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

Hello EREN Members!

As we approach the end of our second year of funding in May 2012, we are very excited about the growth of EREN as a network and the research and education activities evolving within the group. There are 128 of you distributed across 97 institutions, and four ongoing pilot projects each with 10 to 14 institutions participating. We update you on these projects below, and note that some of these projects are still accepting participants.

Also, we are eager to meet many of you at the first EREN All Members Meeting happening this coming June at Meredith College in Raleigh, North Carolina, and EREN will have an active presence at the Ecological Society of America Annual Meeting in August in Portland, Oregon, with posters on preliminary pilot project results and a members social. We hope you will make contact with EREN at one of these events and continue to think about ways to get involved in collaborative ecological research that advances science and engages students.

This is one of the busiest times of the year if you are a scientist-educator at an undergraduate institution, so I'd like to offer my sincere thanks for taking the time to catch up with EREN. We value your participation!

Laurie Anderson  
EREN Coordinator  
Ohio Wesleyan University

## II. Upcoming Events

**The EREN All Members Meeting** will take place from June 27-29 at Meredith College in Raleigh, North Carolina. Dr. Robert C. Walter, Professor of Geoscience and Environmental Science at the Department of Earth and Environment at Franklin and Marshall College, and Cox Visiting Professor at the Department of Geological and Environmental Science at Stanford University, will be the keynote speaker. The tentative title of his presentation is: The Big Spring Run Stream Restoration Experiment: The Effects of Watershed Restoration of Ecosystem Services in a Stream Impacted by Legacy Sediments.

The meeting will also include workshops on data management for large projects, working sessions for the EREN pilot projects, new collaborative project development, contacts with other Research Coordination Networks, and social events.

Registration for the All Members Meeting is **closed** – we are at capacity for our venue. However, stay tuned for information about other EREN events in the future! Information about EREN events at the Ecological Society of America Annual Meeting in Portland, Oregon is forthcoming!

## III. Pilot Project Updates

EREN currently has four ongoing pilot projects that were launched in 2011 to explore different models of collaborative research that advance science and engage undergraduate students. If you are interested in learning more about or participating in the projects below, feel free to contact the Lead Scientists.

## 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 research plots at colleges and universities throughout the United States that will allow faculty and students to address questions related to tree biomass, carbon accumulation, invasive species, and disturbance across a range of sites and ecoregions. Data from this project will be entered in an online database that will then be accessible and searchable to all participants. The online database will soon be available from the EREN website.

There are currently 15 members from 14 different institutions participating in this project. This is a long-term project and the PFPP team is actively seeking new members. For more information on this project please refer to Permanent Forest Plot section of the [EREN website](#).

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

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

### Update

The TurtlePop participants have answered an on-line survey about their needs for the project and the results are currently being processed. Work is being done with a Communications major at Elizabethtown College in order to create a series of training videos that can be posted on the EREN website. These videos will help explain methodologies used in the TurtlePop project. They have also submitted an abstract for a poster presentation at ESA, which will showcase preliminary data for TurtlePop. Visit the [EREN website](#) to learn more about TurtlePop.

### c. 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 will evaluate leaf decomposition rates in paired terrestrial and aquatic systems and compare native and invasive plant species decomposition rates in different climatic conditions and geographic locations. The goals of this study are to (1) develop and test integrative protocols that will unite aquatic and terrestrial decomposition, and (2) identify the threshold of invasive plant abundance necessary to affect ecosystem processes. The leaves will be placed in the stream and forest in the fall of 2012 after leaf fall and the detailed protocols will be available in June 2012.

There are currently 11 members from 10 different institutions involved in this project and it is still open for members to join. For more information please refer to the aquatic and terrestrial leaf decomposition page of the [EREN website](#).

### d. Stream Temperature Project

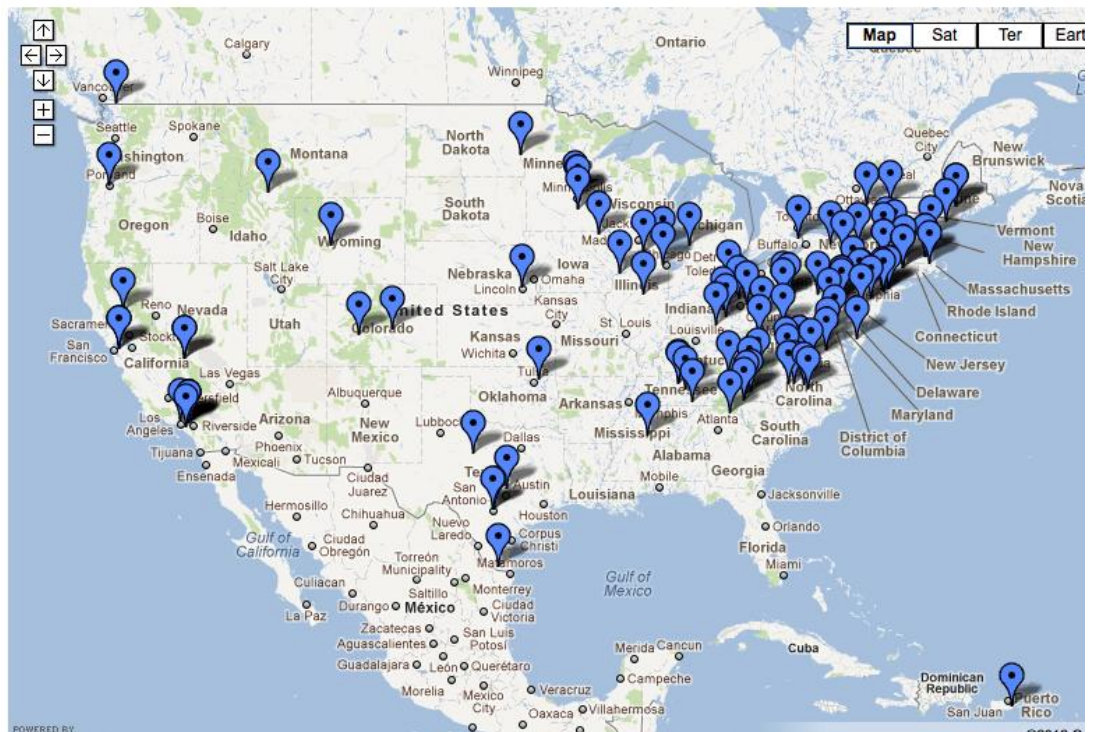
Lead Scientist: Jeffery Simmons, [simmons@msmary.edu](mailto:simmons@msmary.edu), Mount St. Mary's University, MD.

#### **Update**

This project is in month 6 of Phase 2, which will last a total of 14 months. Researchers have been monitoring stream temperatures through the winter. Data analysis is almost complete for the manuscript and poster based on Phase 1 results. A draft of the manuscript is expected to be disseminated in April for review and feedback by the co-authors. Also, a poster abstract has been submitted for the ESA annual meeting in August 2012.

# IV. Member Numbers Update

EREN has been growing rapidly since its creation in 2010. There are currently 128 members from 97 different institutions in the continental United States, Puerto Rico, Canada, and Qatar. This range of areas is vital to the success of the collaborative projects because it allows for data collection in a variety of different environments. This allows EREN members and their students to investigate ecological drivers and processes across regional to continental scales.



## V. Ecologist's Toolbox

*We would like to thank EREN Member Denny S. Fernandez del Viso for this submission to the Ecologist's Toolbox. Dr. Fernandez del Viso is a professor of biology at the University of Puerto Rico at Humacao.*

Every week I ask my Introductory Ecology students to produce a "concept network" (concept map if you prefer) of a specific topic within the weekly ecological theme - physical environment, evolution, adaptations, life history patterns, and so on. For example: water properties and ecological consequences, mechanisms of evolution, mechanisms of thermoregulation, reproductive effort, respectively.

The media to produce this assignment is SpicyNodes ([spicynodes.org](http://spicynodes.org)), a free web based system to create "concept networks". Students learned very fast to produce a network, because the system is very intuitive, and you do not expend time in the graphical part of the network, but concentrate on the content and their linking. It is also a great way for the students to become creative communicating scientific concepts, because the capability of the system to incorporate video (like YouTube), images, websites via linked URL, and documents (like scientific papers) to illustrate and/or support their concepts and definitions.

They are easy to grade or can be used to assess learning objectives, without having to read long and tedious essays or monographs. And because everything is in the "cloud" (you only get an URL from the students), you do not have to deal with hardcopies, or software and formats incompatibilities. Extensions to other areas of teaching and research have to be explored.

## VI. Get to know EREN Members: Karen Kuers

*Dr. Karen Kuers is a member of the EREN Leadership Working Group, one of the founders of EREN, and one of the lead scientists for the EREN Permanent Forest Plot Project (PFPP). She is a professor of Forestry at Sewanee: The University of the South in Sewanee, TN, where she has been teaching since 1994. Karen currently serves as chair of the Department of Forestry and Geology.*

The bottom line....Karen likes trees. She teaches Introduction to Forestry, Dendrology, Forest Ecology, Urban Forest Management, Silviculture, and regularly participates in the Department of Forestry and Geology's team taught Junior Presentations Seminar and Senior Field Project. She coordinates the Sewanee Split Creek Watershed Project, which grew out of her participation in two other research oriented collaborations: ROCA (Research Opportunities and Collaboration in the Appalachians with Appalachian Labs in Maryland, and CAWS (Collaboration through Appalachian Watershed Studies), a project involving 14 other small colleges in the Southern Appalachian region. Karen uses the 50 acre Split Creek watershed, which is instrumented with both a flume and an electronic weather station, to teach students about the hydrology and ecology of upland, forested watersheds. Beginning in fall 2012 she will teach a new course entitled "Forests: Food, Medicine, and More", a course that will explore the wide range of edible, medicinal, and otherwise useful forest products found in forests of western and eastern North America.

Currently an Associate Editor for the Society of American Forester's *Journal of Forestry*, Karen has served on the Board of the Tennessee Urban Forest Council, and is a member of the Ecological Society of America and the International Society of Arboriculture. Some of her other research interests include carbon, nitrogen, and leaf area dynamics of upland oak-hickory forests, and tree responses to human and natural disturbance.

Karen graduated from Spring Hill College with a double major in Biology and Philosophy. After working for a year at the University of Texas Health Science Center in Dallas, TX, she earned a Masters Degree in Biology from Texas A&M University, while also obtaining a Teaching Certificate from the State of Texas. After teaching sciences in grades 7-12 at Bayside Academy in Daphne, AL for 5 years, Karen obtained her Ph.D. in Forest Resources from the Warnell School of Forest Resources at the University of Georgia in 1994, with Dr. Klaus Steinbeck as her major professor.