College of

NATURAL RESOURCES NEWSLETTER

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College of Natural Resources 5200 Old Main Hill Logan, UT 84322-5200 (435) 797-2452 www.cnr.usu.edu

- Nat B. Frazer Dean
- Mark Brunson
 Department of
 Environment and
 Society
- Chris Luecke Department of Watershed Sciences
- Johan du Toit Department of Wildland Resources

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Spring 2010 Graduation

College of Natural Resources' Valedictorian

anielle "Dani" Babbel completed her USU experience with the unexpected honor of having to choose between two Valedictorian invitations. Both the College of Humanities, Arts, and Social Sciences and College of Natural Resources asked Babbel to represent their 2010 graduating student body at their graduation ceremonies. The College of Natural Resources was thrilled when Babbel chose to represent CNR.

Babbel began her education at Utah State in the fall of 2005. She majored in Geography and Anthropology and minored in Spanish and Chemistry. She has a love for international study and has studied in a wide variety of places and circumstances including an ethnographic field school in Peru, researched under a professor on migration in Mexico, assisted in forming an NGO in Rwanda, and a went on a medical internship in Mexico. She looks forward to attending medical school. With her skill of speaking Spanish, she hopes to cater her medical practice to the needs of the Latino populations that currently may not receive quality care because of their marginalized place in society.

Babbel was awarded USU's Bill E. Robins Memorial Award which is presented to the student who represents the best youth has to offer, "Who excels academically, displays outstanding leadership ability, shows dedication to Utah State, and possesses traits that set him or her apart as a rare individual." Claudia Radel served as her faculty mentor.

Dani, doubled as CNR's Scholar of the Year and Undergraduate Researcher of the Year. CNR looks forward to witnessing the great work this alumnus will accomplish in the coming years. •



USU Geography Students inducted into International Honor Society

even students from the College of Natural Resources were inducted on April 30 into Gamma Theta Upsilon (GTU), a prestigious international geographic honor soci-

Undergraduates Audrey Adkins, Tyler Allen, Dani Babbel, Jason Folkman, Melissa Kane, Nathan Payne and graduate student Jodie Madsen joined the society in a ceremony hosted by Department of Environment and Society faculty members.

"Invitation to membership in Gamma Theta Upsilon is based on academic achievement and successful completion of a least three geography courses," said Claudia Radel, GTU advisor and assistant professor in the ENVS Department.

"We're excited to have so many inductees this year," said Ann Laudati, assistant professor in ENVS, who opened the gathering. "Being a part of GTU helps to promote the study of geography and fosters scholarship among our students."

Derrick Thom, emeritus professor of geography, addressed the gathering and told inductees, "I hope your involvement in the society is the beginning of an exciting education and career path for you."



Students members of USU's GTU chapter are, standing from left, Tyler Allen, Dani Babbel, Melissa Kane, Jason Folkman, seated from left, Nathan Payne, Abigail Montandon, Jed Anderson and Jodie Madsen. Not picture are Audrey Adkins and Dennen Frazier.

Thom said geography is a versatile field that crosses diverse disciplinary boundaries and provides a foundation for a variety of career fields including business, teaching and science. "I encourage you to travel abroad, experience varied cultures and learn a second language."

USU established its Gamma Theta Upsilon chapter in 1982. Society membership offers access to networking, scholarship, travel and research opportunities. •



Citizen Forester: Barbara Middleton **Honored for Community Service**

or the previous year Barbara Middleton, CNR's interpretive specialist, was named Citizen Forester of the Year by the Utah Community Forest Council and the Utah Chapter of the International Society of Arboriculture. Middleton is a staff member in USU's Department of Environment and Society.

"Barbara has shown strong support to the community of North Logan by serving as chair of the city's Parks and Recreation Board, helping with the adoption of a City Street Tree Ordinance and was essential in helping North Logan obtain the National Arbor Day Foundation's Tree City USA designation," the award citation read. "Barbara's major contributions to urban forestry were her efforts in planning and planting 106 trees at North Logan City's cemetery and Elk Ridge Park."

The recognition is appreciated but the educator says the real rewards come from working with students on varied efforts to help people better understand natural and cultural landscapes. In addition to the tree-planting project, her endeavors include developing interpretive signs and exhibits for parks, trailheads, historical sites and urban areas.

"Interpretation is about communicating complex information and issues in ways that engage a broad range of audiences," she says. "Each project is a great learning and problem-solving opportunity for students." •

WATS Researchers Earn Top Honors at National Sedimentation Conference

wo CNR student researchers captured top awards at the ninth annual Federal Interagency Sedimentation Conference, held jointly with the fourth annual Federal Interagency Hydrologic Modeling Conference, June 27-July 1 in Las Vegas, Nevada.

Doctoral student Susannah Erwin received first place in the student poster competition for her presentation, Sediment Transport and Channel Form in a Reconfigured Gravel Bed. Barbra Utley, a postdoctoral fellow, placed first in the student paper competition with Evaluation of a Permittivity Sensor for Continuous Monitoring of Suspended Sediment Concentration, an article based on dissertation research Utley recently completed at Virginia Tech.

Both scholars study river processes and environments, sediment transport and monitoring, as well as stream restoration within USU's Department of Watershed Sciences. Erwin, who is pursuing a degree in watershed sciences, conducts research with faculty advisor Jack Schmidt. Utley conducts studies with faculty members Schmidt, Patrick Belmont, and Peter Wilcock.

Erwin's recent research focuses on channel changes along a 2.5-mile stretch of the middle Provo River in Utah's Heber Valley resulting from a major restoration project completed in 2004.

Utley's research focuses on suspended sediment as a leading cause of water quality impairment.

"Among other impacts, suspended sediment reduces the diversity and abundance of aquatic organisms, serves as a carrier for contamnants such as phosphorus, bacteria, heavy metals and pesticides and drives up water treatment costs," Utley says.

Research such as Erwin's & Utley's projects help better predict the effectiveness of restoration efforts. ◆



From left, USU's Barb Utley, placed first in the federal interagency conference's paper competition with co-winner Shea Burns of Arizona. USU's Susannah Erwin, right, placed first in posters. Purdue's Sayjro Nouwakpo, second from right, took second.



Another Salt Lake: Wayne Wurtsbaugh to Study Argentina's Mar Chiquita

As he has for the past 20 years, Utah State University professor Wayne Wurtsbaugh will spend next spring studying a vast, shallow saline lake that supports the migration of large bird populations. But in 2011, he'll be conducting research in the southern hemisphere on Argentina's Mar Chiquita rather than North America's Great Salt Lake, his usual study site.



Wayne Wursbaugh, professor in Department of Watershed Sciences

Wurtsbaugh is a 2010 recipient of a Fulbright Senior Fellowship. He travels to South America in February 2011 to conduct a short course on aquatic ecology for graduate students and advanced undergrads while also pursuing limnological research at Universidad Nacional de Córdoba

Like Great Salt Lake, Mar Chiquita underwent massive flooding in the 1980s. Water levels have receded dramatically yet vegetation killed by salt water remains.

"It's hard to convince residents, whose memories of the flooding are still vivid, that the lake is actually shrinking," Wurtsbaugh says. "That's why generating more research on the lake is important." •

Jessop Boden presents work at NCUR 2010

CNR's Jessop Boden, was one of 17 students representing USU at the 2010 National Conference on Undergraduate Research (NCUR) held at the University of Montana.

The event brought together more than 300 national and international undergraduates involved in scholarly and artistic activities representing a range of disciplines.

Boden, a wildlife science major, represented the college well. "My project on lesser snow geese and their populations can be of interest to the general public," said Boden. "Almost everyone is concerned about the exploding population. With approximately 20-25 million birds nationwide, they take massive amounts of land to breed. The destruction is mostly contained to the coastal grasslands of northern Canada, their breeding grounds."

Boden's faculty mentor was Dr. Dave Koons. "Faculty mentors are key to the success of our students and the Undergraduate Research Program," said Brent Miller, vice president for research. "Utah State has had organized undergraduate research for 35 years, but the culture of faculty mentorship and student research has been present from the university's beginning." ◆



Jessop Boden Photo by Jared Thayne

RESTORING THE WEST CONFERENCE 2010 Managing Plant and Animal Conflict

October 26 & 27, 2010, Utah State University, Eccles Conference Center, Logan, Utah

The 2010 Restoring the West conference will examine management conflicts between animal populations and the plant communities they inhabit. Talks will focus on wildlife and vegetation issues in forest and sagebrush steppe environments. Featured themes include large herbivore relations to aspen and sage grouse interactions with sagebrush. Additional topics include interactions between other animals, ecosystems, and humans. We see this as an opportunity to explore, debate, and propose solutions to contentious issues in the Intermountain West. Discussions will appeal to managers and researchers, including public and private land managers, landowners, and others. This year's conference will include two full days (October 26th and 27th) of invited presentations with a poster session. Poster submissions are requested. •

www.restoringthewest.org





Dr. Adam Beh joins the Department of Environment & Society

s a youngster playing in the "wildlands" of Detroit's seething alleyways and abandoned warehouses, Dr. Adam Beh dreamed of some day working as a park ranger in the great sayannah of Africa.

Beh was drawn to sub-Saharan Africa in his early adulthood. In 1999, soon after graduating from Grand Valley State University (MI), he embarked on a two-year agriculture service experience with the Peace Corps. "It changed my life in ways I still do not fully understand," said Beh.

Assigned to Niger, West Africa, Beh witnessed first-hand the delicate relationship between human communities and natural resources and worked collaboratively with farmers and aid organizations in promoting sustainable agriculture practices. "By the time I visited the East African savannahs of my childhood dreams, I found myself caught between supporting conservation agency agenda and providing for more immediate community needs," said Beh.

Beh realized if he was to promote conservation, he would need to pay attention to the human condition. He brought this perspective to his park ranger profession in Colorado where he noticed many of the resource and society concerns closely paralleled those of the rangelands of East Africa.



Dr. Adam Beh standing with rangers of Kenya's West Gate Community Wildlife Conservancy during capacity building training. Photo provided by Adam Beh

After the Peace Corps, Beh's work in Africa continued. His research focused on role collaborative processes play in sustainable resource management, particularly how an understanding of cultural narratives can provide land managers appropriate options for development.

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Department of Wildland Resources Congratulates Beth Burritt



NR is pleased to announce Beth Burritt's promotion to Extension Assistant Professor. Burritt has worked for the College for the past 27 years. Her new title will be Area Rangeland Resources Agent for Box Elder, Rich and Cache counties.

Burritt received her BS in Animal Science from California Polytechnic State University, San Luis Obispo and an MS in Animal Science from Utah State University "many years ago," Burritt says. She worked with Fred Provenza for the past 25 years as a Research Associate studying how learning and experience of livestock affects their diet selection. The first seventeen of those years were spent conducting research and the last eight were on outreach including creating and maintaining the BEHAVE website, the BEHAVE Facilitators Network (a training program for ag professional on behavioral principles), several instructional CDs and DVDs, several dozen fact sheets and a bi-monthly newsletter.

In Burritt's new position, her focus will include a broader range of issues facing rangeland management. She is especially interested in the Utah Grazing Improvement Program's Rich County Allotment Consolidation Project. She'd like to work more with land managers on demonstration projects to use behavioral principles to improve sustainability and profitability of range livestock operations, including but not limited to training cows to eat noxious weeds, improving biodiversity in sagebrush steppe using livestock grazing and improving livestock distribution on rangelands without fences. •

A Familiar Radio Voice joins CNR

familiar voice heard weekly on Utah Public Radio is now one of CNR's newest professional staff. Holly Strand is one of two radio hosts of Wild About Utah, a three minute show highlighting different aspects of Utah nature which plays four times weekly on Utah Public Radio.

CNR welcomes Holly Strand as the new Proposal Development Specialist for Wildland Resources. She will also be serving research faculty in the Ecology Center and the Biology Department in the College of Science.

Holly's job will relieve faculty of some of the burden for seeking funding opportunities, putting together proposals and developing funded research partnerships.



She is part of a team of grant writers hired by the Vice President of Research's newly created Office of Proposal Development (OPD).

Launched in 2008, the OPD is placing experienced grant writers in different departments around the University. During 2010, the OPD team assisted USU researchers with over 1,400 proposals.

A geographer by training, Holly received her Master's Degree from the University of Colorado. She has professional experience in conservation biology and conservation planning, remote sensing and GIS, environmental and science education, monitoring of biodiversity indicators, and biogeography.

She is fluent in Russian, having led over 30 educational and cultural exchange groups to Russia and nearby countries. For ten years she worked for the World Wildlife Fund as a technical advisor to network offices around the world.

She has co- written large project grant applications to NASA and USAID and has served on two review panels for NASA's Ecological Forecasting program element in Applied Sciences. As Executive Director of the Stokes Nature Center, Strand was responsible for all proposal writing and fundraising.

Holly lives in Providence with husband Chuck and daughter Lena. ◆

Welcome Holly!

Dr. Adam Beh— Visiting Faculty

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Beh directed a participatory action research project in northern Kenya, where he provided park rangers, school teachers, students and community members with digital cameras and asked them to document a way forward for the region's conservation education efforts. The project was a successful attempt at allowing disenfranchised populations the opportunity to tell their conservation story through their own eyes and words.

To date, the display of images taken during the Kenya project continue to provide the Samburu communities a collective and locally relevant road map for future conservation outreach and education projects.

CNR is pleased to announce Dr. Beh will be serving in a one year visiting professor position in the Department of Environment & Society. He came to Logan from Fort Collins, CO, where he completed his PhD in the Human Dimensions of Natural Resources department at Colorado State University.

Beh's research interests include communitybased conservation, sustainability education, participatory research methods, role of culture in negotiating sustainable resource management and narrative analysis.

In his free time he enjoys any activity that is done out-of-doors, amateur photography and the performing arts. ◆

Welcome Adam!

2010 CNR "Of the Year" Awards



Scholar of the Year

Dani Babbel



Teaching Assistant
of the Year
Rebekah
Downard



Outstanding Senior of the Year
Seth Ex



Research Assistant of the Year **John R. Olson**



Researcher & Teacher of the Year **Dr. Phaedra Budy**



search Mentor of the Year Dr. Frank Howe

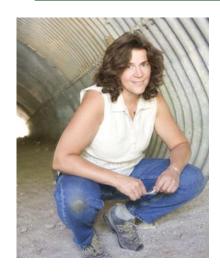


Advisor of the Year **Dr. Karen Mock**



Employee of the Year Tracy L. Jones

Denver Zoo's "Conservationist of the Year"



Dr. Patty Cramer of the Department of Wildland Resources was selected this year as Denver Zoo's "Conservationist of the Year". The award, which she will receive in October, includes a grant for her project on mapping wildlife corridors in Utah. •

One of Cramer's research cameras catches a bull Mule deer using a wildlife crossing.



Joseph Ray Miller Memorial Endowment

he Joseph Ray Miller Memorial Endowment Fund was established this year in honor of Joseph Miller whose life was dedicated to service in the National Park Service (NPS) and to training future stewards of our nation's parks. His passion for protecting parks was inherited from his father; between the two Millers they dedicated 81 years service to the NPS.

Miller was born in 1935 while his father was Superintendent at Chaco Canyon National Monument. Miller grew up in the National Parks.

As a young man, Miller followed his parents to the Grand Teton National Park where his career in NPS began.



Joseph Ray & Sheila Miller on their 25th Wedding Anniversary



Summary of Miller's NPS service:

Mammoth Cover (Kentucky) - Junior Position

Grand Teton National Park (Wyoming) – Junior Position
Bandelier National Monument (New Mexico) - Maintenance Foreman
Canyonlands National Park (Utah) - Chief of Maintenance
Yellowstone (ID, MT, WY) - Management Assistant to the Superintendent
Kennesaw Mountain National Battlefield Park (Georgia) - Superintendent
Grand Canyon National Park (Arizona) – Chief of Maintenance
Virgin Islands National Park – Superintendent
Denver Service Center – Supervising construction projects in Yellowstone & Glen Canyon.
Glen Canyon National Park (AZ, UT) - Chief of Maintenance
Canyonlands (Utah) - Senior Position
Mid-Atlantic Regional Office (PA) – Associate Regional Director

Following a brief period of "retirement" Miller returned to the Park Service at Canyonlands National Park and was selected to serve as the Associate Regional Director for Management and Operations at the Mid-Atlantic Regional Office in Philadelphia. The opportunities that Philadelphia and the mid-Atlantic presented were a highlight in his NPS career.

Miller retired from the NPS in October 1992, after 40 years of service. The Park Service defined Miller's life with a firm devotion to the success of each area where he served.

Soon after Miller's retirement, he and his wife were talking about his Park Service years. Miller's wife, Shelia Gates Miller, recounts, "I asked him what he felt his greatest accomplishment was. He thought for a few minutes. I expected him to say it was one of his positions or awards. Instead, he said when he looks around the Park Service and sees how many Chiefs of Maintenance in NPS were his former employees, the young men in whom he had seen potential and helped them develop it, this was his greatest accomplishment." At that time the Chief of Maintenance in the

Washington Office, along with Chiefs at a number of major parks were former equipment operators, journeyman craftsmen, etc. who Joe had selected to mentor over the years.

Throughout his life Miller thrived in the outdoors. He was an excellent horseman, hunter and fly fisherman. He held a private pilot's license and enjoyed his Cessna 172. He liked camping and annual pack trips into the Wyoming wilderness. In 1997 he built a log cabin in Kane County, Utah, which was his pride and joy.

Sheila said, "Joe was an important part of my extended family. I used to joke if Joe and I ever divorced my parents would ask for custody of Joe. He was very close to his daughters and the quintessential grandpa."

Since Miller's unexpected passing two years ago Sheila has made numerous contributions in honor and memory of his life. One of these contributions, the Joseph Ray Miller Endowment will be used to support students serving in internships throughout the NPS. ◆



Photo by Alex Quistberg



Dennis D. Austin, '72 Range Science Alumnus

ennis D. Austin, Range Science alumnus, has authored a new book written to help the reader better understand the behavior of deer. The book is entitled *Mule Deer: A* Handbook for *Utah Hunters and Landowners*.

Mule deer are familiar sight to residents of Utah and the Intermountain West. Sportsman hunt them, others seek a glimpse of them while hiking or camping, drivers dodge them, and homeowners sometimes delight, sometimes fret as deer visit backyards and gardens. Deer, many of which live in the towns, cities and farms that sprawl over their historical habitat, sometimes seem ubiquitous. Useful information about them, either scientific or practical, is less widespread.

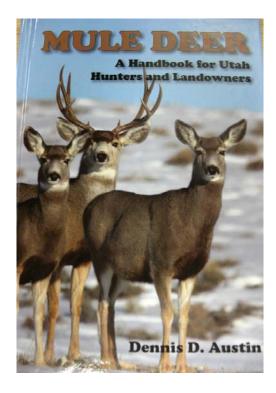
Dennis Austin is a retired research scientist with more than thirty years of experience studying mule deer as a wildlife biologist for the Utah Division of Wildlife. In this handbook he fills that need for information, offering a one-stop reference packed with up-to-date knowledge and practical advice on mule deer. Data on deer herds, analysis of their habitat and forage needs, their seasonal cycles, understanding of their relationships with livestock and predators, wildlife management policies, what landowners would know about dealing with deer, practical considerations for hunters, and much more—all can be found here in this complete, well-illustrated guide to this history, biology, hunting and management of mule deer.

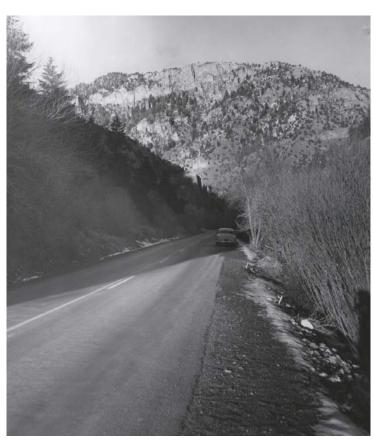
This book is available on Amazon.com. If you know Dennis and would like to purchase a personal copy he can be reached at 435-245-4147. lack

In Memory

1939	Rex Decker, Forestry
1939	Jack Nielsen Jorgensen, Forestry
1950	Merrill M. Lemke, Forestry Management
1950	Robert H. Williams, Forestry
1951	Boyd C. Martin, Fisheries & Wildlife
1954	Russell H. Murray, Range Science
1955	David P. Lodzinski, Range Management
1963	Carl J. Thurgood, Forest Range Management
1967	Bruce Walker, Forest Management
1968	Roger A. McKeel, Game Management
1970	Dennis Child, Range Science
1977	David Grierson Forestry

Special thanks to Mary-Ann Muffeleto who serves as the principal writer for the newsletter and Rachel Quistberg who designed the new format.





Road to Summer Camp 1959, Photo by S.R. Tocher