

### **Newsletter #11**

erenweb.org • erenteam@gmail.com • Follow us at:





## I. Greetings from the EREN Coordinator's Office

#### In this issue:

I. Greetings from the EREN Coordinator

**II. EREN Updates** 

**III. Upcoming EREN Events** 

IV. Get to Know **EREN Members: Bo Dziadyk** 

V. Ecologist's Toolbox

Hello EREN Members.

Here at Ohio Wesleyan, this is the most intense time of the spring semester, with student projects due, lots of end-of-year events, finals looming, and everyone's stress levels off the charts. In the midst of all of this, this newsletter serves as a reminder that summer is coming, with fieldwork on EREN projects in peaceful natural habitats, and great opportunities to connect with my EREN colleagues. Read on for news about grant submissions, the EREN All Members Meeting at Augustana College, and EREN's own Organized Oral Session at the Ecological Society of America Annual Meeting in Sacramento, California. You can also learn more about our 2014 All Members Meeting host Bo Dziadyk and get some teaching tips on using stories to teach ecology from Dave Bowne in our Ecologist's Toolbox section.

Best of luck with the conclusion of the academic year, and thanks, as always, for your participation in EREN.

Laurie Anderson **EREN Coordinator** Ohio Wesleyan University

### **II. EREN Updates**

#### **EREN Pilot Student Assessment**

A primary goal of EREN is teaching undergraduates the science of ecology through collaborative research, so the EREN Leadership Team is piloting an assessment tool to measure the teaching efficacy of EREN projects. This assessment tool is an online survey with questions that address five general learning goals that apply to all EREN projects, and allows students to demonstrate their knowledge with both openended and multiple choice formats. Students will complete this assessment twice (in a pre/post-test approach) and comparisons between the two assessments will be done in the early summer using a scoring rubric.

During the Spring 2014 semester, 10 educators in the EREN network are administering the EREN Pilot Student Assessment. Results of the Pilot Assessment will be discussed at the 2014 EREN All Members Meeting, and modifications to the assessment tool will be made as needed. The revised assessment tool will then be used more extensively in the 2014/2015 academic year.

#### **DATIS Project Updates**

Dr. Carolyn Thomas, Dr. Bob Pohlad, and Megan Gerald are hard at work on the DATIS project. The first batches of aquatic leaf litter packs were removed from the field this semester and Dr. Thomas's Hydrology class and Megan have been working on clearing the sediment from the bags and drying the leaves for future measurements.

#### **Macrosystems Grant Proposal**

In April 2013, EREN members submitted a grant to the Macrosystems Program of the National Science Foundation (NSF) that included a stream ecology project and an invasive shrub ecology project. In early January 2014, we received word that the proposal was declined. Reviews showed strong interest in EREN's potential for training undergraduates, but the panel felt the proposed projects did not have sufficient focus at the macrosystem scale. The proposal was reworked, and a new version of the invasive shrub project was submitted again to the Macrosystems Program in April 2014. A preproposal for the stream study is under consideration by the Ecosystems panel.

# **III. Upcoming EREN Events**

### a. EREN All Members Meeting 2014

The EREN All Members Meeting will take place June 25-27, 2014 at Augustana College in Rock Island, Illinois. The meeting will consist of one day focused on incorporating EREN projects into teaching and one day centered on research project logistics. Participants will arrive for an evening reception on June 25. The agenda on June 26 includes breakout groups for sharing teaching ideas and successes, and development of assessment techniques for curricular exercises that include EREN research. On June 27, ongoing EREN project progress and logistics will be discussed, with time also available for new project development. The day will conclude with trip to Augustana College's field stations.

We thank Bo Dziadyk for being the local host of the 2014 EREN All Members Meeting! He has graciously been coordinating discussions between our EREN Leadership Team and Augustana College. With his help, the All Members Meeting planning is going smoothly and we are excited for a wonderful event at Augustana in June!

Registration for the All Members Meeting is now **closed** – we are at capacity for our venue. EREN members will receive notification by email if there are any cancellations.

### b. EREN at the Ecological Society of America Annual Meeting

EREN will be featured in its own **Organized Oral Session** this summer at the August 2014 Ecological Society of America Meeting in Sacramento, California. Entitled "The Ecological Research as Education Network (EREN): Merging teaching and research through continental-scale collaborative projects," this session will highlight EREN's ongoing research projects, their contributions to ecological knowledge and education, their challenges, and lessons learned. Presenters include EREN Lead Scientists David Bowne, Tracy Gartner, Steve Hager, Karen Kuers, Tim McCay, and Jeffrey Simmons. Overviews of EREN and next steps for the network will be presented by Laurie Anderson and Bob Pohlad.

The EREN Organized Oral Session is scheduled for Friday, August 15, 2014, 8:00 AM-11:30 AM, Room 306 at the Sacramento Convention Center. So plan to stay late at ESA this year to reflect on EREN's accomplishments!

# IV. Featured EREN Member: Bo Dziadyk

Bohdan Dziadyk is a Professor of Biology at Augustana College in Rock Island, Illinois where he has worked for 34 years. His teaching has included courses in majors and non-majors Ecology, General Botany, Local Flora, Ethnobotany and Senior Inquiry. He has taught Applied Ecology (a beautifully expandable and compressible course) on six International Terms in Latin America and Asia.

In 1991, Bo founded the Field Stations program at Augustana when he was appointed the director of a complex that grew to three units and 600 acres in a few years. These include the 420 acre mosaic of wetlands, woodlands and grasslands known as Green Wing Environmental Laboratory in north central Illinois, the 70 acre upland forest complete with a hill prairie State Nature Preserve called the Collinson Ecological Preserve, and a lowland property known as Beling Ecological Preserve with its 100 acres of federally protected wetlands on the Rock River near the Augustana campus. In addition to overseeing the properties, Bo is monitoring secondary succession on an old field at the Beling site and has numerous EREN Permanent Forest Plots set up at all three stations which are studied by Senior Inquiry students. He has remained active in the Organization of Biological Field Stations across the 22 years of Augustana's membership in that organization.

During all his years at Augustana he has been a co-director of the College's Environmental Studies program which includes both a new major along with the traditional minor that has been in place for 40 years. Like ES programs across the country, the program has increased in enrollment and now includes more than 40 majors and minors.

Bo obtained BA and MS degrees in biology, with an emphasis in botany, at Southern Illinois University and a PhD at North Dakota State University studying the ecological structure and functioning of a Nature Conservancy tallgrass prairie remnant in western Minnesota. He was born in Germany of parents who survived WWII as slave laborers in the Third Reich and immigrated to the USA as a child.

## V. Ecologist's Toolbox

We would like to thank EREN Member David Bowne for this submission to the Ecologist's Toolbox. Dr. Bowne is an assistant professor of biology at Elizabethtown College.

In David's words, "Human beings are storytellers." Through storytelling exercises, Dr. Bowne encourages learning and engages undergraduate students in ecological science. "Students read a fictional narrative that connects scientific principles of ecology to their daily life, and doing so helps students become more personally engaged in the scientific material and more interested in analyzing and evaluating the role of science in society."

One example of this teaching strategy is his story "Talking Turkey." This narrative, set at Thanksgiving, is about a college student informing her family of her decision to stop eating meat for ecological, not ethical reasons. "To appreciate her decision, students have to understand food chains, energy flows, the first and second laws of thermodynamics, and ecological efficiency," says Dr. Bowne. The story "puts a human face on these concepts and students actually enjoy critically analyzing the character's decision. Students are then assessed on their understanding of the underlying science and engagement with the material during online discussions and on short answer questions."

Such stories can be easily adapted to fit a professor's own teaching style and needs. Taking this approach to science allows students creativity and a new avenue for learning.

To read Dr. Bowne's full "Talking Turkey" story and its associated assessment tools, follow this link:

http://ecoed.esa.org/index.php?P=FullRecord&ID=510.