

# NREM Update

SEPTEMBER 2010

## FEATURED IN THIS EDITION:

- **NREM Experiences Colorado: A student's account of the Colorado field study with Dr. Amy Gregg**
- **NREM in Alaska: A student's account of the Alaska field study with Dr. John Pichtel**
- **Student Group BEATs Overconsumption**
- **Hazardous Waste? No Problem? A student's account of the HAZWOPER course with Dr. John Pichtel**
- **Welcome, New Faculty!**
- **Introducing Outdoor Pursuits!**
- **Donating to NREM**
- **REMINDER! The NREM picnic is Oct. 1 at 5:15 p.m. at the pavilion across from BMH. Please join us!**

Edited by

- Lanette Erby
- Dr. James Eflin

## NREM Experiences Colorado! By Brittainy Wallick, NREM Senior

Higher education isn't limited to the traditional classroom setting, and for two weeks this past May, several NREM and Historic Preservation students from Ball State University found out first hand just how interesting experiential learning can be.

Students traveled to the south central region of Colorado to study in the Sangre de Cristo Mountains to learn about a wide range of topics from forest ecology to the many historic sites that dot the landscape. There were also several guest speakers who came to the lodge during class time to speak with students about subjects like railroad history, as well as land trusts and water rights.



Hiking on Rainbow Trail in the Sangre de Cristo Mountains

Along with various class time activities, students traveled to different parts of Colorado to experience both natural areas, like the Great Sand Dunes National Park; and cultural sites, such as local museums and historical district tours. Ample time was also provided to go for nature hikes, visit local towns, or simply rest up at the lodge before a hearty, home-cooked meal. At the end of our journey through Colorado, there was a special trip set aside just for fun as students and professors took an afternoon for some white water rafting on the Arkansas River.

The Colorado field study was an experience that reaches far beyond a means to gain some extra credit hours; it was an experience that brought two groups of students together that otherwise might never have met. Students learned about the important issues that surround the people of Colorado and how these issues relate to others around the country, and gave this group of students and professors memories to last a lifetime.



Students at Great Sand Dunes National Park



Rafting on the Arkansas River

## NREM in Alaska! By Ann Raffel, NREM Senior; and Brandon Hart, NREM Senior

The Alaskan field study was an experience of a lifetime. We flew out of Indianapolis on May 9, stopping for a day in Seattle and arriving in Anchorage on the 11<sup>th</sup>. During our stay in Anchorage, we visited the Alaskan Department of Fish and Game's Division of Wildlife Conservation, the Department of Natural Resources, the Alaskan Native Heritage Center, as well as the Anchorage Museum of History and Art. We also visited Earthquake Park, an area where huge tracts of land slid into the nearby inlet during the 1964 earthquake.

After the whirlwind two days in Anchorage, we drove to Seward which is located along the southern coast. Along the way we stopped (or at least tried) to see the Portage glacier, but bad weather forced us onward. Once in Seward, we went on a whale watching cruise, visited the Sealife Center, and climbed halfway up Mt.



Anchorage Skyline



Whale watching

Marathon.

We began our drive north after three days in Seward and stopped at the Kenai Fjords National Park, where we walked through knee-high snow to get to the toe of Exit glacier. We next stopped in Chugach National Forest where we camped for two nights and hiked to the Little Russian Falls. Some of us also had the opportunity to go horseback riding.

Denali National Park was the next destination. After a long day of driving we were rewarded with our first view of Mt. McKinley and a night in Talkeenta. A rugged air seemed to surround Mt. McKinley the next morning as we drove to Denali National Park where we stayed for three days. While in Denali, we hiked often and saw various kinds of wildlife, including a close encounter with a female



Grizzly Bear and Cub at Denali

Grizzly bear and her yearling cub.

We stayed the next five nights in Fairbanks, where we visited a permafrost tunnel from the Cold War era, the University of Alaska-Fairbanks, Chena Hot Springs, and the Alaskan pipeline. We also had an opportunity to talk with Mary Shields, who, in 1974, became the first woman to finish the Iditarod. Unfortunately, all good things must come to an end and on May 27 commenced the journey back to Anchorage to pick up our ride home at the airport. The next day we touched down in Indianapolis after having a life-changing experience, and for many of us, the desire to return.



Piece of the Trans-Alaska Pipeline System

## Student Group BEATs Overconsumption By Kurtis Moss, NREM Senior, BEAT President

The Ball State Energy Action Team (BEAT) is a student-led organization that presents and publicizes energy-related opportunities on Ball State's campus, as well as increases awareness of energy use and ways to reduce energy consumption. BEAT's main goal is to provide resources to help students learn about energy and how they can personally reduce energy consumption at Ball State and at home.

BEAT is in its second year of developing and promoting energy saving tips, contests, ideas, and games that can be found by [visiting our site](#).



BEAT Logo

Last year, BEAT awarded a Nintendo Wii for the video energy challenge, a contest that encouraged students to record themselves saving energy at Ball State. BEAT has challenged and rewarded students for practicing good energy saving habits, such as shutting off lights when exiting a room, using cold water when washing clothes, and replacing incandescent light bulbs with CFLs. BEAT even handed out free CFLs at Earth Day. For more energy

tips and tricks, as well as a fun energy quiz, [click here](#).

This year, BEAT hosts a 2010 Fall and 2011 Spring Residence Hall Energy Challenge. Students in residence halls win prizes while competing to save the most energy. BEAT also made an appearance at the 2010 Lugar Collegiate Energy Summit at the Indianapolis Art Museum, where we spoke with other student-led organizations and professionals. Contact BEAT for more information on how you can get involved on [Facebook](#), [Twitter](#) or by [email](#).



BEAT at Lugar Energy Summit

# Hazardous Waste? No Problem!

By Jennifer Crawford, NREM Graduate Student

I'm not a scuba diver, so I had to give myself a pep talk as I sat there sweating in my Level A gear listening to my tank release air upon demand. "Remember, you CHOSE to take this 40 hour HAZWOPER certification in August..." I reminded myself.



"Walk about" West Quad in full gear

I was participating in an intensive 5-day, 40-hour OSHA course directed by Dr. John Pichtel to learn Hazardous Waste Operations and Emergency Response Standard, more affectionately known as HAZWOPER.

My summer classmates and I were donning the full chemically-protective suits and SCBA (self-contained breathing apparatus) and were preparing for a "walk about" West Quad to experience the movement, sound,

and visual limitations in a normalized setting. Some people find the suits claustrophobic; I was struggling with the elevated sound of my breathing and the sensory deprivation from the classroom environment.

We were all preparing to become First Responders in an emergency situation with unknown or hazardous materials present. All week we engaged in hands-on opportunities. We practiced sampling unknown materials for pH, oxidation state, and radiation level. Using Draeger tubes we assessed the presence of toxins in the atmosphere. We also learned how to use Material Safety Data Sheets (MSDS), Emergency Response Plans, and the Incident Command System. The week-long experience was built toward an

emergency simulation complete with a "hot zone" and the necessary decontamination protocols.

A computer training just cannot provide the same experience as this hands-on workshop. This class was so visceral, we didn't graduate until we had a good glimpse of what we could experience in the field. HAZWOPER grads may not be scuba divers, but we can carry our own oxygen and be ready for the next challenge.



Students in full chemically-protected suits and SCBA

# Welcome, New Faculty!

By Lanette Erby, NREM Graduate Student

## Dr. Joshua Gruver

Dr. Gruver grew up in the forested hills of Maryland near the Appalachian Trail. His previous education includes a B.S. in Biochemistry at Virginia Tech, an M.S. in Forest Resources at Penn State, and Ph.D.'s in both Forest Resources and the Human Dimensions of Natural Resources and the Environment from Penn State.

After completing his B.S., Dr. Gruver joined the Peace Corps and lived in Papua New Guinea for 2 years. "That experience plus several other lengthy travel experiences in less developed countries really changed the way I saw and thought about the world," said Dr. Gruver. "As a result, I eventually decided to go to grad school to better understand natural resource and people-related issues."

Dr. Gruver enjoys using both quantitative and qualitative research methods to study people and communities and their relationships to natural resources, as well as



how communities perceive and respond to natural resource-related risks.

Dr. Gruver also utilizes humor to capture the students' attention, and then engages them with issues, concepts, and ideas via small and large group discussions, related stories, as well as encouraging them to talk about their own experiences. "I want to co-create a learning environment where we explore

issues in ways that allow us to talk about deeper concerns related to how we live on this planet," said Dr. Gruver.

## Dr. Juan Carlos Ramirez-Dorransoro

Dr. Ramirez is originally from Cali, Colombia, South America, where he obtained a B.S. in Mechanical Engineering and worked in the paper, food processing and metal processing industries for several years. Dr. Ramirez comes to us from Purdue

University, where he earned a M.S., a Ph.D., and Post Doctoral training in Environmental Engineering.

His previous research includes indoor control of fugitive emissions of pharmaceutical operations, as well as ambient emissions of particulate matter and gases (ammonia, hydrogen sulfide, carbon dioxide, volatile organic compounds, and nitrogen oxides). Dr. Ramirez is currently working on research pertaining to particulate matter and gaseous emission control in industrial environments.

"I like to introduce the concepts simultaneously with practical applications, and complementing them with laboratories or field trips to industrial sites," said Dr. Ramirez on his teaching methods. "I hope that each student will remember my classes during their professional practice."



# Welcome, Outdoor Pursuits!

By Lanette Erby

PAGE 4



It's safe to say that those in the environmental field have an affinity for the outdoors, so when Ball State opened the new Outdoor Pursuits (OP) program as part of the \$40 million recreation center renovations, we thought it was definitely worth a

mention in our next newsletter, especially since our esteemed alumni receive the affiliate discount for any services purchased and equipment rented.

The Outdoor Pursuits Program includes a climbing wall, trips program, an outdoor resource center, equipment rental, and outdoor skill clinics and workshops. The goal of the Outdoor Pursuits



program is to grow into a dynamic year-round program that runs smoothly and meets the needs of BSU students, faculty, staff, alumni, and the East Central Indiana community.

OP staff plans adventure trips each semester for backpacking, climbing, kayaking, whitewater rafting, fly fishing, biking, and camping, or you can schedule one just for you and your friends, family and/or co-workers. [Click here for a list of upcoming trips!](#) Do you already have the experience to lead one of these trips yourself? Let OP rent you the gear you will need at a price that's easy on your wallet! [Check out their selection here!](#)



Ready to book a trip and rent some equipment, or do you still have questions? [Contact OP](#) to get started! Get outside and play!

## NREM Fall Picnic

All alumni are invited to the NREM Fall Picnic on October 1 at 5:15 p.m. at the pavilion by the women's soccer fields across from Ball Hospital!

It is a great chance to meet our new faculty and graduate students while enjoying grill food and various home-cooked sides.

Email [Connie Tyner](#) if you plan to attend so that we can plan to have enough food. We hope to see you there!

For more information about upcoming events, becoming involved or general information with the Natural Resources & Environmental Management Department, please contact Ms. Connie Tyner, Administrative Coordinator (information provided right).

If you are interested in being considered for membership of the NREM Alumni Society, please contact Mrs. Sue Taylor at [alumni1@bsu.edu](mailto:alumni1@bsu.edu).

The NREM Community would also like to thank everyone who helped contribute to the development of this newsletter.

Natural Resources & Environmental Management

2000 W. University Ave.

West Quad Rm. 110

Muncie, IN 47306

Phone: (765)285-5780

Fax: (765)285-2606

Email: [nrem@bsu.edu](mailto:nrem@bsu.edu)

## Donating to NREM

If you would like to consider making a donation to the Natural Resources and Environmental Management Department, please visit [here](#) or use the link provided on the NREM [website](#) and click on the link for "Giving to Ball State." Below are just some of the areas that you may consider when making your donation.

Thank you for your consideration in supporting Ball State University's Natural Resources and Environmental Management program. The contribution you make to the NREM department may benefit any one or several of the accounts below:

- Funding for the general welfare of the NREM department: #6201
- The operation of the Hults Environmental Learning Center: #6203
- The activities 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 activities to aid in the understanding of soil and water conservation: #6218
- Funding for renewable energy & industrial ecology research and teaching: #6219
- NREM Scholarship: #6250
- Clyde Hibbs Scholarship: #6253
- Alex and Anna Nicoloff Scholarship: #6254
- Charles Mortensen Fellowship: #6255

For more information on giving to NREM, contact [Mark Robbins](#) at 765-285-7055 or [marobbins@bsu.edu](mailto:marobbins@bsu.edu). If you are interested in supporting the creation of a new scholarship, please contact [Dr. James Eflin](#), NREM Department Chair, at (765) 285-2327 or [jeflin1@bsu.edu](mailto:jeflin1@bsu.edu).



BALL STATE  
UNIVERSITY

EDUCATION REDEFINED®