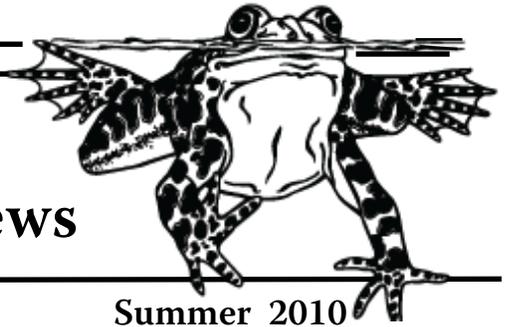

Water's Edge

Gratiot Lake Conservancy News



Volume 12

Summer 2010

GLC's Annual Members Meeting *"Bammert Farm: Biography of a Landscape"*



Photo of Bammert Farm courtesy of the Keweenaw County Historical Society, Margaret Hoffenbecker Collection.

**Tuesday, August 3 at the Eagle Harbor Community Building across from the Shoreline Motel on M-26.
Reception at 6:45, Business meeting at 7, Refreshments at 7:30, Slide/Talk on Bammert Farm by Lee Sweitz at 8:00**

Lee Sweitz has worked in anthropology and archaeology since 1990. Lee recently joined Michigan Tech's Ph.D. program in Industrial Heritage and Archaeology, where she is pursuing research into the food systems of industrial communities, such as those of the Copper Country. Her interest in public education has led her to participate in local events like excavations at Hurontown for Michigan Archeology Day and a presentation at *Key Ingredients: Michigan Foodways* at the Keweenaw Heritage Center, Calumet.

Lee's slide/talk "*Bammert Farm: Biography of a Landscape*" will explore the life history of Bammert Farm, which was an important supplier of food to Central and Phoenix mining settlements from the mid-19th to early 20th century. Lee will examine each of the major periods of the Bammert Farm story, highlighting the diverse documentary sources that have guided her research.

Beginners Workshop on Dragonflies and Damselflies



taught by Bob Marr
at the Gratiot Lake Conservancy Preserve
Saturday, August 14, 9 AM to 3 PM

Want to learn more about the Odonata (dragonflies and damselflies) of the Keweenaw? Amateur odonatist Bob Marr will lead a one day beginner's workshop August 14th focusing on the identification of these "winged dragons" and "neon toothpicks." Turn to page 3 to find out how to enroll in this special field trip at the GLC preserve.



**We know you have talent! We hope you have the time.
Join others who help Gratiot Lake in so many ways:**

Like to cook? Provide some refreshments for the Members Meeting August 3

Like to build things? Mount trail signs on the Bear Paw Path, remount a bat house, make and mount bee or bird houses

Like to garden? Pull invasive plants such as knapweed from the perimeter of Gratiot Lake. Plant some native species.

Like to write? Write an article for the GLC newsletter.

Like watching wildlife? Keep a diary of nature happenings you and others observe at Gratiot Lake. Take photos. From time to time we get reports of various sightings, it would be wonderful to have someone compile this information.

Like boating on the lake? Assist Dorothy Jamison with water monitoring and testing.

Like walking on the shoreline? Help with the coastal cleanup of trash on September 19 (or whenever you have time!)

The Conservancy is seeking volunteers. If you are handy with a pen, a chain saw, a shovel, a trowel, a paint brush, a camera, or a spatula, [e-mail](#) or call Bonnie at GLC.

GLC Welcomes Life Members

GLC is happy to announce two new life members, Charles E. Anderson and Carmen Sandretto.

Please contact GLC for information on how to become a life member!

Albert Petermann III who spent childhood summers at his family home at Gratiot Lake, passed away at the age of 68 on January 1, 2010. In his youth, Albert was an avid fisherman at Gratiot and in later years often returned with his family to enjoy the Keweenaw. GLC wishes to express gratitude for contributions to GLC in Albert's memory.

Gratiot Lake neighbors mourn the loss of Donna Peck, who passed away on February 9, 2010. Donna and her husband Ray lived at Gratiot Lake for 27 years before moving to Hancock in 2007. Donna is especially remembered for her love of animals both wild and tame. GLC thanks all who have made contributions to GLC in Donna's memory.

About *Water's Edge*

Water's Edge is the newsletter of the Gratiot Lake Conservancy. Its purpose is to report Conservancy news, share information about the ecology and history of Gratiot Lake and its environs, and suggest ways to improve stewardship of the Lake and its watershed. View *Water's Edge* in color on the GLC website.

**Please send questions, comments, or articles to
Bonnie Hay, *Water's Edge* Editor
Gratiot Lake Conservancy
P.O. Box 310
Mohawk, MI 49950**

e-mail: belh@verizon.net phone: 906-337-5476
Visit our web site: www.mlswa.org/gratiot-lake-1508/

Continued from first page

Dragonfly/Damselfly Workshop

The day will start in the GLC Noblet Field Station with a short overview of life cycle, ecology, morphology, and behavior of odonata followed by field identification at the GLC preserve. There will be a break for lunch and then more field observation.

Participants will be encouraged (but not required) to net insects for study and release. Insect nets and magnifying lenses will be provided for use by those without their own equipment. Whether or not you wish to net specimens, by all means bring your camera as there will be plenty of opportunities for pictures!

Field guides will be available for reference at the workshop. If you wish to bring a field guide, we recommend *Dragonflies of the North Woods* by Kurt Mead and *Damselflies of the North Woods* by Bob DuBois.

Advance reservations are required. Reserve early for this limited enrollment field trip. At this printing the workshop has only five spaces available. Although geared towards adults, this workshop is suitable for children with an interest in natural history age 11 and older accompanied by an adult. The fee is \$20 (\$15 for GLC members.)

In the case of unsuitable weather (rain, cold), the workshop will be held the following day, August 15th.

Enrollment forms can be downloaded from the [GLC website](#) or mail GLC your name, address and contact information along with check made out to "Gratiot Lake Conservancy."

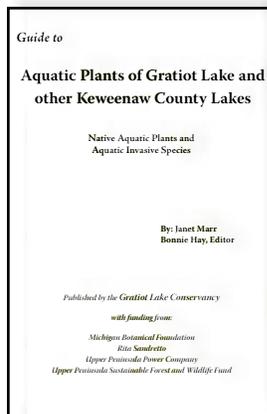
If you would like to apply for a *Janet Avery Scholarship* to attend this workshop, please [email](#) or call GLC. Describe how you would like to use odonata information in your studies, work, or volunteer activities.

Tips for Avoiding Swimmer's Itch

1. Don't feed waterfowl or encourage them to come up to the shore. Ducks and geese are the desired hosts to the swimmers itch parasite in one stage of its complicated life cycle.
2. When swimming, towel off immediately after you leave the water. The tiny parasite takes time to imbed and toweling off rather than air drying seems to deter it. Showering after swimming helps too.
3. Don't sit, wade or swim for long periods in the shallows during a swimmer's itch outbreak—particularly when winds are blowing towards the shore. The parasite inhabits snail territory in shallow water for part of its life and most easily attaches to humans there.

There were occurrences of swimmer's itch in Gratiot Lake (and some other areas in the Keweenaw) last summer. The parasite can stimulate allergic reactions in people. Infestations come and go and may be very local. Please notify GLC if you notice an outbreak in Gratiot Lake.

How's your lake doing?



Copies of the handbook/CD *Guide to Aquatic Plants of Gratiot Lake and Other Keweenaw County Lakes* by Janet Marr are still available to individuals and organizations interested in monitoring inland lakes. GLC has already distributed over 200 copies of this guide to Western U.P. libraries and colleges; local high school biology teachers thru the Western Upper Peninsula Center for Science, Math, and Environmental Education; conservation organizations; local governmental units; community groups; and individuals interested in lake stewardship.

Contact GLC via e-mail or send us a note to request a copy. Single copies of the guide will be distributed free of charge in Baraga, Houghton, and Keweenaw Counties while supplies last. Mailing of multiple copies or distribution outside of the Keweenaw Peninsula will require a shipping and handling fee depending on location.



Since publication of the *Guide to Aquatic Plants*, there has been a restructuring of the Michigan DEQ and DNR which merged to become the Michigan Department of Natural Resources and Environment (MDNRE.) Michigan Lake and Stream Associations (MLSA) has also restructured. As a result, some of the contacts for lake monitoring information published in the *Guide* have changed. Here is the updated information:

The MiCorps is a MDNRE program administered via a contract with the Great Lakes Commission which includes the Huron River Watershed Council and MLSA as partners. The MiCorps website (www.micorps.net) includes the link to the Cooperative Lake Management Program (CLMP) lake monitoring information and data including results of ten years of water sampling at Gratiot Lake.

MiCorps program manager from the MDNRE:
Ralph Bednarz, P.O. Box 30273, Lansing, MI 48909-7773
517-335 4211
bednarzr@michigan.gov (www.micorps.net)

MiCorps Program Manager from Huron River Watershed Council:
Paul Steen, 1100 N. Main Street, Ann Arbor, Michigan 48104
734-769-5123 x601
psteen@hrwc.org (www.micorps.net)

MLSA CLMP contact:
Jean Roth, P.O. Box 303, Long Lake, MI 48743
989-257-3715
jroth@mlswa.org

MLSA main address:
Michigan Lake and Stream Association, Inc.
306 E. Main St.
Stanton, MI 48888
989-831-5100
info@mlswa.org (www.mlswa.org)

Bees and Berries

Although *2010 Pollinator Week* is scheduled for June 21-27, pollinators (including, butterflies, moths, beetles, flies, hummingbirds, bees, and some bats) should be both celebrated and protected year round. It is estimated that over 80% of flowering plant species rely on help of pollinators to form their nuts, seeds, and fruit. About 66% of human food crop species depend on animal pollinators.

For example, the tasty blueberry, which we will be picking soon in the Keweenaw, is insect pollinated. Research done by Michigan State University on blueberry farms in the Lower Michigan found that 166 species of bees, most native to the area, helped with the pollination! Native bees are also key pollinators for other fruits which grow on forest edges, roadsides, and in abandoned pastures in the Keweenaw: apples, cherries, thimbleberries, blackberries, and raspberries.

Some native bees, such as bumblebees and mason bees, are better pollinators than honeybees because they are undeterred in damp cold weather. Research in Ohio showed that 19 species of bees, all native except for the honeybee, were important pollinators of strawberries. The bramble fruits are often pollinated by mason bees, bumblebees, and sweat bees. Although some fruit can form without pollinator assistance, the berry is better formed and larger when bee pollinated.

Most native bees are solitary bees. These bees nest either in burrows in the ground, in existing holes in deadwood, or in hollow plant stems. Because they don't have a large nest with a lot of offspring to defend, solitary bees tend to be less defensive than social bees that live in groups (honeybees and bumblebees).



Photo courtesy of the Zaagkii Project

Zaagkii Wings and Seeds: Native Plants and Pollinator Protection Initiative

As part of a three year native pollinators program sponsored by the Cedar Tree Institute, the Keweenaw Bay Indian Community, and the US Forest Service, teenagers from the western UP constructed and installed mason bee and butterfly houses and are growing native plants attractive to pollinators. In the photo, teens construct mason bee homes at Grace United Methodist Church in Marquette. [You can find out more about this project on the US Forest Service website.](#)

Inviting Bees to Your Garden

1. Reduce or eliminate the use of pesticides. Recent studies show that native bee populations drop by around 50 percent where insecticides have been sprayed.

2. Provide native flowering plants, shrubs, and trees which are good nectar sources throughout the growing season. Avoid modern hybrid flowers, especially those with "doubled" flowers. Often plant breeders have unwittingly left the pollen, nectar, and fragrance out of these blossoms while creating the "perfect" blooms for us. In addition to plants we look to as sources of delicious fruits and berries here are just a few of our local plants that are attractive nectar sources for bees :

Wild bergamont (*Monarda fistulosa*)
Willows (*Salix*)
Goldenrods (*Solidago*)
BunchBerry (*Cornus canadensis*)
Joe Pye Weed (*Eupatorium*)
Asters (*Aster*)
Sugar Plum, Serviceberry (*Amelanchier*)
Chokecherry (*Prunus virginiana*)
American mountain-ash (*Sorbus americana*)
Basswood (*Tilia americana*)
Black Elderberry (*Sambucus canadensis*)
Winterberry (*Ilex verticillata*)
Ninebark (*Physocarpus opulifolius*)

3. Provide nesting sites.

Some wild bees are ground-nesters, digging narrow tunnels down 6 to 36 inches to small chambers of brood cells. Ground-nesting bees need direct access to the soil surface and prefer sloped or well-drained sites.

Many native bees build their nests in wood and use tunnels left by wood-boring insects. Some nest in the soft pithy centers of some twigs (raspberry canes and sumac). Encouraging wood-nesting bees can be as simple as retaining dead or dying trees and branches in hedgerows and encouraging the growth of elderberry, blackberries, raspberries, sumac, and dogwood. By leaving dead trees, or an occasional dead limb, you provide essential nesting sites for native bees. You can build a "bee condo" in a piece of untreated scrap lumber by drilling and smoothing out holes of varying diameter (3/8 to 5/8 inch) about 3 to 5 inches deep (closed on one end). Mount the nest block on a post with southern exposure in an area protected from excessive rain.



Photo by Scott Famous, DoD, Bugwood.org
Mason bees using bee nesting block.

Some Native Bees

Bumblebees (family Apidae) – Bumblebees are very hairy and usually black with yellow or orange stripes. Closely related to honeybees, bumblebees are social, living in small colonies. They usually nest in abandoned rodent burrows in the ground, but may also use cavities in rotting stumps. Unlike honeybees, bumblebees are masters of “buzz-pollination.” When bumblebees grasp a flower and vibrate their flight muscles, pollen is released from deep inside the anthers of certain flowers. Blueberries, cranberries, and tomatoes have been shown to produce more and larger fruit when buzz-pollinated. Bumblebees are used as commercial crop pollinators. Like honeybees, bumblebees have “pollen baskets” on their hind legs. The bees brush collected pollen off of their hairy bodies into the pollen baskets for transport. The pollen baskets on the tricolor bumblebee (at right) appear to be quite full. Although not aggressive, these bees can sting if handled or if their nest is tampered with.



Carpenter Bees (family Apidae) – These large bees are often mistaken for bumblebee queens, but they have hairless, shiny black abdomens and no pollen baskets. The species pictured at left is an important blueberry pollinator. Although they are considered good pollinators, carpenter bees sometimes “cheat,” stealing nectar through holes they cut in the sides of flowers – thus bypassing pollination. Carpenter bees are solitary and bore half inch diameter holes into wood to create nests. These bees can be pests when they chew into wooden structures to make their nests. Carpenter bees rarely nest in painted or varnished wood. Male carpenter bees, the type most commonly observed, cannot sting.

Miner Bees (family Andrenidae) – These small to medium-sized bees nest in the ground, often hiding their nest entrances beneath leaf litter. They are solitary bees, active only in spring, and are the most frequent pollinators of blueberries. Although not aggressive, these bees may sting if handled.



Mason Bees and Leafcutter Bees (family Megachilidae) – This group contains small to medium-sized bees that are deep metallic blue or black with white hair on the thorax. Some have striped abdomens. These are solitary bees that nest in hollow plant stems or holes made by beetles. They use mud to cap the entrance to their nests. Although not aggressive, these bees may sting if handled. Several species of the mason bees live in the UP. The orchard mason bee is an important apple tree pollinator. Mason bees will use man-made nests and are used as commercial crop pollinators. While honeybees tend to focus on flowers in close proximity to one another, mason bees provide more effective cross-pollination by visiting many separate plants on a single foraging flight. For many crops, cross-pollination is necessary for optimum fruit set.

Find out more about bees and other pollinators:

Xerces Society for Invertebrate Conservation

<http://www.xerces.org/pollinators-great-lakes-region/>
Most comprehensive website with a section devoted to pollinators in the Great Lakes region. Links to many additional websites. Information on endangered bees. Teacher resources. Information on building bee homes and habitat.

Pollinator Partnership

<http://www.pollinator.org/>
Lots of great information on pollinators of all kinds. Regional planting guides, information on improving bee habitat, instructions on building mason bee nesting blocks (*Home-made Sweet Homes*), and tools for teachers to use in the classroom.

US Forest Service Celebrating Wildflowers

<http://www.fs.fed.us/wildflowers/pollinators/index.shtml>
Information on pollinators and plants.

Summer 2010 Water's Edge

The GLC website has a page devoted to bees which includes these links. Photos of some local bees can be viewed on the website along with a color version of *Water's Edge*. If you are not yet on GLC's email list to receive notice of website updates and would like to be, please email belh@verizon.net.

MSU Extension

<http://www.msue.msu.edu/portal/>
Conserving Native Bees on Farmland by Isaacs and Tuell
(MSU Extension Bulletin E-2985 May 2007)

National Sustainable Agriculture Information Service

Alternative Pollinators: Native Bees by Mader, Vaughn, Shepherd, and Black (ATTRA publication #IP126)
<http://attra.ncat.org/attra-pub/PDF/nativebee.pdf>
800-346-9140

This publication provides resources on how to plan for, protect and create habitat for native bees in agricultural settings.



Kayak Tour of Gratiot Lake

GLC is sponsoring a kayak trip on Gratiot Lake on Saturday, July 31 from 9:30 AM to 3 PM. Participants may bring their own kayaks, life jackets (pfd's), and equipment or may rent a single or tandem kayak and all equipment from Keweenaw Adventure Company, who will be outfitting and guiding the tour. The trip around the lake will launch at 10 AM from the lake's public access.

Participants will picnic at the Noblet Field Station on the Conservancy Preserve and have an option for a short guided walk on the Bear Paw Path.

Pre-registration with Keweenaw Adventure Company is necessary if you intend to reserve equipment. Limited equipment is available, so sign up early. Children under the age of 18 must be accompanied by an adult. Small children may have difficulty with this tour. Please consult Sam at Keweenaw Adventure Co. if you are considering bringing your small child or have questions about the kayaks. Phone: 906-289-4303; website: www.keweenawadventure.com.

In addition to reserving or bringing a kayak, paddles, and pfd, bring a bag lunch and plenty of water, sunscreen, and insect repellent. If it's hot, you may want to wear a swimsuit. If you want to take a short hike after lunch, bring along a pair of walking shoes.

Participants should meet at the public boat access to Gratiot Lake at 9:30 if they are renting equipment or wish to participate in a technique refresher. We'll begin the paddle at 10 AM. **Heavy rain or winds will cancel this event.** Call 337-5476 if in doubt.

Visit the Gratiot Lake Conservancy web site to view current and archived issues of Water's Edge Newsletter (in full color), informative articles, updated calendar, photos, video clips, and links to more information.

<http://www.MLSWA.org/Gratiot-Lake-1508/>

See Stars on Brockway

Friday, August 13th, 9:30 PM-Midnight

Bring your insect repellent, blankets, beach chairs, binoculars, and telescopes to the Brockway star gathering around sunset. Michigan Tech's Dr. Robert Nemiroff and astronomy students will be on hand to introduce us to the celestial highlights. We hope to see some of the Perseid meteorite shower. Also, Venus, Mars, and Saturn may be visible to the west just after sunset.

Heavy cloud cover, rain, or very high winds will cause cancellation.



Your Donation is Appreciated!

Photos used in this newsletter, unless otherwise attributed, are by Jim Hay. Thanks, Jim!

2010 GRATIOT LAKE CONSERVANCY CALENDAR

Reading the Landscape of the Keweenaw Exploring Our Diverse Watersheds

Four Saturdays, June 19, July 10, August 7, and September 18

Fee. Registration required. Call 482-0160 or 289-4930. [Downloadable brochure on GLC website.](#)

Summer Youth Program Exploration: Aquatic Ecology at Gratiot Lake

Sunday, July 18 - Saturday, July 24

Contact SYP at 1-888-773-2655 or 906-487-2219. Website: youthprograms.mtu.edu

Kayak Tour of Gratiot Lake

Saturday, July 31, 9:30 AM to 2:30 PM

Meet at the Gratiot Lake public access and bring equipment and a bag lunch, or to rent equipment call Keweenaw Adventure Company at 906-289-4303. Review of Kayaking technique at 9:30. Launch at 10:00 AM.

GLC Annual Members Meeting

Tuesday, August 3

6:45 Reception, 7:00 Meeting, 7:30 Refreshments,

8:00 *Bammert Farm: Biography of a Landscape* presented by Lee Sweitz

Eagle Harbor Community Building

Astronomy Gathering On Brockway Mountain

with Robert Nemiroff and MTU Astronomy Students

Friday, August 13, 9:30 PM to Midnight

Top of Brockway Mountain

Beginners Workshop on Dragonflies and Damselflies

taught by amateur odonatist Bob Marr

Saturday, August 14, 9 AM to 3 PM (raindate August 15)

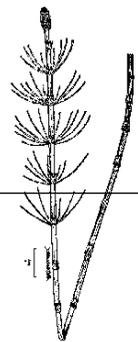
Fee. Advance registration. Contact GLC or [download information from GLC website.](#)

Wetland Plant Workshop

taught by botanist Janet Marr

Saturday, August 21 and Sunday, August 22

Workshop is fully enrolled. Contact GLC to be placed on wait list.



Coastal Cleanup at Gratiot Lake

Sunday, September 19

Help clean up trash from the shoreline!

Meet at Public Access at 9:00AM or contact GLC to pick up trash on your own on a different date.

Questions? Call 337-5476 or [email BELH@verizon.net](mailto:BELH@verizon.net)

Updates? Visit the GLC website at www.MLSWA.org/Gratiot-Lake-1508/

KCF Gratiot Lake Conservancy Fund

Gratiot Lake Conservancy has established a Keweenaw Community Foundation (KCF) donor advised fund. A generous gift from the Joseph G. Nicholas Foundation allowed GLC to establish this fund. The *Gratiot Lake Conservancy Fund* is managed by KCF to further the mission of GLC. The *Gratiot Lake Conservancy Fund* was established to support land conservation, environmental education, and ecological research in Keweenaw County especially in the Gratiot Lake area and within its watershed.

The Michigan Tax Credit allows individuals to give up to \$200 (for couples it is \$400) to a community foundation, and have half of that gift amount credited against Michigan income taxes. So, Michigan residents immediately save \$100 on their Michigan taxable income by giving a \$200 gift through the Keweenaw Community Foundation.

To learn more about the KCF and how to contribute to the *Gratiot Lake Conservancy Fund*, contact:

Barbara Rose, Executive Director
Keweenaw Community Foundation
P.O. Box 101
326 Sheldon Ave.
Houghton, MI 49931.
906-482-9673 mail@k-c-f.org (www.k-c-f.org)

When mailing in donations to KCF be sure to earmark the donation for the *Gratiot Lake Conservancy Fund*.

Reading the Landscape Exploring Our Diverse Watersheds



This popular series of art and natural history field trips for adults is scheduled for 9:30 AM to 2:30 PM on four Saturdays. This seasons trips include: June 19 "A Water Year," July 10 "Reading a Trout Stream," August 7 "Stamp Sands Remediation," and September 18 "Dynamic Shorelines."

Reservations are necessary and group size is limited. [A Reading the Landscape brochure which includes an enrollment form may be downloaded on the GLC website.](#) Call 906-482-0160 or 906-289-4930 for further information.

The fee is \$15. A reduced fee of \$13 is available for GLC members - just indicate that you are a GLC member when enrolling and [email GLC](#) to request the discount. Teachers or students may be eligible for a *Janet Avery Scholarship*. Contact GLC directly about scholarships.

Reading the Landscape of the Keweenaw, now in its eighth year, is co-sponsored by Copper Country Audubon, Gratiot Lake Conservancy, Houghton Keweenaw Conservation District, Keweenaw County Historical Society, Keweenaw Land Trust, Michigan Nature Association, and Trout Unlimited.



Support GLC !

Gratiot Lake Conservancy members receive a biannual newsletter, notice of special events, and an invitation to the Annual Members Meeting. Some GLC programs that have fees are discounted for members.

Donations to GLC are always welcome.

[Click here to download a membership/donation form.](#)

The membership year is from January 1st to December 31st, but you may join at any time.

Donors of \$100 or more will receive a gift of notecards with photos taken at Gratiot Lake.

[Click here to view some of the Gratiot Lake notecard photos!](#)

