



# From Shore to Shore

*“For Minnesota citizens promoting the health of our rivers and lakes”*

Newsletter 52  
October 2003

on the web at [www.shorelandmanagement.org/citizen/index.html](http://www.shorelandmanagement.org/citizen/index.html)

## Calendar of Events

### *Funding & Grant Opportunities For Lake Associations.*

**October 14, 7 - 9 pm**  
**Warner Lake Nature Center**  
**Clearwater**

An evening featuring:

- Paula West of the Minnesota Lakes Association on possible funding sources for lake associations, including lake improvement districts.
- Don Hickman, Initiative Foundation, sharing tips from a funder's perspective on preparing successful grant proposals.
- A representative from the Board of Soil and Water Resources speaking about Challenge Grants.

(The September date was cancelled due to scheduling conflicts.)

Please RSVP your attendance to Missy at 800-433-5236 or 763-241-2720 by October 10.

### *Shoreland Volunteer Training*

**November 22**  
**Warner Lake Nature Center**  
**Clearwater**

At this workshop you'll learn basic limnology, shoreland regulations, watershed concepts, and land use practices that impact water quality. You'll also meet local resource folks and receive tips on sharing your knowledge with others.

Please RSVP your attendance to Missy at 800-433-5236 or 763-241-2720 by November 18.

## Fall Lake Care Campaign Launched In Twin Cities

It's an obituary for a lake. Meant to be a bit offbeat and eye catching, it shares three main messages: 1) Lakes are being damaged from polluted runoff, 2) phosphorus is a key pollutant, 3) there are things we can do to help.

The ad, scheduled to run in early October in the Pioneer Press and Star Tribune, is the first activity of a stormwater pollution prevention campaign being conducted by Metro WaterShed Partners. The campaign aims to assist city-based clean water education programs by placing metro-wide messages in the media and providing city staff with easy to adapt educational materials.

The web site, [mncleanwater.org](http://mncleanwater.org), will start small and grow. This fall it will provide homeowners yard care tips for clean water. Over time it will expand to be a stormwater pollution prevention resource for city staff, educators, and students.

Metro WaterShed Partners is an organization of 40 organizations and agencies involved in water resources education in the Twin Cities Metro area. Grant money for the campaign is coming from the Metropolitan Council, the Minnesota Office of Environmental Assistance, and the Minnesota Pollution Control Agency. For information on the campaign and MetroWaterShed Partners, contact Ron Struss, University of Minnesota Extension Service, 651-215-1950 or [rstruss@umn.edu](mailto:rstruss@umn.edu).

## Obituary

### Patricia, Lake



Lake Patricia, age 12,830, after a long and grueling battle with contaminated runoff. Patricia is survived by 9,999 lakes and hundreds of rivers and streams. An active member in the aquatic community, Patricia contracted damaging amounts of algae due to high phosphorus levels given off by leaves and grass clippings that entered her system. In lieu of flowers, loved ones are asked to rake or sweep leaves from nearby streets and stormwater drains, and to mulch or compost this fall.

For more details visit  
[www.cleanwatermn.org](http://www.cleanwatermn.org)

## Lake George Shoreland Restoration Project St. Cloud, MN ~ June 2003

Lake George has seen many changes in the past two years. It has gone from a steep, gravel and lawn shoreline to a natural habitat of trees, shrubs, native grasses, and wildflowers.

The restoration project was designed and established by Greg Berg, a Shoreland Specialist from the Stearns County Soil and Water Conservation District (SWCD), the Central MN Joint Powers Engineering Staff, and approximately 400 St. Cloud Tech environmental science students over the past two years. The project received \$24,219 through the MN DNR Shoreland Habitat Restoration Program. The students helped plant over 110 trees and 17,000 native grasses and forbs along the lake; both in the water as aquatics and on the upland portion. The Natural Resources Conservation Service (NRCS) also helped with the planting and project coordination.



*Students from one of the St. Cloud Tech High School Environmental Science classes.*

The project began seeing change in the spring of 2002 when the southern and western shoreline of the lake was restored to natural habitat.

In the summer of 2003, more plants were added to the southern area after many did not survive due to heavy rains and flooding. To stabilize the damaged shoreline, an erosion blanket was brought in, filled with topsoil and seeded with annual rye grass for stabilization. The area was also planted with native plants to help stabilize the soil and shoreline area.



*Lee Zabinski, NRCS Technician and students install an erosion blanket and plantings to prevent shoreline erosion.*



*Melanie Boike, NRCS Soil Conservationist, weeding the area planted in the spring of 2002.*

The north section of the lake was re-graded and sloped with topsoil to prepare the area for planting. The area was then seeded with annual rye grass, native grass, and wildflowers. After seeding, the site was covered with an erosion blanket and planted by the students.

Restoring the area back to a native plant community helps create a buffer zone to filter out sediment and prevent other pollutants from entering the lake. This project will not only improve water quality by reducing the erosion, but it also is aesthetically pleasing, adding a variety of color, a natural look to the land, and improved habitat for wildlife. The site also provides an outdoor classroom for students, both during project implementation and in the future.

## Clearing The Shoreland, Shoreline Regulatory Haze

*Ron Struss, Metropolitan Education Coordinator*

Want instant confusion over land use regulations? Then “just add water!” Those of you who have sorted out a zoning ordinance or applied for a permit know how confusing it can be. The grid below is offered to clear the haze hanging over shoreline and shoreland regulations. But first some definitions!

**State statute:** A law created by the state legislature that gives authority to state or local government to regulate an activity. State statutes can be complete in themselves or call for the creation of state rules to provide specifics for implementation. State statutes can be read at: [www.leg.state.mn.us/leg/statutes.asp](http://www.leg.state.mn.us/leg/statutes.asp).

**State rule:** State rules provide specifics needed by certain state statutes so they can be implemented. Rules are established by state agencies, and have the force and effect of law. Agencies cannot establish rules without authority from the legislature. State rules can be read at [www.leg.state.mn.us/leg/statutes.asp](http://www.leg.state.mn.us/leg/statutes.asp).

**Local rule (ordinance):** Local rules are established by town, city, and county governments and special units of government such as watershed districts. Authority for establishing local rules is given by the state. A common form of local rule is the ordinance.

**Permit:** Permits give authority to carry out a specific activity, providing requirements that apply are followed. Permits can be issued by local, state, or federal government.

<b>Shoreland management:</b> Land alterations within 1,000 feet of a lake, or 300 feet of a river and its designated floodplain. Projects include building of structures, installing or replacing sewage treatment systems, or substantially altering the shoreland landscape.			
State statute	State rule	Enforcement	Permits
Chapter 103F (cities & counties) Chapter 103D (watershed districts)	Chapter 6120 (cities & counties)	Town, city, county, or watershed district rules, usually in the form of zoning ordinances.	Permits issued by local zoning authority, a town, city, county, or watershed district.
<b>Discussion:</b> The state sets standards for shoreland regulations but does not enforce them. That is the job of local government. The state requires local units of government to enact and enforce rules that are as, or more restrictive as the state standards. An explanation of state shoreland development standards can be found at: <a href="http://www.dnr.state.mn.us/shorelandmgmt/guide/standards.html">www.dnr.state.mn.us/shorelandmgmt/guide/standards.html</a> . Watershed districts are covered by a different state statute than towns, cities and counties.			

<b>Shoreline alterations:</b> Land alterations below the Ordinary High Water Level (OHWL) in public waters or public waters wetlands. Projects include filling, excavation, shore protection, bridges and culverts, structures, docks, marinas, water level controls, dredging, and dams.			
State statute	State rule	Enforcement	Permits
Chapter 103G	Chapter 6115	State government, however overlapping local or federal controls may also apply.	Permits issued by the state, but permits can also be required by local and federal government.
<b>Discussion:</b> The state may require one or more of the following DNR permits for shoreline alterations: Public Waters Work Permit, Aquatic Plant Management Control Permit, or a Fisheries Permit. Working in the shoreline area is tricky because in addition to the state, local and federal (Army Corp of Engineers) controls might apply. It is best to check with all three levels of government before undertaking a project. Information on working in public waters and public water wetlands is at: <a href="http://www.dnr.state.mn.us/permits/water/">www.dnr.state.mn.us/permits/water/</a> .			

# Plant topic of the issue: Minnesota Native Plants – Part 4

Mary Blickenderfer, Shoreland Vegetation and Landscape Educator

You can spot us a mile away, scissors in our hands and pockets and packs bulging with bags of freshly collected native seed – the “bag people” of the native plant world! Once all the seed in those paper bags has dried on the porch or in the attic and/or the pulpy seed begins to ferment in plastic bags on your kitchen counter (see Minnesota Native Plants – Part 3 in July 2003 issue of this newsletter for collection instructions), you may be wondering “What do I do now?” The following instructions will help guide you through native seed cleaning and storage.

## Cleaning seed

### “Dry seed”

Remove seed from the seed head (shake heads in a bag, tap in a bowl, tease by hand, etc. – whatever works for the type of seed head you have).

Sift with food strainers or a window screen (different mesh sizes can be used if available) and winnow (outside!) as necessary to remove the large chaff.

### “Wet seed”

Clean when fruit is very ripe or fermenting.

For stony seeded fruit, buzz briefly in a blender to separate the pulp from seed. If seed can be damaged by blender blades: wrap blades with duct tape, squeeze the fruit by hand while in the plastic bag, or work the fruit in a rigid container using a potato masher to separate the pulp from the seed.

Rinse and decant liquid to remove the floating pulp and non-living seed from the viable seed that has settled to the bottom of the container. Repeat as necessary until decanted water is clean.

## Storing seed

### “Dry seed”

Place cleaned seed in labeled paper bags or envelopes. Store all labeled packages in a critter-proof container. A metal container with tight fitting lid is recommended. If insects are present, place pest strips in the container. Place container and contents in an unheated place (e.g., garage).

Note: most dry seed, except seed of several sedge species, will retain viability for several years if kept dry, cool, and bug-free.

### “Wet seed” and wetland plant seed\*

“Stratify” seed by planting it directly in flats containing moist growing medium.

Place the entire flat in a plastic bag, label the bag, including the date stratification is initiated, and seal. Place in a location that will experience cold to freezing temperatures for a 6-8 week stratification period. A root cellar or unheated garage will work well for the flats, if critter-free.

Check the flats during the stratification period: protect from critters and water, as necessary. If the seeds begin to sprout, remove them from plastic bags, place in a warm sunny location, and continue to care for the plants as necessary.

\* Most *dry seeds of wetland plants require a stratification to break dormancy* (e.g., sedges, blueflag iris, boneset, Joe-pye-weed, swamp milkweed, blue vervain, etc.). Most *other dry seeds will germinate more uniformly* if stratified, but stratification is not required to break dormancy.

## Other Notes:

As a general rule: store seeds under the conditions they would experience naturally if left unpicked.

“Parachute-seeded” species (e.g., milkweed, asters, goldenrods, etc.) harvested just before they “fuzz out” are much easier to clean - if done immediately while the “fuzz” is still moist.

A few species require “double stratification” (i.e. cold-warm-cold stratification). The first cold treatment is needed for root emergence. The second cold treatment is needed for leaf (cotyledon) emergence. Minnesota species that require this type of stratification include trilliums, highbush-cranberry, wood lily, and Turk’s cap lily.



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