



Ecology Update

News you can use from BWSR's technical staff to promote the health of Minnesota's landscapes.

Summer 2014

Ecology Update is a twice yearly communication from BWSR detailing work going on related to a variety of ecology topics including restoration, biodiversity, invasive species, soil health, hydrology, conservation practices, landscape resiliency, and landscape stewardship.

BWSR Programs and Resource Updates

BWSR "Native Vegetation Establishment and Enhancement Guidelines" – BWSR's vegetation [guidelines](#) have been updated with new pollinator resources and new information to guide specific project types.

BWSR's Featured Plant Archive – Every month, BWSR staff send out a featured plant, providing a wide variety of information on plants that are native to Minnesota. You can find the Featured Plant archive [here](#) on the BWSR website.

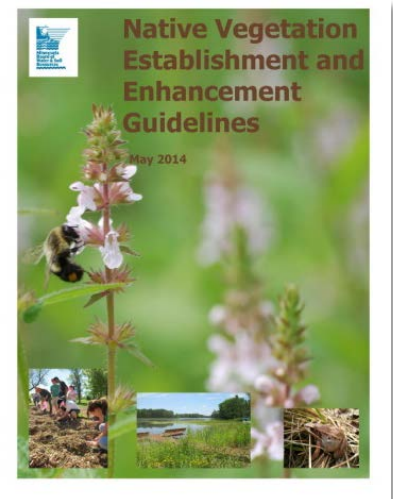
Hydrologic Monitoring of Wetlands – This BWSR [publication](#) provides practical guidance on monitoring of wetland hydrology, and is based on years of collective experience at BWSR. The reasons for undertaking hydrologic monitoring include: wetland identification, boundary determination, functional assessment, determining success of wetland restoration or replacement, assessing potential for wetland restoration or creation, measuring water movement, and measuring duration, frequency, or seasonality of wetness.

Landowner Guide to Conservation Easements – Looking to educate interested individuals about easement stewardship? Check out the new [Landowner Guide to BWSR Conservation Easements](#).

BWSR Pollinator Initiative – Continuing its efforts to support pollinators, BWSR staff are developing a pollinator toolbox to help partners incorporate pollinator-friendly habitat in their projects. The toolbox will feature pollinator guidance, resources, and model projects that demonstrate how partners have effectively restored pollinator habitat. Look for a special email announcement when the toolbox goes live.

Hands-on Opportunities

Starting this season we are posting "Hands-on" training opportunities in the BWSR [Train Tracks](#). If you are installing a project and see an opportunity to



Blue Lobelia was the June 2014 Featured Plant. Pollinator favorites have been highlighted in the monthly newsletter over the past year.

involve others in the process please send your contact information and some brief information about the effort to dan.shaw@state.mn.us. Our goal is to provide opportunities for students and conservation professionals to broaden their knowledge about how to install a wide range of projects including lakeshores, green roofs, stream stabilization, invasive species removal, rain gardens, and wetland restorations. Upcoming opportunities include:



July 14 – Tansy removal along Hwy 61 (Cook Co.) near Schroeder, contact:

angelique.edgerton@gmail.com

July 16 – Watonwan County wetland restoration seed collection and management, contact: dan.shaw@state.mn.us

August 14 – Murray County wetland restoration seed collection and management, contact: dan.shaw@state.mn.us

September 20 – Native Prairie Seed Harvest Day at Lakeside Prairie Farm near Barrett, contact: ryan.heinen@state.mn.us

November 15th - Oak Savanna Restoration/invasive species control day at Lakeside Prairie Farm near Barrett, contact: ryan.heinen@state.mn.us

Open-ended – Wetland monitoring well installation and monitoring, contact: eric.mohring@state.mn.us

Weather dependent – Fall prairie prescribed fire at Lakeside Prairie Farm near Barrett, contact: ryan.heinen@state.mn.us

Looking for your success stories!

BWSR's "[What's Working](#)" webpage has been one of our most popular resources. The purpose is to encourage peer-to-peer learning through information sharing. One of the challenges of building any new resource is to populate it with up-to-date information, and that's where you come in. We want feature your project successes and encourage you to take a few minutes of your time to summarize tactics and approaches that have been particularly successful in your conservation efforts to help other professionals. Information and questions can be directed to dan.shaw@state.mn.us.

Summer 2014 What's Working Featured Project

"On sites prone to Canada thistle establishment, having a strong Canada Wild Rye component as well as composite forbs, like Black eyed Susan and Yellow Coneflower seems to put pressure on the thistle populations. Some of these species can be incorporated at slightly higher rates without significantly raising the cost of plantings. After a few years, the later succession plants will become more dominant and suppress the germination of weed species (via the Martin SWCD)."



Visit the [What's Working Webpage](#) for more information. Don't forget to send your success stories for website inclusion website to dan.shaw@state.mn.us.

Other Ecology Resource Information

State Noxious Weeds - There have been some recent changes to the [Minnesota Noxious Weed List](#): Japanese and giant knotweeds are listed as Specially Regulated Plants; Garlic Mustard has been re-listed from a Prohibited-Control species to a Restricted Noxious Weed; Wild Parsnip is separated from "non-wild cultivated varieties", Musk Thistle has been delisted from the state list due to it being considered a regional species that affected counties can add to their County Noxious Weed List.

2014 National Wetland Plant List Annual Update - This document from the Corps of Engineers lists the indicator status of species for wetland delineation and now includes new range extensions of 754 species to new regions. 120 new species were also added, increasing the total number of plants from 7937 to 8057. The updated file can be found at: http://wetland_plants.usace.army.mil.



Floristic Quality Assessment Update - The Rapid FQA Manual, Data Form, and Calculator have been updated so that the plant nomenclature conforms with the 2014 National Wetland Plant List. They can be found on the PCA website at: <http://www.pca.state.mn.us/index.php/water/water-types-and-programs/surface-water/wetlands/floristic-quality-assessment.html>.

Minnesota Wildflowers – The Minnesota Wildflowers website now includes more resources, including [trees and shrubs](#), [vines](#), [ferns and fern allies](#), and [grasses, sedges and rushes](#).

Iowa Prairie STRIPS Project – [STRIPS](#) stands for “Science-based Trials of Rowcrops Integrated with Prairies” and involves interdisciplinary team of researchers, educators, and extension specialists studying the water quality benefits and wildlife interactions of integrating small strips of prairie within row-cropped agricultural landscapes.

Nitrogen in Minnesota Surface Waters - The Minnesota Pollution Control Agency conducted a study and developed a summary report on “[Nitrogen in Minnesota Surface Waters](#).” This publication helps us better understand the nitrogen conditions in Minnesota’s surface waters, along with the sources, pathways, trends and potential ways to reduce nitrogen in waters.

Education Opportunities

Conservation Webinars – This [webinar](#) portal is a great source of information on the latest research and industry practices in forestry, conservation, bioenergy, and natural resources. There are webinars about [pollinators](#), [wetlands](#), [plant materials](#) and more. These free webinars provide the opportunity to accrue continuing education credits from professional accrediting organizations such as Society of American Foresters, International Society of Arboriculture, The Wildlife Society, Certified Crop Advisors, and others. You can receive continuing education credits for both live and on-demand webinars. The webinar portal is a service of the Southern Regional Extension Forestry Office, [North Carolina State University's Extension Forest Resources](#), [Texas AgriLife Extension Service](#), other participating land-grant universities and the [USDA Natural Resources Conservation Service](#).

New Ecological Restoration Planning and Management Course – A new course (LA5403) will be available this fall (Friday mornings) at the University of Minnesota that is designed to teach practitioners all phases of the restoration process from grant writing, budgeting and plan development to project coordination and management. This course is also planned to be part of a new Ecological Restoration minor. Contact dan.shaw@state.mn.us for more information.

Restoring Minnesota Online Courses – The “[Restoring Minnesota](#)” on-line courses are moving into their second year. These courses on site assessment, seed mixes, native planting, monitoring and vegetation management provide were developed through a partnership of the University of Minnesota, BWSR, DNR, MnDOT and LCCMR. The courses have been designed to be as interactive and as “real world” as possible. That means you’ll be able to visit warm, sunny field sites even when it’s 40 below. An ecological restoration certificate can be obtained by attending four out of the five courses and at least one field session.