

Bass Lakes Area Environmental Partnership

10 June 2023 - Annual Public Meeting Minutes

- Commence: 10:00
- Adjourn: 11:55
- Location: 8449 W. Lisaius Ln, Irons, MI 49644
- Board of Directors:
 - President: Lisa Adams
 - Vice-President: Tom Shear
 - Secretary: Heidi Haskins
 - Treasurer: Barb Seiler
 - Director: Linda Irmischer (absent)
 - Director: Jeanne Kavanagh
- Invited Guests: Sheriff Rich Martin, Mr. Erick Elgin of MSU Extension
- Attendees from the Public: 45

- Agenda:
 - Introductions and Meeting Housekeeping Information
 - Updates on Big Bass and Little Bass Lakes
 - Diver Assisted Suction Harvest (DASH) Boat Campaign Kick-off
 - Presentation from Mr. Erick Elgin of MSU Extension
 - Plant identification and Eurasian Water Milfoil (milfoil) hand-pulling demonstration
 - Fundraiser Picnic Lunch (\$10 donation requested)

Thursday, 15 June 2023

- Housekeeping information (restrooms, etc)
- Introduction of Bass Lakes AEP organization and board members
 - short organizational history presented to include explanation of how Bass Lakes AEP became a 501c3, explanation that we are not a membership-based organization and that all funding comes from donations received and grants
 - summary of actions taken, events executed and accomplishments since organization conception in March 2021
 - all communication are now electronic; information communicated via email, our website and Facebook
 - all state and federal taxes, permits and licenses obtained
 - attendance at countless hours of conferences, webinars and one-on-one conversations with MSU/DNR/EGLE scientists to educate ourselves about aquatic invasive species (AIS) and lake/shoreline ecology
 - accomplishing one of our main goals of educating people about:
 - AIS, why they are harmful and how to prevent their spread
 - lake ecology/healthy lakes
 - shoreline preservation and restoration
 - potential impacts of septic systems
 - hosted annual MSU Mobile Boat Wash events
 - hosted annual AIS Blitz events
 - We continue to look for ways to
 - decrease herbicide chemicals in Big Bass Lake
 - prevent herbicide chemical treatments in Little Bass Lake
 - Big Bass Lake has spent approximately \$400,000 in herbicide application to-date
 - Little Bass Lake is try to prevent introduction of herbicide into lake
 - recognition of Tom Stinson as head of Fish and Fish Habitat Committee

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- fishing competitions were organized over the past two summers in coordination with the Michigan DNR
 - over 700 lbs of stunted bass were removed from the lakes
 - announcement of upcoming fishing competition over Labor Day weekend
 - more information will be provided in separate communications later in the summer
- to-date Bass Lakes AEP has received nearly \$20,000 in grants
 - 2021 Trout Unlimited - used for Big Bass Lake DASH operations completed June 2021
 - 2021 Laird Norton Family Foundation - used for Big Bass Lake DASH operations completed June 2021
 - 2021 Bass Pro Shop - Cabela's Outdoor Fund grant used for fishing competition prizes
 - 2022 GLE Energy grant put toward DASH Boat Campaign
- Cooperative Lake Monitoring Program (CLMP) Updates
 - explanation of CLMP program provided
 - Big Bass Lake has been enrolled since 2019; Little Bass Lake has been enrolled since 2021
 - Data is most useful when trend analysis over time can be performed. The more data, the better the analysis of the overall health of the lakes.
 - Citizen Scientist thank you and recognition
 - Big Bass Lake volunteers: Ruthanne Gilbert, Colleen Howes, Linda Irmischer, Jeanne Kavanagh, Laura McKay, Bert Merriman, Sheryl Steenwyk and Deb Trukowski, Lisa Adams
 - Little Bass Lake volunteers: Heidi Haskins and Tom Shear
 - Presentation of CLMP measuring and sampling equipment and procedures
 - Secchi disk - weekly measurement for water clarity

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- Total phosphorus - samples collected in spring and late summer
- Dissolved oxygen/temperature - measured twice/month at depths from surface to just above the lake bottom
- Chlorophyll - samples collected monthly to measure amount of algae in water
- Aquatic invasive species watch - performed annually
- Score the shore - shoreline habitat assessment performed every 3-5 years
- there are approximately 300 lakes in the state that participate in CLMP, including a handful from Lake County
- **Big Bass Lake 2022 CLMP results** (available at [basslakesaep.wixsite.com](https://basslakesaep.wixsite.com/micorps.net) or micorps.net)
 - Big Bass Lake is oligotrophic to mesotrophic, tending toward mesotrophic
 - this means the lake is somewhere between clear water with a little or no weeds and a more turbid lake with moderate plant and algae growth
 - this is primarily due to nutrient pollution from fertilizers, primarily nitrogen and phosphorus, likely driving algae growth and diminishing water clarity
 - some dissolved oxygen (DO) is in deeper waters through mid-summer, but devoid of DO by late summer
 - this means that Big Bass Lake can not support cold water fish (for example, the cisco, trout, whitefish), but can support warm water fish (for example, bass/pike)
 - Big Bass Lake does have milfoil, but no other invasive species found to-date
 - Harper Lake has Starry Stonewort which is easily transferred on trailers, boats, fishing equipment, etc.
 - **clean, drain, dry of all watercraft (boat, trailer, kayak, paddle, etc) is critical** to prevent the spread of aquatic invasive species between neighboring lakes and into Big and Little Bass Lakes
 - Score the Shore evaluates the health of shoreline habitat (lawns, seawalls, vegetation near shore, woody debris) using a defined rubric.

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- pristine lake score = 100
- Big Bass Lake scored 65.9 out of 100.
- the average score of all lakes who performed Score the Shore was 73
- these data can be used as the basis for writing grant proposals for erosion control projects and/or habitat enhancement
- **Little Bass Lake 2022 CLMP results** (available at [basslakesaep.wixsite.com](https://basslakesaep.wixsite.com/micorps.net) or micorps.net)
 - Little Bass Lake is oligotrophic to mesotrophic, tending toward oligotrophic
 - DO is higher throughout the entire summer at deeper depths
 - the lake does not stratify as significantly as other lakes, but does have an area at very deep depths with no oxygen
 - Little Bass Lake has a lot of oxygen present at middle depth. These oxygen levels and the lower level of stratification of the lake provide an environment that sustains the Cisco fish.
 - Little Bass Lake does have milfoil
 - Little Bass Lake scored 76.1 out of 100 for Score the Shore.
- DASH Boat Campaign Kick-off
 - Tom Shear presented information regarding common methods of control for invasive aquatic plants.
 - discussion on introduction and continued use of herbicide in the lake ecosystems.
 - discussion of benthic mat (barrier) introduction used to smother invasive plants and then re-populate with native plant transplants
 - discussion on use of biologics (weevils)
 - Erick Elgin of MSU extension contributed that findings have been varied regarding the success of biologic control on the mitigation of milfoil
 - DASH discussion on the execution of suction harvest processes

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- is the most viable option of milfoil control that does not include the use of herbicide
- Bass Lakes AEP started a DASH boat campaign to purchase a for use on Big Bass and Little Bass Lakes to help mitigate milfoil growth and spread
 - The fundraising goal is \$60,000 and will cover procurement of the boat, required ancillary equipment and initial operating cost. Long-term operating costs are not included in the initial fundraising goal of \$60,000.
 - breathing air would be surface air supplied houka system; divers would have buoyancy related equipment and emergency air equipment
 - Bass Lakes AEP is offering to fund dive certifications for volunteers in exchange for completion of 45 days of hand pulling dive operations.

- Sheriff Martin presented a \$500 donation from the Lake County Sheriff's Office Charitable Campaign funds to Bass Lakes AEP DASH Boat Campaign!

Sheriff's Charities donate to two local nonprofits

Ongoing campaign continues to support community

By Cathie Crew
STAFF WRITER

LAKE COUNTY — The Lake County Sheriff's Office Charitable Campaign has had a busy week, presenting donation checks to two local nonprofit organizations.

On June 8, Sheriff Rich Martin presented the Carr Settlement Fire Department with a donation of \$1,000 to help support the purchase of a portable suction device.

On June 12, Martin presented the Bass Lake Area Environmental Partnership a check for \$500 to support their work.

"It was a privilege to issue out another check from our charity campaigns," Martin said. "These are ongoing programs that will continue to benefit charities within the county."

The Lake County Sheriff's charitable campaign includes the Sheriff's Returnables for

Charity, the Blessing of the Bikes Shirt Drive, the Special Cause Sheriff Patch Drive, the Challenge Coin Sales, the No Shave/Beard Campaign and Retired Sheriff Plate sales.

To date, the campaign has given donations totaling over \$61,385 to local nonprofits and community organizations.

The Lake County Sheriff's Charitable Campaign would like to thank all those who have contributed to these programs.



Photos courtesy of Lake County Sheriff's Office

Lake County Sheriff Rich Martin (far left) presented a donation check for \$1,000 to the Carr Settlement Fire Department to support the purchase of a portable suction device, part of the ongoing Lake County Sheriff's Office Charitable Campaign.



Photos courtesy of Lake County Sheriff's Office

Members of the Bass Lake Area Environmental Partnership were recently presented with a donation check of \$500 from Lake County Sheriff Rich Martin, part of the ongoing Sheriff's Office Charitable Campaign.

If you would like to contribute your returnable bottles or cans, please contact the Lake County Sheriff's office at 231-745-2712.

If you know of a charity or non-profit that could use a do-

nation, please email Sheriff Martin at rmartin@co.lake.mi.us

For more information follow the LCSO Facebook page, call 231-745-2712, or contact Sheriff Martin.

- Erick Elgin of MSU Extension was introduced. Discussion with Erick Elgin focused on long-term management of lakes.

- goals of long-term management are:

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- preserve the invertebrate population: it is the beginning of the food chain in the lake ecosystem
- keep Phosphorus and Nitrogen on the land and not in the lake: if applied near-shore or on sloped shores it can be washed into the lake putting excess nutrient pollution into the water
- keep sediment on the land on not in the lake: construction projects are one of the most impactful activities that introduce sediments into lake waters, and that is why silt fences are so important
- keep the shoreline habitat healthy: near-shore habitat is critical to invertebrate and fish spawning populations, shoreline habitat is critical to prevent erosion and provide stability; offshore habitat is critical to entire lake ecosystem
 - even doing a little bit is helpful
 - examples:
 - shoreline: maintain or reintroduce native plants
 - near-shore: leave fallen trees in place, leave a 5-8 foot unmowed buffer at the edge of the lake
 - off-shore: do not add debris (branch bundles etc), it may attract fish at first but disrupts the habitat because it is not found there normally and introduces biomass degradation in the area (i.e. muck)
- Question and Answer period with Erick Elgin
 - questions were asked regarding the lifecycle of the invasive milfoil - would it ever conclude and go away?
 - Erick explained that invasive milfoil has been in the state of Michigan for over 100 years. Studies conducted in the state of Wisconsin have data that indicate that some lakes have invasive milfoil introduced and the plant doesn't spread, others lakes have invasive milfoil and it does spread; it is unknown why it spreads on one lake and not in another. He also explained that once invasive milfoil is present in a lake it will never go away, and can only be mitigated to control the growth to help keep it from out-competing the native vegetation in the lake

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- Plant Identification and milfoil hand-pulling demonstration
 - breakout session with Erick Elgin and any interested attendees conducted on the shoreline.
- Hand-pulling Milfoil
- Fundraiser Picnic Lunch opened, \$10 donation requested for meal

Respectfully submitted,
Heidi Haskins, Secretary
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