This is an opportunity to learn from prominent leaders in science and lake management. Perhaps most importantly, it is an opportunity to unite as a group to learn best protection, prevention, and preservation practices for the waters of the Great Lakes State that so many call home!

The Michigan Inland Lakes Convention is honored to work in partnership with the Michigan Clean Water Corps (MiCorps), the statewide volunteer lake and stream monitoring program. For those who want to get involved with the monitoring of Michigan's inland lakes, there will be various sessions focused on citizen science. One of the most effective means of connecting between state-funded researchers and citizens is through the MiCorps volunteer-based lakes and stream monitoring programs.

A technical training is offered to volunteers each year with supplemental resources available online; however, convention attendees will have several chances to learn in detail how to contribute to the incredible body of data that citizens throughout the state have worked passionately to collect!

Featured at the 2018 Michigan Inland Lakes Convention will be two keynote speakers whose backgrounds are rooted firmly in a passion for water and ecosystem health. Lisa Borre, an experienced lake manager, writer, and ecosystem and climate change analyst from the Cary Institute of Ecosystem Studies in New York, will fuel in-depth conversation on global lake protection and management. Bill Creal, the former Chief of the Water Resources Division of the Michigan Department of Environmental Quality and current Research and Innovation Director for the Great Lakes Water Authority will speak on our state's water conservation history and current initiatives.

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Photo Credit: Gabriela Shirkey



Photo Credit: Angela DePalma-Dow

Registration for this event opens in May, and participants can choose to attend one or both days. Early arrivals on Wednesday, October 3rd are encouraged to attend an evening reception where they will be welcomed with hors d'oeuvres and drinks. Those interested in proposing material for the convention such as a workshop or field trip, poster or lecture should note the deadline for submission on June 1st. There will also be a selection of door prizes and a photo contest at this year's convention. For any interested in donating a good or service, or a photo in the contest, note that submissions are due by August 3rd.

For more information regarding convention registration and submissions, visit <http://michiganlakes.msue.msu.edu/>, and find us on Facebook at Michigan Inland Lakes Partnership. This biennial event is a program of the Michigan Inland Lakes Partnership, a group focused on promoting collaboration to advance stewardship of Michigan's inland lakes since 2008. The convention results from the collaborative efforts of Michigan State University Extension, the Michigan Department of Natural Resources, the Michigan Department of Environmental Quality, the Michigan Aquatic Managers Association, Northwestern Michigan College, the Michigan Chapter of the North American Lake Management Society, and the MSU Institute of Water Research. *R*

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Honoring the Past, Preparing for the Future:

By Scott Brown, MLSA Executive Director

Michigan Lake & Stream Associations Becomes Michigan Lake Stewardship Associations



Formed in 1961 by an enthusiastic group of waterfront property owners who recognized the potential for voluntary lake and stream associations to preserve our freshwater resources and our riparian rights, Articles of Incorporation formalizing the establishment of the Association of Michigan Lakes and Streams Associations (AML&SA) were filed with the state on January 28th, 1963. Launching our now 57-year-old organization with no more than a mere 400 bucks cash on hand, an initial membership of just a few lake associations, and an abundance of commitment, ideas, and energy, the fledging organization would establish a Board of Directors, open a central office, begin a monthly newsletter, grow to over 100 associations, launch the now widely-circulated Michigan Riparian magazine in 1965, and hold 10 consecutive and highly successful annual conferences by the year 1970.

Submitting the necessary paper work with the Michigan Attorney

General Charitable Trust Division and the Department of Licensing and Regulatory Affairs to change the name of the organization in early 1970, the abbreviated and much easier to pronounce name, Michigan Lake and Stream Associations (ML&SA) would be approved in June, 1970. Achieving steady membership and revenue growth throughout the decade, the organization's first Executive Director, Donald Winne, would be hired in the late 1970's and a central office was established in downtown Three Rivers. At about the same time, Pearl Bonnell of Long Lake, Michigan, would be hired as Director of Operations. It is important to note that Pearl's lakefront residence would remain the de facto ML&SA northern office until her retirement many years later. Often referred to as the "dynamic duo", Pearl and Don devoted nearly three decades of their highly productive lives travelling throughout the state working with lake associations to improve their capacity to preserve

and protect their respective freshwater resources.

Although the original founders of our organization envisioned serving an active membership comprised of both lake and stream property owners associations, the concept of stream property owners associations never really took hold. A comprehensive review of ML&SA year-to-year membership revealed that, with the exception of individual and corporate members, our membership has always been comprised primarily of lakefront property owners associations.

Honoring our past and recognizing the vital role Michigan's lake associations in preserving the health and vitality of our inland lake heritage for the future, our Board of Directors recently voted to change the name of our organization to Michigan Lake Stewardship Associations (MLSA). Wikipedia defines stewardship as "an ethic that embodies the responsible planning and management of resources". Although we have changed our name to more accurately reflect the mission and people we strive to serve on a day-to-day basis, our organization remains steadfastly committed to the idea that pro-active lakefront property owner voluntary associations are in the best position to advocate for riparian rights and inland lake protection and preservation in Michigan. *R.*

ML&SA 57th Annual Conference an Unequivocal Success

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their winning battle utilizing only non-chemical methods. A Michigan Swimmers Itch Partnership workshop supported by team members Jim Vondale, Joel Buzzell, Swimmers Itch Solutions' Dr. Curt Blankespoor, Freshwater Solutions' Ron Reimink, and Wayne Swallow of SiLotions LLC, explained the considerable progress achieved by their dynamic partnership in the past decade in finding effective solutions to "swimmer's itch".

Again, thanks to everyone for contributing to the success of our ML&SA 57th Annual Conference! Please "stay tuned" to the next issue of *The Michigan Riparian* magazine for the dates and venue of our first ever annual conference held under our new organizational name Michigan Lake Stewardship Associations! And, please do not forget about the 2018 Michigan Inland Lakes Conference that will take place on Thursday and Friday, October 4th & 5th at the Crown Plaza Hotel (Airport) in Grand Rapids. To learn more about the lakes convention, please visit <http://www.canr.msu.edu/michiganlakes/convention/index>. 

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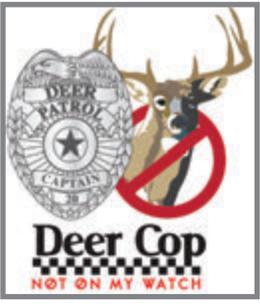
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ML&SA Presents 2018 Megan E. Cook Memorial Scholarship Awards

By Scott Brown, MLSA Executive Director

The 57th annual banquet provided a very special opportunity for Michigan Lake and Stream Associations to publicly announce this year's winners of the **Megan Erin Cook Memorial Scholarship** awards. Two awards are dedicated in the loving memory of the gifted and highly talented 16 year-old, Megan Cook who tragically lost her life in a car accident November, 2016. Megan is the daughter of Beth and Randy Cook.

One scholarship was awarded to a deserving undergraduate student, and one scholarship was awarded to an exceptional graduate-level student—both demonstrating promise in pursuit of their respective degrees. The 2018 winners of the Megan E. Cook Memorial Graduate Scholarship Award is Paige M. Kleindl, a graduate student at Grand Valley State University and Michaela A. Kratofil, a student in the Michigan State University Department of Fisheries and Wildlife. Congratulations to Paige and Michaela on their impressive achievements! *R.*



Megan E. Cook Memorial Scholarship Award winner Paige M. Kleindl (left) poses with Jennifer J. Jermolowicz-Jones, MLSA Director, and Science Advisor.



Beth Cook, MLSA Treasurer, conference coordinator and Megan's mother, presents the Megan E. Cook Memorial Scholarship award to Michaela A. Kratofil (left) of Michigan State University.

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Pentwater Schooner Program

By AnnaMae Bush, Board of Directors, Pentwater Lake Association



Captain Lee Price is on the hunt for a schooner for which “the price is right.” Price has an ambitious vision to put Pentwater on the map with a schooner program similar to Michigan Heritage Alliance – Sail Champion in Traverse City and Veterans on Deck in Charleston, SC. These programs serve veterans suffering from PTSD (post

and certifications. Price has his BA in Psychology/Sociology and an MA in Educational Leadership. His employment experience includes serving as executive director of a community mental health center, and working with Bill Bluhm, while Bill was the Superintendent of the Oceana Intermediate School District.

It is a noble cause to serve our veterans and our children. Serving them through a sailing program is an opportunity not many communities can provide. Pentwater is surely in a unique position to take on the challenge. If you would like to get involved as a volunteer or as a board member for the program, or if you simply have questions or ideas, you are urged to contact Lee Price by email at captainleeprice@gmail.com, or by phone at (419) 376-3277. *R.*

traumatic stress disorder) and children with emotional impairments. With easy access to Lake Michigan, Pentwater makes an ideal location for this type of program.

The Pentwater Schooner Program is in its early stages of formation. The participants of five counties will be involved: Muskegon, Newaygo, Oceana, Lake, and Mason counties. Current efforts are focused on gaining non-profit status, finding a schooner, and securing funding support. Price is in dialogue with Village administrators and the Planning Commission to determine the best possible docking location.

The vision for the program is well-developed. Price says the program will function with one schooner, approximately 50' long and with double-masts. He has been watching sales lists for schooners across the U.S and abroad. However, he does not think the program has to be delayed until the schooner has been purchased. He currently has smaller sloops with which the program can start. Price is confident the program will “float” with half of the program time focused on the participants, and the other half hosting day, sunset, and midnight cruises and other events to raise funds

Collaboration is very important to potential funding sources. Price sees the Pentwater Schooner Program partnering with the Maritime Museum in Ludington, with the veterans’ facilities in the participating counties, and with Pentwater’s junior sailing program run by Bill and Sue Bainton.

Price developed his vision for this program from a lifetime of experience, education, and service. His boating experience began in 1970 and he began racing in 1981, with multiple wins in prestigious races. He has several licenses

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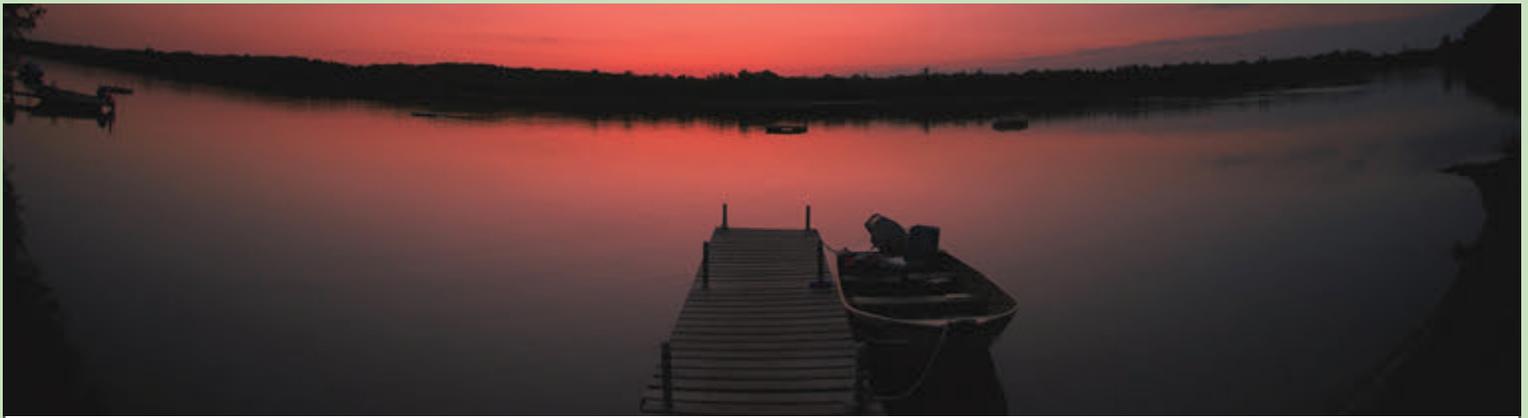
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“The Difficulty of Bottomlands Ownership Location”

By Clifford H. Bloom, Esq.

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Most readers of *The Michigan Riparian* magazine are familiar with the Michigan appellate case law indicating that on most inland lakes in Michigan, the waterfront or riparian lots extend under the water and to the center of the lake. See *Heeringa v Petroelje*, 279 Mich App 444; 760 NW2d 538 (2008); *Weisenburger v Kirkwood*, 7 Mich App 283; 151 NW2d 889 (1979); *Hall v Wantz*, 336 Mich 112; 57 NW2d 462 (1953); *Gregory v LaFaive*, 172 Mich App 354; 431 NW2d 511 (1988). If the lake were round, the location of the bottomlands and riparian boundary lines would be easy to determine – riparian boundary lines would radiate to a point in the center of the lake (like slices of a pie or pizza). Unfortunately, however, lakes are not perfectly round such that the courts must use a variety of different techniques to determine which property owner owns a specific section of the bottomlands under the lake. And, almost never do the underwater riparian boundary lines for a waterfront property radiate to the center of the lake at the same angle as the side property lines for the lot on dry land.

Depending on the shape of the lake, layout of the shoreline of the lot or lots involved and other factors, the courts can use a variety of different techniques to determine the center of an inland lake. For a few lakes that are fairly round, there might be one center point for the whole lake. However, with most lakes, the courts utilize a combination of points and thread lines for determining the angle of riparian boundary lines.

Why is it that determining the exact location for a riparian boundary line under the waters of a Michigan inland lake is so difficult? There are generally five reasons. First, as many judges have put it, determining the location of underwater riparian boundary lines on an inland lake in Michigan is more of an art, than a science. For a given area of a lake, the surveyors or surveyors/engineers who give professional opinions regarding the location of a common riparian boundary line offer a

variety of different techniques that can be utilized. Rarely do two surveyors or surveyors/engineers agree on where a common boundary line is located. Ultimately, only a judge can determine the exact location of a riparian boundary line. Second, there are a variety of different techniques for determining the center or thread line of a lake and at what angles the riparian boundary lines radiate to the center or thread line. Third, lawsuits involving the location of the riparian boundary lines tend to be time-consuming, expensive and complex. Fourth, there are many persistent myths that laypeople perpetuate regarding bottomlands ownership that wreak havoc with the public’s understanding of bottomlands ownership. Quite often, laypeople try to determine the location of their own riparian boundary lines. And, in almost all cases, they are wrong! Finally, riparian boundary line disputes are often contentious, emotional and frustrating. Given how strongly people feel about their waterfront property and the fact that many lake lots are small such that every inch of lakefront property is important, riparian boundary line disputes tend to be very intense.

Many surveyors and surveyors/engineers in Michigan hold themselves out as being able to properly do riparian boundary lines determinations. In fact, it has been this writer’s experience and opinion that there are a limited number of such experts in Michigan who are truly skilled at determining underwater boundary lines for Michigan inland lakes.

Based on all of the above, if two neighbors feud over their common riparian boundary line, it is almost always better to attempt to reach a compromise settlement for the bottomlands boundary line location rather than to risk expensive court litigation. *R.*

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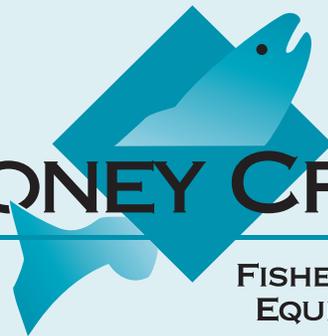
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