



**State University College at Brockport**  
**Department of Environmental Science and Biology**  
**Fall 2013 Newsletter**  
**[www.brockport.edu/envsci/](http://www.brockport.edu/envsci/)**

**Welcome—Dr. Christopher Norment, Chair**

As incoming Chair of the Department of Environmental Science and Biology, I would like to welcome all of our students, faculty, and staff to the new academic year. In particular, I want to thank our new undergraduate and graduate students for choosing to study environmental science at the College of Brockport. I trust that all of you will have a wonderful and satisfying educational experience here, one that will justify your decision to attend Brockport. I also would like to offer a warm welcome to Dr. Katie Amatangelo, the department's newest faculty member. Dr. Amatangelo comes to us from Brown University, where she was a postdoctoral research associate. Her area of expertise is plant ecology and this year she will be teaching our Plant Ecology, Biostatistics, Conservation Biology, and Ecology courses. Finally, I would like to thank Dr. James Haynes for serving as Chair of the Department of Environmental Science and Biology for nine years. Being chair is a difficult and time-consuming job, and Dr. Haynes brought extraordinary dedication, energy, and concern to the position.

As we begin this new academic year, it might be worthwhile to reflect briefly upon the importance and excitement of environmental science. The importance of our discipline is connected to the crucial problems that it seeks to address, including climate change, pollution, habitat destruction, and species extinction. Its excitement is due to many things, including its positive effects on the quality of human and nonhuman life, the creative solutions suggested by our science, and the pleasure that comes from doing research *out there, in the living world*. However, at the same time becoming an environmental scientist also carries a cost because we come to understand the true magnitude of the dangers that face our planet. In the words of Aldo Leopold, author of *A Sand County Almanac*, "One of the penalties of an ecological education is that one lives alone in a world of wounds." It is our job to understand these wounds and to work with others to heal them. So—work hard (and in your free time play hard!) and believe, passionately, in what you are doing at Brockport, whether as a student, teacher, or member of our vitally important support staff. Have a great year!

**Dr. Kathryn Amatangelo**

Welcome, Dr. Amatangelo, to the Department of Environmental Science and Biology! Dr. Amatangelo earned her BS with Distinction from the University of Michigan, Ann Arbor, in 2001, with a major in Resource Ecology and Management. She went on to earn her PhD in Biological Sciences from Stanford University in 2008.

Her research activities focus on plant community change, global change ecology, species invasions, functional traits, ecosystem function, terrestrial biogeochemistry, and paleoecology. Please visit Dr. Amatangelo's website at [www.brockport.edu/envsci/faculty/Amatangelo.html](http://www.brockport.edu/envsci/faculty/Amatangelo.html) to see her publications, research activities, and grants. We are happy that Dr. Amatangelo has joined our department, and look forward to collaborating with her in the future.



## Environmental Science and Biology Degrees are a Good Investment in Your Future!

The job market is tough, competitive, and demanding. Environmental Science and Biology alumni at The State University of New York, College at Brockport, are proving that it can be successful. Here are a few of the job positions they hold.

Rhonda Hudgins (MS '10) NYS DEC, Bureau of Wildlife, Avon, NY Fish— **Wildlife Technician I**

Matthew Lockner, (BS '02) **NYS DEC Police**, Avon, New York

Alex Czayka (MS '12) Western Reserve Land Conservancy, **Associate Eastern Field Director**. Alex works on land protection in Trumbull, Portage, and Mahoning Counties in NE Ohio. He is working out conservation easements for private landowners in these three counties. Alex is working on the purchase/preservation of land for threatened species, such as Massassagua rattlesnake.



Alexander Healy (MS '13) - Sequoyah National Wildlife Refuge, U.S. Fish and Wildlife Service—**Resource Management Intern**. Alexander manages habitat for a variety of plant and animal species. His main objectives are wetland plant and seed production surveys, agricultural production surveys, and invertebrate surveys within management wetland areas.

Will Smith (BS '11) - Nebraska Cooperative Fish and Wildlife Research Unit, **Assistantship**. Will is working on his MS thesis with a focus on population assessment and management of invasive white perch populations in two reservoirs near Lincoln. Will passed on the following message to Dr. Makarewicz **"I just want to say thank you for all of your support and guidance at Brockport and beyond. It's meant the world to me."**

Lynn Zicari (BS '12) - Ravi Engineering and Land Surveying, P.C. **Environmental Technician**. Lynn has worked on asbestos abatement projects as an air technician/project monitor, assisted the DEC on brownfield sites taking soil, groundwater, and air samples and will also be involved environmental assessments. **"I love the work, especially since I'm not in the office all that much!"**

Nathan Gross (BS '08, MS '11) - Tetra Tech, Inc., Buffalo, NY—**Environmental Scientist/Biologist**. Nate works on wildlife-related projects on various U.S. military installations and energy projects throughout the country. Nate's time is split between office work in Buffalo and out-of-state field work.



Ronald Gross (BS '10) - NYS DEC Conservation Officer and Forest Ranger Academy—**Environmental Conservation Officer**. Congratulations to Ron and Jennifer Wiesner (BS '10) on their upcoming nuptials in November, 2013



Ben DiSalvo (BS '01; MS '06) - Maricopa County Environmental Services, Peoria, AZ—**Environmental Health Supervisor**

Christina Accardi-Cappelli (MS '13) - Cornell University, Ithaca, NY—**Animal Health Diagnostic Center**

Mandi Caldwell (BS '12) - Central Michigan University—**Research Assistant** Mandi conducts host-fish suitability testing on an endangered freshwater mussel, the snuffbox (*Epioblasma triquetra*)



# Thank you, Dr. Makarewicz, for 40 Years of Teaching, Opening Young Minds, and Showing the Road to Success



Dr. Joseph Makarewicz's Retirement

By Dr. Chris Norment

Forty years ago, Dr. Joseph Makarewicz, a new PhD from Cornell University, assumed a position as assistant professor of biology at SUNY Brockport. It was a time when 8-track tapes, Lynyrd Skynyrd, the Rolling Stones, muttonchop sideburns, bell-bottom pants, IBM Selectric typewriters, and disco were big, and the Buffalo Bills had a winning record. Forty years later, almost all of these things have disappeared (fortunately, in most cases), and the Bills have descended into mediocrity— but the Stones are still recording and Dr. Makarewicz is doing all of the things he did back in the mid-1970s, when he first came to Brockport. He still is receiving major grants, publishing peer-reviewed papers, teaching classes, and supervising graduate students, although now as a member of the Department of Environmental Sciences and Biology instead of the Department of Biology. But it now seems that while Mick Jagger and company will tour again in 2014, Dr. Makarewicz has decided to retire at the end of the spring term—rumor has it so that he and his wife can follow the Stones across Europe.

Seriously, though, Dr. Makarewicz's retirement really will mark the end of an era at Brockport. Since his arrival, he has had a career that would be envy of almost any scientist. He has become a national and international leader in great lakes research, published over 100 peer-reviewed papers and just as many technical reports, been awarded over \$13 million dollars in grants and contracts, and mentored forty successful Masters students. He also has received numerous awards, including a SUNY Chancellor's Award for Excellence in Teaching, a Fulbright Senior Research Fellowship, and in 1998 was promoted to the highest position that an academic can receive in the SUNY system, that of SUNY Distinguished Service Professor. And very importantly, Dr. Makarewicz has been instrumental in the creation and growth of environmental science education at The College at Brockport. Prior to establishment of the Department of Environmental Science in 2002, he served as first coordinator of the environmental science major and as director of the environmental science program. He then went on to serve as founding chair of the current department, which began with only three permanent faculty members, about thirty undergraduate majors, and no graduate program of its own. Now there are six full-time faculty, about 120 undergraduate majors, and over thirty graduate students pursuing Masters degrees in environmental science and biology.

I have been at The College at Brockport for twenty years, and it hard to imagine life here without Dr. Makarewicz—as I am sure is the case for many of his colleagues, and perhaps for Dr. Makarewicz himself. When I asked Dr. Makarewicz about his plans for retirement, he told me that during the 2014-2015 academic year he will be in his lab and office, and finishing work on several grants and papers. He said that he also looks forward to doing "exactly what I want to do," spending more time with his children and grandchildren, and just relaxing (on the golf course?). Although Dr. Makarewicz still has another eight months left as a full-time member of our department, I hope that everyone will wish him the best, and congratulate him on a "job (very) well done."



## ENV Undergrad and his Ageless Box Turtle

Every newsletter should have a **"Special interest story."** Jeff Cokeley (BS in progress) was an avid outdoorsman during his youth in western Pennsylvania. "When Jeff was 13 years old, he found a box turtle," states Holland Cokeley, and "He put his initials on it — JC 1965." The story does not end with Jeff initialing the Box Turtle. Fast forward forty-seven years. Holland Cokeley was in his yard in Pennsylvania and saw a Box Turtle wandering there — low and behold, with Jeff's initials. How can this be? First, the Box Turtle has a life span of up to 100 years; the shell is hard, and the engraving most likely did not harm the turtle. This is not just a "one that got away" fish story. This story went viral both nationally and internationally! It was even given a small skit on Saturday Night Live!!! Not only is Jeff an avid outdoorsman (He spent his six-month delayed enlistment from the U.S. Air Force at the height of the Vietnam War hiking the Appalachian Trail from Maine to Georgia.), but Jeff in his early, youthful 60s is furthering his education by majoring in Environmental Science and Biology with a concentration in Terrestrial Ecology/Biology. So, the Box Turtle..."My dad cooked him up for dinner that night." Just kidding, the old turtle is still happily strolling across the same stretch of woods in South Strabane Township that he was in 1965.



### Student Field Work —Summer 2013

**Kate Bailey—(MS in progress)** Surrounded by vast expanses of cattails, lilies, and the occasional zoom of dragonflies, Great Lakes coastal wetlands research was an adventure — rain, sun, wind, and waves all-inclusive. Starting in June and until the first week of August, the crew and I sampled for bugs, fish, plants, and tested water quality at wetland sites along Lake Ontario, even sites near Kingston, Ontario, Canada. Although we were practically stranded for a day on Amherst Island, Canada, it was an exciting learning experience. My favorite site that we sampled this summer was Cootes Paradise in Burlington, Ontario, which is the largest wetland on the western shore of Lake Ontario. Cootes Paradise is home to the "Fishway," which is a gated dam that prevents invasive common carp from entering this impacted wetland. I was on the "bug crew" and was responsible for sweep-netting the water for aquatic macroinvertebrates, as well as counting the critters we collected, followed by preserving them for identification, which is going on right now.

**Molly Stetz (BS '12, MS in progress)** Identification of at-risk wetlands by determining the main course of water for each site

**Kathryn DesJardin (BS/MS in progress)** Field crew for Great Lakes Restoration Initiative coastal wetland monitoring project. Katie assisted in the identification on *Trapa natans* (water chestnut), an exotic invasive plant.

**John Bateman (BS '10, MS in progress)** I spent this past summer working on several projects funded by state and federal agencies. While most of my work focused on bird and amphibian monitoring within coastal wetlands along Lake Ontario, I also worked on vegetation surveys at Braddock Bay (Monroe County, NY). In addition to these projects, I had the opportunity to use the Environmental Science and Biology department's new Trimble R6 RTK GPS receiver. This is a highly accurate GPS device that allowed me to know where I am on the Earth's surface within two centimeters horizontally and three centimeters vertically. I used this device to record several hundred points within Braddock Bay to determine surface and basin elevations. These data were then used in GIS to create topographic maps that will be used by the US Army Corps of Engineers to determine where channels will be excavated to open up the cattail mat and encourage the growth of native wetland sedges and grasses.

