The 2012-13 year was successful for the Quinney College of Natural Resources at Utah State. We started the year with a heartfelt celebration of the contributions made to our College by the S.J. and Jessie E. Quinney family. This naming event recognized the most recent gift from the foundation, and celebrated the history of support provided by one of the outstanding philanthropic families in our state.

We ended the year also in celebration of a record $12M in research support generated by our faculty. Some of this year's new projects included: a National Science Foundation EPSCoR award to Dr. Todd Crowl and his colleagues to improve water sustainability in Utah, an NSF award to Dr. Karen Beard to study impacts of climate change on plant-herbivore interactions, Dr. Chris Monz's National Park study of visitor impacts, and the salmonid habitat monitoring and restoration projects directed by Drs. Joe Wheaton, Nick Bouwes, and Brett Roper. We also congratulate Dr. Dave Koons and Rodrigo Ferreira who were awarded Teacher of the Year and Graduate Research Assistant of the Year for Utah State University.

We hope you enjoy reading about these and other happenings in the Quinney College of Natural Resources. We look forward to the coming year when we welcome three new faculty members and a host of new students.

Best Wishes,

Chris Luecke
Dr. Rich Etchberger’s Principles of Wildlife Management course (WILD 4500) employs a flipped classroom approach to educating students. Rich posts videos of the day’s lecture on YouTube and students watch the videos before class. Then during face-to-face meetings in the classroom, Rich and the students work on spreadsheet and writing assignments, and generate classroom discussions. You can watch some of Rich’s videos at: http://www.youtube.com/user/DrEUSU

Dr. Roslynn Brain’s Communicating Sustainability Class (ENVS 4700) is designed as a service learning course to allow students to foster real-world change via application of course content. Students work in groups to identify a local community partner, determine key stakeholders involved, and craft a strategic plan for future sustainability efforts. Students developed sustainability projects for local businesses, non-profits, churches, apartment complexes, high schools and campus organizations.

The Master of Natural Resources degree program has grown rapidly in the past 5 years. We now have 73 students in this on-line Masters program targeted toward natural resource professionals who seek to advance their careers. This past year 22 students graduated with MNR degrees and we will also welcome about 20 new students into the program this year. Students in the program hail from 19 states and one in Africa and London. Alissa Tanner (above) is a US Forest Service employee who completed the program in summer of 2013. She works on the Idaho Panhandle National Forest.

In the last 100 years, moose populations have expanded their southern boundary in North America into northern Utah. To better understand and manage these herds, Dr. Dan MacNulty and his graduate students are tracking moose herds with satellite radio collars. This technique will be used to gather population data and to quantify the relative influence of moose density, harvest, and climate on the moose population growth rate.

Dr. Joe Wheaton and Dr. Nick Bouwes have developed data collection and mapping apps to improve the way observations and decisions are made in the field. These low-cost apps run on iPads and assist in stream restoration design, long-term monitoring of fish habitat and beaver dam activity, large woody debris and beaver dam support structure design, and fluvial audits.

Utah State University’s Water Quality Extension team unveiled its interactive outreach project ‘A River Runs Through Us’ at USU’s Swaner EcoCenter in Park City. The interactive widescreen LCD displays information about the local watershed including real-time stream monitoring and learning activities. “Our aim was to use technology to engage people at all knowledge and age levels,” says Nancy Mesner, program coordinator for Water Quality Extension.
Undergraduate Students

Fifty-five of our graduate students received their degrees during the May 2013 commencement ceremonies. These included 10 Doctor of Philosophy degrees, 29 Master of Science degrees, and 16 Master of Natural Resources recipients. This year marked the largest number of post-baccalaureate degrees earned by QCNR students.

Aldo Compagnoni graduated Spring 2013 with a PhD in Ecology. He studied Climate Change and Plant Demography in the Sagebrush Steppe. Aldo is now working as a PostDoc with Dr. Tom Miller at Rice University in Houston, Texas.

Tracy Bowerman graduated with a PhD in Aquatic Ecology from the Department of Watershed Sciences in 2013 and now works as a postdoctoral research associate at the University of Idaho studying prespawn mortality of Chinook salmon.

Seth Cook, who earned his MS in Human Dimensions of Ecosystem Science & Management in December 2012, is Director of Land Protection at Pee Dee Land Trust in Florence, South Carolina.

Chance Broderius began a Masters Program in Fisheries at Oklahoma State University.

Clayton Handy is a Certified Arborist in Logan, Utah.

Hesper Kohler is an intern at the International Halibut Commission in Seattle, Washington.

This summer, QCNR initiated a new program called “Research Experiences for Undergraduates” (REU). The program sponsors three undergraduate students per summer who work directly with individual QCNR faculty mentors on research projects. Competition for this program was keen: for three positions, we received 83 applications from high-achieving students in 26 states representing 43 different universities.

The students received a stipend and living expenses for the summer as well as travel expenses to and from their home institutions. All three students have had a busy summer, and presented their research at the end of July. We anticipate that this program will help spread the word among potential graduate students about the quality and diversity of research going on in QCNR. The program for summer 2014 will also host three students, and will be advertised Spring 2014.

Research Experience for Undergraduates

Sixty-eight undergraduate students graduated from the QCNR this academic year. Quinney Scholars who graduated included Amanda Cox, Katherine Fisher, Kourtney Blanc Harding, Nicholas Kaczmarczyk, Shane Kitchen, Hesper Kohler, Quinn Larson, and Amy Rohman. Lisa Boyd and MaCall Davis graduated from the Uintah Basin Campus and Moab Campus.

Alejandro Sevde is an undergraduate from Northern Michigan University and works with Dr. Karen Beard.

Jason Augspurger is an undergraduate from South Dakota State and works with Dr. Phaeddra Budy.

Jesse Godbold is an undergraduate from Eastern Kentucky University and works with Dr. Dan McNulty.
The Quinney College of Natural Resources continues to seek outstanding high school and transfer students throughout the nation. We've developed new partnerships with high schools and junior colleges to ensure students take applicable transfer courses to graduate from the QCNR. This spring, we met with students and professors at Shasta College in Redding, California who are especially interested in our natural resources programs as they currently have junior college programs in geographic information systems, watershed restoration, forest science, and ecosystem restoration.

Mark Devey will be studying Watershed and Earth Systems. He attended Herriman High School in Riverton, Utah.

Olivia Schwanda is from Boulder Junction, Wisconsin and attended Lakeland Union High School. She is studying Conservation and Restoration Ecology.

Audree Van Valkenburg will be studying Environmental Studies. She attended West Jordan High School in West Jordan, Utah.

Heather Ship will be studying Wildlife science. She attended Timpahogos High School and is from Orem, Utah.

Molly Van Engelehoven attended Hillcrest High School in Salt Lake City, Utah. Her focus is Environmental Studies.

Stephanie Hall is an incoming freshman in Wildlife Sciences. She is from Reno, Nevada and attended the Nevada Virtual Academy.

Dave Koons is a population ecologist who studies both plants and animals. To provide managers with the best possible scientific guidance, Dave has built his research program around themes that link basic and applied aspects of population ecology. His primary contributions have been in the areas of life-history evolution and population dynamics in variable environments. Dave’s research examines the effects of global change on trophic interactions and ecosystem processes.

Dr. Koons was recognized for his passion for both research and teaching during the 2012-2013 academic year. He received the Quinney College of Natural Resources Teacher & Researcher of the Year awards. He also received the 2013 Robins Award for the USU Researcher of the Year.

Patrick Belmont pursues questions related to hydrology and geomorphology with a focus on landscape erosion and watershed sediment dynamics. His research addresses basic questions regarding erosion and sediment transport in rivers. He applies his research findings to address issues in river management and stream restoration.

During 2012-13, his research group published six peer-reviewed papers in high impact journals and he was invited to write three entries for the World Book Encyclopedia. Patrick also delivered eight invited presentations including a keynote address at the University of Colorado Hydrologic Science Symposium and an invited talk at the European Geosciences Union meeting in Vienna, Austria.

Christopher Monz’s research program examines visitor use patterns and behaviors in parks and protected areas, and the resultant effects on ecological processes. Park managers use this information to formulate sustainable visitor management strategies that optimize visitor experiences and minimize environmental impact. Chris’s work has contributed to theoretical development in examining the dynamics of ecologic responses under various use scenarios.

Currently, Chris has projects with several national park units, including Grand Teton, Acadia, Kenai Fjords and Glacier Bay. He received a Fulbright Scholar award for his upcoming sabbatical year and will be working on ecological monitoring and assessment issues in Norway with colleagues at the University in Tromsø.
WELCOME TO LOGAN

Dr. Jim Lutz comes to us from the University of Washington where he completed his doctoral degree in Forest Ecosystems with Jerry Franklin. As a research scientist at UW, Jim developed long-term forest plots in Yosemite, the Wind Rivers, the Sierra Nevada, and the Cascades to assess how climate, fire, and insects shape forest structure and species composition. Jim will begin work on Intermountain forest plots this summer. Dr. Lutz will join the Wildland Resources Department as a Forest Ecologist.

Dr. Peter Howe recently completed his post-doctoral position in the Climate Change Communication project at Yale University. Peter’s research focuses on the link between human perception and vulnerability to climate change. He is interested in integrating geospatial analyses with research on human behavior. Dr. Howe will join the faculty in the Environment and Society Department as a Human Geographer and teach the Introduction to GIS course this fall.

Dr. Eric Thacker joins the faculty of Wildland Resources as the Range Extension Specialist. Eric comes to us from Oklahoma State University where he is completing a post-doctoral research appointment in their Natural Resource Ecology & Management Department. Dr. Thacker’s research interests are focused on the interaction of rangelands and the animals that use them. Eric will be coming back to Utah State where he completed his doctoral work under the guidance of Terry Messmer.

Dr. Fred Baker retired from his faculty position in the Wildland Resources Department June 30th. Fred was on the faculty for 29 years studying forest pathology, the impact of disease on forest ecosystems, and urban forestry. Fred is enjoying his return to the north woods of Minnesota where he is completing his retirement home.

Dr. Roger Banner retired from his position as Range Extension Specialist in the Department of Wildland Resources. Roger served the department well for 35 years and is completing a series of projects on the impacts of grazing on rangelands of the Intermountain West. Roger is looking forward to enjoying time on his ranch in Montana.

Dr. Zhao Ma is leaving USU to take a faculty position at Purdue University. She will join her husband Jonathan Bauchet, who accepted a position in consumer finance also at Purdue. We will miss Zhao and Jonathan, but wish them well in their new endeavors.

The Quinney College of Natural Resources at Utah State University is seeking funds to remodel the S.J. and Jessie E. Quinney Biology and Natural Resources Building. The remodel will provide new classrooms and teaching laboratories so that students can take advantage of state-of-the-art equipment, computer facilities, and laboratory settings. We will construct two new lecture halls and two new teaching laboratories in the remodeled building. These lecture halls will seat 60 students and provide space for the rapidly growing undergraduate programs in the Quinney College of Natural Resources. These lecture halls and laboratories will be equipped with the latest computer projection systems and designed to work with current remote sensing platforms and geographic information systems.

The atrium of the building will be expanded to create an atmosphere of collegial discussion among students and faculty. Environmentally sensitive design elements will be incorporated into the remodeling efforts to enhance the lessons of sustainable living.