

## 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. EREN Project Updates

Hello EREN Members!

The EREN Leadership Team has been engaged in many projects in 2013, which slowed our newsletter production. So, seems like it's about time to give you an update on EREN activities! In a nutshell, EREN is growing and thriving. We have new members, new collaborative projects, and new grant proposals under consideration. We have been working through the data collected in our 2012 survey of members and find that over 1,300 students have been engaged in some way with EREN projects and data across our 162 institutions. I am thrilled with our progress, and humbled by the energy and dedication our 215 members bring to their engagement with EREN. We haven't set ourselves an easy task – coordinating research projects across multiple sites and scales with undergraduates as participants is challenging in so many ways. However, as the project updates below will attest, we ARE doing it, together. Thank you for making EREN what it is, and what it will become.

Laurie Anderson  
EREN Coordinator

## II. EREN Updates

**April 1, 2013:** A team of EREN members submitted a grant proposal to the Macrosystems Biology panel of the National Science Foundation. The proposal was pitched as a “training grant” and described two collaborative research projects: an aquatic project on the effects of riparian vegetation on stream metabolism, and a terrestrial project on the impacts of invasive shrubs across environmental gradients. These two projects will use the EREN model of distributed, collaborative work across sites, peer-to-peer training, and immersion in real research to train undergraduate students and PUI faculty in continental-scale science. At this time, the proposal remains under review.

**June 23-25, 2013:** The EREN All Members Meeting was held at Trinity University in San Antonio, Texas. Kudos to our local host Dr. Kelly Lyons and the conference staff at Trinity for taking good care of us and for arranging a special Mexican dinner on the Riverwalk! We had 43 EREN members in attendance, and particularly enjoyed the new project ideas that were introduced at this meeting. Dr. Heather Powell of the National Ecological Observatory Network gave an engaging keynote presentation on opportunities for undergraduates to become involved in NEON and in an “ecocorps” training program she is developing.

**August 2013:** EREN again had an active presence at the annual Ecological Society of America Meetings in Minneapolis, MN, with three presentations focused on preliminary results of EREN projects and EREN’s progress as an organization. EREN also hosted a lunch social event that was attended by about 40 people. The EREN Leadership Team has submitted a proposal for an Organized Oral Session on EREN for the 2014 ESA meeting.

### III. Upcoming EREN Events

The EREN Leadership Team will meet in Raleigh, NC on November 2 and 3, 2013. Please send ideas for the agenda to EREN Coordinator Laurie Anderson at [erenteam@gmail.com](mailto:erenteam@gmail.com).

After the November meeting, EREN plans to announce the date, location, and travel compensation available for the 2014 EREN All Members Meeting. Watch your e-mail account and the EREN web page for updates!

### IV. EREN Project Updates

EREN currently has eight collaborative projects underway or completed. The number of participant members and institutions in each project are highlighted within each section. An updated list of all EREN members and a Google map displaying all EREN member universities can be found on the EREN website. You may contact the Lead Scientist(s) if you wish to join a project, or visit [www.erenweb.org](http://www.erenweb.org) and click on the "Research" tab for more details.

#### a. Permanent Forest Plot Project

*Lead Scientists: Karen Kuers, [kkuers@sewanee.edu](mailto:kkuers@sewanee.edu),  
Sewanee: University of the South, TN, and Erin Lindquist,  
[erinlind@meredith.edu](mailto:erinlind@meredith.edu), Meredith College, NC.*

The goal of this project is to establish a set of permanent forest research plots at colleges and universities across the continent that will allow faculty and students to address questions related to tree biomass, carbon accumulation, invasive species, and disturbance over a range of sites and ecoregions. This project currently has 66 registered database users representing 44 institutions.

## **b. TURTLEPOP: Population Structure of Freshwater Turtles along an Urbanization Gradient**

*Lead Scientist: David R. Bowne, [bowned@etown.edu](mailto:bowned@etown.edu), Elizabethown College, PA.*

Unlike its study organism, project TurtlePop is cruising along. Twenty-six schools participated in the first period of data collection in Fall 2012. These results were presented at an extremely well-attended poster presentation at the ESA conference in Minneapolis, MN. They are now in the thick of data collection for the second year. Additional schools joined the project and one dropped out due to lack of turtles caught, bringing the current participant number to twenty-seven. Judging from feedback from participating faculty, the project appears to be very successful in engaging students. Participants have been also been motivated to pursue additional research questions. For example, Sandra Cooke and colleagues at High Point University, NC are investigating hybridization between native yellowbelly sliders and invasive red-eared sliders. Danielle Garneau at SUNY Plattsburgh has initiated a radiotelemetry study of turtle movement behavior. Dan Druckenbrod and a student at Rider University are documenting turtle use of logs installed in a campus lake specifically to promote basking by native turtles. Check out the Facebook page for more updates.

## **c. Stream Temperature Project**

*Lead Scientist: Jeffery Simmons, [simmons@msmary.edu](mailto:simmons@msmary.edu), Mount St. Mary's University, MD.*

The primary objective of this project is to quantify the extent and nature of change in stream temperature regime caused by the presence of vegetated riparian zones (with respect to streams with no riparian vegetation). This project is in the process of wrapping things up by revising their first manuscript and writing a second manuscript. Throughout the project, 16 participants from 12 institutions contributed to data collection.

#### d. Aquatic and Terrestrial Leaf Decomposition

*Lead Scientists:* Carolyn L. Thomas, [cthomas@ferrum.edu](mailto:cthomas@ferrum.edu), Ferrum College, VA, and Tracy Gartner, [tgartner@carthage.edu](mailto:tgartner@carthage.edu), Carthage College, WI.

This project evaluates leaf decomposition rates in paired terrestrial and aquatic systems and compares native and invasive plant species decomposition rates in different climatic conditions and geographic locations. This year there are 18 participants from 16 institutions involved in the DATIS project.

#### e. Oak MAST: Monitoring and Assessing Seed Traits

*Lead Scientists:* Harmony Dalglish, [hjdalglish@wm.edu](mailto:hjdalglish@wm.edu), College of William and Mary, VA, and Michael Steele, [michael.steele@wilkes.edu](mailto:michael.steele@wilkes.edu), Wilkes University, PA.

Hard mast seed resources, such as acorns, play a major role in eastern forest communities. These seeds teach about resource availability and animal behavior across various locations and climate patterns. This project, beginning its pilot year this fall, will assess variation in seed traits, seed production, and insect infestation among important oak species.

#### f. Distribution of North American Earthworms

*Lead Scientist:* Tim McCay, [tmccay@colgate.edu](mailto:tmccay@colgate.edu), Colgate University, NY.

With 22 participants at 19 institutions, this academic year will be the first official cycle for this project that aims at sampling earthworms and environmental variables important to their presence, abundance and diversity. A large thank you goes to all those who piloted the project last year and provided suggestions on refining the protocol. A set of workshops at the last EREN all-members meeting helped participants to more confidently identify animals. Five collaborators have now sent data or specimens along to Colgate, and we are working through them now. Thanks to all participants.

### g. Bird-Window Collisions

*Lead Scientists: Steve Hager, [stevehager@augustana.edu](mailto:stevehager@augustana.edu), Augustana College, IL, and Bradley Consentino, [consentino@hws.edu](mailto:consentino@hws.edu), Hobart and William Smith Colleges, NY.*

The Bird-Window Collisions project will investigate how landscape structure and connectivity in urban areas affects the pattern and magnitude of bird collisions in order to better inform public policy, building design and conservation efforts. Collaborators begin collecting data for our pilot field season very soon, so data should be rolling in shortly. The most recent count shows 17 collaborators on this project, including two near Mexico City, Mexico, and one near Vancouver, BC, Canada.

### h. Impacts of the Emerald Ash Borer

*Lead Scientists: Ben Dolan, [dolan@findlay.edu](mailto:dolan@findlay.edu), The University of Findlay, OH, and Jason Kilgore, [jkilgore@washjeff.edu](mailto:jkilgore@washjeff.edu), Washington and Jefferson College, PA.*

Aiming at addressing questions related to the loss of ash trees in forest communities due to the emerald ash borer, this project utilizes information from the EREN Permanent Forest Plot Project. It attempts to measure emerald ash borer infestation, ash decline and loss, and response by understory plants. Development and testing began in fall 2012 and a presentation and discussion of the draft protocol was held at the June 2013 EREN Members Meeting.