

WATER'S EDGE

Gratiot Lake Conservancy News

Volume 4

Spring/Summer 2002

Annual Open House at Noblet Field Station

Come by land or by lake!*

Refreshments will be served!

Sunday, August 4, 12PM-4PM

- ★ Walk the Bear Paw Path
- ★ See videos
- ★ Learn about your watershed
- ★ Visit with neighbors
- ★ Look into Lake research

** 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.
(raindate: Sunday, August 11)*



*Fritillary (See pages 4 and 5
for more on butterflies)*

Conservancy Calendar

Tuesday, July 16	Jim Sweeting, Wildlife Biologist/Forester, available by appointment for free conservation consultation (see page 3)
Sunday, July 21 7PM	"Poisonous and Edible Mushrooms Found in the Keweenaw" Eagle Harbor Community Center (see page 3)
Monday, July 22 through Friday, July 26	Class for teachers on Wetlands and Watershed Stewardship in residence at the Noblet Field Station
Friday, July 26 7PM	Slide talk on the above theme Eagle Harbor Community Center
Sunday, August 4 Noon-4PM (raindate August 11)	Gratiot Lake Conservancy Fourth Annual Open House Noblet Field Station
Monday, August 12 10PM-? (rain/cloud date August 13)	Star Party on Brockway Mountain (see page 7)
Wednesday, August 14	Jim Sweeting, Wildlife Biologist/Forester, available by appointment for free conservation consultation (see page 3)

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 education 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 education and research activities.

Thank you, Mike and Raven!

After three great summers at Gratiot Lake, Diane Raven and Michael Scheiwe of Headwaters have moved on to other full time endeavors. The Conservancy will certainly miss the internships they offered teenagers at the Noblet Field Station (and the Artist in Residence program). They served by teaching and by example as mentors for an energetic group of budding naturalists and ecologists. It was a pleasure to see the Noblet Field Station come to life with their thoughtful and intensive work. Their research on clams, algae, birds, and small mammals has enriched the way we view the Lake and its watershed.

Sampling Gratiot Lake indicates Good Water Quality

Results of 2001 Cooperative Lakes Monitoring Program (CLMP) indicate that Gratiot Lake ranks well on the two measures taken but may have room for improvement.

In the secchi test, a black and white disc is lowered into the lake to measure turbidity. This indicates the amount of sediment or algae in the water. This measurement is taken weekly mid-May to mid-September. In reports from 184 Michigan lakes, measurements from 1.4 - 62 feet were recorded. The average for the state was 12.2 feet. Gratiot fluctuated between 8.7 feet and 16 feet with an average of 13 feet. Historically, readings from Gratiot taken in 1975 and 1988 by the State averaged 15-20 feet. Current readings indicate that Gratiot is a healthy lake with some periods of algal "blooms" which may indicate some pollution from fertilizers, or leaking septic systems, or sediment runoff into the water.

In August 2001, for the first time a summer phosphorus reading was taken in August. High phosphorus levels may indicate fertilizer runoff or septic leakage that can cause over production of algae in lake water. Gratiot had a measurement lower than the average of the 150 Michigan lakes tested. This is an indication that Gratiot is a healthy lake.

Thanks again to Ed Kaeding who has been steadfast in looking into the water and making measurements for two summers.

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 watershed, and to suggest ways to improve stewardship of the Lake and its watershed. Please send questions, comments, or offerings for *Water's Edge* to Bonnie Hay, Editor *Water's Edge*, P.O. Box 310, Mohawk, MI 49950
e-mail: belh@bellatlantic.net
phone: (July/August) 337-5476
Visit our new website at <http://www.mlswa.org/gratiot-lake-1508>

Mushrooms – a glimpse of a special Kingdom



Amanita

Mushrooms, which people often think of as “almost” plants, have their own special Kingdom of Fungi status. In fact after looking closely at their genetic structure, some scientists now feel that fungi are more closely related to animals than to plants!

What’s so special about mushrooms and fungi? Which fungi are good to eat? Are there poisonous mushrooms in our area?

Come hear Dana Richter, a research scientist and instructor at Michigan Tech, School of Forestry, give an informative slide presentation, “Poisonous and Edible Mushrooms Found in the Keweenaw.” He will explain the fascinating and numerous roles of mushrooms in the ecosystem and will include many beautiful pictures comparing some common edible species with some that are deadly. Mr. Richter’s specialties are wood decay, tree diseases, and the fungi that produce mushrooms. He has led numerous mushroom workshops and is a skilled fungi photographer.

Join us Sunday evening July 21 at 7 PM at the Eagle Harbor Community Center. This event is free of charge and open to the public. A mushroom walk with Mr. Richter will be scheduled at a later date.



Bolete

Watch for a Wildlife Expert in Your Own Backyard!

The Conservation District for Keweenaw County is offering a free service for property owners who want to enhance the conservation values of their land. Jim Sweeting, a professional wildlife biologist/forester, is available to come to your camp, cottage, or woodlot to identify plants and wildlife and will suggest ways to improve wildlife habitat and to attract birds and mammals. He also can offer information on the sustainable management of woodlands and about state and federal cost share programs designed to improve woodlands and maximize wildlife values.

The Gratiot Lake Conservancy has invited Jim Sweeting to come to the lake on July 16 and on August 14 to meet privately with interested landowners. If you would like to set up an appointment for Mr. Sweeting to visit your home or camp, or if you would like more information about this service, please e-mail Bonnie Hay at belh@bellatlantic.net or call Bonnie after July 2 at 337-5476. The 2-4 hour appointments are free of charge.

Membership Update

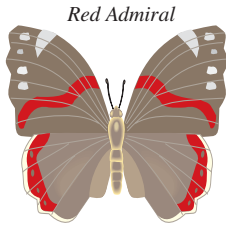
As of June 2002, GLC has 24 member families. A number of generous donations have also been received.

We appreciate your support.

Please check your label for your membership renewal date. Your membership is current until the date listed on the label.

Thanks for renewing!

Gardening for Butterflies and Hummingbirds



Red Admiral

Most of us enjoy wildlife watching at Gratiot Lake. It's exciting to see bears and deer and foxes, but butterflies and hummingbirds, some of the smallest visitors, are always welcome. While only one kind of hummingbird comes to this area, the Ruby-throated Hummingbird, I was surprised to discover at the United States Geological Survey website that sixty-five species of butterfly have been observed in the Keweenaw Peninsula.

Many Gratiot lake camps and cottages have hummingbird feeders hung outside their windows. Some have gone a step further and planted native flowers attractive to hummingbirds or butterflies in place of lawn next to their homes. Planting native wildflowers attractive to wildlife can enhance enjoyment of the Lake and be a plus for lake ecology.

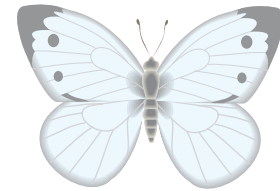
On the next page are guidelines for butterfly/hummingbird gardening. The butterfly plants listed are mainly nectar plants on which adult butterflies feed. Caterpillars usually require very specific food plants depending on their species. Although many butterfly and moth species feed on leaves as caterpillars, with a few exceptions, e.g. gypsy moth and tent caterpillar, most native butterflies and moths are not considered nuisances or threats to native plant species.

A good source of information on native seeds and plants is the Wild Ones, a national organization with an informative website with links to their Upper Peninsula chapter.

Visit <http://www.for-wild.org/>

or call James Lempke head of the local chapter at 906 -428-9580.

Wild Ones has a list of native plants and seeds and where they can be purchased. In addition, they run related workshops.



Cabbage White

Also check local nurseries and greenhouses, such as Einerlei and Nissalas. Be sure to ask if their plants are from seed or stock native to the Upper Peninsula. The more local the better.

Another good method is to hand collect seed yourself from local plants in the late summer or fall. Be aware that some native seeds are a challenge to propagate and some need to go through a freezing period before they will germinate.



Fritillary

More information on local butterflies is available through the Michigan Lepidoptera Survey website at www.msu.edu/user/kriegeir/mis

At this website go to "Resources" and then click on the "Butterflies of North America" link.

"Thank you" to Water's Edge
proofreaders: Judy Kroon,
Jim Hay, and Ben Hay.



Viceroy

Butterfly Tips

Adult butterflies are attracted to yellow, red, orange, pink, or purple flowers that are flat topped or clustered.

Plants should be grown in sunny areas. Butterflies need sun for orientation and to warm their wings for flight.

Pesticide use can be fatal to butterflies.

Some Nectar Plants for Butterflies*

(selections from a National Wildlife Federation list, Backyard Almanac, and Butterflies of the North Woods by Larry Webster)

Aster spp.

Joe-pye-weeds, *Eupatorium* spp.

Bergemonts, *Monarda* spp.

Milkweed, *Asclepias* spp.

Black-eyed Susan, *Rudbeckia hirta*

Blazing Stars, *Liatris* spp.

dogbane, *Apocynum androsaemifolium*,

Apocynum cannabinum

Pickerelweed, *Pontederia cordata*

Buttonbush, *Cephalanthus occidentalis*

Staghorn Sumac, *Rhus typhina*

Cardinal Flower, *Lobelia cardinalis*

Sunflowers, *Helianthus* spp.

Coreopsis spp.

Vervain, *Verbena hastata*, *Verbena urticifolia*

Goldenrod, *Solidago* spp.

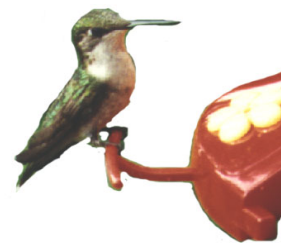
Blazing star, *Liatris aspera*

Vervain, *Verbena* spp.

Goldenrod



Hummingbird Tips



Plant in sun and shade in several areas throughout the yard to discourage the dominance of one bird.

Plants with red or pink tubular flowers attract hummingbirds.

Use no pesticides. Pesticides can be lethal to hummingbirds and also kill the insects and spiders they rely on to supplement their diet and feed their young.

Hummingbird feeders should be

hung in the shade if possible,

cleaned every three to five days,

and filled with a solution of one part table sugar to four parts water (boiled and cooled).

Hummingbird Plants *

(selections from a National Wildlife Federation list, Backyard Almanac, and Butterflies of the North Woods, by Larry Webster)

Bee-balm, *Monarda fistulosa*

Cardinal-flower, *Lobelia cardinalis*

Scarlet paintbrush, *Castilleja coccinea*

Columbine, *Aquilegia canadensis*

Jewelweed, *Impatiens capensis*

Native honeysuckle *Lonicera dioica* (not the vine!)

*These lists were edited by Janet Marr with an eye towards species native and non-invasive in the Upper Peninsula of Michigan.

Efficient Outdoor Lighting Preserves a Glimpse of the Milky Way!

Everyone enjoys seeing the Milky Way, the Northern Lights, and shooting stars. Outdoor lighting can obscure our view of the heavens; however, it doesn't have to. Here are some light saving and money saving tips which will reduce excess light "pollution" while allowing for the security and safety that outdoor fixtures provide.

Don't overlight. Use outdoor lights only where and when necessary.

Aim lights down. Choose "full-cut-off shielded" fixtures that keep light from going uselessly up or sideways. (See illustrations at right.)

Target the area you need to light. Aim the light at night if possible so you can see where the light goes.

Select a bulb just bright enough to accomplish the task—this saves money and energy.

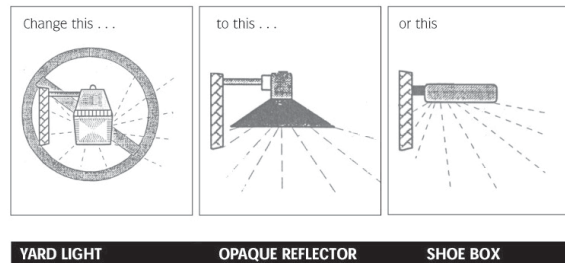
Choose energy efficient low pressure sodium or high pressure sodium lamps whenever yellowish light will do the job.

Put lights on a motion detector switch which turns them on only when someone enters the area.

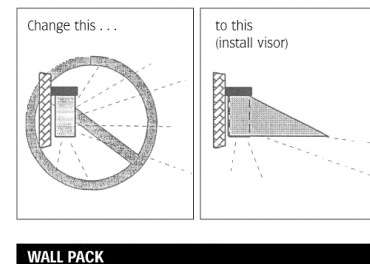
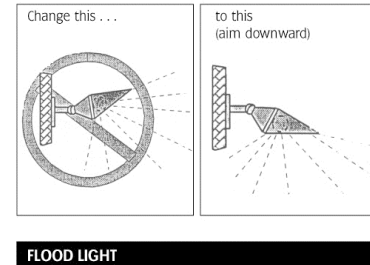
Ideally, only turn outdoor on lights when necessary or put them on a timer to turn them off when no longer needed at night.

For more information:

International Dark Sky Organization
3225 N. First Ave
Tucson, AZ 85719
telephone: 520-293-3198
web: <http://www.darksky.org>



What You Can Do To Modify Existing Fixtures



University of Michigan astronomy group
web:
<http://www.umich.edu/~lowbrows/light/>

*** Come to See Stars ***

The Keweenaw is a great place from which to view the Universe. The clear, crisp air and low level of artificial, ambient light make star viewing-even without a telescope-rewarding. On Monday, August 12 (rain/cloud date August 13) Robert Nemiroff, an Astrophysicist who teaches at Michigan Tech, has offered to help the Conservancy host a star party. We will meet at 10 PM-? on Brockway Mountain to christen the telescope donated to the Conservancy by Art Dion. The crescent moon will set early, and we should have a good view of the stars, possibly Venus and the Perseid meteor showers. Bring binoculars, telescope (if you have one), and something to sit/lay on. Please call (337-5476) or e-mail (belh@bellatlantic.net) to let us know you plan to attend. Even if you are unable to join us, you can see some wonderful astronomy photos at Dr. Nemiroff's "Astronomy Picture of the Day" page at <http://antwrp.gsfc.nasa.gov/apod>

Getting the Lead Out



Lead has long been known as a substance dangerous to people. The Federal government years ago banned lead in gasoline, plumbing pipes, and paint. In 1991, the use of lead shot was banned because of its detrimental effect on wildlife and the environment.

For the past ten years, a controversy has been brewing over lead found in fishing sinkers and jigs. This lead fishing gear is often consumed by waterfowl either because it is in fish they eat (the one that got away) or because they pick it off lake bottoms (snagged again!).

Experts blame an average of 25% of waterfowl and loon mortality on poisoning from the lead they are exposed to. According to the Michigan Loon Preservation Society lead fishing tackle has been implicated as an important cause of waterfowl mortality in 13 studies. "Lead, once dispersed into lakes, may persist for up to 300 years, though degradation can be more rapid depending on soil conditions and other factors. At least 27 different species are known to be affected by lead poisoning, including numerous duck species, the Trumpeter, Tundra and Mute swans, Bald eagles, Sandhill cranes, and the Common Loon." A Michigan study found 20% of dead loons studied had succumbed to lead poisoning.

New Hampshire banned the use and sale of small lead sinkers and jigs. Maine banned the sale of small lead sinkers, but it allows their use. Canada banned the use of small lead fishing sinkers and jigs in national parks and national wildlife areas. New York recently banned the sale of lead tackle. Minnesota has chosen an educational campaign, an effort encouraging anglers to "Get The Lead Out" when they fish. Although the Seney National Wildlife Refuge in the eastern U.P. may be designated as a "Lead Free Fishing Area" by the U.S. Department of the Interior, Michigan has no regulations.

The good news is that there are alternatives to lead sinkers and jigs. However, they are more expensive and hard to find in the U.P. The Conservancy plans to inform some of the local stores which sell fishing tackle about the availability of lead free tackle. You can help by asking your favorite store to stock alternatives to lead tackle and by giving lead free sinkers and jigs a try. A list of lead free fishing tackle suppliers and tips for fishermen is published on the Michigan Loon Preservation Society website <<http://www.michiganloons.org/>> or can be obtained by e-mailing or by calling the Conservancy (listed at bottom of page 2).

Photo Courtesy of Dorothy Jamison



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 will receive invitations to special events. As a member of the Conservancy, you will also have the opportunity to obtain discounted subscriptions to magazines of the *Orion Society* and discounted *Michigan Lakes and Streams Association* Membership.

#

Membership Application

Please complete this form and mail with your check to: The Gratiot Lake Conservancy
P.O. Box 310
Mohawk, MI 49950

- o 1 year membership \$10 contribution
- o 3 year membership \$25 and up

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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