The NREM Alumni Career Panel for Fall 2013 featured seven individuals who represented an interesting cross section of successful NREM alumni. The individuals who volunteered for the panel were of different ages, at different stages in their careers, and represented both public and private sectors. These loyal alumni included representatives from government agencies in Indiana and Ohio, working from the local to the state levels, as well as representatives from industrial corporations and the Indianapolis Zoo.

The audience was filled with undergrad and graduate students working on degrees in natural resources and environmental management eager to learn about opportunities for future employment. “The common thread that tied us all together that night,” said moderator Terry Coleman, “was that we all had or would very soon all have the same or a very similar educational foundation rooted in the natural sciences.”

For Coleman, the panel discussion confirmed that the basic core principles learned through Ball State’s NREM department are critical for placement and success in these areas of the workforce.

Echoing Coleman, Pritchett stated, “The panelists provided insight into how they were able to reach their career objectives, which should help future graduates excel in their chosen fields.”

For panelist Abby Thompson, Indianapolis Zoo Horticulturalist, taking advantage of opportunities was the resounding theme discussed toward the end of the evening. She recommends students get involved with volunteer activities, internships, and workshops. “Not only are the developmental skills invaluable,” said Thompson of these experiences, “but also [is] the chance to network and meet folks who may offer you your next job.”

Summing up the evening graduate student Cathy Janiczak stated, “I think in a down economy, these types of seminars give students hope that they can find a career they are interested in instead of just a job. The most important thing I took away is how good a degree in NREM looks to potential employers.”
Wilderness Trip to Red River Gorge, KY

Wilderness. The term elicits a wide range of emotions from people like anxiety, freedom, fear of the unknown… irrepressible joy! It’s one thing to learn about wilderness through books, academic articles, class discussions, and term papers. It’s another thing entirely to go to the wilderness and spend a few nights in the dark and tangled woods, which is what Dr. Joshua Gruver’s class did for four days this past October. Fourteen intrepid explorers headed off to Red River Gorge and Clifty Wilderness in eastern Kentucky, all part of the Daniel Boone National Forest.

Students camped on private land just outside the park boundaries and made trips to the gorge and surrounding environs. “I wanted the students to be exposed to the wilderness, to build and cook their food over a fire, to hear the yips of coyotes in the distant darkness, to feel the early morning chill that greets you when you unzip your tent at six in the morning as you get ready for the sun-rise hike to the ridgeline,” says Gruver of the trip.

Gruver’s Wilderness and Society course, offered this past semester, explored how the wilderness concept has evolved in the use of Roderick Nash’s *Wilderness and the American Mind* as a guide (among other literary and scientific works by Abbey, Cronon, Nelson, Thoreau, and others). The class followed America’s changing attitudes and perceptions through time toward wilderness and more broadly the conservation movement. Through class discussions and presentations, students analyzed arguments for wise-use/land conservation vs. land protection. They learned how governments, institutions, and political leaders define and shape wild ecosystems for the benefit and sometimes detriment of people who use and rely on such ecosystems.

What students said about the trip:

“[I had limited insight as to what kinds of management/regulation were involved in such an enormous plot of land… it helped me to put wilderness management into perspective.”

“I felt most engaged with nature when I climbed to the top of The Knobs and watched the sun rise over the treetops... This made me realize why I chose to go into [studying] natural resources.”

“My favorite part of the trip was being able to get away from civilization. It was extraordinarily refreshing to be out in the woods with very little to be stressed out by.”

“No distractions...I gain perspective from moments like that.”

The immersive experience of primitive camping, paired with a visit to the Gladie Environmental Center at Red River Gorge, helped highlight wilderness conservation issues. While at the Gladie Center, a US Forest Service educator spoke to the students about the history of the park, wilderness management, and strategies for managing the large numbers of visitors that come to the park every year.

“This trip is so important for all of us” says Gruver. “We not only learn about the details of park geology, the park’s wilderness management strategies (or the Limits of Acceptable Change), and forest biodiversity, but we also learn to communicate and engage with each other in ways that the formal classroom doesn’t always allow for.”

“[This opens up new and creative pathways for teaching and learning.” — Dr. Joshua Gruver

Toward this, Gruver and two graduate students in the course, Amy Rhodes and Michael Cooper, developed a series of outdoor activities for the trip to help students engage and observe wilderness in ways that perhaps differed from the usual.

For example, Amy read a passage from Emerson’s essay “Nature” while the students sat in an open cave perched on a mountainside overlooking the forest. Michael led students on a hike while they were blind-folded. With only a rope to guide them, students had to rely on their other senses to help them finish the course woven between the trees. Later the same day, the group moved from exploring their internal perceptions of the wilderness to a six mile hike through the gorge that included multiple expansive views of arches, rock towers and chimneys, and lush rhododendron-filled valleys.

Around the campfire that night over bowls of homemade vegetable soup (thanks to student Moya Smith), the stars burned brightly through the night sky and the coyotes began their night calls… a pack to the east and one to the west. The students answered their calls with their own wild voices. Amy broke out hand drums, tambourines, castanets, and other noisemakers and everyone began creating music together with wild abandon. Free from the constraints of society and the bonds of the familiar, the fourteen intrepid wilderness explorers raised their collective voices to the night sky, reflecting the sentiments of Thoreau, “…in Wildness is the preservation of the World.”
We met up with Amanda Johnson and Matt Pritchett just a few days before commencement on December 14, 2013. We asked them to share their experiences as students in the Department of Natural Resources and Environmental Management. Here are their stories...

By Amanda Johnson

“To explain my overall experience at Ball State University would mean defining one of the most difficult and rewarding two and half years of my life. I met people that restored my faith and passion in environmental causes, learned that I am capable of going beyond the tiny box in which I was placing my career, I completed more hours of work in a week than I thought I could find time for, and I came to realize the positive impact that I can make in the future.

“I enrolled in the Natural Resources and Environmental Management program hoping to understand the current waste management issues that face America and the world. I soon found out that there are many angles from which I could tackle these issues. I learned that most of them primarily stem from apathy by those who create the waste. I found that through phytoremediation (the engineered use of green plants to extract or degrade toxic substances in contaminated soil or bodies of water) toxic metal contamination left by industries could be dealt with in a sustainable manner.

“For my research, Dr. John Pichtel offered a plot of land in Muncie where I could grow test plants to determine their abilities for soil-metal remediation. I conducted a greenhouse study with the plants red clover, perennial ryegrass, and sunflower, and then determined their uptakes of cadmium, chromium, copper, nickel, lead, and zinc. I had never done a study like this, but I felt supported throughout the entire process by the faculty, my fellow students, and my family.

“Even into the first days of the graduate program, people would ask me, ‘So what’s next for you after graduation?’ Ideas floated around for awhile, but now I clearly hope to work in HAZMAT emergency response or HAZMAT cleanup. I never would have had a chance to even consider this career if I wouldn’t have taken the time to earn this degree. The pride and confidence I now have in myself grew exponentially during my time as an NREM graduate student. For anyone who is reading this and considering a graduate degree, I can tell you that every difficult moment was worth it for me!”

By Matt Pritchett

“Looking back on my experience going through the Natural Resources and Environmental Management program, I feel fortunate to have established what I hope to be lasting relationships with my professors and my peers. The curriculum has prepared me for challenges I may face in my future career. I think having learned about many different areas of natural resources and how they are interconnected will be highly beneficial, moving forward. The department was very supportive in helping me find the best grouping of classes to provide the knowledge base needed to pursue my career interests. These interests include environmental consulting, watershed management, and environmental project management.

“Working as a student employee in the department gave me valuable work experience that is sure to help me in my future endeavors. My position as a water quality technician provided me with the opportunity to use water-monitoring equipment and perform laboratory analysis of the water samples collected. My most recent position was as project manager of a brownfield site on the east side of Muncie. My supervisor, Dr. John Pichtel, empowered me to work independently at this site, giving me the opportunity to organize cleanup efforts with the city of Muncie. It was very gratifying to have local residents stop by the property and show their appreciation for our efforts to clean up this site and help to improve the community.

Thank you to all of my professors and classmates for a great experience at Ball State University!”

Save the date! The annual NREM Internship & Career Fair will be held on Thursday, January 30, 2014, from Noon until 4:00 p.m.
Ball State University Alumni Center (2800 West Bethel Avenue, Muncie).
Organizations with internship and employment opportunities can download the registration form at www.bsu.edu/alumni/nrem.
NREM Alumni Update: Where Are They Now?

Samantha Grover graduated from natural resources and environmental management with a master of science in May 2013. Her graduate research focused on the human dimensions of agriculture and natural resources. Recently, her master’s thesis received the Distinguished Thesis Award from the Ball State University Alumni Association. After graduation, Sam and her husband moved back to their home state of Minnesota where they live happily in Minneapolis. Samantha has been busy in the six short months since leaving Muncie. She just finished a part-time seasonal position with a sustainable food systems non-profit group called the Minnesota Project and now works as a communications associate in the Department of Horticultural Science at University of Minnesota.

For the Minnesota Project, Sam worked as a neighborhood coordinator in the communities of Brooklyn Park and Brooklyn Center. In these culturally diverse suburbs with a high proportion of low-income residents, she worked with a program called Garden Gleanings. One of her tasks at Garden Gleanings was to facilitate the distribution of fresh produce donations from local gardeners, community gardens, and farmers to food shelves. “Cumulatively,” says Grover, “our program (which covers several other neighborhoods in the metro area) helped bring over 50,000 pounds of fresh vegetables to local food shelves this season.”

Speaking of her new position at the University of Minnesota, Sam stated, "Although the main focus of my work is in coordinating communications and media, sometimes it feels like my job is the kitchen sink. One day I might find myself filling in as a teaching assistant for an undergraduate course, the next day I’m planning a research symposium. I’m grateful that I was able to get a range of experience academically and through my graduate assistantship while I was at Ball State. I feel like it's really helped me to be adaptable in the workplace." You can read her food blog at [http://www.cookingat45degrees.com/](http://www.cookingat45degrees.com/).

What’s Happening Around the Department?

There is always something exciting happening in the NREM department! Haven’t stopped by in awhile? Here’s a look at the last semester.
NREM would like to thank those individuals who contributed to this issue of the newsletter. Your input is appreciated! Our gratitude goes to:

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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 through 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 gift to one or more of the following BSU Foundation accounts that support programs and scholarships related to NREM:

6201  General welfare of NREM (including support of student research and travel)
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 or simply to stay in touch, contact Dr. James Eflin, NREM chair at 765-285-2327 or jeflin1@bsu.edu