

Woodland Advisor
Program's Vision:

To be
Minnesota's
leading resource
for citizens
participating in
forestry learning.

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Forest Roads

Adapted by Angela Gupta

Do you think about your forest roads much? If not you should. "Research has shown that 90 percent of the sediment that ends up in our nations waters from forested lands is associated with improperly designed and maintained roads. Sediment in streams lead to a number of problems for fish populations, including siltation of spawning beds and aquatic insects habitat, increased water temperature, and reduced oxygen," according to an article by Daniels, McAvoy, Kuhans, and Gropp in the September '08 *Forestry Source*.

As a forest landowner you should limit the quantity of roads on your property. This not only reduces road erosion but reduces your maintenance. However if you're building a road, consider road slope, soil type, vegetation cover, and erodibility before you begin and during road construction. In steep terrain, roads are generally on side slopes. Stream crosses, wetlands, seeps, and other wet areas should be avoided. If a crossing is needed, permits, culverts, bridges, or other water crossing techniques may be required. Roads should follow natural land contour when possible.

The time to consider drainage options is when a road is being constructed. Several common methods of reducing road erosion are cross culverts, rolling dips, diversion ditches, and water bars. All of these methods have their pros and cons so a little homework will serve you well.

You cannot become complacent after the road is complete. Much like a house, roads need maintenance. It's important to make sure ditches and culverts remain free of debris, especially before vegetation becomes established. Maintaining road shape and drainage with regular grading is another important maintenance task. Avoid leaving berms when grading as they can channel water back onto the road bed. If wet spots develop

don't drive around them because that increases their size. It's better to treat them quickly. A possible solution is to lay geotextile material on the area and then put 4-6 inches of gravel over it to allow drainage.

Consider closing roads that are not essential. Remember wood-roads can be converted to recreational trails that could reduce erosion and maintenance while still providing access and enjoyment.

Article adapted from 'Plan and Manage Forest Roads for Water Quality' by Barbra Daniels, Darren McAvoy, Mike Kuhns, Ron Gropp, The Forestry Source, September 2008.

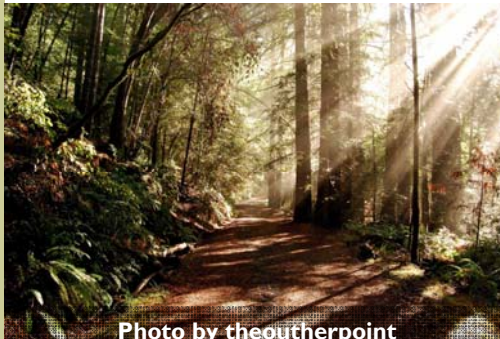


Photo by theouterpoint

Wisconsin Woodland Leadership Institute

By Ken Nichols

The Wisconsin Woodland Leadership Institute (WWLI) (www.uwsp.edu/cnr/fop) is a collaborative effort of the University of Wisconsin Extension and the UW-Stevens Point College of Natural Resources. Originally the program was offered to Wisconsin woodland owners but for the past two years Minnesotans have been included. The program was initially started in 2001 to strengthen the skills of woodland owner organizations by building leadership capacity. The Leadership Institute does this through three weekend seminars. Some seminar topics include forest history, ecology, responsible forestry activities and most importantly an understanding of the skills leaders must employ to gain involvement in decision making on conservation issues by citizens and members. One of the most valuable sources of information gained in the WWLI is the participants themselves. Students are required to read three books and do out of class assignments, as well as develop and carry through a community project. There is a direct relationship as to what effort one puts into and gets out of the program.

John DuPlissis, john.duplissis@uwsp.edu, has been the coordinator of the program since 2002. John arranges for the presenters, is a guidance counselor, mediator, and more. He is part of the selection process for WWLI participants. Minnesota candidates are selected by recommendations from the U of M Natural Resource Extension Educators or the Minnesota Forestry Association. In the seven years of the WWLI, 132 people have completed the program with 19 coming from Minnesota.

The Wisconsin Woodland Leadership Institute is a valuable lifetime experience for people who want to teach, learn and lead community members towards a conservation ethic. It is very appropriate that the graduation at the last seminar takes place at Aldo Leopold's "Shack" near Baraboo, Wisconsin. Leopold was instrumental in promoting land ethic and land health. The participants in the WWLI will no doubt take Leopold's messages back to their communities.

Ken Nichols wrote this article and will write others as part of his WWLI commitment.



Help Save Ash Genes!

By Mike Reichenbach

Emerald Ash Borer (EAB), an invasive species, threatens to kill Minnesota's ash trees. In response to the threat of EAB the University of Minnesota's Andrew David, a forest genetics researcher, and Mike Reichenbach, Extension Educator, began a project to protect the genetic diversity of ash in Minnesota. Seed collected from wild grown ash trees will be stored in a seed storage facility in Colorado. More than 200 persons have received ash seed collection training and will be collecting seed throughout the state.

Ash seed began ripening in mid-September. Collection of seed has begun and can continue through much of the fall. It may be easier to collect from trees now before the seed is scattered by winds and rain. Persons wishing to collect seed should watch the ash seed collection webinar found listed under the webinars tab at the following website <http://forest.nrri.umn.edu/ash> The ash seed collection form can also be downloaded from this site.

This is a proactive response to the presence of EAB in the upper Great Lakes region and the lack of a viable quarantine method to keep EAB out of Minnesota.

Minnesota is host to three species of ash, white ash, green ash, and black ash. While white ash is an upland species found along the Mississippi River in southeast Minnesota; both black and green ash are common lowland hardwoods found throughout the majority of the state. Ecologically, black and green ash are the most important hardwoods in the lowland forest community. They represent 51% of the lowland hardwood cover type in Minnesota. Black ash is very important in native cultures as a source of wood for ash baskets. Both black and green ash provide a source of pallet, saw, and veneer logs.

All of Minnesota's native ash species are threatened by the EAB, which was introduced from Asia in 2002 to the Detroit, Michigan and Windsor, Ontario area. The insect was most likely transported on solid wood packaging associated with an overseas shipment. Within the United States the insect is most often transported on firewood.

Although adults feed on ash leaves the larval stage does the most damage by feeding exclusively on the cambial layer. Unlike most borers that target larger trees EAB is capable of utilizing seedlings down to as small as one-half inch in diameter. As of August 2008 EAB has been found in Illinois, Indiana, Maryland, Michigan, Missouri, Ontario, Ohio, Pennsylvania and Wisconsin. It has been responsible for the death of over 20 million ash trees despite quarantines on moving nursery stock and firewood out of infected areas.

Biological efforts to control EAB and its spread have been largely unsuccessful because EAB does not appear to use long-range pheromones that would be useful in trapping the insect. Due to the lack of an effective control for EAB, the number of ash species affected, the range of susceptible tree sizes, and the fact that no natural resistance to EAB has been detected, it is prudent and proactive to prepare for an invasion of EAB in Minnesota. In Minnesota this preparation includes the training of 180 Emerald Ash Borer First Detectors and more than 200 persons in ash seed collection. This gene conservation effort will preserve the genetic variation for a future point in time when EAB can be controlled and both species can be reintroduced to Minnesota using locally adapted seed sources.

For information contact Mike Reichenbach, 218-726-6470, reich027@umn.edu or Gary Wyatt, 507-389-6748, [wyatt@umn.edu](mailto:w Wyatt@umn.edu) both with the University of Minnesota Extension.



Volunteer Opportunities

Angela Gupta is the Woodland Advisor Volunteer coordinator. To contact her call (888) 241-4536. To follow up on the opportunities below please contact the person listed. For more detail and additional opportunities please check our website: <http://cfc.cfans.umn.edu/wa/volunteer.htm>

“The future belongs to those who believe in the beauty of their dreams.”

- Eleanor Roosevelt



Photo from <http://web.utk.edu/~grissino/images/mlk.gif>

- Ash seed collection—Help conserve Minnesota's ash gene resource. See article above for more information.
- Make “tree cookies” for Project Learning Tree (PLT)—PLT needs volunteers to create tree cookies as teaching aides for teachers to use with their students. Tree cookies are slices of branches or trunks that show the rings of a tree. Slice the branches or trunk into half-inch thick, wafer-shaped “cookies” that are between three to six inches in diameter. Sand the surfaces until the rings appear. Finish the surfaces with clear varnish. “Interesting” cookies with easily readable rings are preferred (e.g. cookies that show history of disease, disturbance, or other story). Labeling cookie species and location harvested is optional, but appreciated. Contact Laura Duffy, PLT coordinator, MN DNR, for more information or to send cookies, 651-259-5263 or email laura.duffey@dnr.state.mn.us
- 4-H & Forestry Afterschool program help—Are you interested in helping at one or more 4-H & Forestry afterschool classes in Rochester, Winona, or Grand Rapids? Dates, times, and activities are variable and can be matched with your areas of interest. Contact Sam Grant, 4-H Extension Educator, for details, 507-536-6302 or samgrant@umn.edu

Upcoming Events

Activities: Woodland Advisor Program Classes are underlined. For more information please see the web-site cfc.cfans.umn.edu/wal/

October 2008

- Wed, Oct 1, Tree & Shrub ID, 6:00-9:00pm, Redwood Area School District High School, Redwood Falls, for info contact Gary Wyatt , 507-389-6748 to register contact Kathy Eckwright, 888-241-3214
- Thurs, Oct 2, Managing Woodlands: Buckthorn, Garlic Mustard, & Beyond, 6:30-9:00pm, Wood Lake Nature Center, Richfield, for info and to register contact Barb Spears, 651-328-0463
- Thurs, Oct 9, Paper Birch Management, 1:00-4:00pm, Forest History Center, Grand Rapids, for info and to register contact Julie Miedtke, 218-327-7365
- Sat, Oct 18, Forest Certification, 8:30am-noon, call for location, Aitkin, for info and to register contact Diomy Zamora, 888-241-0720
- Mon, Oct 20, Holiday Wreaths, 6:30-8:30pm, Forest History Center, Grand Rapids, for info and to register contact Julie Miedtke, 218-327-7365
- Sun, Oct 26, Minnesota Invasive Species Conference, 11:00am-5:00pm, Duluth Entertainment Convention Center, Duluth, for information contact Nancy Herselius, 515-480-2420
- Tues, Oct, 28, Measuring & Reading Your Forest, 1:00-4:00pm, Forest History Center, Grand Rapids, for info and to register contact Julie Miedtke, 218-327-7365
- Thurs, Oct 30, Woodland Ownership & Income Taxes, 6:15-9:00pm, East Central Energy building, Braham, for info and to register contact Jason Rehn, 651-674-2333.
- Thurs, Oct 30, Invasive Species and Forest Health, 2:00-4:30pm, call for directions, Brainerd, for info and to register contact Diomy Zamora, 888-241-0720



Photo by esagor

November 2008

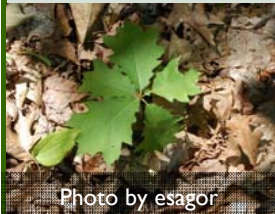


Photo by esagor

- Sat, Nov 1, Recreational Trail Design for Forest Landowners, 9:00am-noon, Eagle Bluff Environmental Learning Center, Lanesboro, for info and to register contact Mary Jane Stearns, 888-241-4536
- Sat, Nov 1, Oak Regeneration, 1:00-4:00pm, Eagle Bluff Environmental Learning Center, Lanesboro, for info and to register contact Mary Jane Stearns, 888-241-4536
- Thurs, Nov 13, Carbon Credit Payments, 2:00-4:00pm, North Central Research and Outreach Center, Grand Rapids, for info and to register contact Julie Miedtke, 218-327-7365

December 2008

- Tues, Dec 9, Woodland Ownership and Income Taxes, 6:00-9:00pm, U of MN Cloquet Forester Center, for info contact Mike Reichenbach, 218-726-6470 to register contact Denise Volk, 888-241-0724



Bird watching in the forest riparian zone

By June Kallestad-NRRI

"Teacher! Teacher! Teacher!" came the shrill cry from the woods.

"The birds talk to me," said Anna Peterson with a big grin. "That's an Ovenbird. Oh! And do you hear the squeaky wheel? That's a black and white warbler. Cool!"

Her enthusiasm was catching for the audience of about 10 forest professionals, gathered around her to learn about breeding birds' response to forest harvesting in tree buffer zones near streams. Peterson is a University of Minnesota biology doctorate candidate finishing up a long-term, National Resources Research Institute (NRRI), research project on birds in forest riparian zones.

Loggers leave a buffer of trees near streams to protect the water quality, but sometimes those buffers hold valuable timber. Can some harvesting of trees take place in those riparian zones without degrading water quality or negatively impacting wildlife? NRRI has been taking part in an 11-year-study on Pokegama Creek near Grand Rapids to understand the effect of two harvesting methods on bird populations—especially those considered "priority" species.

A separate but similar study at eight sites in northern Minnesota is also underway with funding from the Legislative-Citizen Commission on Minnesota's Resources (LCCMR). This study began in 2001 to understand the effects of new riparian zone guidelines that allow some harvesting of timber in these buffer zones.

In particular, the study focused on how differences in tree density (residual basal area) would affect populations of birds. By harvesting riparian zones at different tree densities they could determine which bird species were associated with the different basal areas. They learned that with increasing tree densities, short-distance migrant species (like the American Robin) decreased and birds that prefer early successional forests like Mourning Warblers also decreased.

The May workshop, "At Water's Edge: Current state of riparian forest management research in Minnesota" was well attended by over 100 natural resources professionals and loggers over the course of three days. UPM/Kymmene paper company allowed researchers the use of 144 acres for the Pokegama Creek studies. The company's foresters took part in the workshop to continue to improve their management strategies.



Photo by crookw



We're on the web!
<http://www.cnr.umn.edu/cfc/wa/>

Woodland Advisor Program

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Return Service Requested

Suggested Reading



The *Minnesota Conservation Volunteer* magazine recently came across my desk and I actually took some time to read

it! I was very pleasantly surprised by the topics and articles. This bi-monthly magazine is free from the DNR or available on-line. To subscribe or check out the current issue's content go to: <http://www.dnr.state.mn.us/volunteer/index.html>

Meet a Woodland Advisor Organizer

David Wilsey, a new Extension Educator in Cloquet, provides leadership through the collaborative development of natural resources programming that incorporates western and traditional knowledge and perspectives between the U of MN and northern Minnesota's American Indian community.



Previously Dave was a Business Analyst for Target Corporation in Minneapolis. He returned to the U of MN's Conservation Biology program and earned a master's degree on a study of livelihood and lifestyle uses of non-timber forest products in northern Minnesota. In 2002, he and his wife became Peace Corps volunteers in Ecuador. After their return he entered a doctoral program in Interdisciplinary Ecology in Gainesville, FL.

What is the Woodland Advisor Program?

The Woodland Advisor Program is your opportunity to learn about forests and forestry. Classes are generally 3 hours in length. Participants who complete 45 hours of woodland ecology and management classes receive a certificate of completion. Classes also provide foresters and Stewardship Plan preparers with continuing education credit. Participants who are interested in ongoing educational opportunities after completing 45 hours of classes and want to participate as a volunteer can become a Woodland Advisor Volunteer. Woodland Advisor Volunteers are leaders in their communities. They help their neighbors learn more about the options and opportunities that exist for their forestland. This helps all Minnesota's citizens by helping to maintain the health, beauty, and productivity of Minnesota's forest land.

Classes are open to anyone on a pay-as-you-go basis. Costs may vary, but most 3-hour sessions cost \$20. A discount may be available for Minnesota Forestry Association Members on classes where registration is handled through the University of Minnesota Extension. Inquire when you register about a discount.

For class times and locations, registration information, or more about the Woodland Advisor program, contact the Cloquet Forestry Center at 888-241-0724 or visit cfc.cfans.umn.edu/wa/.

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