LEC Sensor Network featured by NSF

Our LEC Environmental Sensor Network is a featured research highlight on the NSF’s SEE innovation website! Visit http://go.usa.gov/ZjjQ to view the report.

Funded by an NSF Field Stations and Marine Laboratories (FSML) equipment grant to LEC Director Dr. Carol Stepien with Drs. Richard Becker, Jiquan Chen, Kevin Czajkowski, and Tom Bridgeman, the sensor network provides real-time data on on the exchange of green house gases (CO₂, CH₄), H₂O, and energy across the Lake Erie watershed, as well as the physical, biological, and chemical properties of the Western Lake Erie Basin.

It is the first carbon, energy, and hydrologic flux network within the Great Lakes, providing new, important data to assess lake/bay/river changes and analyze key environmental patterns in the region. These data are contributing to continued study of the impacts of global climate and ecosystem change, and findings will provide important comparison and exportation to aquatic systems worldwide. For more information and to access the latest data, visit: http://www.utoledo.edu/nsm/lec/sensor_network.

Congratualtions to the following recent Ph.D. graduates on their new appointments!

Dr. Amanda Haponski (Ph.D. awarded August 2013 under Dr. Stepien) is offered a postdoctoral fellowship in fish genomics with Dr. John Gold in Corpus Cristi, Texas.

Dr. Lindsey Pierce (Ph.D. awarded Dec 2013 under Dr. Stepien) is beginning a postdoctoral fellowship at the Cleveland Clinic.

Dr. Jeremy Pritt (Ph.D. awarded January 2014 under Dr. Mayer) is beginning a postdoctoral fellowship at the U.S. Geological Service in Ann Arbor with Dr. Ed Roseman.

Dr. Osvaldo Jhonatan Sepulveda-Villet (Ph.D. awarded Dec 2012 under Dr. Stepien) is beginning a Faculty Appointment as Assistant Professor of Aquaculture at the University of Wisconsin, Milwaukee this January 2014.

Upcoming Events

Lake Erie Center Public Lecture Series
All talks are Thursday evenings at 7 p.m. and will take place at the Lake Erie Center, 6200 Bayshore Road, Oregon, OH

JAN
23

FEB
13
Donald Schloesser, USGS Great Lakes Science Center. "Restoration of burrowing mayflies in western Lake Erie: Have we jumped the gun?" Thursday, February 13, 2014, 7:00 pm.

MAR
20
Dr. Chris Winslow, Ohio SeaGrant, Stone Laboratory, CLEAR, and GLAERC. "Lake Erie critical issues (e.g., invasive species, harmful algal blooms, dredging, and coastal economic development) and the work being done to address these concerns." Thursday, March 20, 2014, 7:00 pm.

APR
24
Dr. Kristen DeVanna Fussell, Ohio State University Aquatic Ecology Laboratory. Title TBA. Thursday, April 24, 2014, 7:00 pm.
Lake Erie Center Photo Contest -- the finalists!
We received some amazing entries in our 2013 photo contest, themed, “the nature of our region, from Oak Openings to Maumee Bay.” Winners will be announced at a reception before our public lecture on January 23, 2014, and all entries will be on display at the LEC beginning January 22. Pictured on this page are the finalists in the adult, teen, and youth categories.
Wetland construction set to begin at MBSP
By: Joe Heidenescher

Construction is set to begin this spring on a manmade wetland at Maumee Bay State Park in Oregon, Ohio, after a delay due to the government shutdown last October. Funded by Great Lakes Restoration Initiative grants to Dr. Daryl Dwyer, the six-acre wetland will filter out *E. coli* and other contaminants that flow into the area from Wolf Creek and Berger Ditch. The pollutants frequently impact the swimming beaches at MBSP, degrading water quality and often necessitating postings for unsafe swimming conditions.

The wetland will reside near the park's entrance at North Curtice Road; it will take about a year to build. Although it will not completely solve the contamination problem, it is expected to reduce pollutants and beach postings substantially.

In addition to improving water quality at Maumee Bay State Park and in Lake Erie, the project will restore habitats for many species of insects, birds, amphibians, and plants. As part of this effort, over 6,000 plants will be installed at the wetland this spring.

Project managers are looking for volunteers to help reach this 6,000-plant goal! If you or your organization is interested in lending a hand, please contact Danielle Long (Danielle.long2@rockets.utoledo.edu).

Members of the public also are invited to help photo-journal the entire construction process. Upload your photos from the area at www.facebook.com/uterrl or email them to Danielle Long, and be a part of this environmental improvement project! Images will be displayed at a photo station west of the entrance to MBSP.

To learn more about Dr. Dwyer and the Environmental Remediation & Restoration Lab at the Lake Erie Center, visit http://www.utoledo.edu/nsm/lec/research/errl. To view streamgage data for Wolf Creek / Berger Ditch, see: http://waterdata.usgs.gov/oh/nwis/uv?site_no=04194085.

Congratulations to Jeremy Pritt on the successful defense of his Ph.D. dissertation! Jeremy presented his research, “Fish Migration as an Ecosystem Linkage between Lake Erie and its Tributaries,” at the LEC on January 10, 2014. He is pictured here with his committee: (L to R), Dr. Tom Bridgeman, Dr. Christine Mayer (advisor), Dr. Ed Roseman, Dr. Hans Gottgens, and Dr. Patrick Kocovsky (the new Dr. is on the far right!).

Jeremy is now serving as a postdoctoral research scientist at the USGS Great Lakes Science Center in Ann Arbor, Michigan, working with Dr. Ed Roseman!
Please support our work by becoming a Friend of the Lake Erie Center!

Your tax-deductible contribution will help support our research, education, and outreach, as we work to protect our region’s most valuable natural resource - Lake Erie! We are a vibrant and active facility, located on the shores of Lake Erie in Oregon, Ohio, where students, scientists, agency partners, political leaders, and members of the public come together on Great Lakes environmental issues. We continue to be a leader in research on such important topics as toxic algal blooms, water quality, habitat conservation, and fisheries. With your support we look to expand and continue our efforts in the coming year.

To explore giving options, visit: https://give2ut.utoledo.edu/folec.asp

If you have not visited our facility, please stop by! We offer guided tours every Wednesday at 10 a.m. or by appointment, and we host a number of public events throughout the year.

We invite you to get to know our work and interact with us online, though our website (www.utoledo.edu/nsm/lec), Facebook page (www.facebook.com/lakeeriecenter), and Twitter feed (twitter.com/lakeeriecenter) -- and please do stop by our facility at 6200 Bayshore Road in Oregon! We appreciate your support and hope to see you at the LEC.

Welcome new graduate students!

After a record number of LEC students completed their graduate degrees last year, we are happy to welcome our newest students, Matthew Snyder and Brian Schmidt!

A member of Dr. Stepien’s Great Lakes Genetics/Genomics Lab, Matthew writes:

Love and appreciation for the natural environment has lead me to pursue a career as a biologist. I received my B.S. in Ecology from San Francisco State University, where I worked on population genetics and the spread of adaptive lateral plate loss and reduction in Central California populations of threespine stickleback. I am interested in the spatial and temporal scales of evolution, contemporary evolution, and conservation genetics. I seek to fulfill the pressing need for the application of genetics to conservation and management of native and invasive species by conducting high quality research in my areas of interest. My research in Dr. Stepien’s lab involves quantification of round goby eDNA and population genetics of the invasive round goby in the Great Lakes across spatial and temporal scales.

The newest member of Dr. Mayer’s Aquatic Ecology Lab, Brian describes his interests and research aspirations:

I have always been an outdoor enthusiast, partaking in hiking, mountain biking, kayaking, and most notably fishing. I received B.S. degrees in Fisheries and Biology from the University of Wisconsin-Stevens Point. As an undergrad, I studied the effects of zebra mussels on the benthic littoral macro-invertebrate community in a southeastern Wisconsin lake. I also studied largemouth bass fecundity in northern Wisconsin lakes, as part of a project examining potential causes of shifts from historically percid dominated systems into centrarchid dominated systems. My research at the LEC will be a continuation of the larval fish sampling project in the Maumee River in collaboration with the U.S.G.S.

2014 Lake Erie Center Art Contest

Theme: The Nature of our Region, from Oak Openings to Maumee Bay

We are now accepting entries for our 2014 art contest! Artists of all ages, backgrounds and skill levels are invited to submit a piece of 2D or 3D art that fits the theme, “The nature of our region, from Oak Openings to Maumee Bay”! Take a look around our region and let the natural wonders inspire your creativity! Prizes will be awarded in multiple age and art categories, including $50 VISA gift cards for 1st place winners! You may enter 2D or 3D art, including paintings, drawings, sculptures, glasswork, fabric crafts, clay and wood creations, scrap art, or nearly any media and form you can think of! Let your creativity shine!

For more information, visit www.utoledo.edu/nsm/lec, or contact Meredith Gray, 419-530-8361 or meredith.gray@utoledo.edu.

Entries due by Friday, April 11, 2014.