



# From Shore to Shore

For Minnesota citizens promoting the health of our rivers & lakes

October 2004

#62

## Calendar of Events

### → Governor's Clean Water Initiative, North Central Lakes Stakeholder Meeting

November 12, 2004 – Cass County, MN

For time and location call (218) 828-2326 or e-mail [burke044@umn.edu](mailto:burke044@umn.edu). The public is welcome.

## Shoreland Advocate Remembered

Carol Mortenson died September 11, 2004, after a long and courageous battle with cancer. Working as a botanist for the Fish, Wildlife and Plant Resources Program of the Leech Lake Band of Ojibwe, Carol was active in restoring and preserving native habitat. She was a strong supporter and collaborator with the University of Minnesota Extension Shoreland Education Program. She authored and co-authored many books and articles on invasive plant species and their control (see *From Shore to Shore* June 2004 issue), and was instrumental in developing the Northern Minnesota Botanical Society, which provides opportunities to learn about local plants and plant communities. She is already missed.



## Composting Fall Leaves

Submitted by: Eleanor Burkett, University of Minnesota Extension Service, Brainerd Regional Center, (888) 241-0720, [burke044@umn.edu](mailto:burke044@umn.edu)

Fall leaves are valuable to gardeners. Composted leaves keep soil in prime condition for most gardening projects. Follow these tips to optimize leaf composting:

- Use large compost bins, 5 to 6 feet across. This size allows for rapid internal heating of the compost pile, which drives the decomposing process. Smaller bins will be slow to heat and will not be able to maintain processing temperatures through the cold Minnesota winter. Bins larger than 6 feet across may restrict oxygen flow into the leaf pile, slowing decomposition.
- Mix some nitrogen into the leaves as you pile them. Leaves are rich in carbon (which makes for great compost) but are comparatively low in nitrogen (needed to feed decomposing bacteria). Nitrogen could be added as a nitrogen fertilizer or fresh green organic matter. For example, for every four bushels of leaves, add 1-2 cups of lawn fertilizer without any weed killers (such as 34-0-0 or 21-0-0). Or add 1 part leaves with 2 parts fresh grass clippings or similar green garden debris.
- Moisten the leaves as they are piled. Rains will be slow to wet through a leaf pile, and moisture is essential for decomposition.
- Do not turn compost piles in the fall. This allows heat to escape and heat drives decomposition through the winter. Turn compost piles in the spring.
- Leaves can be easily picked up with lawn mowers. However, shredded leaves may over-pack in the compost bin, restricting the oxygen flow needed for decomposition.

With attention to these guidelines, a gardener can produce fall leaf compost ready to use by the following late spring. On its own, a pile of leaves may take 2 to 3 years to decompose. For more information, contact your local Extension office and request the publication, *Options for Disposing of Leaves*.

For information on making a composting bin, call Info U at (800) 525-8636 and enter code #277, or visit the University of Minnesota Extension Service Web site at [www.extension.umn.edu](http://www.extension.umn.edu) and type "compost bin" into the search box. ■

# Awards for Lakescaping and Lake-Friendly Home Construction

Submitted by: Philip Hunsicker, (218) 824-5095, phunsicker@1000fom.org

Three lakeshore development projects accomplished what all lakeshore development projects should: they respected the intent of shoreland regulations and their design fit with the natural environment. These projects were honored with Brainerd Lakes Area Lake-Friendly Development Awards on August 16. The 68 people that packed the Breezy Point City Hall to recognize the winners were also entertained and educated by Doug Sandstrom, a long-time Conservation Officer with the Minnesota Department of Natural Resources (DNR) of Longville, Cass County.



*Lakescaping Award – Roosevelt Lake Project*

The 2004 award for Lakescaping went to the Roosevelt and Lawrence Area Lake Association (RALALA) of Outing in Cass County. With the support of MNDOT and the DNR, over 50 lake association volunteers removed grass from a highway right-of-way along State Highway 6 and planted native vegetation in its place. The 40-plus native species do not require mowing, like the grass did, and they are better filters for highway runoff that flows into Roosevelt Lake. The project was completed in just two days.

The 2004 award for Lake-Friendly Home Construction went to Kevin and Joyce Brick of Sorenson Lake in Merrifield. Their log home and the grounds surrounding it were designed to preserve the environment. For example, the gable roof of the home drains stormwater away from



*Joyce and Kevin Brick, winners of the Lake Friendly Home Construction Award.*

the lake, their driveway is pervious sand and soil instead of impervious asphalt, and a buffer zone of natural vegetation was left along the lakeshore to provide screening, reduce erosion, and provide shelter for wildlife.



*The Brick home – winner of the Lake Friendly Home Construction Award (white part of house will be covered with native fieldstone creating a more natural look).*

A runner-up award for Lakescaping was presented to the Portage-Crooked Lake Improvement Association in Crow Wing County. Under the guidance of Master Gardener Rose Puckett, three lakescaping demonstration sites were established along the lake. Low-maintenance buffer zones of native vegetation have eliminated erosion problems (something rip-rap can't do) and butterfly and bird habitats were created (again, something rip-rap



*Lakescaping Award winners: Roosevelt and Lawrence Area Lake Association*

can't do). Education efforts include a yearly pontoon tour of the sites.

The Brainerd Lakes Area Lake-Friendly Development Awards began in 2003 to highlight responsible shoreland behavior in an area that is developing rapidly. The trend to build large, suburban-style "starter castles" on postage stamp-sized lakeshore lots worried the award sponsors which include: 1000 Friends of Education efforts include a yearly pontoon tour of the sites. Minnesota, the Crow Wing County Lakes and Rivers Alliance (LARA), the Brainerd Lakes Area Audubon Society, the Minnesota Lakes Association, the DNR Nongame Wildlife Program, the DNR Section of Fisheries, and the DNR Division of Waters.

By publicly recognizing individuals who have chosen to develop or redevelop their lakeshore properties using ecologically sustainable and sensitive principles, the sponsors hope that environmentally friendly development along lakeshores will become the newest and most lasting trend. They encourage people to think about how a "little piece of Heaven" fits into the natural environment and with the regional ambiance. Bigger isn't better; better is better: better planning, better designs, better ideas, and a better way of accommodating a growing population. In the Brainerd area, the Lake-Friendly Development Awards push for this betterment. ■



*Lakescaping Award runners up: The Portage-Crooked Lake Association*

# Impervious Surfaces: What Shoreland Property Owners Should Know

Submitted by: Eleanor Burkett, University of Minnesota Extension Service, Brainerd Regional Center, (888) 241-0720, burke044@umn.edu

Minnesota's lakes, rivers, wetlands and other natural areas are hot real estate these days. Development along these waters is reducing clarity, vegetation, and fish and wildlife habitat at an astounding rate. What was once an occasional small cabin along a wild shore has become a ribbon of structures and paved areas circling a lake.

All this construction has added rooftops, roads, walkways, decks, parking areas and driveways, increasing the amount of impervious surfaces. Rainwater and snowmelt normally infiltrate (are absorbed) into the soil; impervious surfaces reduce the amount of water that can seep into the soil and often funnel runoff carrying roof and road containments, soil particles, and nutrients into lakes, rivers, or wetlands. Impervious surfaces can contribute to increased erosion and sedimentation. They can also increase water temperatures by adding warmed water from roads and parking lots, affecting aquatic plants and animals.

Property owners can take steps to reduce runoff flowing directly into lakes, rivers and wetlands through planning and landscaping. Here are some suggestions:

Reduce the amount of impervious surfaces

- choose gravel or pervious materials for driveways, parking areas and walkways
- use stepping stones or mulch for walkways instead of concrete, and use a "S" shaped walkway rather than a straight (funneling) pattern when creating a path to the water

Divert rain and snowmelt and encourage infiltration

- slope paved surfaces so water flows into vegetated ditches
- direct rain from gutters and down spouts to rain gardens

Make use of vegetation

- minimize lawns - stop mowing a strip of land near the shoreline
- plant a vegetative buffer strip using native plants such as grasses, forbs, trees and shrubs (extremely effective in slowing runoff, absorbing nutrients and breaking down pollutants)

- preserve trees and natural vegetation – native vegetation is cheap and easy, the less disturbance near a shoreline the better
- minimize land disturbances – and use precautions such as silt fences if a land disturbance is necessary

If you have questions about impervious surfaces, check with your local Soil and Water Conservation District, county planning and zoning department, or environmental services department. Other resources include:

- Shoreland Management Resource Guide – [www.shorelandmanagement.org](http://www.shorelandmanagement.org)
- Board of Water and Soil Resources – [www.bwsr.state.mn.us](http://www.bwsr.state.mn.us)
- Minnesota Pollution Control Agency – [www.pca.state.mn.us](http://www.pca.state.mn.us)
- Minnesota Department of Natural Resources – [www.dnr.state.mn.us](http://www.dnr.state.mn.us)
- Natural Resources Conservation Service – [www.mn.us.usda.gov](http://www.mn.us.usda.gov)
- Minnesota Erosion Control Agency – [www.meca.state.mn.us](http://www.meca.state.mn.us)
- Protecting Our Waters, Shoreland Best Management Practices Fact Sheet #8: Minimizing Runoff from Shoreland Property. 1998. University of Minnesota Extension Service, St. Paul – [www.extension.umn.edu](http://www.extension.umn.edu)
- Rain Gardens: A How-to Manual for Homeowners. University of Wisconsin Extension, Madison – <http://cecommerce.uwex.edu/pdfs/GWQ037.PDF>
- Frequently asked questions about pervious surfaces. Nonpoint Education for Municipal Officials – [http://nemo.uconn.edu/reducing\\_runoff/questions.htm](http://nemo.uconn.edu/reducing_runoff/questions.htm)
- Sustainable Drainage Systems – [http://www.ciria.org/suds/637\\_project\\_intro.htm](http://www.ciria.org/suds/637_project_intro.htm) ■

[wrc.coafes.umn.edu](http://wrc.coafes.umn.edu)

[www.seagrants.umn.edu](http://www.seagrants.umn.edu)

[www.extension.umn.edu](http://www.extension.umn.edu)

[www.shorelandmanagement.org](http://www.shorelandmanagement.org)



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