A Note from the President

December is a natural time to reflect on the year and think about our Chapter’s progress. In terms of membership, we have 82 members and are now the second largest of the five MBC chapters. Much of our growth stems from back-to-back Forays in northern Michigan, e.g. St Ignace in 2017 and Bellaire near Traverse City in 2018. Mark your calendars now for the next Foray which will also be held “Up North” in Marquette, MI, July 12-15, 2019 on the campus of Northern Michigan University. Hope to see you there.

As you can imagine, the Forays required a great deal of planning, usually starting a year in advance. We want to acknowledge several of our GLC members who helped make the 2018 Foray a wonderful success. Thank you, Angie Lucas, Julie Medlin, Julie Hurd, Liana May, Derek Shiels, and Brad Slaughter. If you would like to volunteer to help with the 2019 Foray, please let us know. The MBC board is taking the lead in planning the event and there are a variety of tasks ranging from administrative duties to field scouts, that need GLC volunteers.

Our annual GLC Board Meeting was held May 27th during the spring foray and was well attended by all five board members and ten members at large. There was a round of discussion on projects that the chapter could undertake in the coming year with the help of member support. Suggestions included forming an open forum Listserv for exchange of botanical information, and sponsoring student summer research projects. Additional field trip offerings were also considered, if organizers could be found.

Open board positions for the 2019 season resulted in a cascade of new officers and appointments. Derek Shiels, current Vice-President graciously agreed to take on a new role as GLC President. With that in mind, Liana May, will be taking on the role of Vice-President; Emily Douglas, Treasurer, Gin Cawood, Secretary, Phyllis Higman, Carolyn Miller, and Irene Eiseman, Directors-at-Large. Jim Hewitt had kindly agreed to serve an interim Treasurer until the end of this year. We also would like to extend sincere gratitude to Leslie Kuhn and Jim Hewitt who served as Treasurer and Secretary respectively, since the founding of the Chapter in 2015.

Looking back to my earlier role as coordinator of the Special Members group, now Great Lakes Chapter, it has been extremely rewarding to observe and participate in the progress of our chapter. I look forward to the Chapter’s new initiatives in the coming months and encourage all our members to become more active in club activities.

Best regards to all for an enjoyable Holiday Season and fruitful New Year.

Irene Eiseman, President

Mark your Calendar for July 12-15, 2019 MBC State Spring Foray
Marquette, Michigan

Mark your calendars now for the next Foray which will be held on July 12-15 on the campus of Northern Michigan in Marquette, Michigan. Please note this is NOT on Labor Day weekend.

Check out our iNaturalist Cyber Foray Website
https://www.inaturalist.org/projects/michigan-botanical-club-spring-foray-2018

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2018 Student Foray Awards

Congratulations to Sara Campbell and Ethan Jacobs, who were recipients of the 2018 Joan Robb Student Foray Award. Sara recently completed her junior year at Michigan State University studying plant biology. Ethan Jacobs recently attended North Central Michigan College studying biology and is continuing his senior year at Central Michigan University.

When asked about a recap of their experiences from the Foray, both Sara and Ethan shared some of their more memorable moments.

From Sarah: “I had no idea what to expect when I got the sponsorship for the 2018 Botanical Foray. Never in my wildest dreams did I expect to have such a prolific, fun, and valuable experience. I certainly was not envisioning a group of young and old botany enthusiasts wading through neck-high swamp water to investigate the flora of a bog in northern Michigan. The greatest part to me was how broad everybody’s knowledge spanned, and furthermore how willing and excited they were to share what they knew with others. Somebody who would be down on their hands and knees with their magnifying glass looking at a sundew or some other tiny plant might hear birdsong, and suddenly jump up and yell out, "Oh, did you hear that?!" and proceed to explain the species of bird and everything they knew about it. I had an excellent time, and I am so excited to come again next year. Thank you to everybody who kindly taught me something I didn’t know before.”
From Ethan: “Being chosen to represent the Great Lakes Chapter as a student representative was an opportunity that I won’t soon forget. While at the foray, I had the chance to meet many professionals who hold or have held careers that interest me. The warm welcome I received from them and their willingness to talk to me about their fields and how they got to where they are now is a testament to the organization’s quality and importance. One of my favorite experiences was bog trotting. I had never experienced that kind of ecosystem. I knew that we had wetland areas in Michigan, but I had no idea that Michigan was capable of providing a home for carnivorous plants. I am grateful for the knowledge that this foray has given me”.

We acknowledge the generous support of the Michigan Botanical Foundation and member donations for providing financial assistance for the student sponsorship program. In addition, each student received a 1-year subscription to TGLB and membership in MBC/GLC.

Fitzgerald Park Spring Field Trip Field Trip 2018

On May 5th, 2018, we organized an early spring field trip to “The Ledges” outcrop at Fitzgerald Park in Grand Ledge, MI. This area contains some of the most extensive exposures of Pennsylvanian-age rocks in Michigan, ~270 million years old! Our walk along the Grand River provided a non-stop display of Michigan wildflowers, Cardamine concatenata, C. diphylla, Caulophyllum thalictroides, Claytonia virginica, Dicentra canadensis, D. cucullaria. Hepatica acutiloba, Enemion biternatum, just for starters. Native trees, Tsuga canadensis, Sassafras albidum, Cornus alternifolia lined the river, along with ferns, Athyrium filix-femina, Polypodium virginianum, and Phegopteris connectilis. Our quest to find the elusive cliff fern, Woodsia obtusa, was unsuccessful, as later examination of frond sori yielded a species of Cystopteris. We thank Jackie Blanc, Nature Interpreter at Eaton County Parks, for guiding us through the wonderful nature trails. This is certainly a location worthy of future visits.

--Field trip photos by Irene Eiseman & Leslie Kuhn
Photo Highlights from the 2018 Foray

Tony Reznicek with *Aralia nudicaulis* (wild sarsaparilla) at Skegemog Swamp.

*Equisetum sylvaticum* (woodland horsetail) and *Lonicera dioica* (red honeysuckle) at Jordan River Valley, Antrim county.
Michigan's Upper Peninsula has a great many interesting places to seek out plants. Many times, it is simply finding a convenient place to pull over such as at some of the roadside rest areas or small county parks along Lake Michigan. Other times, it is checking for preserves owned by some of Michigan's land conservancies or public state federal lands.

The Hiawatha National Forest’s Grand Island National Recreation Area near Munising in Alger County is one of my favorite places, in part because I have been volunteering there for many years. I am always pleasantly surprised to find something new. The sandy tombolo which separates Trout and Murray bays can have an abundance of pink lady's-slippers (Cypripedium acaule), especially after a cool damp spring. Finding northern slender ladies'-tresses (Spiranthes lacera) along Trout Bay Road was a real treat this year. Depending on the season and where you walk on the tombolo, you will find something to interest you, from jointweed (Polygonum articulatum) and hair grass (Avenella flexuosa) in sandy areas of the dunes, to trailing arbutus (Epigaea repens) and pipsissewa (Chimaphila umbellata) as you enter the red pine woods. Some springs, the sugar maple – beech woods along Center Road can appear like the forest floor is covered with snow due to the abundance of spring beauties (Claytonia virginica) and Dutchman's breeches (Dicentra cucullaria). Even Williams Landing can produce surprises with one-flowered pyrola (Moneses uniflora). The area near the intersection of Duck Lake, Trout Bay and East-West roads can have an abundance of cow-parsnip (Heracleum maximum). Often black bears will eat the cow-parsnip when the seed heads start to develop.

The Nature Conservancy – Michigan Chapter has preserves and reserves scattered across the Upper Peninsula. Along M-134 and Lake Huron, the Gerstacker and John Arthur Woolam Preserves in Mackinac County have an abundance of common and not so common plants. The Gerstacker Preserve trail system allows for access to a variety of habitats from the Lake Huron shore to inland lakes and across old forested dunes. The Woolam Preserve trail system begins at the parking area a short distance off M-134 and goes to the Lake Huron shoreline. It then follows the shore into Carmuse Quarry property that has a Michigan Department of Natural Resources easement. For those with geologic interests, the trail passes some ancient lime-stone sea stacks, of course much smaller than Castle Rock but still interesting to see. Depending on the time of your visit, lady-slippers (Cypripedium sp.) can be abundant along the trails of both preserves. Along the trail to Big Trout Lake in the Gerstacker preserve, bunchberry (Cornus canadensis) is common in the bordering forest and butterworts (Pinguicula vulgaris) and balsam ragwort (Packera paupercula) occur along the trail.
The Lake Michigan shoreline has many great places to visit for some wildflower wonders. Public access points offer the ability to wander dunes, beaches and interdunal wetlands. Hog Island State Forest Campground in Mackinac County offers easy access to low dune and shallow interdunal wetlands where fringed gentian (Gentianopsis virgata) and horned bladder-wort (Utricularia cornuta) can be seen in late summer or early fall. Gould City Township Park near Scott Point in western Mackinac County provides an opportunity to see Pitcher’s thistle (Cirsium pitcheri). Depending on lake levels, Indian Point and Peninsula Point in Delta County can be places to see an abundance of fringed gentians. As you drive the county road from Nahma to Indian Point, watch for swamp thistle (Cirsium muticum) and grass-of-parnassus (Parnassia glauca) growing along the roadside. The northern portion of the Garden Peninsula in Delta County can is a great place to discover a variety of wildflowers. If you want a bit of adventure, travel down the Garden Grade, find a parking spot and roam around. Just be aware that the grade is narrow with occasional mud holes and often is used for logging operations. Along the old grade and its side roads, you will find such plants as great blue lobelia (Lobelia siphilitica), sundew (Drosera sp.), common milkweed, (Asclepias syriaca), boneset (Eupatorium perfoliatum), and cotton-grass (Eriophorum sp.). If you are adventuresome, bring a compass or GPS and the area's topo map and go into some of the old beaver meadows along Hartmann Creek to see blue vervain (Verbena hastata) that is often 5 to 6 feet tall. While in the area of the town of Cooks, check out the old sand pit south of US-2 between the power substation and the Garden Grade. Depending on time of year, there can be an abundance of pale spiked lobelia (Lobelia spicata) and Kalm’s lobelia (Lobelia kalmia) in damp areas or blazing-star (Liatris aspera) along the drier sand ridge.

Farther south in Menominee County, there are some small county parks that border Green Bay and M-35 that offer some of the very few access points to the shoreline. Bailey Park is still one of my favorite places along Green Bay with very low dunes and white cedar forests.

In Marquette County, two of my favorite places are Weyerhaeuser’s Wetmore Pond Hiking Area and the Nature Conservancy’s Echo Lake Preserve. The Wetmore Pond Hiking Area off County Rd. 550 has an abundance of well-maintained trails that lead through a variety of habitats allowing one to find twinflower (Linnaea borealis), pale corydalis (Capnoides sempervirens), cranberry (Vaccinium sp.), goldenrod (Solidago juncea), and bristly sarsaparilla (Aralia hispida). Echo Lake Preserve is about a mile off County Rd 550 and has a variety of habitats including small streams, granite
cliffs, a lake, several old beaver ponds, maple woods and balds. With the varied habitats, one might find such plants as pale corydalis, leatherwood (*Dirca palustris*), and Indian tobacco (*Lobelia inflata*).

On the Keweenaw Peninsula, the Michigan Nature Association and the Nature Conservancy have several preserves. **Mary McDonald Preserve at Horseshoe Harbor** and **Helmut and Candis Stern Preserve at Mt. Baldy** are two Nature Conservancy properties that need to be visited. The hike to the top of Mt. Baldy can be quite strenuous but the view is great and there's a good variety of wildflowers along the trail including wood lily (*Lilium philadelphicum*). The **trail to Horseshoe Harbor** is not quite as strenuous, but parking is very limited at the trailhead. Plants such as wood lily, barren-strawberry (*Geum fragarioides*), soapberry (buffalo-berry) (*Shepherdia canadensis*) and butterwort (*Pinguicula vulgaris*) can be found.

The **Michigan Nature Association** has an abundance of preserves from **the rock bluffs of the Keweenaw Peninsula’s east shore**, along **Brockway Mountain** to the sand dunes along **Great Sand Bay**. Most of the MNA’s properties have well maintained trails through varied habitats. The **Russell and Mirium Grinnell Memorial Nature Sanctuary** has a rather rugged trail which allows one to see such plants as thimbleberry (*Rubus parviflorus*) pine-drops (*Pterospora andromedea*). The **Estivant Pines Nature Sanctuary** is noted for its towering old growth white pines (*Pinus strobus*) and the trail system of the **Black Creek Nature Sanctuary** leads to a cobble beach. It allows one to see such wildflowers as rattlesnake-plantain (*Goodyera* sp.), baneberry (*Actaea* sp.) and wild sarsaparilla (*Aralia nudicaulis*).

The **Ottawa National Forest’s Cyrus McCormick Wilderness**, straddling the Baraga and Marquette county line, can be a very interesting place to hike and check out the plant life. Much of the area has either remained uncut or is slowly reverting to old growth forest with yellow birch (*Betula alleghaniensis*), red maple (*Acer rubrum*), and white pine. There are a few trails remaining from the early 1900’s including the old road that goes to White Deer Lake where lungwort lichen (*Lobaria* sp.) can be seen on some of the trees. Along the trail to Lower Baraga Lake bog clubmoss (*Lycopodiella inundata*) can be seen along the shoreline. The **North Country Trail** also wanders through the southeast portion of the wilderness.

Remember that spring and summer aren't the only times to view the native plants of the Upper Peninsula. Autumn can be a great time to check out the various seed heads and pods. Also, most any wild place can be a great place to discover!

--- Text and photos submitted by Bob Kahl
Meet Our New Board Members!

Liana May, Vice President

Liana is the owner and operator of Borealis Consulting LLC, where she specializes in botanical surveys, natural community mapping, and conservation-oriented natural resource management plans. Growing up in the dunes and forests of Leelanau County, she had a passion for plant diversity, biogeography, and conservation from a young age. This has led to a diverse path of studying reforestation in Madagascar, human-forest interactions in Tanzania, and over a decade of mapping vascular plant occurrences in Michigan. Current projects include monitoring changes in vegetation structure and diversity inside of deer exclosures at the Leelanau Conservancy’s Palmer Woods and encouraging public engagement in natural sciences through citizen science workshops, presentations, classes, and bio-blitzes. Liana teaches several botany mini-courses at North-western Michigan College in Traverse City each summer. She earned a B.S. in Environmental Science (2006) and a M.S. in Conservation Ecology, Informatics, and GIS (2013) from the University of Michigan’s School of Natural Resources and Environment. Her graduate research in the Global Change Ecology Lab focused on seedling recruitment dynamics in the dry forests of coastal Tanzania.

Emily Douglas, Treasurer

Emily currently works for the Leelanau Conservancy as a Land Steward, monitoring the public areas and helping with restoration projects. She previously worked for Sleeping Bear Dunes National Lakeshore monitoring and surveying inland lakes for Aquatic Invasive Species and worked with Grand Canyon National Park restoring and delisting the endangered sentry milk-vetch (Astragalus cremnophylax var. cremnophylax). Emily graduated from Arizona State University with a degree in Botany. She LOVES native plant species and the role they play within the health of the ecosystem and she is delighted to be working in her field of study to protect important plant and wildlife habitats. Emily lives in Cedar with her partner Blaise and son Lennon and enjoys the woods in every season. When she is not trying to identify plants, you may find her canoeing, camping or sewing.

Carolyn Miller, Director-at-Large

Carolyn’s interest in Michigan flora started out at a very young age and has continued throughout her life. She has a B.S. in Botany from Michigan State University, where she currently serves as the Plant Recorder for the W.J. Beal Botanical Garden and Campus Arboretum. Carolyn’s responsibilities
there include collecting phenology data, creating and maintaining an inventory of all the trees and shrubs throughout the MSU campus, and keeping records and maps up-to-date utilizing innovative GPS and GIS technology. She also serves on the MSU Campus Landscape Stewardship Committee and is involved with campus sustainability through the wood repurposing program & invasive species removal. Carolyn is actively involved in a host of environmental and conservation organizations including the Red Cedar Wild Ones, Mid-Michigan Corporative Invasive Species Management Area, and the Capital Area Audubon. She previously served as the Curator of Plant Collections at the Naples Botanical Garden in Naples, Florida, where she was involved with the major expansion of the garden. She also served as the Plant Recorder for the Meijer Gardens in Grand Rapids, Michigan.

Thank you for joining the Board. We look forward to working with you!

MBC – Great Lakes Chapter Board Members (Effective January, 2019)

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<tr>
<th>Position</th>
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<tr>
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<td>Derek Shiels</td>
<td><a href="mailto:d.r.shiels@gmail.com">d.r.shiels@gmail.com</a></td>
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<td>Carolyn Miller</td>
<td><a href="mailto:carolynjmiller43@gmail.com">carolynjmiller43@gmail.com</a></td>
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MBC-Great Lakes Chapter Treasurer’s Report, November 15, 2018

Balance carried forward from 2017: $1,867

Income:
Membership dues and donations: $2,610

Expenses:
State Membership Dues: $525
The Great Lakes Botanist vol. 56(3-4) at $6 * 69 members: $414
The Great Lakes Botanist vol. 57(1-2) at $6 * 81 members: $486
Postage and photocopying: $37
Canadian check deposit fees: $5
Sponsored student at Spring Foray: $315
Total expenses: $1,782

Current Balance: $2,695

--Submitted by Jim Hewitt, Interim Treasurer, November 13, 2017
Great Lakes Chapter - Members Recognition

The Great Lakes Chapter of the Michigan Botanical Club gratefully acknowledges the generous support of the following members who have provided additional funding through their memberships.

<table>
<thead>
<tr>
<th>Sustaining Membership</th>
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<tr>
<td>John Case</td>
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<tr>
<td>Chuck &amp; Janet Dickerson</td>
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<td>Timothy &amp; Irene Eiseman</td>
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<td>Steven Garske</td>
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<td>Lynden Gerdes</td>
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<th>Family Membership</th>
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<tr>
<td>Robert &amp; Sheridan Haack</td>
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<td>Jim Hewitt &amp; Louise Wescott</td>
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<td>Robert &amp; Judy Kelly</td>
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<td>Sheila Lyons-Sobaski</td>
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Some Coastal Fen Species

<table>
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<tr>
<td>Triantha glutinosa</td>
<td>(false asphodel)</td>
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<tr>
<td>Gentianopsis virgata</td>
<td>(small fringed gentian)</td>
</tr>
<tr>
<td>Parnassia glauca</td>
<td>(grass-of-parnassus)</td>
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---Photos by Phyllis Higman, Editor---

2019 MBC – Great Lakes Chapter Dues

A New Year is here, and it is time to pay your Chapter dues! Please see the instructions on the membership form (next page) and join us for another memorable year!
Michigan Botanical Club – Great Lakes Chapter
2019 Membership Dues

Name: ________________________________________________________________

Address: ____________________________________________________________________________

City: __________________________________ State/Province ________________________________

Zip code + 4-digit code ______________________+

Telephone: ________________________ Email: ________________________________

Do you prefer to receive the Arisaema newsletter in paper format? ______________________________

Sustaining membership ____ $50.00 (or more)

Individual membership ____ $30.00

Family membership ____ $40.00

Student membership ____ $15.00 Name of University ________________________________

US members make checks payable to: Michigan Botanical Club - Great Lakes Chapter

Canadian members, please send a money order in U.S. funds.

Mail to:
Emily Douglas, Treasurer
MBC-Great Lakes Chapter
13420 S. Cedar Road
Cedar, MI 49621

Thank you for your continued support!