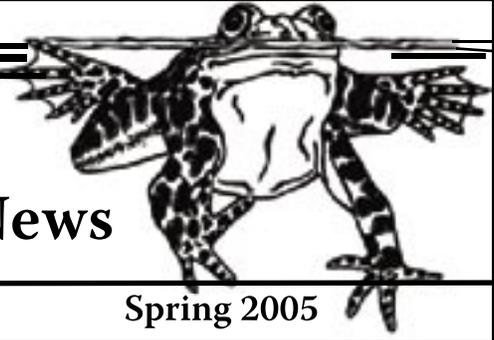


Water's Edge

Gratiot Lake Conservancy News



Volume 7

Spring 2005

CONSERVANCY CALENDAR

Reading the Landscape of the Keweenaw

Fresh Water Studies

Art and Natural History Field Trips for Adults

Saturdays, July 2 through August 6

Brochure enclosed or call 906-289-4514 for information.

Kayak Tour of Gratiot Lake

with Keweenaw Adventure Company

Sunday, July 17 from 9 AM to 3 PM

Reservations required.

Watercolor Landscape Painting

with Carl Mayer

Monday July 18 and Tuesday July 19 from 10AM to 4PM

Fee. Registration in advance required.

Water Bugs--Reading the Landscape at Gratiot Lake

with Walt Summers and John VanPelt

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

Brochure enclosed or call 906-289-4514 for information.

Fee. Registration required.

Gratiot Lake Conservancy

Annual Members Meeting

Tuesday, August 2 (evening)

Members look for your invitation in the mail!

Seventh Annual Conservancy

Open House At the Noblet Field Station

Sunday, August 7, Noon to 3 PM

Astronomy Gathering On Brockway Mountain

with Robert Nemiroff

and MTU Astronomy Students.

Friday, August 12, 9:00 PM to ?

Reading the Landscape

An Evening of Conversation with Barbara Spring

Saturday, August 13, 5:30 PM to 7 PM

Eagle Harbor Community Center

Free program featuring the author of *The Dynamic Great Lakes*.

Refreshments.

Conservancy Initiates Land Acquisition Fund



The Gratiot Lake Conservancy is pleased to announce the formation of a Land Acquisition Fund. An important mission of the Gratiot Lake Conservancy is to preserve and protect Gratiot Lake and its surrounding watershed. This new fund which was started with a generous gift from Joe Nicholas will enable the Conservancy to acquire properties outright and through grants which require matching funds.

Since GLC was established in 1998, more than 10,000 feet of shoreline and 307 acres have been preserved at the lake. In addition, 466 acres of Bammert Farm, located northwest of the lake, were donated to GLC last year.

Continued on page 2.

The Gratiot Lake Conservancy is a Michigan Not-For-Profit Corporation formed in 1998 to preserve and protect Gratiot Lake and land within the Gratiot Lake watershed.

Through educational programs and materials, the Conservancy encourages good stewardship of the watershed and an understanding of its history and ecology.

We promote research to further understand the Lake and its watershed. The Noblet Field Station located in the SE corner of the Lake is the staging area for many of the Conservancy's educational and research activities.

Continued from page 1

Many areas near Gratiot Lake are worthy of conservation. Wetlands are a high priority. Lands which allow better access to the Gratiot Lake preserve and the Noblet Field Station or would afford an additional shoreline buffer to the lake are also desirable.

GLC is ready to begin a more deliberate program to apply for grants to protect key areas in and around Gratiot Lake. Most of these grants require a match of 10% to 50% and the Land Acquisition Fund will be used for that purpose.

Similar to our Education Fund which awards scholarships for local students to participate in GLC's natural science education programs, your donation can be earmarked specifically for the Land Acquisition Fund. In this way you can make an important contribution toward saving the unique character of this beautiful area for future generations.

To contribute to the Land Acquisition Fund, please mark your donation "Land Acquisition Fund," and send it along with the form on the back of this newsletter. Donors of \$100 or more will receive a gift of notecards with photos taken at Gratiot Lake. Future newsletters will report on land acquisition progress and its sponsors. Thank you for supporting the Land Acquisition Fund!



Photo courtesy of Jim Hay

Notecards including the above photo, the eagle photo on page 1, and others taken at Gratiot Lake will be GLC's gift to you for donations of \$100 or more to the Land Acquisition Fund.

Keweenaw Conservation Pioneer Mourned

Jim Rooks, a dedicated naturalist who was instrumental in the protection of Copper Harbor's Estivant Pines, passed away on March 10, 2005. Jim was a voice for conservation in the Keweenaw and a gifted teacher who helped many experience the Copper Country's natural treasures. He understood that immersion in nature encourages an appreciation that promotes good stewardship of the land.

Before GLC was formed, Jim used the Noblet cabin (now the Noblet Field Station) for some of his Bear Track Tours. He got the ball rolling on the restoration effort of the 1940's hunting lodge which now is used by GLC for education and research programs.

Sandretto Scholarship and Aquatic Ecology at Gratiot Lake

Thanks to a generous donation by Rebecca (Rita) Sandretto, the Jack Sandretto Scholarship Endowment will award a full scholarship to a deserving student. If you know of a 9th through 12th grade student who would like to apply for a scholarship to attend Michigan Tech Summer Youth Program: Aquatic Ecology Exploration at Gratiot Lake, July 24th - July 30 please contact Pete Larson, Summer Youth Program Coordinator at 906-487-2219.

About Water's Edge

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

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: <http://www.mlswa.org/gratiot-lake-1508/>

Guided Kayak Tour of Gratiot Lake Scheduled for July 17

The Gratiot Lake Conservancy (GLC) is sponsoring a six hour kayak trip on Gratiot Lake on Sunday, July 17 from 9AM to 3PM. Participants may bring their own kayak and equipment to the lake's public access or may rent a single or tandem kayak and all equipment from Keweenaw Adventure Company, who will be outfitting and guiding the tour. Novices to kayaking will be given an introduction to the technique beforehand.

Bonnie Hay, Program Director of GLC, will point out natural history highlights during the excursion. Participants will picnic at the Noblet Field Station on the Conservancy Preserve and have an option to walk the Conservancy's Bear Paw Path.

Registration is necessary whether or not you intend to rent equipment. Group size will be limited so register 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 if you are considering bringing your small child or have questions about the kayaks (906-289-4303, website: www.keweenawadventure.com).

To register send your name, address, phone number, and e-mail address to GLC (information on page 2). Be sure to indicate whether you need to rent a tandem or single kayak from Keweenaw Adventure Company at \$60 per person, or if you are bringing your own equipment.

Are you... A cookie baker, a litter picker-upper, a wildlife watcher, a weed puller?



Have you always wanted to... write for a newsletter, see a photo you took in print, teach children, or help clear a trail?

The Conservancy is seeking volunteers to share their talents and interests. There are opportunities to help with everything from trail opening to cookie baking. Just e-mail or call Bonnie at GLC.

Thank you to Jim Hay, Ben Hay, Joe Lizzadro, and Gina Nicholas for assistance with this newsletter!

7th Annual Open House at Noblet Field Station

*Come by land or by Lake. **



Refreshments will be served.

**Save this date!
Sunday, August 7
Noon to 3 PM**

- * Visit with friends and neighbors.
- * Participate in art and nature activities.
- * Walk the Bear Paw Path.
- * Learn about GLC and its programs.
- * View slides/ videos.

* If you come by boat, please beach your boat rather than attempt to use the old dock. The cabin is accessible by logging road. A map will be available near mailboxes. If the weather looks questionable, call Bonnie at 337-5476.

GLC Receives Invasives Grant

The Gratiot Lake Conservancy has received an Aquatic Invasive Species Information and Education Grant from the Tip of the Mitt Watershed Council through the Great Lakes Aquatic Habitat Network & Fund. This small grant will allow GLC to distribute information about aquatic invasive species, such as Eurasian watermilfoil, spiny water flea, curly leaf pond weed, and ruffe that threaten Keweenaw lakes and streams.

Michigan Tech students, Liisa Niva and Derek Bustos, will distribute information about plants and animals, mostly non-native, which can disrupt native fisheries, impact lake ecology, and even interfere with boating. The information, some of which is reproduced in this newsletter, also details what boaters and anglers can do to prevent inadvertent introduction of these nuisance species into local lakes. Information was given to anglers at the LaCLabelle/Gratiot Lake Fishing Tournament registration meeting in June and to local bait shops and fishing and boating supply stores.

GLC can supply a short video on the subject for viewing by interested individuals or groups. Also available for loan is a CD which contains information and Power Point presentations on aquatic invasives. Call or e-mail if you would like to borrow this for use with your group. Information will also be available at the GLC Open House on August 7.

Watercolor Landscape Painting at Gratiot Lake July 18 and 19

Gratiot Lake Conservancy invites you to attend a Watercolor Landscape Painting Class with Carl Mayer on Monday, July 18 and Tuesday, July 19 from 10 AM -4PM. This two day workshop at Gratiot Lake is appropriate for beginning and intermediate students. Instruction will take place both indoors and out-of-doors. Carl Mayer is an active member of the Transparent Watercolor Society of America and an experienced art teacher.*

Advance registration required. Space is limited. Send your name, address, phone number, e-mail address, and a check (made out to Gratiot Lake Conservancy) for \$80 (\$65 for GLC members) to
Gratiot Lake Conservancy
P.O. Box 310
Mohawk, MI 49950
Contact Gratiot Lake Conservancy for information:
belh@verizon.net
906-337-5476
www.mlswa.org/Gratiot-Lake-1508/

*Carl Mayer attended Suomi College and holds an MA in Art Education from NMU. An art teacher for 33 years at Marquette High School, Carl retired in 1992. He remains active in teaching and painting. Carl has studied with renowned watercolorists: Edgar Whitney, Robert E. Wood, Nita Engle, Zoltan Szabo and Catherine Chin Liu. His most recent award was in 1999 when he received "Outstanding Art Educator of the Year" for the greater Marquette area.

Thanks to the generosity of Orin Ahlstrom, a scholarship for a high school or college student is available for the Watercolor Landscape Painting Class. The award will be based on need. Please apply to GLC.

SUPPORT GLC!
See page 8 for membership details.

Visit the Gratiot Lake Conservancy web site to view this issue of Water's Edge News in full color, past newsletters archive, informative articles, photos, video clips, and links to more information.
<http://www.MLSWA.org/Gratiot-Lake-1508/>



"Gratiot Blue" by Marilynn Brandenburger

Gratiot Lake 2004 Artist in Residence Offers Artwork to Benefit GLC

Marilynn Brandenburger, GLC's 2004 Artist-in-Residence, has been developing a series of paintings of Gratiot Lake, the Noblet Field Station and Lake Superior based on her experiences last summer. The original paintings and pastels, as well as prints of the images, are now available for sale. To help support the GLC's work in preserving the lake and its environs and to show her appreciation for the wonderful time spent at the cabin, Marilynn will contribute to the Conservancy 25% of the sales price of any work sold.

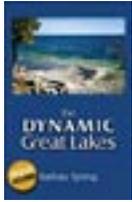
To see the paintings Marilynn has produced so far, go to <http://www.brandenburgerstudios.com/lakesuperior.html>. Original works are priced as indicated on the website. Digital prints are available in two sizes:

- 1) approx. 6" x 8" image (size varies with dimensions of original) on 8.5" x 11" paper are priced at \$45 + \$5 for shipping
- and
- 2) approx. 8" x 11" image on 11" x 14" paper are \$90 + \$5 shipping.

To order, contact Marilynn directly:
Marilynn Brandenburger
643 Clairmont Circle
Decatur, GA 30033

phone: 404-325-4302
email: marilynn@brandenburgerstudios.com

More paintings are on the way, so check the website regularly. A color brochure of the artwork will soon be available through Bonnie Hay.



An Evening with Barbara Spring
author of
The Dynamic Great Lakes

Stop by the Eagle Harbor Community Center after the Eagle Harbor Art Show to hear Barbara Spring discuss Lake Superior and the Great Lakes water system. This final event of the Reading the Landscape series will take place on Saturday, August 13 from 5:30 to 7 PM. The discussion is free of charge and open to everyone. Refreshments will be served.

In her book, *The Dynamic Great Lakes*, Spring notes that about 20 per cent of all the earth's fresh surface water is in the Great Lakes basin. Barbara drew from the work of geologists, limnologists, fish biologists, and naturalists in researching the book. Learn more about Spring and the Great Lakes by visiting her website at <http://www.geocities.com/barbaraspring/>

Bete Grise Preserve
Dedication

You are invited to attend the dedication of the newly conserved Bete Grise Preserve which is scheduled for Saturday, July 9 at 2 P.M. Meet at the turnoff for Bete Grise South off of M-26 (Gay-Lac La Belle Road). Travelling from US 41, this parking area is on the left 10 miles from the intersection of US 41 and the Lac La Belle Road. Travelling from Lake Linden on M-26, it is on the right at 15 miles.

Bete Grise is recognized by the Michigan Natural Features Inventory Program as the most significant coastal plain marsh community in the Upper Great Lakes region. It is home to more than 300 species of plants and animals. Water flowing out of Gratiot Lake via the Little Gratiot River eventually empties into Bete Grise Bay—so the two are both vital pieces of the same watershed system.

The preservation of Bete Grise was accomplished by a partnership of The Nature Conservancy's Michigan Chapter, Keweenaw Land Trust, the Houghton Keweenaw Conservation District, and the South Shore Association. Grants from both the DEQ Coastal Wetland Program and the U.S. Fish and Wildlife Coastal Program enabled this pristine piece of wetlands, dunes, and Lake Superior shoreline to remain in perpetuity in its natural state for habitat preservation, low impact public access, education, and research.

Water Bugs

On July 30, Reading the Landscape's session will be held at Gratiot Lake. Wetland biologist Walt Summers and creative designer John Van Pelt will join GLC's Bonnie Hay in leading an exploration of stream life. Participants will use nets and magnifying lenses to uncover the stream's inhabitants. John Van Pelt will help participants record their finds with scratchboard art. This is one of six art and natural history field trips for adults sponsored by GLC along with six other conservation groups in the Keweenaw. Refer to brochure on GLC website or call 906-289-4514 for registration information.



Pictured above, Janet Marr points out identifying features of Cowslip to Karen Endres and Sue Haralson during the Conservancy's June Botany Workshop which visited various sites in the Keweenaw including the Bete Grise Preserve and Gratiot Lake.

Scholarships to GLC's classes are available for Gratiot Lake Residents and Gratiot Lake Conservancy Members. To apply, contact GLC (info on page 2).

Stars on Brockway
August 12, 9:00 PM-?

Bring your bug dope, blankets, beach chairs, binoculars, and telescopes to the Brockway star gathering around sunset. The Perseid meteor showers should peak on this date, and since the waning crescent moon will rise late, it shouldn't interfere as it has done in the last couple of years. MTU's Robert Nemiroff and his astronomy students will be on hand to introduce us to the celestial highlights. We may cancel without notice if it's very cloudy or raining!



Aquatic Invaders answers from (page 7):

1. Zebra Mussel, 2. Spiny Water Flea, 3. Purple Loose-strife, 4. Rusty Crayfish, 5. Eurasian Ruffe,
6. Eurasian Watermilfoil

Eurasian Water-milfoil

(*Myriophyllum spicatum*)

- Invasive plant.
- Delicate feather-like leaves. Leaflets are mostly the same length.
- Leaves are usually limp when out of the water.
- Leaves arranged in whorls (circles) of three to five around the stem.
- Usually twelve to twenty-one leaflet pairs per leaf.
- Long spaghetti-like stems.

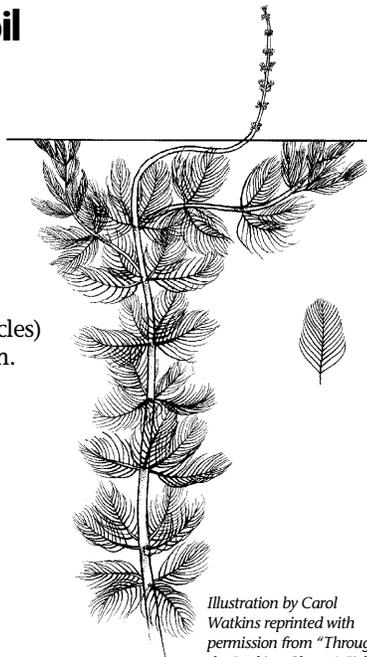


Illustration by Carol Watkins reprinted with permission from "Through the Looking Glass, A Field Guide to Aquatic Plants"

LP/04

Why CARE about Aquatic Invasive Species?

According to the Michigan Department of Environmental Quality Office of the Great Lakes, Aquatic Invasive Species

- reduce game fish populations.
- ruin boat engines and jam steering equipment.
- make lakes unusable by boaters and swimmers.
- dramatically increase costs of drinking water treatment facilities, power plants, dam maintenance, and industrial processes.
- reduce native species.
- degrade ecosystems.
- affect human health.
- reduce property values.
- affect local economies of water dependent communities.

For more info visit their website at

<http://www.michigan.gov/deqaquaticinvasives>

Help . . .



Zebra Mussels



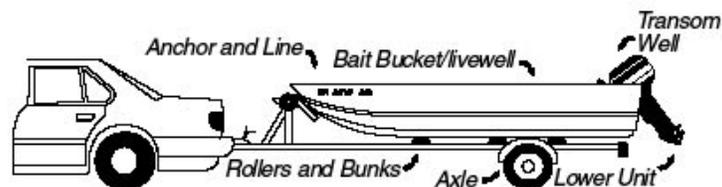
Eurasian Water-milfoil

. . . Prevent the Spread of Invasive Species

Clean Boats . . . Clean Waters

BEFORE Leaving the Boat Launch:

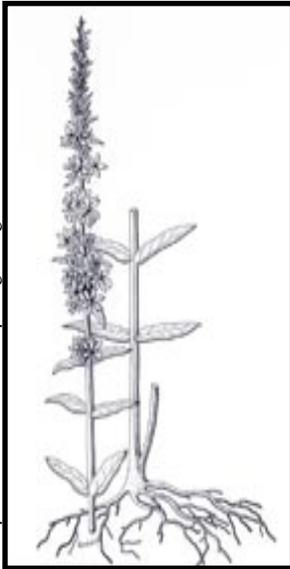
- **Inspect** and **remove** aquatic plants and animals.
- **Drain** or flush water from live well, bilge, motor, etc.
- **Dispose** of unwanted live bait in the trash



For more information, contact your local DNR Service Center or visit <http://dnr.wi.gov/org/caer/ce/invasives>

Stop Aquatic Invaders!

Cindy Roche, www.forestryimages.org



Purple Loosestrife

These animals and plants have come to the US from other parts of the world. They have hitchhiked in foreign products, in ballast water of ships or were imported as additions to aquariums, ornamental ponds, and gardens. Most invasive species wouldn't have arrived in our waters without the inadvertent help of people. The aquatic invaders often have survival advantages over native species because they don't have natural checks and balances here. As a result, although they may be harmless or even beneficial in their native environment, they pose a big threat to aquatic ecology and native fisheries here.

Recognizing these invaders and taking appropriate action can prevent their spread. Help to protect the quality of our Keweenaw lakes and streams.

Match the descriptions with the aquatic invaders below!

Answers on page 5.

Information on this page compiled from the following sources...

Invasive.org <http://www.invasive.org>

Michigan Sea Grant <http://www.miseagrant.umich.edu/ais/plants.html>

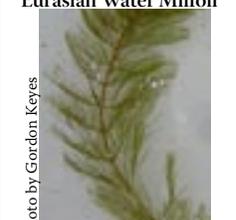
Minnesota Sea Grant <http://www.seagrant.umn.edu/>

U.S. Fish and Wildlife Service <http://www.protectyourwaters.net/>

U.S. Department of Agriculture <http://www.invasivespecies.gov/>

TEACH Great Lakes <http://www.great-lakes.net/teach/pollution/ans/>



<p>1. Like related native species which they are taking the place of, this striped invader is a superior water filterer. It has spread to all the Great Lakes and many inland lakes since its discovery near Detroit in 1988. Adults can attach to boats or boating equipment that sit in the water. Wash boat, tackle, downriggers, trailer and other boating equipment to kill this invader. Dry your boat and equipment for at least 5 days before transporting to another waterbody.</p>	 <p style="text-align: center;">Eurasian Ruffe</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Gary Cholewick, USGS</p>
<p>2. Less than half an inch in size. These tiny crustaceans that came from Europe have been spread throughout the Great Lakes region in bilge water, bait buckets, and livewells. Fishing lines and downriggers will often be coated with this invader's eggs and clinging adults.</p>	
<p>3. Gardeners have helped to spread this pretty wetland invader which now has established itself in 40 states. It can be found in the Keweenaw peninsula. It crowds out the native plants that are used by wildlife for food and shelter, and it has little wildlife food and shelter value.</p>	 <p style="text-align: center;">Spiny Water Flea</p>
<p>4. Spread by anglers who use them as bait, this invader is prolific. It consumes lake and stream vegetation, depriving native fish and their prey of cover and food. Native crayfish have a hard time competing with this invader which is larger and has a tougher shell which discourages predators.</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">USGS Archives</p> 
<p>5. This invader was first noted in Duluth in 1985. In the St. Louis River there, populations of yellow perch, emerald shiners, and other forage fish have declined dramatically as numbers of this invasive species have increased. Avoid accidentally transporting this invader in livewells, bilge water, and bait buckets. Water should be drained from the motor, livewell, bilge and transom wells, and bait buckets should be emptied on land before leaving any waterbody.</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Photo by Gordon Keyes</p> 
<p>6. In nutrient rich lakes this invader can form thick underwater stands of tangled stems and vast mats of vegetation at the water's surface in a matter of a few months. It can interfere with water recreation, degrade water quality, and crowd out native plants and fish. Fragments clinging to boat motors can spread this Invader from lake to lake. Inspect and remove any visible mud, plants, fish, or animals from boat and motor before transporting to another waterbody. It is already a problem in some U.P. lakes.</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Eric Coombs, ORDOA, www.forestryimages.org</p>  <p style="text-align: center;">Purple Loosestrife</p>



Become a Member of the Gratiot Lake Conservancy!

One way to show your support for the Gratiot Lake Conservancy is to become a member. In addition to the biannual newsletter mailed to all Gratiot Lake residents, members receive invitations to special events and an invitation to the Annual Members Meeting.

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

Please complete this form and mail with your check to <input type="checkbox"/> 1 year Membership \$10 contribution <input type="checkbox"/> 3 year Membership \$25 and up <input type="checkbox"/> Additional Donation ____ <input type="checkbox"/> Donation to Land Acquisition Fund ____	The Gratiot Lake Conservancy P.O. Box 310 Mohawk, MI 49950
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PLEASE PRINT

Name: _____

Street or Box #: _____

City, State, Zip: _____

E-mail address: _____

Phone number: _____

Winter address if different from above:

----- The Gratiot Lake Conservancy is a 501(c)3 non-profit organization. Your contribution is tax deductible. -----

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