

DES FALL 2008 WELCOME

DEAR DES MAJORS:

It's that time....summer is coming to an end and here you are..... back in class again. All of us in the Department of Environmental Science (DES) are anxious and ready to welcome you to the fall 2008 semester...so....a ***BIG WELCOME*** to the new ES students and to our returning students!!

DES FACULTY SUMMER VACATION??

Sam Langley-Turnbaugh conducted a research project with student Sarah Hayes examining soil quality in Pondicherry Park in Bridgton, Maine, a site recently made publicly available after 200 years of private ownership. Sam also traveled to Vienna, Austria, to present a paper on phytoremediation of lead in urban soils of Portland, Maine, at the International Eurosoils Conference. She is also continuing to work with Sarah Hayes and Bill Yeo as they prepare to present their research on changes in trace element distribution with elevation in alpine systems at the Soil Science Society of America meetings in Houston in October. Lastly, Sam spent a large portion of her summer working in her role as Principle Investigator for the Eastern Alliance in Science, Technology, Engineering and Mathematics (EAST), with a mission of increasing the numbers of students with disabilities enrolled in science majors at USM.

This summer Professor Robert Sanford, Co-director of the SENCER (Science Education for New Civic Engagements and Responsibilities) New England Center for Innovation housed at Southern Connecticut State University, represented USM at the SENCER Summer Institute where he gave a presentation on science education. He also was a speaker at the first annual Presumpscot Riverfest held in Westbrook, Maine. Early this summer, Professor Travis Wagner and Professor Rob Sanford submitted their revised environmental science lab book to Wiley Publishers for production of the second edition. Professor Sanford is on sabbatical for the fall 2008 semester. As part of his sabbatical he is conducting research and writing for a number of books, including one on the Presumpscot River, and one on environmental history. As usual, he may have bitten off more than he can chew, so don't be surprised if you see him furtively scurrying back and forth trying to keep up. His departmental and advising duties will be met by other DES faculty—if you are his advisee and not sure who your interim advisor is, see Therese Martin after the semester begins.

Travis Wagner was busy this summer researching e-waste in Maine. In May, he presented his work at an international conference on waste management in Edmonton, Alberta. He is currently working on the second phase of the research, which is looking at socio-economic factors influencing household participation of e-waste collection in

Maine. Travis and Rob Sanford also completed the draft manuscript of the second edition of their environmental science lab manual.

Over the summer, Joe Staples hosted a high school student intern from the Upward Bound program. The project involved assembling an insect teaching collection that will be used in Environmental Entomology and other classes. Joe also taught Human Biology at the USM Lewiston-Auburn campus and has continued collaborative research efforts in insect chemical ecology with individuals from the USDA in Peoria Illinois and Illinois State University (ISU). Joe has also begun collaborating with researchers at ISU to conduct a preliminary evaluation of the Microtox™ toxicity analysis system in assessing the antimicrobial properties of metathoracic gland secretions in the lubber grasshopper *Romalea microptera*. These preliminary data will then be used to develop standardized laboratory protocol for assessing immunodefensive secretions in various insect species. The objective for this research is to develop means of quickly characterizing pathogenic susceptibility of pest and non pest insect species as part of an Integrated Pest Management approach to insect control.

Karen Wilson's summer was busy as usual - when you do work on aquatic systems, you have to work fast while the water is (relatively) calm, and the lakes aren't frozen. The summer started out early with the alewife run: by early May, Karen's collaborator Theo Willis was tagging alewives at Dresden Mills, and Karen and Theo were out on the water off Boothbay and Eastport, collecting diets from potential alewife predators. In June, Spencer Blair-Glantz (ESP) began his summer research fellowship studying zooplankton community change and sediment deposition in Damariscotta Lake. Adam Marquis (EPP) began his summer SURF fellowship researching the species distribution of native and invasive crayfish in Portland and the Belgrade Lakes areas. Ryan Duffy (ESP) also joined the lab this summer, lending his considerable horticultural knowledge to plant identification out on the marsh. In August, Abby (Finamore) Pearson (ESP-2007) was awarded a graduate assistantship in the Biology Department here at USM and has already begun her master's studies with Karen looking at Phragmites invasions and salt marsh restoration. Jackie Vachon (ESP-2008) spent the summer working with Abby in the field at Sherman Marsh, mapping Phragmites patches and surveying permanent vegetation plots, and surveying nitrogen in the marsh for that one last research credit (congratulations graduate!!). In early August, Karen presented a paper and poster at the Ecological Society of America meetings in Milwaukee - thousands of ecologists all in one place made for an interesting week. Karen has just finished up another sampling trip in the Eastport area (nothing like catching mackerel and sculpin while watching finback whales, porpoise and sea birds catching more (and smaller) fish than you,) and is happy to be back home in Portland.

NEW ADDITION TO THE DES FAMILY

Daniel Martinez will be joining DES with plans to build a research and teaching program in Energy, Resources, and Environment. He will be teaching a course this fall entitled Sustainability and Global Energy Systems (ESP 275). The course will explore the vital role energy plays in every aspect of modern and developing society. On-going work

includes the study of global energy consumption and its relationship to the UN Human Development Index. He is also looking to model and build an energy system using a decorative windmill and a generator to produce enough electricity to run a rechargeable lawnmower for use in small urban lots. He always welcomes student participation in his work. Daniel earned his Ph.D. in Chemical Engineering at the University of Rochester and NASA's Goddard Space Flight Center and has been doing postdoctoral work in Global Energy Policy and Planning with a focus on the developing world.

ESP 150 FIELD IMMERSION

The Field Immersion course is scheduled for September 11-14th and we have a large group again this year heading for Camp Hawthorne for this fun and exciting learning adventure. For students enrolled in the course check your email and blackboard for all the details you will need to participate in the course. Announcements/instructions will be made the first week of classes so stay tuned. If you have any questions please contact Therese at theresem@usm.maine.edu or 780-5390.

This fall DES faculty will be presenting on their research projects as part of a DES brown bag series. These presentations will count toward those students enrolled in ESP 150.

CONFERENCE OPPORTUNITIES

The New England Environmental Education Alliance will hold its annual conference: "A Journey Home: Fostering Ecologically Centered Communities" on October 3-5, 2008, in Hancock, NH. Professor Robert Sanford will be presenting there. If you are interested in attending you may go on line for more information about the conference. For anyone interested in formal education (classroom teacher) or informal (naturalist, nature center, interpreter), this is the place to be.

The Northern New England Chapter of the American Planning Association will hold its annual conference at the Woodstock Inn, Woodstock, Vermont, on September 4th and 5th. Some of our graduates are planners who belong to this professional organization and will be in attendance.

Professional conferences are the major way we keep in touch with our field and our colleagues—especially important in diverse rural areas such as northern New England. We encourage you to attend conferences most closely related to your area of interest—this is a great way to get ideas about internships, learn at workshops, pick up job leads, and experience a sense of professional community.

DES NEW PEER MENTOR

We are pleased to announce the 2008/2009 ES peer mentor, Curtis Pratt. Curtis is a Senior in DES, focusing on the Environmental Safety and Health degree. He will act as peer advisor assisting other students in such academic areas as advanced registration. If

you would like to contact Curtis, email Curtis.Pratt@maine.edu or call the ES office (780-5390) and we will be happy to connect you with him.

WE ARE HIRING WORKSTUDY STUDENTS!

Therese is looking for a student to work with her in the ES office. Student should be interested in clerical work and have strong computer skills. Duties will include filing, copying, answering the phone, and special projects. For more details contact Therese at 780-5390 or come by the office, 106 Bailey Hall.

Dr. Karen Wilson is looking for a few good workstudy students to work in the lab and assist with diet studies, plant identification, sample analysis, and data entry. All you need to be is motivated, responsible, willing to commit ~10/weeks, and ready to learn new things. Contact Karen via email (kwilson@usm.maine.edu) for an interview.

Travis Wagner is the director for the national 10th Biennial Conference on Communication and Environment to be held at USM in June 2009. If you are interested in working on the many various aspects of conference planning and have workstudy funding, contact Travis, twagner@usm.maine.edu. If you are interested in working at the conference in exchange for a waiver of the fee plus free meals, see Travis for more details.

Joe Staples is looking for a student with workstudy funding to assist in set-up and take-down of teaching laboratories in environmental science. Student will also be tasked verifying equipment inventory, maintaining live insect colonies for research, filing research papers, and updating electronic database. Other responsibilities will include sampling and data collection, monitoring functionality of laboratory equipment, and recording various biometrics from live insect specimens. Organizational skills are a must. Interested students should contact Joe Staples via email at jstaples@usm.maine.edu to schedule an interview.

If you are really looking for hands onDr. Langley-Turnbaugh is recruiting students with workstudy funds to assist her in the lab with an on-going research project analyzing heavy metals in soils. You can contact her at langley@usm.maine.edu.

ADDRESS CHANGE?

PLEASE.....if you have a change of address or phone number, come by the office and inform Therese. Students who will be relocating to the dorms or apartments in the area, we really need to have your new local addresses, phone numbers, and emails.

EMAIL COMMUNICATION POLICY

Last year USM established email as an official and primary means of communication to all of its students accepted and/or enrolled. In some cases, email may be the only form of communication. USM will assign email addresses to all accepted and/or enrolled

students in the form of FirstName.LastName@maine.edu. Students are responsible for reading all information sent to them via their University assigned email account. The University assigned email account is the MaineStreet “Business” email address, regardless of email account preference. The University has the right to expect that such communications will be received and read in a timely fashion. Confidential information will not be sent via email. Faculty and staff in the Department of Environmental Science will also adopt this policy by sending most information to our DES students via email and our ESP Listserv. Students should activate their assigned email account at: <http://mail.maine.edu>. If you need assistance in activating your email account, contact the USM Help Desk at 780-4029.

STAY INFORMED....SUBSCRIBE TODAY!!!

DES has its own listserv....to subscribe click on the following link, <http://lists.usm.maine.edu/subscribe/ESP-L>. Fill in your email address and your name, and click “Join ESP-L.” Once on the listserv, check it often. There will be notices of scheduled ES Student Group meetings, student group planned activities, job postings, peer advisor information, faculty postings, and campus events. And you can feel free to communicate with other ES majors and faculty via listserv. It works both ways....so we hope to see you on the serve!!!

STUDENT GROUP ...GEAR UP FOR THE NEW YEAR...

Hello to all DES Majors! A big *HELLO* to our new students, and a *WELCOME BACK* to all that are returning.

As the fall approaches, it is the time to jump start the student group and get everyone excited for the coming year. The student group is a great way to meet fellow DES students and to catch up with the veterans.

Last year the group facilitated many activities and participated in events at USM. This year we hope to expand upon that. We will be planning hiking trips and other outdoor adventures, as well as becoming active in environmental issues and projects around USM. We have ideas for fundraisers to help support the student group and its mission to promote environmental awareness and enjoyment.

We look forward to your many new ideas and suggestions and encourage everyone to participate and contribute in the ES student group to make it a successful and fun time for all this coming year. Everyone in the department and friends of the department are whole heartedly welcome and wanted! If you have any questions or ideas please contact the following officers:

President: Sandy Gilbreath (sandy.gilbreath@maine.edu)

Vice President: Amanda Roy (amanda.roy@maine.edu)

Secretary: Miranda Beaubien (miranda.beaubien@maine.edu)

Treasurer: Jen Joy (jennifer.joy@maine.edu)

The Welcome Back Picnic will be in early September, as well as the first meeting of the group. Join the listserv to get all this information and the latest on DES events!

Hope to see you all when school starts up!

- The Environmental Science Student Group -

In closing, all of us in the Department of Environmental Science are looking forward to seeing you next week...enjoy the remainder of your vacation...then let the fun begin!!

Sincerely,

The DES Staff