On January 31 from noon to 4pm, the NREM department, along with the Alumni Society, will host the annual NREM Internship and Career Fair at the Alumni Center.

Dozens of employers from around the state in the fields of natural resources and environmental management will attend to discuss internship and career opportunities with students. In the past, the event has been extremely successful in benefitting both students and employers in the processes of job searching and career exploration.

Recent graduate John Scheiber (BS’07) reflects on his past experiences at the career fair. “From what I remember I was a little nervous about going and meeting all the different companies or agencies, but once I got there, it was really nice that all of these opportunities were available. One of the biggest challenges was making a good impression on the one that I felt was the best fit for me.”

At the NREM fair, John found an internship with the U.S. Army Corps of Engineers (USACE), and when his internship ended, he was offered a full-time position. Since then, he has found himself on the other side of the desk, now attending the career fair to represent USACE as an employer.

“I still get a little nervous beforehand, but I always enjoy meeting with the other alumni and seeing what everyone is doing or offering. I love being able to talk to the students about what they are looking for and then sharing what the Corps has to offer, even if it is not directly related to my employers’ needs. The Corps benefits by informing students about we do and have to offer, and we benefit by getting highly qualified employees for our project and hopefully retaining a few when possible.”

The USACE is just one of many employers at the fair who will be recruiting students for internships, jobs, and volunteer positions and speaking with them about future career paths. Last year, 24 organizations related to the NREM field attended the fair, along with over 150 students. The fair will offer an opportunity for students to explore their interests and speak to employers in their desired field one-on-one. It will also allow employers to efficiently advertise opportunities and to meet with qualified students who may fill their needs.

The Alumni Society is always seeking out and accepting more organizations to participate in the fair. A pre-event luncheon will be hosted for attending representatives and the Alumni Board the day of the fair.

If you or your organization is interested in attending the career fair to discuss employment or volunteer opportunities with students, please contact Laura Waldron at alumni1@bsu.edu or 765.285.1080.

You can also visit the NREM Alumni Society events page at the link below to view a more complete schedule and download a registration form.

NREM Alumni Events Page: www.bsu.edu/alumni/nrem
Spotlight on Alumni: Kristen (Saile) Dragoo Checks in from Wyoming

What are NREM Alumni up to? All sorts of things! We recently heard back from a recent alumnus, Kristen (Saile) Dragoo ('03). She shared her experiences in the natural resources field following graduation.

What positions have you held related to the natural resources and environmental management field?

After I graduated in 2003, I worked as an education intern at Merry Lea Environmental Learning Center in Goshen, IN. Since then, I have worked in various positions at Grand Teton National Park in Wyoming. I just accepted a new position as the Moose District Lead Interpreter and Outreach Coordinator.

Okay… So what do you actually do?

In my new position, I will be doing some of the same things as I did as a seasonal Park Ranger - assisting park visitors at the visitor center information desk, developing and leading interpretive programs and guided hikes for the general public and for school groups, and coaching and mentoring other interpreters. I will also be taking on a few more supervisory duties as well as handling some outreach projects. One major project includes The Class of 2016, a park service-wide initiative that links parks with local students who will graduate in 2016, the year of the National Park Service’s centennial. Grand Teton National Park is working with a group of freshman at Jackson Hole High School. I will coordinate in-school and out-of-school park experiences, curriculum-based programs, leadership opportunities, and scholarship contests for this group throughout their high school career. This will culminate in a project (of their choice) that will be part of the NPS centennial celebrations in 2016.

Another recent park initiative that I will take the lead on is our distance learning program, called “Snow Desk.” It is a unique, distance-learning initiative that connects students from hundreds of miles away to Grand Teton National Park. The program gives teachers an opportunity to work as park rangers over the summer months and bring some of their learning back to the classroom during the school year. Park rangers broadcast live from a desk carved out of snow, and have live interaction with students across the country. This year, we hope to expand our Snow Desk activities even further.

What has been your most memorable moment or field experience working in the field of natural resources and environmental management?

Working in a crown jewel national park everyday and teaching park visitors about this amazing place means that I am fortunate to have a lot of memorable moments. But a day spent with a local school group sticks out as one of the most touching experiences. A group of local 5th graders came up to the park in the heart of winter to go snowshoeing and learn about wildlife in the winter climates. They were your average 5th graders - excited to be outside of the classroom but generally unimpressed with me, the park, and our plans for the day. We had an amazing snowshoe hike. A bald eagle soared over us, we watched a river otter float down the river, and we followed and deciphered fascinating tracks in the snow. By the end of the day, my excitement had spread to the class and they were totally engaged in the lessons they were learning about the park and its wildlife. I knew we had a fun day, but it wasn’t until I received letters from this class a couple weeks later that I realized that I (and, more so, the park) had really reached those students.

What advice would you give to students seeking positions in natural resources and environmental management?

Follow your passion – even if it takes a lot of time and effort, it is worth it to have a job that you care about. You will be more successful at a job that you have a passion for, and your excitement and motivation will be contagious to those around you.

Alumni Networking & Social Event—Mark Your Calendars!

Please join us for an evening of food, fun, and visiting with faculty, friends and alumni at Rock Bottom Restaurant and Brewery in downtown Indianapolis on Thursday, March 14 from 4:30-7pm.

Rock Bottom Restaurant and Brewery is located at 10 West Washington Street, Indianapolis, IN 46204
**Master’s Students Share Work at Professional Conferences**

Cathy Janiczak attended the Association of Conservation Engineers conference in Chesterton, Indiana to learn more about the use of sound engineering practices in the natural resources and recreation development field. The focus of the conference this year was the 'Creation of Outdoor Recreation Facilities'. While attending, Cathy also had the opportunity to learn about the complex ways in which engineers are involved in natural resources within the state of Indiana.

“Conservation engineers combine both biological and environmental aspects into their creations. I didn't realize how involved engineers were in taking an idea and making it into a reality,” says Cathy. Cathy also prepared a presentation for the conference about the design and management of Dunewood Campground at the National Lakeshore in northern Indiana, discussing topics such as parking lot design of walk-ins, registration design flaws, and the management of people within the campground. Cathy is a first year graduate student in NREM whose research work currently focuses on the participation, constraints, and attitudes towards wildlife of female hunters in Indiana.

Kristi Todd attended the Argonne Symposium for Undergraduates in Science, Engineering, and Mathematics in Chicago, IL. The conference was produced with the Central States Universities, Incorporated (CSUI) research conference, and provided an opportunity for students to present their work and hear from professionals around the country. Kristi presented her summer research project, titled, “Temperature dependent macroinvertebrates in the Upper West Fork White River, Indiana.” Her study analyzed the distribution and sensitivity of aquatic macroinvertebrates to water temperature by plotting species locations and river temperatures over the course of the summer. Kristi's study found several species to be specific to particular temperature ranges in the White River and Buck Creek.

“The conference gave me the ability to present my project in a professional setting,” says Kristi. “It allowed me to defend my project and to receive compliments on it- I was surprised by all of the positive comments that I received. It also allowed me to see what other universities were studying in the environmental field.” Kristi is in her second year of master’s work in NREM, with her thesis work focusing on the effects of stormwater runoff in relation to nutrient loads in the White River.

**Student Group Rises to Stormwater Challenge**

Three NREM students, Erica Kudyba ('13), Jamie Hosier ('12), and Brian Kowalski ('14) are working with an interdisciplinary team of three other students to craft their submission to the EPA Campus RainWorks Challenge.

The team has selected a series of sites at Ball State to develop designs for rain gardens to reduce surface runoff and allow for a more natural infiltration of rainwater. Winning teams for the competition are awarded a cash prize, as well as research funds for a supervising faculty member to conduct research on the potential of green infrastructure to sustainably manage stormwater. Yet, the team chose to participate in the challenge largely for the educational value and the real world type experience the project offers.

“It's a good, practical way to apply the skills I've learned in my soil and water classes. I also like that we're able to collaborate with students from other departments to problem-solve,” says senior Erica Kudyba.

Winners of the competition will be announced in April. The team will also likely showcase their work at the Ball State Student Symposium this spring.
Congratulations to four graduate students who are soon to finish their degrees this December!

Andrew Kennedy will complete a master of arts in NREM. Under the direction of Dr. James Eflin, Andrew completed his creative project, titled “Engaging with the Forest Service Response to Climate Change.” For his creative project, Andrew aided the Forest Service Unit called Helena and Lewis & Clark National Forests in achieving compliance to the agency’s climate change response initiatives through use of a scorecard and roadmap system. Andrew collected and analyzed data related to climate change efforts that occurred over the last year. Following graduation, Andrew’s plans are to continue working with the U.S. Forest Service. He has been offered a position working in recreation at the Shasta-Trinity National Forest in northern California. The Shasta-Trinity is the largest national forest in California with a diverse landscape ranging from 1,000 to 4,162 feet in elevation. The 2.1 million acre forest encompasses five wilderness areas, hundreds of mountain lakes and 6,278 miles of streams and rivers.

Brandon Fischer will complete a master of arts in NREM. Advised by Dr. James Eflin, Brandon researched and composed his research paper, titled “Comparison of State Electronic Waste Recycling Legislation to Indiana’s Law.” Given the recent rise in consumption of electronic products and the negative environmental effects of their improper disposal, Brandon researched legislation passed in 29 U.S. states that encourages electronics recycling and discourages their disposal in landfills. He categorized each of these states based on the structure of their legislation, and also grouped the remaining 21 states into categories based on their legislative history in regard to electronics recycling. While at working on his master’s, Brandon also had the opportunity to complete an internship with IDEM in the Office of Pollution Prevention and Technical Assistance, a position he said both prompted him to choose his research topic and helped to prepare him for life after finishing school.

Brandon also reflects positively on his experience on campus. “I think the biggest thing that stood out to me while at Ball State is the people I’ve met both inside and out of the department. I feel like I’ve made some good lifelong friends on this campus.” Brandon is currently considering a role in state government as part of his future plans, although he has not ruled out working in a private industry setting.

Elizabeth Zinn will complete an Ed. D. in science with NREM as a major and biology and education as cognates. Elizabeth has worked under the advisement of Dr. Jarmila Popovicova to develop her dissertation work, which focuses on the ability of constructed wetlands to remove triclosan, an FDA listed chemical of concern that enters the environment primarily through wastewater. Elizabeth’s study investigated the efficiency of constructed wetlands to remove the toxin through field data collected at 8 different wetlands over two study periods. She also used a laboratory setting to explore the effect of specific wetland plants on the removal of triclosan from the environment. “I also appreciated the chance to do research that is relevant and practical. The chemical that I studied, triclosan, is currently under review by the US FDA and the US EPA because of concerns that it may have impacts on human and ecosystem health. It is exciting to know that my research could contribute to that national discussion.”

Elizabeth is currently a faculty member at Goshen College in the Sustainability and Environmental Education Department. She works at Goshen's Field station called Merry Lea Environmental Learning Center where she teaches several college and graduate classes, leads public programs, and even teaches K-12 groups who come to the center.

“In a world of mounting environmental challenges, it is essential that we do more than give students knowledge. We need to empower them to make positive changes in their communities. The Ed.D. program helped me to think carefully about new ways to educate toward this goal.”
**Graduate Students Finish Degrees (cont’d)**

**Dava McCann** (photo unavailable) will complete a master of science degree in NREM with her thesis work titled, “Farm Operations, Farm Operators, and Commodity Payment in 2007: A Statistical and Geospatial Approach.” Under the advisement of Dr. Amy Gregg and Dr. Joshua Gruver, Dava explored the relationship between commodity and operator characteristics on farms and government payments received. Using economic variables, operator characteristics, farm organizations, farm typologies, tenure, and geographic variables, she also examined the equitability of government agriculture payments across Farm Resource Regions. Using statistical and spatial analysis, Dava’s study found that corn, soybean, wheat, and cropland variables were strongly correlated to government payments variables.

**NREM Alumni Meet ’n’ Greet a Success!**

On November 28, the NREM Alumni Society hosted a reception for current NREM students and faculty to meet some of the past NREM graduates. Students and alumni began the evening by introducing themselves and chatting casually over pizza and refreshments on campus. The event also featured a panel of nine former NREM students to talk about making the move from student life to professional life in the environmental field. Alumni and panel members represented governmental agencies, private industry, and non-profit organizations to give students a wide range of perspectives. Students and faculty members asked panelists for their advice on breaking into the environmental field, building workplace connections, skills and trainings desired by employers, and even career opportunities. Alumni shared their career paths and offered valuable insights about the journey from entry level positions to more managerial level positions in the natural resources field. The panelists especially recommended that students be open to a variety of careers and to try to gain a diverse skill set to be able to adapt to many different situations.

**Immersive Learning Opportunities in NREM**

The NREM department, in partnership with Building Better Communities (BBC), will be offering two immersive learning courses during spring semester. Students will have the opportunity to take part in a unique learning experience that will allow them to bring their skills out of the classroom and into the community by creating tangible products for use by an area partner.

**Youth Outdoors: Engaging Teens with Stewardship and Recreation in Indy Parks.** As part of the NREM 405 Capstone course, Dr. Amy Gregg will challenge students with the real world problem of increasing environmental participation and awareness among teens through a partnership with Indianapolis Parks. Students will work together to draft ideas for curriculum and stewardship programs targeted toward teens for actual use in the parks system, and they will present their ideas to receive feedback from Indy Parks throughout the semester.

**Voices of Growth: Food, Farming and Sustainability in East Central Indiana.** Dr. Joshua Gruver, assisted by graduate student, Samantha Grover, will lead a team of students in creating a series of radio broadcasts focusing on the issues of food, farming, and sustainability in East Central Indiana. In collaboration with Indiana Public Radio (IPR), the student team will develop storylines, write scripts, collect interviews, and edit pieces for final broadcast on IPR in the East Central Region.

**NREM Instructors to Travel Abroad**

Dr. John Pichtel will be on sabbatical leave while traveling to the University of Stirling, Scotland as well as Pondicherry University, India. While abroad, Dr. Pichtel will be conducting field research at selected military bases, collecting soil material and analyzing for the presence of various explosives and propellants and attempting to determine the decomposition that has occurred among several compounds. Dr. Pichtel will also provide research seminars at both universities and use his research experiences to expand the perspectives in the second edition of his course textbook, “Waste Management Practices – Municipal, Hazardous, Industrial.”

Dr. Jarmila Popovicova will be spending spring semester in Costa Rica, where she will serve as Director for the Costa Rica Center. Students from multiple disciplines will join Dr. Popovicova in an immersive experience at the Timimbina Biological Reserve to learn about culture, sustainability, and environmental management in Costa Rica’s unique landscape while having the option to earn academic credit in Spanish, History, Biology, Anthropology, and/or NREM.
NREM would like to thank those individuals who contributed to this issue of the newsletter. Your input is appreciated! Our gratitude goes to:

- Natural Resources and Environmental Management
  West Quad 110
  Muncie, IN 47306

Visit us on the Web!
http://www.bsu.edu/nrem

Contact NREM and submit news for consideration in the newsletter!

- For more information about news and upcoming events, contact Connie Tyner, administrative coordinator, 765-285-5780, nrem@bsu.edu
- Please send news about promotions or new positions, recognitions, and changes in you contact information to Sue Taylor, alumni1@bsu.edu, 765-285-1080. “Like” NREM Alumni Society on Facebook, and visit their Website. Click here to nominate an alumnus for an award.

- Sue Taylor
- Laura Waldron
- James Eflin
- Joshua Gruver
- Amy Gregg
- John Pichtel
- Jarka Popovicova
- Kyle Johnson
- Kristen Dragoon
- Cathy Janiczak
- Kristi Todd
- Andrew Kennedy
- Brandon Fischer
- Dava McCann
- Lisa Zinn
- John Scheiber

Support NREM and Achieve Active Alumni Status!

The Ball State University Alumni Association has historically provided “active status” to alumni when they make monetary gifts to the BSU Foundation. These monetary gifts may be of any amount, to any BSU Foundation account, and take the place of a dues paying program that some other universities utilize. We ask that you consider becoming active -- it is a great way to say thanks for your own education and to ensure that Ball State continues to provide outstanding programs for its students and alumni.

Your gift may be designated to any account in the BSU Foundation, including NREM. (Indiana residents can receive a 50% tax credit up to $200 when they file form CC-40 with their state taxes, reducing their out-of-pocket cost. Please contact either the BSUAA or Ball State University Foundation for more information).

Not a Ball State graduate? We need your support as well. Please consider a year-end gift to one or more of the following BSU Foundation accounts that support programs and scholarships related to NREM:

- 6201 General welfare of the NREM department
- 6203 Operation of the Hults Environmental Learning Center
- 6204 NREM Alumni Society activities and award programs
- 6216 Research programs with the NREM department
- 6217 Soil research projects with the NREM department
- 6218 Soil and water conservation education activities
- 6219 Renewable energy and industrial ecology research
- 6250 NREM scholarships
- 6253 Clyde Hibbs Scholarship
- 6254 Alex and Ana Nicoloff Scholarship
- 6255 Charles Mortensen Fellowship

Questions?

To make a donation, please visit the NREM website and click on the link labeled “Make a Gift.” Or click this link: www.bsu.edu/giving

- For more information about giving to NREM, contact Darleen Lugenbuhl at dmlugenbuhl@bsu.edu
- To support the creation of a new scholarship, contact Dr. James Eflin, NREM Department Chair at 765-285-7055 or jeflin1@bsu.edu