

September 2012



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Requesting business cards!

NREM will develop a traveling bulletin board to show at recruiting fairs and other events, showcasing current/past jobs of our alumni. Let us show what you've been doing -- and give our future alumni ideas about opportunities! Please, send your business cards to:

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Ball State University



News from NREM

Students Explore Alaskan Resource Management

In May, Dr. John Pichtel led a group of 10 students on a 3-week long field study in Alaska. Students began their journey in Anchorage before heading down to Chugach National Forest and the town of Seward on the Kenai Peninsula. The group then spent a week "roughing it" while camping amidst stunning views in Denali National Park and closed the trip with an exploration of Fairbanks.

Over the course of the field study, students met with professionals from numerous Alaskan agencies to learn about the unique environmental and cultural management of the state.

NREM senior Joe Speer reflects on his field study experience. "I liked hearing different positions of professionals on environmental issues in Alaska, and I also liked interacting with them

after presentations and getting further explanation on their stances. One of the most striking parts of the learning experience was also just seeing how self-reliant many of the Alaskan people are. One of my favorite memories from the trip was seeing two grizzly bears dig along a creek when we stopped along the highway on the way to Denali."

Last May was the eighth time Dr. Pichtel has led students on excursions to Alaska, but every trip has been a little different, he says. "[This trip], our itinerary, including the persons and agencies we met with, changed significantly. An especially valuable addition was the Alaska Native Federation. My favorite part about taking groups to Alaska is the eye-opening revelations that students experience during meetings and tours, where they discover that management of



Above: Dr. Pichtel leads a hike in Chugach National Forest

natural resources is not black and white, but countless shades of gray."

Students came back from the trip with an understanding of the resource issues pertinent to Alaskan management and their relevance to the lower 48 states, as well as many wonderful photos and memories.

Natural Resources Club Kicks Off This Fall

The Natural Resources Club is starting up again for the year and is ready to accept new members and ideas for this year's activities. Lauren Prater, an NREM senior also minoring in biology and international relations, is the new club President. She is optimistic about the year to come. "I'm just really excited to hopefully see the club grow

- it lost some momentum last year, so I'm really hoping I can help it attract members. I want NR Club to be fun for people. My big goal for the year is a rockin' Earth Day event or even a full week of events! That's what I'm really going to be pushing at meetings."

The NR club held its first event on September 11, where Dr. John Pichtel presented a

timely discussion on emergency response. Lauren would also like to see the club do some fun activities such as kayaking, canoeing, hiking, camping this year, and she noted that new ideas are always welcome.

For more information about the Natural Resources Club, please contact Lauren Prater at nrclub@bsu.edu.



Below: Bikers participating in one of last year's Tour of Muncie events



Upcoming Tour of Muncie Bicycling Events

NREM alumni Kyle Johnson, '01 and David Bradway, '06 are working with other community members to organize the 3rd Annual Tour of Muncie bicycling event.

You may remember last year's event, which included various tours led by community volunteers of locations such as historical sites, green infrastructure, "weird" Muncie sites, and community gardens. In the upcoming year, the Tour of Muncie will take a slightly different approach, focusing on several smaller scale events throughout the year rather than doing one large-scale event like in previous years.

This fall, Tour of Muncie will kick off the year with a Muncie

-themed bicycle scavenger hunt on Saturday, September 29 at 1pm. Teams of 2 to 4 are encouraged to participate by solving clues while cycling around Muncie and competing to be the first team to finish with correct answers.

"I feel we have helped increase awareness of cycling in our community, showing that it can be fun and easy way to get around," says Johnson. "I would like to think that by having our cycling events based out of downtown, we had a hand in getting Muncie City Hall to see the need for bike lanes in Muncie. I also feel that we fill a niche in the cycling community by providing events that are more

suited to the casual cyclist, instead of the typical lycra-clad enthusiast that most cycling events tend to cater to."

Look for more Tour of Muncie events throughout future months, such as "Cranksgiving" a bicycle food drive in November, "The Worst Day of The Year Ride" in February, and the "Summer Solstice Ride" in June. Also, keep an eye out for Tour of Muncie in the Ball State Homecoming Parade!

For more information about Tour of Muncie and promoting bicycling in the community, please visit: www.tourofmuncie.com.

Summer Forestry Class Collects Field Data at McVey

"The help of the students in this course and the data they collected is invaluable to my research."

Below: McVey Memorial Forest, located on SR 1 in Randolph County, offers walking trails for public use. For more info, visit: http://www.stevepancol.com/randolph_co_.htm



In August, a team of 10 undergraduate and 2 graduate students earned course credit by participating in an intensive weeklong workshop led by Dr. Joshua Gruver to learn about forest management.

Students spent one day in the classroom learning about trees, forests, and private forest landowners and 4 days at McVey Memorial Forest learning how to lay out sample plots and how to collect forest stand level data. The class also received visits by forestry professionals from the state, district, and private organizational levels to help students understand more about forest management. Students had plenty of memorable educational experiences, such as fighting through pouring rain, August heat, and waist-high nettles while collecting field data.

Although the course was primarily a learning experience for students, the plant and animal habitat surveys the class conducted are being used for the development of an actual management plan.

Current NREM master's student Jennifer Curry is in the process of completing her creative project, which includes the writing of a management plan for McVey Memorial Forest. The forest property was gifted to Red Tail Conservancy in 1958, and included a will laying out the desires for future management by the property's donor. Jennifer was approached in fall 2011 by the Red Tail Conservancy to write a formal management plan, so she has focused her graduate work around private forest ownership and forest management.

Jennifer played a critical role in developing the forestry workshop for students, co-creating the course with Dr. Gruver.

"I wanted students to get involved not only for the help in collecting data, but also to offer them some hands on experience," says Curry. "I think it's very important to see real world applications as opposed to just reading about it in a book and discussing it in class."

"The data they collected will be used to determine what species are where on the property. This is important because each area of McVey will have to be managed differently due to the species present and habitat availability for wildlife. The help of the students in this course and the data they collected is invaluable to my research."

NREM at the Fair!

In August, the NREM department once again spent a fun-filled afternoon at the Indiana State Fair on Ball State Day. This year, the booth's theme was, "The Life Cycle of Lunch: Your Choices for Food." NREM staff and volunteers drew in fair visitors with a fun milk can ball toss to celebrate the year of the dairy cow and stumped visitors with trivia questions about food and agriculture. Visitors had a fun time guessing which states produced the ingredients for their favorite foods and learning which kinds of cows are best for making milk and ice cream. Frisbees and other giveaways were a hit with those who were willing to step up and take the challenge.



Above: NREM Master's student, Samantha Grover, stumps a visitor at the state fair

Two NREM Students Complete Doctoral Degrees

Congratulations to two NREM students who completed their dissertation work over the summer and were awarded doctorate degrees!

Nick Emmons completed his Doctorate of Education in Science with a NREM concentration under the advisement of Dr. Joshua Gruver in August 2012, focusing on Native American tribal resource management. Nick can now be found at Fort

Lewis College in Durango, Colorado, where he serves as an Assistant Professor of Native American and Indigenous Studies and an Affiliate Faculty in Environmental Studies.

Navid Asbaghi also completed his dissertation work over the summer under the direction of Dr. John Pichtel. Navid finished with a Doctorate of Education in Science degree, with work focusing on

phytoremediation (the removal of toxic materials from soils through the use of plants). Before completing his doctoral work, Navid also completed a master's degree in NREM. Navid is currently working in as a Computer Support Specialist at Bracken Library.

See below for summaries of Nick and Navid's dissertation works.

Below: Adam Metzger (BSU '97) and his two children



Spotlight on Alumni

What are NREM Alumni up to? All sorts of things! We recently heard back from alumnus, Adam Metzger (BSU '97). Here's what he said:

"I have recently accepted a position with **Nalco Company** as a Senior Technical Consultant in the Power and Primary Metals Business Units. The focus is on control of air-borne particulate and dust control solutions. I have worked for Nalco since 1999 in various roles and locations. I presently reside in Birmingham AL, with my wife and two children"

Let us know your news! Tell us where you are employed, where you volunteer, or something about your family. Send alumni news to *Sue Taylor*, alumni@bsu.edu, or call 1-888-1GO-4BSU.

Phytoremediation of Nitroglycerin in Smokeless Powders

By Navid Asbaghi

[My] study evaluated the feasibility of the removal of nitroglycerin (NG), as applied in commercial smokeless powder from soil. Smokeless powder was applied to soil at multiple rates in a laboratory environment, and NG-contaminated soils were seeded with oats or planted with live sedge plants. Compost was also used as a soil treatment. Soils were sampled at 7, 14, 30, and 60 days after initial planting. Determination of residual NG in the samples was performed using gas chromatography with an electron capture detector. Additionally, the populations of soil-borne bacteria were determined for each treatment. Microbial activity in the root zone was a major contributor to NG decomposition in the soil. Only modest quantities of NG removal could be accounted for by abiotic processes. NG decomposition by photolytic processes was observed; however, this effect was a minor contribution to NG removal from soil. Soil bacterial numbers remained relatively constant regardless of the rate of smokeless powder application. The data also indicate that addition of compost to the soil imparted a positive effect in NG decomposition and/or removal from soil.

Understanding Cultural Revitalization among the Pokagon Band of Potawatomi Indians

By Nick Emmons

[My doctoral] research seeks to understand the cultural revitalization of the Pokagon Band of Potawatomi Indians. Escaping and resisting pressures to remove, the Pokagon Band were able to remain within the confines of their homelands. Located in southwestern Michigan and northwestern Indiana, the Band is currently engaged in a revitalization process that seeks to facilitate contemporary innovations with traditional Potawatomi values. A multi-faceted qualitative approach to the interpretation of data combines semi-structured contextual interviews and phenomenological interviews with citizens of the Pokagon Band. Phenomenological interviews were used to understand more about the experiences of tribal citizens at cultural events. The participants identified the homelands, family relationships, and understanding tradition as factors that sustain their interest in the cultural activities of the community.

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Visit us on the Web!

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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 your 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.



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Thank You!

NREM would like to thank those individuals who contributed to this issue of the newsletter. Your input is appreciated! Our gratitude goes to:

- Sue Taylor
- Laura Waldron
- James Eflin
- Joshua Gruver
- Jennifer Curry
- Joe Speer
- Kyle Johnson
- John Pichtel
- Navid Asbaghi
- Nick Emmons
- Lauren Prater

Make a Difference: Support NREM

Your contribution is invaluable to the support of this department. The gift you make may benefit one or several of the accounts listed below. Thank you for your support of Ball State University's Natural Resources and Environmental Management program.

- Funding for general welfare of the NREM department #6201
- Operation of the Hults Environmental Learning Center #6203
- Activities and awards of the NREM Alumni Society #6204
- Funding for research projects within the department #6216
- Funding for soil research projects within the department #6217
- Funding for soil and water conservation education activities #6218
- Funding for renewable energy and industrial ecology research #6219
- NREM scholarships #6250
- Clyde Hibbs Scholarship #6253
- Alex and Ana Nicoloff Scholarship #6254
- Charles Mortenson Fellowship #6255

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