State University College at Brockport Department of

Environmental Science and Biology

Spring 2007 Newsletter 585-395-5975 www:brockport.edu/envsci

Dr. James Haynes Department Chair

Welcome back to a very cold start to the spring semester, especially after record warm months in November and December. As you will see below, students, faculty and alumni of the department are very busy. Many graduate and undergraduate students are conducting exciting research projects, and the faculty is very excited about the new M.S. program in Environmental Science and Biology that will accept the first students for the fall 2007 semester. The student environmental club is very active and changed its name to ECOS (Environmentally Conscious Organization for Society). Led by Instructional Support Associate Hilary Richardson for the past 3 years, students in ENV 202 have conducted an environmental audit for SUNY Brockport, and a report with recommendations for greater campus sustainability has been given to the college administration.

Dr. Christopher Norment <u>Professor, Terrestrial</u> Ecology/Biology

Dr. Norment received a \$20,000 grant from the New York State Biodiversity Institute for Scrubland Bird Habitat Relations and Management in the Lower Great Lakes Plain of New York. This grant will fund the second year of **Kristie Klees (BS 05)** MS thesis research project.

Dr. Norment received acceptance for publication of **In the Fair Country** by the University of Iowa Press for late 2007 or early 2008. The book is a work of creative nonfiction that describes Dr. Norment's Ph.D. research on Harris's Sparrows in the Northwest Territories of Canada.

Dr. Norment continues to be the supervisory professor of research for the following students:

Hollee Schwingel: Winter ecology of small mammals: use of the subnivean space by small mammals in the Brockport woods. **Levi Atwater:** Historical analysis of Harris's Sparrows in the Great Plains.

Kristie Klees, Sarah Miloski, Bill Forder, Jesse Batz, Eric Somers, Levi Atwater: A GIS analysis of changes in salamander distributions in Western New York between 1940 and 2000.

<u>Norma Polizzi, Esq.</u> <u>Welcome!</u>

Norma A. Polizzi, Esq., is teaching Environmental Law this semester. Knowing what is legally required is very important to environmental scientists, and her course is designed to enlighten students on what will be required of them once they join the workforce. It is a broad overview of federal and state laws that have a real impact on day-to-day environmental work.

Ms. Polizzi has a lifelong passion for addressing environmental problems. Environmental Law will be offered every spring and fall semester.



Environmental Science and Biology Student Club – Now ECOS

SUNY Brockport's environmental club had a make over this past summer, changing its name from the previously dull BEAN to the refreshing ECOS. While the acronym might be cool, its meaning is indicative of the BSG club we have become—an **Environmentally Conscious** Organization for Society, and we are living up to that name. In the fall of 2006, ECOS was involved in the Ocean Conservancy's International Coastal Cleanup at Hamlin Beach State Park. This event brought out more than 30 people to help cleanup Lake Ontario's coastline. ECOS also sponsored a 5k run at Letchworth State Park for the Park's autumn festival and celebrated with a camping trip that weekend to encourage outdoor activities by Brockport students.

America Recycles Day on November 15th was observed in the Seymour Student Union, with ECOS hosting Monroe County Environmental Services, Sunnking Electronics Recycling and other environmentally conscious organizations. The event promoted recycling awareness on campus and in the community through the collection of sneakers, electronics and clothing. Finally, the club held a zoo cleanup at the Seneca Park Zoo. At least ten members of the club came out to help Seneca Park rake up their fall foliage and were treated to a behind the scenes tour and feeding of the hippopotamus.

ECOS is looking forward to another successful semester with future events to include a trip to the Green Festival in Chicago, IL in March (including a tour of the Shedd Aquarium and the field Museum!), Earth Day events on April 22nd, and a spring cleanup on campus to celebrate National Arbor Day.



If you would like to be included in our community group, send an email to <u>hrichard@brockport.edu</u> (Hilary Richardson, ECOS Advisor). Meetings are held in Room 108A Lennon, usually on Wednesday afternoon at Noon. We hope to see you there!

Environmental Science and Biology Spring Seminars

Bruce Nilles (Sierra Club) and Fred Palmer (Peabody Energy) will debate the role of **"Coal in** *America's Energy Future."* Wed, February 21, 6:00-8:00 pm, New York Room, Cooper Hall.

Dr. Kimberly Schultz, Associate Professor at SUNY CESF, will present, "Aquatic Exotics: Can small invaders have large effects?" Friday, April 20, 2007, Room 220/221 Seymour Union.

<u>ENV Alumni</u> <u>Research, Employment,</u> <u>Just "News"!</u>

<u>Sarah (Davidson) Hile (BS,04)</u> –

Sarah is a marine ecologist and scientific diver for the National Oceanic and Atmospheric Administration (NOAA) at the Center for Coastal Monitoring and Assessment. She works with CCMA's Biogeography Team on a number of projects. Most of her time is spent working on a U.S. Caribbean coral reef ecosystem monitoring project, where she assists in fish and habitat data collection in the US Virgin Islands and Puerto Rico. Some of the products of these data are habitat utilization maps, journal publications, national monument and park inventory assessments, and monitoring protocols.

Danielle Merry (BS, 05) -

Danielle is currently working at Devine, Tarbell and Associates in Liverpool, NY as an Assistant Scientist. Devine Tarbell works on hydropower, and Danielle is assisting the coordination of seven study groups for Verdant Power's Roosevelt Island Tidal Energy Project in New York City. Verdant is doing studies on using underwater turbines in the East River for power generation. Danielle recently visited fellow alumni Andy Hasse (BS, 06) and Patrick Swain (BS, 06), who are working for ENSR in New Jersey; they are reported to be doing very well in the field of environmental science and biology!

Amy (Kron) Zona, (BS, 02) -

Amy is employed at Monroe #1 BOCES as a certified teacher in Biology. Amy also works with other teaching professionals on researching and writing curriculum grants.

Nicole Howard (BS, 06; ENV

<u>minor</u>) – Nicole has been accepted in to the Masters of Architecture program at the University of Colorado.

Adam Lotyczewski (BS, 06) –

Adam is working at Life Science Labs in Canandaigua, NY as a Technician.

Ian Conboy (MS, 07) – Pigeon Creek, a tidal lagoon on San Salvador in the Bahamas, may play an important role as nursery habitat for coral reef fishes. It is home to important fish species

such as the endangered Nassau grouper (Epinephelus striatus), snappers and grunts. These fish are important for local fishing and for maintaining the ecological balance on patch reefs. Over the past year, Ian conducted research in the tidal lagoon to quantify the role the it ecologic role it plays in the life history of patch reef fishes. During the two trips over 19,000 juveniles from 25 species were counted in the dense mangroves that line the perimeter of Pigeon Creek. The goal of the research is to provide data to help establish critical habitats to protect during the process of designating San Salvador as a National Marine Park in the Bahamas. A decision is expected in 2007.

Renee Pszyk (BS, 08) – During the summer of 2006. Renee worked with Drs. Norment and Norris surveying the avian and vegetation communities of the grassland birds at John White Wildlife Management near Bosom, New York. Renee also assisted graduate students Patrick Herbert and Mananjo Jonahson collecting data for their thesis projects on walleye and lake sturgeon, respectively. Renee participated in the Marine Biology/Geology class in the Bahamas in January, and will be returning to the Caribbean the summer of 2007 to perform reef monitoring and conservation in Belize. Renee plans to pursue a MS in Environmental Science and Biology at SUNY Brockport proceeded by a one-year field technician position.

Ross Abbett (BS, 05; MS, 08) -

Ross monitored various sites in Sandy Creek, Hamlin, New York the fall of 2006 to locate redds (nests) of spawning trout and salmon. Fry emergence traps will be constructed and incubation times of salmonid eggs calculated to capture a subset of emerging salmonid fry in the spring of 2007. Traps will be placed on 2-5 redds and captured fry will be counted and identified. Chinook salmon, coho salmon, brown trout and rainbow trout are the four species targeted by Ross' study. Electro-fishing surveys will be conducted the spring and summer of 2007 to document juvenile salmonid survival and to discover habitats within Sandy Creek capable of supporting early life stage salmonids. The goal of Ross' study is to quantify Sandy Creek's salmonid production, determine factors limiting their production, and document microhabitats that are capable of accommodating one and two year old salmonid habitation.

Andrew Haase, (BS, 06) – Andy works for ENSR in New Jersey working with freshwater and marine systems. He performs coral and reef identification, field sampling, and data analysis and writes reports, assessments and permits. Andy also has been given the task of performing essential fish habitat surveys which is "great to learn" and "very important". **Brent Wilson, (BS, 06)** – Brent recently obtained a position with Bergmann Associates, Inc., in Rochester, NY as GIS technician in the Geospatial Division. He is responsible for GIS data production, collection and analytical tasks for private and local government clients.

Richard Tilyou, (BS, 89) – Rich is in his 17th year of teaching 10-12th grade Chemistry & Earth Sciences at Niagara-Wheatland Senior High. Especially helpful, notes Rich, was Dr. Haynes' Pollution Biology course.

Kevin Tompkins, (BS, 94), Gregory Light, (BS, 93), Joseph Lomedico (BS, 93). All three of these alumni found employment in their field right in the Rochester area. Kevin works at Castle Genetic on E. Henrietta Road, and Greg and Joe both work for UCB Manufacturing.

Michael Schlueter, (BS, 99) -

Mike is in his 8th year of teaching Environmental Science and Biology at Victor High School.

Frrederick Stoss, (MS, 74) -

Associate Librarian, Science and Engineering Library at SUNY Buffalo, and Co-Chair of the American Library Association's Task Force on the Environment, Fred is also a "climate change messenger." He was chosen from several thousand applicants to participate in a 3-d training workshop, led by Al Gore, which included scientists, educators and communication specialists. Attendees gained information and skills needed to present customized versions of Gore's global warming slide show which is the basis for the film and book.

Richard Smith, (BS, 07) - A

double major in Environmental Science and Chemistry, Rick has been accepted into the Chemical Oceanography Ph.D. program at Texas A&M University.

Gregory Lampman (BS, 94; MS,

97) – Greg works for the Energy Efficiency Services group, NYS Energy Research & Development Authority, Albany (NYSERDA). He manages a Technical Assistance Program that provides interested facilities with energy efficiency technical evaluations, electrical peak-load reduction studies, energy procurement analysis, feasibility analysis for combined heat and power, and renewable technologies. The goal of the program is to increase the environmental performance, productivity and economic competitiveness of participants.

Mary Merner (MS, 95) Mary

works at the Monroe County Environmental lab as an Environmental Chemist. She supervises the Microbiology lab that analyzes drinking, stream and lake, and waste water.



<u>We keep in Contact with</u> <u>our Alumni!!!!</u>

We have developed an e-mail database to keep our alumni informed of job opportunities, seminars, etc. Information is sent to all alumni who wish to be included. Alumna Amy Day (BS, 94) says, "I got some job positions yesterday from you...this would have been invaluable when I was seeking jobs back when." So, if you would like to be kept "in the **loop**", please tell us to add you to the list if you have not been receiving job announcements from us. Send your request to ddilker@brockport.edu.

<u>Master of Science in</u> <u>Environmental Science</u> <u>and Biology</u> <u>Coming in fall, 2007!</u>

Our faculty has directed more than 80 successful MS thesis projects in Biological Sciences. In just few months we will embark on our own MS program in ESB, and we are very excited! We are in Lennon Hall which was completely renovated in 2002. As you can see above, our graduates have been highly successful in obtaining positions in the public and private sectors. We are ten miles from Lake Ontario and 30 miles from the Finger Lakes and Iroquois National Wildlife Refuge, all of which provide opportunities for graduate student education and research.

For more information, e-mail **ddilker@brockport.edu**



Fall 2007 Undergraduate and Graduate ENV Course Schedule

ENV 111	Principles of Biology
ENV 201/ 202	Environmental Science
ENV 405/ 505	Plant Ecology
ENV 419/ 519	Limnology
ENV 421/ 521	Limnology Laboratory
ENV 452/ 552	Environmental Law
ENV 457/	Marine Biology-
699	Bahamas
ENV 459/ 559	Mammalogy
ENV 469/	Environmental
569	Imagination

ENV 490/	Fishery Techniques &
590	Fish Identification
ENV 495/ 595	Aquaculture

For a description of a course, please email **<u>ddilker@brockport.edu</u>**



Environmental Science and Biology Faculty and Staff

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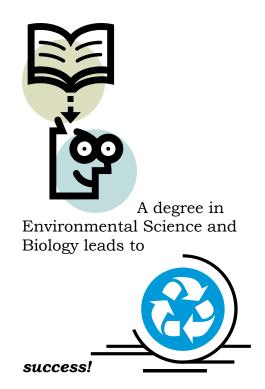
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We welcome your comments and information

Please give us your comments on this newsletter. If you would like additional copies or information on Environmental Science and Biology, or if you would like to arrange a visit to our facilities, contact Deborah Dilker at **ddilker@brockport.edu**. **Alumni** – please give us your updates. We always include you in our newsletter so everyone is aware of how valuable a degree from SUNY Brockport in Environmental Science and Biology is!