Restoration news bites:

- ERIE Trainee Michael Habberfield recently gave a presentation at the Northeast Partners in Amphibian and Reptile Conservation annual meeting at Allegany State Park titled "Pool Arrangement & Scale of Translocation Influence Movement Parameters & Habitat Selection of Green Frogs (Lithobates clamitans)."

- ERIE Trainee Justin Donhauser recently had a paper accepted to the journal *Ethics & the Environment* titled "How theoretical analyses in ecology can enable environmental problem-solving." The paper will come out in December of this year.

- Dr. Diana Aga of the Chemistry Department gave a keynote presentation featuring ERIE Trainee Joshua Wallace’s research at the "Antibiotics in Agroecosystems: State of the Science" Workshop at the Biosphere in Tuscon, Arizona.

- ERIE Trainee Luke Scannell recently presented a poster at the American Chemical Society Meeting titled “Feasibility of Utilizing Algal Biomass for the Pretreatment of Hydraulic Fracturing Wastewater.”

- REU participant Kimberly Alexander will be presenting a poster titled "Hydrodynamic Effects of Invasive Mussel (Dreissena polymorpha and Dreissena bugensis) Shells in a Laboratory Flume" with Dr. Sarah Delavan this fall at the Council on Undergraduate Research’s Research Experience for Undergraduates Conference in Arlington, Virginia.

Two ERIE IGERT Trainee Internship Spotlights

**This article was provided by Jonathan Pleban, Geology Department & ERIE IGERT Trainee.**

ERIE IGERT Trainee Jonathan Pleban completed an internship this summer with the United States Geological Survey (USGS) Water Energy and Biogeochemical Budgets (WEBB) program in order to quantify dissolved organic carbon (DOC) transport between streams and aquifers. The project took place in the uplands of the Sleepers River Research Watershed in Danville, VT where mercury from coal burning plants further west is entering the ecosystem as it is deposited, reacts, and travels with DOC. It is the WEBB program’s goal to study DOC as a proxy for mercury transport in order to more easily track its movement through the environment. Research for the project had the objective of comparing in-stream, riparian, and upland sources and sinks of DOC.

Jonathan was able to collect a data set that can be used to describe how DOC is transported from aquifers to streams. This is important for his research because DOC seems to be an important factor in controlling the conditions of the hyporheic zone. In previous studies he was only able to look at streams that had low DOC concentrations, but with this internship the other end-member (high DOC streams) could be observed.

Jonathan Pleban measuring leaf gas exchange of drought stressed Brassica rapa genotypes. Photo: Christine Pleban

Jerry Pleban recording field data. Photo: Maggie Dicks

**This article was provided by Jonathan Malzone, Geology Department & ERIE IGERT Trainee.**

ERIE IGERT Trainee Jonathan Malzone completed an internship this summer with the United States Geological Survey (USGS) Water Energy and Biogeochemical Budgets (WEBB) program in order to quantify dissolved organic carbon (DOC) transport between streams and aquifers. The project took place in the uplands of the Sleepers River Research Watershed in Danville, VT where mercury from coal burning plants further west is entering the ecosystem as it is deposited, reacts, and travels with DOC. It is the WEBB program’s goal to study DOC as a proxy for mercury transport in order to more easily track its movement through the environment. Research for the project had the objective of comparing in-stream, riparian, and upland sources and sinks of DOC.

Jonathan was able to collect a data set that can be used to describe how DOC is transported from aquifers to streams. This is important for his research because DOC seems to be an important factor in controlling the conditions of the hyporheic zone. In previous studies he was only able to look at streams that had low DOC concentrations, but with this internship the other end-member (high DOC streams) could be observed.

Jonathan Pleban measuring leaf gas exchange of drought stressed Brassica rapa genotypes. Photo: Christine Pleban

Jerry Pleban recording field data. Photo: Maggie Dicks

**This article was provided by Jonathan Malzone, Geology Department & ERIE IGERT Trainee.**

ERIE IGERT Trainee Jonathan Malzone completed an internship this summer with the United States Geological Survey (USGS) Water Energy and Biogeochemical Budgets (WEBB) program in order to quantify dissolved organic carbon (DOC) transport between streams and aquifers. The project took place in the uplands of the Sleepers River Research Watershed in Danville, VT where mercury from coal burning plants further west is entering the ecosystem as it is deposited, reacts, and travels with DOC. It is the WEBB program’s goal to study DOC as a proxy for mercury transport in order to more easily track its movement through the environment. Research for the project had the objective of comparing in-stream, riparian, and upland sources and sinks of DOC.

Jonathan was able to collect a data set that can be used to describe how DOC is transported from aquifers to streams. This is important for his research because DOC seems to be an important factor in controlling the conditions of the hyporheic zone. In previous studies he was only able to look at streams that had low DOC concentrations, but with this internship the other end-member (high DOC streams) could be observed.

Jonathan Pleban measuring leaf gas exchange of drought stressed Brassica rapa genotypes. Photo: Christine Pleban

Jerry Pleban recording field data. Photo: Maggie Dicks
This past summer we held three summer workshops: pumping test design & analysis; bioengineering & redirective stream stabilization; and streambank stability analysis & modeling. The workshops were very successful and we had participants from organizations across NY state and Canada. We are in the process of re-evaluating the summer workshop program and will offer two workshops (one week total) in summer 2015 focused on stream restoration.

The first workshop, Fundamentals of Stream Channel Design, will be held on June 1-2 and be taught by Dr. Sean Bennett and Dr. Alan Rabideau of UB. This workshop will focus on stream restoration design approaches, modeling tools, local case studies, and other aspects of physical stream channel design.

The second workshop, Watershed Management Planning, Assessment, & Monitoring, will be held June 3-5 and taught by Dr. Kelly Frothingham of Buffalo State College, Dr. Wayne Gall of NYS Department of Health, and Dr. Alan Rabideau. This workshop will focus on watershed/project planning, biomonitoring methods, using the Stream Visual Assessment Protocol (SVAP), and include a session on aquatic macroinvertebrate identification and sampling.

More information will be posted our workshop webpage. Registration will open in late 2014/early 2015.

Donations to Assist in Ecosystem Restoration Student Research Needed

Please consider donating to the Ecosystem Restoration Scholarship Fund. Your tax-deductible gift will support summer student research in ecosystem restoration in the Great Lakes & Western New York Region.

Your support is greatly appreciated.
Donations are accepted online.
Thank you!

ERIE IGERT Trainee Graduates

Congratulations to recent ERIE IGERT trainee graduate, David T.R. Stewart! Dr. Stewart graduated with his Ph.D. in Chemistry earlier this year under the advisement of Dr. Diana Aga. His dissertation was titled “Emerging Environmental Contaminants and the Metabolic Effects of Exposure Investigated by Mass Spectrometry.” Dr. Stewart is now a tenure track assistant professor of Chemistry at D’Youville College in Buffalo.