

# From Shore to Shore

For Minnesota citizens promoting the health of our rivers & lakes

November 2004

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## Announcements

### → Itasca County Native Plant Sale

You can order native trees and plants from the Itasca County SWCD for planting next spring. Order forms are available by calling (218) 326-0017 or emailing [andy.arens@mn.nacdnet.net](mailto:andy.arens@mn.nacdnet.net)

### → New Resources Available

For detailed descriptions go to page 3.

- Healthy Rivers – A Water Course
- Guide to Aquatic Invertebrates of the Upper Midwest
- Guide to Using Natural Resource Information in Local Decision-Making



## Award-Winning Program

Submitted by: Eleanor Burkett, University of Minnesota Extension Service, Brainerd Regional Center, (218) 828-2326, [burke044@umn.edu](mailto:burke044@umn.edu)

On Friday, October 22, the Initiative Foundation recognized six "community superheroes" at its Awards for Outstanding Community Initiative event at Madden's Resort in Brainerd. Nominated by their peers and chosen by volunteer selection committees, each award winner receives \$1,000 for the charity of their choice, a commemorative video tribute, and a commissioned sculpture created by Minnesota master glassworks artist, Michael Tonder.

The 2004 Outstanding Environmental Initiative Award went to the Brainerd-based Youth Outdoor Corps, a program that teaches high school students to take water quality samples, report accurate results, and manage a small business. Developed by the University of Minnesota Extension Service, Crow Wing County and Independent School District 181, the Outdoor Corps provides water quality information to area lake associations and county water planning advisory boards at an affordable cost. What started as a small program now includes 60 lakes, covering eight counties throughout central Minnesota and employing more than 40 youth and adult mentors.

"The program is successful on many levels," said Kent Montgomery, regional extension educator for the Extension Service and manager of the Outdoor Corps program. "The students get an opportunity to advance their science skills and explore career possibilities in natural resources. Their clients get affordable, reliable information on the quality of their lakes."

For more information on the Outdoor Corps, contact Kent Montgomery at (218) 828-2326 or email [kmontgom@umn.edu](mailto:kmontgom@umn.edu). ■

# Some Minnesota Lakes Seeing Toxic Algae Blooms

Contacts: Ralph Pribble, MPCA, (651) 297-1832, Doug Schultz, MDH, (651) 215-1303, Tom Conroy, DNR, (507) 359-6014

It's not unusual for warm, shallow lakes to turn green and soupy with algae during the "dog days" of late summer. But sometimes the type of algae growing in the lake can be harmful to people or animals. That's been the case recently on three lakes in Minnesota where toxic blue-green algae blooms have occurred.

Late this summer a lakeshore resident on Lake Benton, in Lincoln County, reported large numbers of dead fish and said his dog had died after going into the lake and apparently ingesting algae. In July, a dog was reported to have died from contacting water thick with algae in Fish Lake near Mora, in Kanabec County. In Lake Crystal, southwest of Mankato in Blue Earth County, testing by the Minnesota Pollution Control Agency (MPCA) confirmed a toxic algae bloom.

The MPCA, Department of Health (MDH), and Department of Natural Resources (DNR) are advising people not to swim or wade in these lakes and to keep pets or farm animals out of the water until the algae clears up.

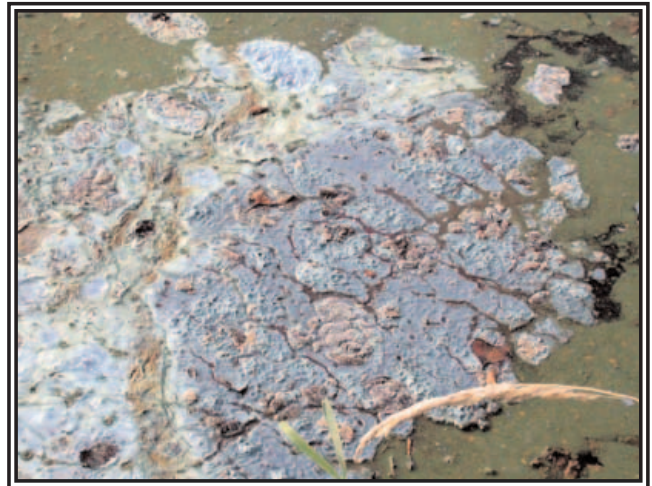
Although blue-green algae occur in most lakes in Minnesota, the type and concentration can vary considerably from lake to lake. Blue-green algae thrive in warm, nutrient-rich lakes. Sometimes the algae become so abundant they completely dominate the lake, and all or parts of it turn bright green or bluish green, with the water taking on a "pea soup" consistency.



*Water to avoid!*

Occasionally these blooms turn toxic. Although blue-green algae are relatively common in late summer, most blue-green blooms do not become toxic. They can go from

harmless to toxic, and back again, without necessarily changing appearance. Sometimes winds will dissipate a toxic bloom in a short time. At other times, the wind can blow mats of floating algae to the lakeshore. Most problems occur when the algae clump near a shoreline and livestock, pets, wild animals, or birds drink the water.



*Water to avoid!*

Steve Heiskary, a lake expert with the MPCA, said blue-green blooms occur every summer, but this year seems to have had more than the usual number of toxic blooms. "Heavy rains this spring and early summer probably carried more than the usual amount of nutrients into surface waters," he said, "and this could be why we've had more problems this season."

Some species of blue-green algae naturally produce toxic substances. According to the MDH, humans and animals may experience illness or other health effects if there is skin contact with algal toxins or large amounts of algae are ingested.

The agencies recommend that people and animals should not ingest the water. Do not let children or pets enter the water. Contact with these algal blooms should be avoided. If contact does occur, the material should be washed off thoroughly, paying special attention to the swimsuit area. If your pet comes in contact with a bloom, wash off your pet's coat to prevent the pet from ingesting the algae while cleaning itself.

Swimming in water with an algal bloom may cause symptoms such as skin rash, hives, runny nose, irritated eyes and/or throat irritation. Swallowing or ingesting water with an algal bloom may cause symptoms such as vomiting, diarrhea, or nausea; headache, throat irritation, or

muscle pain; and in severe cases paralysis, respiratory failure, or death. It may also cause seizures or convulsions in your pets.

If you suspect an animal has been affected by an algae bloom, contact a veterinarian as quickly as possible, as some of the toxins in a toxic algae bloom can kill in an hour or less, while some may take up to 24 hours to affect the animal.

Tom Conroy, a DNR Information Officer in New Ulm, said the combination of abnormally warm temperatures and the opening of Minnesota's hunting seasons can be "a potentially dangerous situation for hunting dogs."

Not only are there concerns about dogs ingesting toxic blue-green algae but there is also the danger that dogs can "quickly become overheated in warm temperatures," Conroy warned. "Dogs don't know when to quit so it's up to the owner to make sure it doesn't overdo it. Keep a close eye on your dog, don't let it drink or lick algae off itself, rest it often, and have plenty of cool water on hand," Conroy urged.

For more information on toxic algae blooms, see the MPCA Web page titled, "Toxic algae can spell danger for pets and livestock," at [www.pca.state.mn.us/water/clmp-toxicalgae](http://www.pca.state.mn.us/water/clmp-toxicalgae).

Digital photos of fish kills on Lake Benton or Lake Crystal that resulted from the toxic algae blooms are available by contacting Ralph Pribble at 651-296-7792 or by e-mail at [ralph.pribble@pca.state.mn.us](mailto:ralph.pribble@pca.state.mn.us). ■

## New Resources Available

**"Healthy Rivers: A Water Course"** – A new CD available from the Minnesota DNR contains a multi-media educational program about river ecology and management. Scientific information about rivers and practical ways to contribute to the health of our watersheds are presented in an enjoyable format for non-technical audiences. Individual copies of this great resource are available through the Minnesota's Bookstore for \$19.95 (651-297-3000, 1-800-657-3757, [www.minnesotasbookstore.com](http://www.minnesotasbookstore.com)). Product information, ordering links, and trouble shooting can be found at [www.dnr.state.mn.us/healthyivers/](http://www.dnr.state.mn.us/healthyivers/).

**"Guide to Aquatic Invertebrates of the Upper Midwest"** – Are you interested in aquatic invertebrates, those critters that live at the bottom of your stream? This 200-page spiral-bound guide has a water-resistant cover and includes over 500 original drawings. The guide includes keys for identifying aquatic invertebrates to the Class, Order, and Family level and offers detailed descriptions, feeding group information, and tolerance values for each Family. A great resource for volunteer monitors, students, classroom teachers, and aquatic resource professionals, this guide is

## Introducing...

### Molly Zender Zins



**Molly Zender Zins** started as the Technical Advisor for Crow Wing County on October 18, 2004. Molly comes with a background in environmental education focusing on natural history interpretation and sustainability education. She will work with the Shoreland Volunteers, shoreland property owners and Master Gardeners on a part-time basis. You can reach her at [zend0007@umn.edu](mailto:zend0007@umn.edu) or by phone at (218) 824-1068. Molly will be in the office generally on Tuesdays and Thursdays.

only \$25, including shipping and handling. To order, send your check or money order made out to the "University of Minnesota" with your name and complete mailing address to: WRC Aquatic Invertebrates, 173 McNeal Hall, 1985 Buford Ave, St. Paul, MN 55108.

The Brochure, "**A Quick Guide to Using Natural Resource Information**" and companion CD-rom "Guide to Using Natural Resource Information in Local Decision Making" – Are you interested in land use planning? DNR's Central Region Community Assistance Unit and Dakota Soil and Water Conservation District have developed these products to help local communities include natural resource information in the local land use planning process to ensure that land use decisions are made in an environmentally sensitive and fiscally responsible way. The guide outlines a step-by-step natural resource-based planning process designed to provide guidance for people with a wide range of backgrounds and interests. They can be obtained as hard copy from the DNR or in electronic form at the DNR's website: <http://www.dnr.state.mn.us/nrig/index.html>. ■

# HONEYSUCKLE – Friend or Foe?

Submitted by: Mary Blickenderfer, Regional Extension Educator, University of Minnesota Extension Service, (218) 327-4616, blick002@umn.edu

While common and glossy buckthorn get most of the attention and bad press for their large-scale invasion and ultimate destruction of native plant communities, Eurasian honeysuckles are in the same league. Most aggressive in our area are tartarian honeysuckle (*Lonicera tatarica*), Morrow honeysuckle (*Lonicera morrowii*), the hybrid of these two species (*Lonicera x bella*), and amur honeysuckle (*Lonicera maackii*). In addition to these shrubs, the Japanese honeysuckle vine (*Lonicera japonica*) was “introduced (with good intentions but disastrous results) from southern Asia, now in many places an aggressive vine that defies eradication, forming dense tangles that overwhelm the native (or other) vegetation” (Voss 1996). Control of these honeysuckles requires labor-

intensive mechanical (pulling, mowing, burning) or chemical (herbicide) treatment. Mature shrubs should be removed first, followed by ongoing treatment of the seedlings that may re-sprout from roots or germinate from seeds in the soil.

In contrast to their European cousins are several honeysuckles native to our area, none of which are aggressive invaders. Bush-honeysuckle (*Diervilla lonicera*) and glaucous honeysuckle (*Lonicera dioica*) occur in woods and thickets throughout Minnesota. Fly honeysuckle (*Lonicera canadensis*), hairy honeysuckle (*Lonicera hirsuta*), northern fly honeysuckle (*Lonicera villosa*) and swamp fly honeysuckle (*Lonicera oblongifolia*) occur in the northern part of the state.

You may be wondering if you have an invasive honeysuckle in your back yard, and how you tell it from the native honeysuckles. As a general guideline, the non-native honeysuckle shrubs are large (5-12' high), have opposite leaves, and produce delicate white-pink flowers that become bright red (may be orange to yellow) pea-size berries situated in pairs in the leaf axils (where leaves attach to stem). The native honeysuckles are low inconspicuous shrubs (or vines), have opposite leaves, but produce yellow flowers that become pairs of cone-shaped red berries (*Lonicera canadensis*), narrow capsules (*Diervilla lonicera*), or pea-size red or blue/purple berries. Consult a plant key or plant expert for positive identification.

One final note: don't eat the berries of the non-native honeysuckles! They are bitter and some contain an unknown poison that causes violent vomiting and bloody diarrhea (Holmaasen 1989). ■

#### References:

Holmaasen, I. 1989. *Traed och Buskar*. Stockholm: Interpublishing. 176pp.

Voss, E. 1996. *Michigan Flora*. Ann Arbor: Cranbrook Institute of Science. 622pp.



Morrow honeysuckle (*Lonicera morrowii*) is an invasive plant similar to our native honeysuckles.

Photo by Kenneth J. Sytsma

wrc.coafes.umn.edu

www.seagrant.umn.edu

www.extension.umn.edu

www.shorelandmanagement.org



*Shore to Shore* is made possible by Minnesota Sea Grant, in cooperation with the University of Minnesota Water Resources Center.

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