

RESTORATION NEWS MIDWEST

Newsletter of the Midwest-Great Lakes Chapter of the Society for Ecological Restoration International – March 2010, Volume 2, Issue 3

BYLAW VOTE RESULTS AND UPCOMING ANNUAL MEETING

I am pleased to announce that the proposed Chapter Bylaws were approved by the Chapter members in January 2010. We received a total of 39 votes and all votes were in support of the proposed bylaws. The Chapter Bylaws are posted on our website and are now the official guide for how the chapter operates now and in the future. Thank you for your feedback and support with this matter.

Our Annual Chapter Meeting to be held on April 9 and 10 at the University of Wisconsin-Madison Arboretum is only three weeks away. It is fun working with the other members of the Annual Meeting Committee, Chapter Board of Directors, and our colleagues from the University of Wisconsin-Madison Arboretum in getting things ready for the big weekend.

Dr. Joy Zedler will give the Friday night keynote presentation and the title of her presentation is "Restoration Targets Are Changing". On Friday we also have a special session on the Great Lakes Restoration Initiative, a workshop on natural channel design, a workshop on use of multi-spectral aerial imaging, a poster session and sponsorship exhibits. The agenda for Saturday includes the business meeting, contributed oral presentations, a Plenary Presentation on the University of Wisconsin-Madison Arboretum, and tours of the Arboretum. We have 53 contributed presentations that will be given by presenters from all states in the Chapter boundaries as well as New York, Kentucky, Missouri, and Mississippi.

We are grateful for the generous support of

our co-sponsors the University of Wisconsin-Madison Arboretum and our other meeting sponsors (Genesis Nursery, Stantec, ENVIRON International Corporation, JFNew, The Nature Conservancy-Indiana, and Ecological Restoration Services). Sponsorship exhibits will also be available for viewing on Saturday.

Please watch the Chapter website for updates as we will be posting the final meeting schedule and the abstracts on the web before the meeting. It is going to be a fantastic meeting and we hope to see you there.

Rocky Smiley, President

REGIONAL-STATE REPORTS

This is a special newsletter section devoted to reports from MWGL SER Chapter members on their project updates, new collaborations, volunteer events, innovative technologies, preliminary or unusual findings, thought-provoking concepts, imaginative solutions, and any other restoration related activity or accomplishment occurring in the past year (3/1/2009 to 3/15/2010). State Representatives, At-large Representatives, and the Newsletter Committee collaborated in soliciting reports to develop this section.

OHIO

EnviroScience, partnering with GPD Group and RiverReach Construction, performed a design-build restoration of over 2000 linear feet of Haley's Ditch (Little Cuyahoga Tributary) in Akron, Ohio for Lockheed Martin. The restoration followed a voluntary site remediation that removed PCB contaminated soil. Project objectives included post-remediation sub-grading, natural stream channel restoration, floodplain

expansion, and riverine wetland restoration. Design for the reach was based on morphological analysis of existing and reference streams. Local natural stone aggregate mix was selected by hydraulic analysis. Woody debris was incorporated in various capacities as grade control, instream habitat and as deadfall in the floodplain. For more details contact Joel Bingham (jbingham@enviroscienceinc.com).

Nina Sengupta, Nicole Cavender, Shana Byrd and their colleagues at the Wilds, completed the second year of research for a three year study intended to document the best practices for land preparation, land management, and seed-mixes for planting necessary for optimum growth of prairie plant species on reclaimed coal mined land in Ohio. Additionally, the study hopes to demonstrate that these best management practices support biodiversity, improve soil characteristics, increase carbon sequestration, and provide additional energy sources. Initial field results suggest that an improvement in prairie establishment occurred in the second year. Contact nsengupta@thewilds.org for more information.

In the past year 28 Cincinnati Nature Center Volunteer Land Stewards committed 850 hours toward the treatment of 200 acres by assisting with removal of nonnative invasive plant species such as Amur (bush honeysuckle), garlic mustard, multiflora rose, autumn olive, Dame's rocket, lesser celandine, Chinese wisteria, and purple loosestrife. Contact Jason Brownknight (jbrownknight@cincynature.org) for more information.

Rocky Smiley (USDA-ARS) and Bob Gillespie (Indiana University-Purdue University Fort Wayne) recently published a book chapter titled "Influence of physical habitat and agricultural contaminants on

fishes in agricultural drainage ditches" This literature review synthesizes fish-habitat relationships, influence of agricultural contaminants, and the impact of drainage and conservation practices on fishes in these modified streams. We found that most research has documented the negative effects of stream channelization and only limited information is available on the effects of conservation practices intended to provide ecological benefits. Contact Rocky (rocky.smiley@ars.usda.gov) if you would like a reprint.

INDIANA

John Shuey (Indiana Chapter - The Nature Conservancy), Spencer Goehl (Eco Logic), and Paul Rothrock (Taylor University) gave presentations in March 2010 as part of the Southern Indiana Community Weed Management Association's one day seminar "Ecological Restoration: Planning Implementation, and Evaluation: A Seminar for Restoration Professionals". PDFs of the presentations are available at www.ecologicindiana.com/conference/index.php

The Indiana Office of The Nature Conservancy used forestry mowers to mulch shrubs and small trees (<6" dbh) during the winter months to restore 86 acres of fire-suppressed barrens to more open canopy. Larger trees were girdled to enhance openings. Foliar herbicide treatment in spring and autumn prescribed fire will control woody resprouts. Monitoring and research will follow plant and animal response to the restoration for four years. The goal is to provide clear and compelling reasons for other land managers to restore their black oak barrens lands and to provide guidance on restoration approaches. Contact: John Shuey (jshuey@tnc.org)

Eighty acres of uplands and wetlands were seeded at Houghton Lake, Marshall County, Indiana to restore watershed and hydrology in a glacial lake/fen complex. The restorations will improve water quality and wetland habitats. Preliminary work focused on preventive control of invasives. The seeding mix is designed to establish dense native plantings to “crowd out” invasive species. Once the restoration is well established we will use plugs of rhizominous sedges in areas particularly prone to invasive species. Another 80 acres will be restored in 2011, and at least three years of intensive management are required to insure native communities are well established. Contact: John Shuey, Indiana Office – The Nature Conservancy (jshuey@tnc.org)

MICHIGAN

Dr. Clifford W. Welsch is a retired (1995) Professor at Michigan State University (welsch@msu.edu). He has devoted his retirement activities to ecological restoration. His major interest is native grassland restoration. On his home site near DeWitt, Michigan, he has constructed a 20-acre native grassland consisting of > 120 native grasses and broadleaves, a site that is virtually free of non-native grassland vegetation! Because of the sites high quality, between 100 and 200 individuals visit this site annually. He is also a volunteer Land Steward of three native grassland preserves in southwest Michigan. Retirement has been a very meaningful experience!

Doug Landis and Anna Fiedler have launched a website about prairie fens (www.prairiefen.msu.edu) intended to help landowners and conservation agencies identify these rare wetlands, the species in them, and to determine if their prairie fen could be restored. The website provides information on which habitat factors and

plants to look for to determine whether you have a prairie fen and information on who to contact for help with managing and restoring it. The website is a collaboration between Michigan State University, The Nature Conservancy, Michigan Natural Features Inventory, the Michigan DNR Landowner Incentive Program, and The Stewardship Network. For more information contact Anna Fiedler (fiedlera@msu.edu).

We are continuing our experimental work on establishing a diverse native plant community composed of grasses and forbs on a degraded, spotted knapweed-infested site in western Michigan. The study included several site preparation methods and incorporates hand pulling of mature knapweed as an additional control measure. Initial results indicate that hand pulling alone provides control of mature knapweed similar to some herbicides, although it is very labor intensive. Hand pulling as a follow-up to herbicide treatment promises to help prevent knapweed resurgence. Future work will incorporate burning as an additional control measure as a planned part of the current study. Contact Neil MacDonald (macdonan@gvsu.edu) for more information.

ILLINOIS

In 2009, Mike Retzer, Tharran Hobson, Rob Hilsabeck, and others concluded a three year project to establish fish species that were native to three floodplain backwater lakes of the Illinois River. Many species were those that are not traditionally stocked (e.g., spotted gar, tadpole madtom). Thirty five species and 1,711,055 individuals were stocked. This project was the largest effort ever to establish native fish communities along the Illinois River and required the cooperation of the Illinois Natural History Survey, Illinois Department of Natural Resources, The Nature Conservancy, and The Wetlands Initiative.

Additional stocking and monitoring of the lakes are recommended. Contact Mike Retzer (retzer@illinois.edu) for a copy of the report.

Tallgrass Restoration of Schaumburg, IL cleared exotic species this winter from several IDNR Hill Prairie sites in 20 Illinois counties. Hill prairies are one of the most endangered natural communities in Illinois. Typical work included chemical and mechanical invasive brush control and brush pile burning. Work this growing season will include cutting, pulling and applying herbicide to invasive species in order to increase the quality of the hill prairie habitat. For more information contact Noelle Hoeffner (noelle.hoeffner@tallgrassrestoration.com).

Tallgrass Restoration of Schaumburg, Illinois and Elgin High School students and teachers partnered during a volunteer Restoration Workday in February. We cleared 1.5 acres of invasive species in the Oak and Hickory Woodland that Elgin High School uses as their outdoor classroom. This was a wonderful opportunity for the students and teachers to learn the benefits of ecological restoration and for Tallgrass to establish a good community partnership. For more information contact Noelle Hoeffner (noelle.hoeffner@tallgrassrestoration.com).

WISCONSIN

Milwaukee County Department of Parks, Recreation & Culture working in partnership with the University of Wisconsin Cooperative Extension has used creative outreach opportunities to educate and engage County residents in numerous hands-on restoration ecology orientated projects throughout the Park System's 10,000 acres of natural areas. 2009 saw the creation of partnerships with 40 community organizations, corporations, universities, and government agencies. These partnerships in turn led to the training of 3000

natural areas volunteers who donated over 10,000 hours toward the management of Milwaukee County owned natural areas. Further information is available by contacting Brian Russart, Natural Areas Coordinator (brian.russart@milwcnty.com).

The South-Eastern Wisconsin Invasive Species Consortium (SEWISC) is one of the Midwest's newest Cooperative Weed Management Areas. Its mission is to educate the public and protect biodiversity and ecological function throughout this region, contributing to a high quality of life for present and future generations. SEWISC developed two Invasive Species Management workshops in 2009. Workshops were developed specifically for Park and Right-of-way Managers. Together 100 attendees from 16 Wisconsin Counties learned to identify invasives, use proper control methods, and heard about Wisconsin's new Invasive Species Rule (NR40). For more information contact Vice-President Brian Russart (brian.russart@milwcnty.com) or check out our website.

Katie Beilfuss, the Outreach Program Director, led the efforts to organize the Wisconsin Wetlands Association's 15th Annual Wetland Science Conference held February 11 to 12, 2010 in Eau Claire, Wisconsin. Dr. Joy Zedler gave the Plenary Session presentation on restoring wetland ecosystem services. Oral presentation sessions included Wetland Restoration in a Mitigation Environment, Wetland Restoration Theory and Approaches, and Wetland Restoration in a Stormwater Environment. Additional details and presentation abstracts are available at the following webpage: www.wisconsinwetlands.org/2010conference.htm.

JFNew and the City of Middleton, Wisconsin worked to restore stream stability, aquatic conditions, and riparian conditions along Pheasant Branch Creek. Thirteen areas of significant and active erosion were addressed along the 0.6 mile corridor through a combination of rootwad revetments, rock vanes, cross vanes, and native seeding. JFNew estimates that recession rates based on field measurements and aerial review have resulted in reducing the sediment load by 470 tons/year. Stabilization will reduce the annual sediment load to Pheasant Branch Creek and Lake Mendota. This work was completed in conjunction with other restoration efforts including invasive species control and conserving significant habitat resources. For more information contact Nicole Staskowski (nstaskowski@jfnew.com).

MINNESOTA

In 2009, the University of Minnesota's Center for Integrated Natural Resources Management with funding support from the Minnesota Pollution Control Agency and Martin County Soil and Water Conservation District established a multi-purpose stream restoration on an impaired reach of Elm Creek, a subwatershed of the Minnesota River Basin. The objective was to demonstrate cost-effective stream restoration techniques within an economically productive agro-ecosystem to enhance channel stability, reduce sediment loads, and improve aquatic and riparian habitats. Along with its ecological and agricultural benefits, the project site serves as a unique opportunity for public education and outreach featuring affordable alternatives for stream restoration, agroforestry practices, and cattle grazing management in southern Minnesota. For more information contact Chris Lenhart (lenh0010@umn.edu).

SELECTED CONTENTS OF THE MARCH 2010 ISSUE OF ECOLOGICAL RESTORATION

Ecological Restoration is the oldest publication to deal exclusively with ecosystem restoration and is published for the University of Wisconsin-Madison Arboretum by the University of Wisconsin Press and in association with the SER International. Below are selected Restoration Notes and Articles from the March 2010 issue.

Restoration Notes

M. E. Gerken, J. R. Thompson, and C. M. Mabry. Restoring nutrient capture in forest herbaceous layers of the Midwest (Iowa).

J. Krumholz, T. Barber, and C. Jadot. Avoiding "band-aid" solutions in ecosystem restorations.

J. Kao-Kniffin and T. C. Balser. Soil microbial composition and nitrogen cycling in a disturbed wet prairie restoration (Wisconsin).

Articles

N. F. Sayre. Climax and "original capacity": the science and aesthetics of ecological restoration in the southwestern USA.

J. Faass. Florida's approach to natural resource damage assessment: a short, sweet model for states seeking compensation.

E. L. Bouressa, J. E. Doll, R. L. Cates Jr., and R. D. Jackson. Burning and grazing to promote persistence of warm-season grasses sown into a cool-season pasture.

T. W. Yitbarek, S. Belliethathan and M. Fetene. A cost-benefit analysis of watershed rehabilitation: a case study in Farta Woreda, South Gondar, Ethiopia.

R. E. Keane and R. A. Parsons. Restoring Whitebark Pine forests of the northern Rocky Mountains, USA.

D. A. Vanderbosch and S. M. Galatowitsch. An assessment of urban lakeshore restorations in Minnesota.

M. Bare and O. Tello. Restoration of a tropical forest: the orchid and botanical garden of Puyo, Ecuador.

For more information on current and past issues of Ecological Restoration see:
<http://www.ecologicalrestoration.info/firstpage.html>

UPCOMING ECOLOGICAL RESTORATION RELATED CONFERENCES AND EVENTS – APRIL TO JUNE 2010

In Harmony with Nature – Creating Green Space with Native Plants, Pomeroy, OH. April 1, 2010. Contact kneen.1@osu.edu

Joint Michigan Bird Conservation Initiative and the Michigan Chapter of the Wildlife Society Annual Meeting 2010, Petroskey, MI. April 7 to 10, 2010.
www.mibci.org/index.php?id=199

Legacies and Newcomers in Ecological Restoration in the Midwest. The Second Annual Meeting of the Midwest-Great Lakes SER Chapter, Madison, WI. April 9 to 10, 2010.

www.ser.org/content/SERMWGL.asp

Environmental Habitat Steward Certificate Program Training Session, Indiana Wildlife Federation, April 10 to 11, 2010, Portage, IN.
www.indianawildlife.org/workshops.htm

2010 Ohio Chapter of the American Society of Landscape Architects Annual Meeting, Columbus, OH. April 22, 2010.
www.ocasla.com/

2010 Awards Banquet, Minnesota Chapter of the American Society of Landscape Architects, Minneapolis, MN. April 23, 2010.
www.masla.org/content/view/14/27/

Wildlife, Wild Places, Wild Night. A Celebration of the 50th Anniversary of The Nature Conservancy in Indiana, Indianapolis, IN. April 24, 2010.
www.nature.org/wherewework/northamerica/states/indiana/events/events6011.html

Eagle Creek Park – Starling Nature Sanctuary, Indianapolis, IN. April 24, 2010. Volunteers are needed to help install paw paw and spice bush as part of an ongoing restoration effort to increase the biodiversity of the property. Contact DMILLER@indy.gov for additional information

Annual Spring Confluence, River Alliance of Wisconsin, Madison, WI. May 1, 2010. For more details see:
wisconsinrivers.org/index.php?page=content&mode=view&id=197

Marott Park Nature Preserve, Indianapolis, IN. May 1, 2010. Join us for the 18th Annual Pulling of the Greens. Come to a garlic mustard pull and enjoy this beautiful urban preserve in the peak of the wildflower season. Contact DMILLER@indy.gov for additional information.

Ecology of Lake Superior: Integrated Approaches and Challenges in the 21st Century, U.S. EPA and Aquatic Ecosystem Health and Management Society, Duluth, MN. May 3 to 5, 2010. Contact: Jennifer Lorimer (jennifer.lorimer@dfo.mpo.gc.ca).

Eagle's Crest Nature Preserve Field Trip, Indianapolis, IN. May 10, 2010. Don Miller from the Indianapolis Parks and Recreation Office of Land Stewardship will lead a field trip to look at the ongoing restoration program at the site. Participants may be able to see a nesting eagle along with examples of restoration practices surrounding the preserve which will include reforestation, prairie and woodland invasive species control results from machine removal. Contact DMILLER@indy.gov for additional information.

83rd Annual Meeting of the Central States Water Environment Association, Madison, WI. May 11 to 14, 2010
www.cswea.org/events/

Raymond Park, Indianapolis, IN. June 5, 2010. Volunteers are needed to help remove the invasive white clover out of a wetland and prairie restoration site. A walk will be taken through an adjoining 10 acre older-second growth woodland. Kevin Tungesvick from Spence Restoration Nursery will be leading the walk and will discuss the plants and restoration methods at the site. Contact DMILLER@indy.gov for additional information.

Global Changes from the Center to the Edge, Joint American Society of Limnology and North American Benthological Society Meeting, Sante Fe, NM. June 6 to 11, 2010.
www.benthos.org/Annual-Meeting.aspx

Assisted Migration of Plants – Janet Meakin Research Symposium, Glencoe, IL. June 11, 2010.
www.chicagobotanic.org/school/symposia/JMP.php

Up By Roots: Healthy Soils and Trees in the Built Environment, Ohio Chapter of the International Society of Arboriculture,

Columbus, OH. June 18, 2010. View the Events section of the Chapter's webpage for more information (www.ocasla.com/).

Show Me The Water, American Water Works Association Conference and Exposition, Chicago, IL. June 20 to 24, 2010.
www.awwa.org/ace10

Moose in a Warming World, 2010 North American Moose Conference, International Falls, MN. June 23 to 26, 2010.
www.nrri.umn.edu/Moose2010/index.htm

VOLUNTEERS NEEDED – JULY BIODIVERSITY SURVEY OF GOOSE POND FISH AND WILDLIFE AREA

The Indiana Academy of Science and the Friends of Goose Pond are conducting the first ever biodiversity survey of Goose Pond Fish and Wildlife Area on July 16 and July 17, 2010. This Fish and Wildlife Area is the largest Wetland Reserve Program restoration in Indiana and the seventh largest one in the United States. Initial bird surveys suggest that this area is an avian hotspot in Indiana, but very little is known about other taxa.

Taxonomic teams will inventory as much of the biota as possible in this two day period. Specifically, we are recruiting volunteers to sample the following taxa: algae, arachnids, bryophytes, fungi, terrestrial and aquatic insects (particularly dragonflies, damselflies, and butterflies), aquatic macroinvertebrates, mollusks, vascular plants, fish, amphibians, reptiles, birds, non-volant mammals, and bats. Expertise in other taxonomic groups not listed here are welcome too. Please contact Barbara Simpson (barbsimp@comcast.net) if you are interested in participating.



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