

EECONEWS



...an informational newsletter available quarterly

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Environmental Education Council of Ohio



David Wright, EECO President

"I'm asking that EECO members and friends do something we've not asked of you before: Contact your representative and your senators, and ask them to co-sponsor the NCLI legislation. Get them to imagine."

A Word From The President...

Lobbying is easy, right? Not really. If it were, we would have seen legislation passed to fund Great Lakes restoration, or ratified the Great Lakes Compact, or funded Ohio H.B. 245's diesel retrofit incentive program, or...you get the picture. None of the aforementioned efforts have yet been realized. Lobbying's tough. It requires skilled pros, like Jack Shaner at Ohio Environmental Council or Marnie Urso at Audubon Ohio, or Molly Flanagan at NWF-Great Lakes—they do this for a living. EECO never, ever gets into lobbying. We just don't do it. We've enough other fish to fry, pardon the pun.

Until now. This summer, the votes on the No Child Left Inside Act, formally known by most of us by their official bill numbers as H. 3036 and S. 1981, will take place. The stakes are really high.

Imagine if you will, a United States of America where states that receive federal education funding will, no later than a year after the legislation's enactment, submit a plan to the U.S. Department of Education to ensure that high school graduates are environmentally literate. The plan, done in consultation with each state's natural resource agency and with input from the public, will result in students who are prepared to demonstrate an understanding of environmental challenges. Imagine an Ohio that mandates field experiences as part of the regular school curriculum and creates programs that contribute to healthy lifestyles through outdoor recreation and sound nutrition. Moreover, this Ohio would create enhanced professional development for teachers to improve their environmental content knowledge and field pedagogical skills. The U.S. Secretary of Education would create a peer review panel to evaluate state plans and provide suggestions, and every two years, each state would report on its implementation, much like No Child Left Behind does.

It gets better. Partnerships, which EECO has championed for years, made up of education institutions, businesses and non-profits among others, will be encouraged to apply for federal and/or state grants to implement all of the dynamic environmental education programs and capacity building methodologies that we know increase environmental literacy. And before a naysayer protests, state plans have to relate to academic content standards. That really is a piece of cake. We've been doing that for years, and we're pros at that part. That ship sailed, there's no trade off between standards and experiential environmental education.

EECO is a charter member of the No Child Left Inside Coalition, 154-member organization representing more than 19 million people (www.eenclb.org). Part of the organization's website is devoted to making it easy to contact your congresspersons about this legislation. And that's what I'm asking that EECO members and friends do: Contact your representative and your senators, and ask them to co-sponsor the NCLI legislation. Get them to imagine.

BECOME AN EECO MEMBER! • Register online at www.eeco-online.org

Ohio's Special Places: Niederman Family Farm

Lynn White, EECO Board Member

The Niederman Family Farm, in Liberty Township, Butler County, Ohio is a wonderful example of the innovative ways that small farms are being kept in the family. The farm



has been in the Niederman family since 1943, and is now in its fourth generation of operations, according to BethAnn Niederman. In addition to being a working farm, they also have: a rental barn used for weddings and retreats; fall campfires; boat and RV storage; Paintball Country; a Corn Maze; a Christmas display; and numerous educational opportunities.

BethAnn spoke about bringing new components into their education programs each year so they stay new and exciting for repeat visitors. One large addition during 2007 was a full-size fiberglass cow that visitors could safely milk. They have also added a small classroom to show videos and provide indoor learning space during inclement weather.

BethAnn uses many of the resources and lesson plans available through the Farm Bureau. They have Ohio Agriculture in the Classroom, a program that is available to anyone wanting to learn where the food they eat, clothes they wear and the items they use everyday come from.

For more information about the Niederman Farm, please visit: www.ohiotraveler.com/niederman_family_farm.htm. For information about the Farm Bureau and its programs and resources, visit: ofbf.org.

Students visit the farm to learn how farmers work to:

- take care of us with food and clothing
- take care of animals, and
- take care of the environment

In the spring, three generations help, grandparents down to grandkids, as field trip visits are common. During these field trips, children and adults learn about the above three concepts while meeting baby animals and the working farm animals, planting pumpkin seeds, and going on hayrides.



Your EECO Board: Key Actions and Updates

Erv Ball, EECO board vice president

Your EECO board has been busy, and not just with conferences, programs and projects.

Over the last year, we made it a priority to define and address fundamental organizational issues that will determine the degree of EECO's continued growth.

As a result of this work, we determined three capacity-building board priorities:

- 1) A board training, evaluation, and professional development process.
- 2) Improvements to our internal and external communications, especially the enhancement and promotion of our website.
- 3) A diversification of our funding sources to fuel EECO's growth.

We are very proud to report that the board authorized the establishment of the Environmental Education Council of Ohio Endowment Fund. Established with donations totaling \$30,000, this fund will be managed by The Columbus Foundation. It provides an excellent base to which we will add a broad range of donations to secure EECO's future.

As always, this is your organization. We invite your feedback, comments and suggestions. Please refer to the back cover of this newsletter for information on how to contact board members and EECO staff.



ANNUAL EECO CONFERENCE APRIL 24-27, 2008 ROOTS: BRINGING PEOPLE BACK TO NATURE

Plans are well underway for another exciting and educational EECO Conference. The conference will be held at the Mohican State Park Lodge, Malabar Farm State Park, and other venues in the Mohican Valley.

This year's conference is being planned and hosted by the EECO Region 6 "Rising Star" Leadership Team of: Joanne Mudra, Janet Ellsworth, Steve James, Kevin Stone and Louise Fleming. Herb Broda, Gail Laux, Louis Andres and Ron Reed round out the local volunteer planning committee, and conference co-chairs are Jen Dennison, Sue Wintering and Dennis Clement.

The conference planning committee is making every effort to make this annual conference as "green" and affordable as possible. Plan on attending to get back to nature!

For more information about the Annual Conference and to register, go to www.eeco-online.org/

Switching to Grass? Meet *Panicum virgatum*

Nelson Strong, contributing editor

While Ohio is one of the most urban states, agriculture is still big business here. Of Ohio's 26.4 million acres, about half (about 13.5 million acres) are currently devoted to agriculture; approximately 11.5 million grow row crops such as corn, soybeans, or wheat and about 2 million are pasture and hay.

I don't think of many "native" Ohio plants when I think of farms (except for what might be growing in woodlots). Even the grasses I generally associate with farms - bromegrass, orchardgrass, timothy, tall fescue, perennial ryegrass - are of European or Eurasian origin.

But global warming and escalating oil prices may change that.

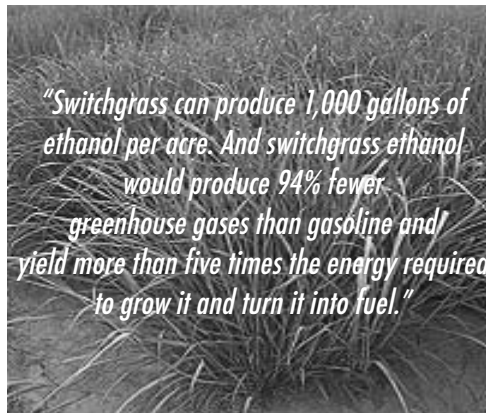
I refer, of course, to ethanol, which currently means corn or soybeans. But in the not-too-distant future, it may be that ethanol = switchgrass - a native, warm-season prairie grass.

Switchgrass (*Panicum virgatum*) is one of half-a-dozen grasses native to Ohio's prairie areas. Others include big and little bluestem, cordgrass, and Indiangrass.

These grasses and a variety of broadleaved flowering plants (called forbes) comprised perhaps 1,000 square miles of prairie (about 2½% of the state's vegetation) prior to the early 1800's. These prairies - ranging in size from a few to several thousand acres - were scattered mostly across the western half of Ohio.

Prairie plantings have been increasingly popular in land labs, on school grounds, in parks, rain gardens, and back yards for several years.

While turning switchgrass into ethanol requires additional study and new infrastructure, the plant offers a number of advantages over, say, corn: Switchgrass is perennial. It prevents soil erosion and provides nesting and wildlife habitat. Being native, it is relatively pest-free. It improves soil quality and water holding capacity, and its vast root system sequesters carbon. Switchgrass requires much less fertilizer than corn, can be planted on marginal soils, and can tolerate flooding and drought.



According to researchers at The Ohio State University, switchgrass can produce 1,000 gallons of ethanol per acre compared to 400gpa for corn. And ethanol from switchgrass would produce 94% fewer greenhouse gases than gasoline and yield more than five times the energy required to grow it and turn it into fuel.

Switchgrass isn't without downsides. It can be tricky to establish and takes three years to yield a crop. But the short-term negatives could be far outweighed by the positives.

It seems ironic that soon farmers could be replanting prairie grass where 200 years ago their ancestors plowed it up to plant corn. Just another one of those cycles of nature...

EECOSHORTS

ODNR EMPLOYEES CENTER OF SECONDARY EDUCATION PROGRAM

Dave Landis, ODNr Unified Education Program Coordinator
An exciting new website, Real World Learning, provides resources for developing lesson plans for secondary science, language arts and career education.

Start by going to www.dnr.state.oh.us. Click on "Educational Resources", then on "Real World Learning". By clicking on a module, you'll be provided a menu of informative ODNr employee interviews. Secondary teachers, particularly high school teachers, can also access the "Teacher Page."

During this first year of evaluation and lesson plan development, ODNr invites EECO members to review the site and provide comments via the "Contact Us: Send us your comments" link.

EECO educators are encouraged to team up with local secondary teachers to develop and submit a lesson plan for inclusion on the site. Finally, we hope



An interview with Sharon Lingle, geologist, is just one of several that visitors will find in the Lake Erie: Coastal Management Module.

that you will attend a session about this program at this year's annual conference, titled "WebQuesting for Conservation and Outdoor Recreation."

Read Dave's complete article at www.eeco-online.org and click on "Publications."

BIRDS + WINDOWS = NASTY COLLISIONS, SPRINGTIME HAZARD

Donna Lewis, Boonshoft Museum of Discovery

Spring's arrival brings an array of exciting bird-related events, including the return of our beloved songbirds. Unfortunately, it also brings with it the number one killer of birds: window collisions. What can you do to help an injured or stunned bird, and how can you prevent these nasty accidents?



Ideas and resources can be found at Fatal Light Awareness Program (FLAP), a Toronto-based non-profit (www.flap.org)

For related classroom projects, visit www.birds.cornell.edu. Children can also learn what to do if they find an injured wild bird outside - the National Wildlife Rehabilitator's Association has information on what to do and whom to contact. (www.nwrwildlife.org)

Read Donna's complete article at www.eeco-online.org and click on "Publications."

WINTER SNOW 2008 - ECO ARTS AND SUSTAINABILITY

Over 40 formal and non-formal educators took the opportunity to participate in practical, hands-on ideas and re-

sources for bringing the outdoors into their teaching while incorporating academic content standards at this year's Winter Snow Conference.

Weekend highlights included a musical performance by Jennie Morgan from The Columbus School for Girls, an art and group collaboration project led by Jillian Davis, also from The Columbus



School For Girls, and Keynote Speakers From APOC - A Piece of Cleveland. (You can learn more about APOC at apieceofcleveland.org). Saturday evenings' art collaboration was auctioned at the end of the evening. Nearly \$200 was raised to help benefit EECO!

OOPS!

In our last issue, we ran an article titled *Everybody's Talking About the Weather*. Unfortunately, we misstated the facts regarding how seasons occur. Thanks to sharp-eyed reader Joann Ballbach, we now have the correct fundamental fact via the National Oceanic and Atmospheric Administration:

The seasons have nothing to do with how far the Earth is from the Sun. If this were the case, it would be hotter in the northern hemisphere during January as opposed to July. Instead, the seasons are caused by the Earth being tilted on its axis by an average of 23.5 degrees (Earth's tilt on its axis actually varies from near 22 degrees to 24.5 degrees).

For a more complete explanation of how the Earth's axis tilt creates seasons, please visit: www.crh.noaa.gov/fsd/astro/season.php

OEEF Insert

Ohio Places to Learn About Agriculture and the Environment

Here is a list of some of our favorite farm education centers that are open to the public to visit around the state (most of which are past OEEF grantees), and some Ohio websites on agriculture education.

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- Crown Point Farm and Education Center
Crown Point Ecology Center
3220 Ira Road - Bath, OH 44210
(Summit County)
www.crownpt.org/
.....
- Dull Homestead Farm and Future Energy Center
10404 National Road
Brookville, OH 45309
(Montgomery County)
www.greenenergyohio.org/page.cfm?pagelid=102 and
www.daytonpeacemuseum.org/FutureEnergyCenter.htm
.....
- Greenacres Farm
8255 Spooky Hollow
Cincinnati, Ohio 45242
(Hamilton County)
www.green-acres.org/agriculture.htm
.....
- Malabar Farm State Park
Louis Bromfield Visitor Education Center
4050 Bromfield Road
Lucas, OH 44843-9745
(Richland County)
www.malabarfarm.org/
.....
- Nationwide and Ohio Farm Bureau Ohio 4-H Center
Opening April 4, 2008 on the OSU Campus in Columbus
(Franklin County)
www.ohio4-hcenter.org/index.html
.....
- Slate Run Living Historical Farm
(Columbus Metro Parks)
1375 State Route 674 N.
Canal Winchester, OH 43110
(northeastern Pickaway County)
www.metroparks.net/ParksSlateRunFarm.aspx
.....
- Stratford Ecological Center
3083 Liberty Road
Delaware, OH 43015
(Delaware County)
www.stratfordecologicalcenter.org/

Ohio Virtual Sites to Learn More About Agriculture and the Environment

- Agriculture in the Classroom (USDA and Ohio Farm Bureau)
ofbf.org/page/CASH-4Y4QHY
- Ohio Ecological Food and Farm Association
www.oeffa.org/
- Innovative Farmers of Ohio
firegod.com/xoops/html/modules/content/index.php?id=1
- Local Harvest (Community Supported Agriculture)
www.localharvest.org/org.jsp?id=19
- Project Food, Land & People
www.foodlandpeople.org/

Educating About Agriculture

Jeanne Russell, Ohio Dept. of Natural Resources/Div. of Soil & Water Conservation

Are you (and your students) agriculturally literate? Do you know how to raise a raisin? Just what is the world's most widely grown grain? Ever wonder why ice cream sundaes aren't called ice cream Thursdays?

The American Farm Bureau Foundation for Agriculture builds agricultural awareness in a society that is continually becoming farther removed from the farm and the sources of its food and fiber. Their website (www.ageducate.org) provides a bushel of valuable resources, including: teacher guides, state agriculture statistics, kids' activities, and videos. They also produce a 34-page recommended reading list of 160 books for ages two through adult. Each book is reviewed to ensure that it depicts agriculture accurately, with modern images and with as few stereotypes as possible.

From goats to gardens and the Dust Bowl to desserts – information about the many faces of agriculture can be found on this site.

Solar Power + Water Pump = Happy Cows and Clean Water

In keeping with the agriculture theme, the Ohio Environmental Education Fund would like to showcase a recent grant project that illustrates how a little ingenuity and appropriate technology can significantly reduce water pollution from some of our state's most common polluters...cows!



The Ohio Environmental Education Fund awarded \$16,198 to the Harrison Soil and Water Conservation District for a demonstration project that uses solar energy to pump water to livestock.

When cows go up and down stream banks to drink, they send a lot of soil and mud into the water. Manure and urine can also cause water quality problems.

A solar powered pump is an inexpensive way to bring water to livestock so that they can be fenced out of the stream. The small pumps can access water from almost any water source such as wells, ponds, spring tanks, creeks, and hand dug wells or cisterns. The system is also suited to use with tanks in fields far from electricity and pressurized water lines, and pastures without a readily available water source.

The Harrison SWCD partnered with SWCDs in Belmont, Carroll, Guernsey and Tuscarawas counties, as well as the OSU Extension, the U.S. Department of Agriculture Farm Service Agency, the Natural Resources Conservation Service, the Stillwater Creek Interest Group and the Muskingum Watershed Conservancy District. Together, they demonstrated the system at three field days, four fairs and six field trials, reaching about 5000 people in the five-county area.

To see photos of the solar pumping system and some happy Ohio cows, as well as to learn how to build a similar setup, see the Harrison SWCD web page, www.harrisonswcd.org/solar.html.

Ohio EPA-EECO Partnership Regional Priorities



- Region 1: urban/multicultural, language arts
- Region 2: high school, environmental careers
- Region 3: social studies, environmental careers
- Region 4: urban/multicultural, environmental careers
- Region 5: pre-service teachers
- Region 6: language arts
- Region 7: adult education
- Region 8: urban/multicultural, environmental careers
- Region 9: pre-service teachers, high school
- Region 10: high school, environmental careers
- Region 11: adult education, environmental careers
- Region 12: early childhood, urban/multicultural



ENVIRONMENTAL EDUCATION OPPORTUNITIES

SPRING & SUMMER 2008

April

- April 5-6 Ohio Community Gardening Conference: Nourishing our Neighborhoods. For more information, contact: www.fpconservatory.org/growingtogreen.htm, Franklin Park Conservatory Columbus, Ohio. Some fees may apply
- April 13-19 National Environmental Education Week, register your event at www.eeweek.org/ Nationwide
- April 22-23 Ohio Environmental Health Association, annual education conference, oeha.tripod.com/ Marriott Northwest, Dublin, Ohio. Some fees may apply
- April 24-27 EECO Annual Conference www.eeco-online.org, Mohican State Park. Some fees may apply
- April 25 Leopold Education Project Facilitator training, open to people who have already participated in a LEP educator workshop. Contact: Phoebe Atkinson, (216) 321-5935 ext. 224 or atkinson@shakerlakes.org

May

- May 5 Central Ohio Water Fair, school programs gina.hayes@epa.state.oh.us, Statehouse Lawn, Columbus
- May 7 Children's Water Festival, contact Gayle Galbraith, (937) 333-3725 or gayle.galbraith@ci.dayton.oh.us. water.cityofdayton.org/water/em/festival.asp, Dayton
- May 10 State Science Day, www.ohiosci.org, The Ohio State University, Columbus, Ohio
- May 21-22 Northeast Ohio Stormwater Conference. For information contact 216-201-2001 x1205 or hstark@ccbh.net or www.finkerscreekwatershed.org, Cuyahoga Community College Eastern Campus, Highland Hills, Ohio

June - July

- June 1 Application deadline for OEEF environmental science and engineering scholarships, www.ohiosci.org
- July 8 Ohio Environmental Education Fund, deadline to submit Letter of Intent to apply in the July grant cycle, www.epa.state.oh.us/oeeef
- June 17-19 Black Swamp Environmental Education Extravaganza, sponsored by NW Ohio Soil and Water Conservation Districts, www.woodswcd.com, Perrysburg. Some fees may apply
- July 7-11 Language of Nature, summer writing institute and Leopold Education Project educator workshop, sponsored by the Environmental Education Council of Ohio, www.eeco-online.org Cuyahoga Valley National Park, Some fees may apply
- July 15 Ohio Environmental Education Fund, deadline to submit completed grant application, www.epa.state.oh.us/oeeef

August - October

- August 11-13 'Teaching and Learning With Monarch Butterflies', a three-day teacher workshop combining classroom and field experiences for pre-K to grade 8 teachers. More information and registration at: www.eirc.org - click on Monarch Teacher Network™. Fees Apply
- OR 13-15 Columbus
- October 8-10 Ohio Chemistry and Technology Council's "Teachers Industry and the Environment" Conference, www.ohiochemistry.org, Dublin, Ohio, See website for stipend information

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|---|---|--|
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| | | |
|---|---|--|
| Region 1 - Linda Pettit Franklin Soil and Water Conservation District Tel: 614/486-9613 Fax: 614/486-9614 lpettit@franklinswcd.org | Region 5 - Sue Magness Hamilton County Dept. of Environ- mental Services Tel: 513/946-7736 Fax: 513/946-7779 sue.magness@hamilton-co.org | Region 8 - Dawn Wrench Earth Day Coalition Tel: 216/281-6468x225 Fax: 216/281-5112 dwrench@earthdaycoalition.org |
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| Region 4 - Donna Lewis Boonshoft Museum of Discovery 937-275-7431 ext. 114 Fax - 937-275-5811 dlewis@boonshoftmuseum.org | Janet Ellsworth Tel: 419-884-0818 Fax: 419-525-6389 wellsworth@neo.rr.com | Region 11 - Vicki Kohli Fairfield Soil and Water Conservation District Tel: 740/653-8154 Fax: 740/653-1135 vicki-kohli@oh.nacdn.net |
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The EECO Newsletter is published four times per year for members of the Environmental Education Council of Ohio, a non-profit organization.

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**For membership application, please contact
Josh Flory, Membership Manager.
For information about EECO's programs and services,
please contact Brenda Metcalf, Executive Director.**

Visit EECO online at www.eeco-online.org

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