Assistant Professor Sadanand Dhekney describes his winter-hardy grape rootstock research during the Powell Research and Extension Center Field Day.

SEE STORY PAGE 5
Dear Friends and Colleagues,

This September, the college will host two dignitaries from Tribhuvan University in Nepal. The vice chancellor’s visit is the latest exchange in a nine-year relationship with Nepal. It also highlights the international nature of our industry. To meet the estimated worldwide demand for food, food production will need to double by 2050. This is a formidable task and one that requires innovation, creativity, and collaboration. International research and teaching partnerships are an integral part of this process. Shared interests, challenges, and goals are often the basis for reaching out to colleagues in other countries.

Tribhuvan University and our ecosystem science and management department first started to collaborate in 2004. Why Nepal? Because Nepal and Wyoming have many things in common. We share high-elevation ecosystems, an economy in which natural resource development is being balanced with soil and land reclamation issues, and rural life challenges such as transportation and access to health care and education. Much of the work with Tribhuvan University centers on soil science, reclamation, and high-altitude grazing. In a recent article on UW’s ties to Nepal, Pete Stahl, a professor of soil science in our Department of Ecosystem Science and Management, noted, “They want to maintain their ecosystems and natural beauty in the face of development, much like we do in Wyoming.” In addition to joint research projects, this past year UW offered a study abroad course in which 10 UW students traveled to Nepal to work with 10 Tribhuvan University students on environmental quality issues.

Veterinary medicine faculty members also have active exchange programs with colleagues in Kenya, Uganda, and Tanzania. The shared interest in this case is tourism focused on wildlife and outdoor experiences coupled with a substantial livestock production industry. This spring, the college hosted a six-member African delegation that worked with UW veterinary scientists on brucellosis diagnostics and disease challenges created by wildlife/livestock interactions.

A few years ago, the animal science department hosted Cassio Brauner, a graduate student from Universidade Federal De Pelotas in Brazil. Collaboration between the Department of Animal Science and colleagues in Brazil is a natural fit because of our common interests in beef cattle production. This relationship has led to an international course in agriculture, and Universidade Federal De Pelotas will be the destination for the first class. Initial work by Associate Professors Kristi Cammack and Scott Lake, extension livestock specialist, and extension beef specialist and Associate Professor Steve Paisley centers around our shared interests in carcass quality, ultrasound technologies, nutritional impacts on reproduction, and crossbreeding systems.

Another example is the collaboration of the Department of Plant Sciences and Manor House Agricultural Center in Kenya. When Emmanuel Omondi came to UW to obtain a Ph.D. in plant sciences, he was also the director of Manor House Agricultural Center in Kitale. Manor House promotes sustainable agricultural practices and appropriate technology for the small-scale family farmers of Africa. Today, an active partnership exists between agricultural researchers in Kenya and UW. This includes research on minimum tillage protocols, crop rotation, and cover crop treatments as well as a three-week student study tour of sustainable agriculture practices in Kenya.

The free exchange of ideas is central to higher education and university-sponsored research. Our partnerships with others throughout the world are a natural extension of this principle. I hope you join us September 13-14 for Ag Appreciation Weekend. This year’s honorees include Doug Stark and Jim Neiman, who will receive our outstanding alumni awards, the Wyoming Mining Association will be honored as this year’s Research/Partner of the Year, and Victor McMurry will receive our Legacy Award.

Dean Frank Galey
College of Agriculture and Natural Resources
LATCHININSKY
PRESIDENT-ELECT
OF ORTHOPTERISTS’ SOCIETY

Associate Professor Alexandre Latchininsky has been elected president-elect of the Orthopterists’ Society.

The society has 440 members from 60 countries on six continents.

His term started at the society’s meeting in Kunming, China, August 11-15, and will serve four years as president-elect. Latchininsky, the University of Wyoming Extension entomologist, then becomes president in four years at the next congress. He’ll serve four years as president.

The group is devoted to facilitating communication among those interested in Orthoptera and related organisms. The group fosters research and publication in all aspects of the biology of these insects from ecology and taxonomy to physiology, endocrinology, cytogenetics, and control measures, according to its website http://140.247.119.225/OrthSoc/.

ANIMAL SCIENCE SOCIETY HONORS LAKE

The American Society of Animal Science presented its Western Section Young Extension Award to Scott Lake, assistant professor in the Department of Animal Science.

“Lake’s research has huge implications for animal health and food production,” according to the award selection committee. He was honored in June at the society’s Western Section meeting in Bozeman, Montana.

Lake, University of Wyoming Extension livestock specialist, conducts applied research in ruminant nutrition and management. He has secured more than $3 million as a principal investigator in support of his applied research program. Lake leads a large multistate research project with Zoetis (formerly Pfizer) on the value of artificial insemination and the use of DNA technology in the selection process.

This past year, Lake has served as a member of the Wyoming Sheep Quality Assurance Panel. He and colleagues have successfully obtained USDA funding to develop materials, including extension materials, for sheep producers.

A Nevada native, Lake joined the UW faculty after serving at Purdue University for three years. He received his bachelor’s and master’s degrees at the University of Nevada, Reno, in 1999 and 2001, respectively, and received his Ph.D. in ruminant nutrition at UW in 2005.

Since arriving at UW, Lake has been active in extension, research, teaching, and professional service.

College publications receive national awards

Publications from the Wyoming Agricultural Experiment Station and the University of Wyoming Extension earned gold and bronze awards from the Association for Communication Excellence.

The awards were presented during the organization’s annual meeting June 11-14 in Indianapolis, Indiana. The Office of Communications and Technology in UW Extension produces all the publications.

2012 Impacts, which presents UW Extension educator programs and how they engage Wyoming citizens, received a gold award.

CONNECT, published annually, received a gold award in electronic publications, and Reflections, also published annually, received a bronze in the category. Reflections also received a bronze award in technical publications.

The Association for Communication Excellence in Agriculture, Natural Resources, and Life and Human Sciences is an international association of communicators, educators, and information technologists.
What would happen to producer profits if Roundup Ready sugar beet technology was no longer available and how facilitators help Wyoming citizens make group decisions received first and second places in the 2013 Reflection research magazine.

Reflections highlights research in the college and is a publication of the Wyoming Agricultural Experiment Station (AES). An anonymous group of faculty members and researchers in the college rank the articles.

Scientists in the Departments of Agricultural and Applied Economics and Plant Sciences found that producers who use Roundup Ready sugar beet seed, and assuming a 2-ton per acre increase because of the technology, gain on average $95 per acre more than if low-cost, conventional tillage and seed was used. If a producer utilizes high-cost, conventional production practices, the Roundup Ready system is $107 more profitable without any yield increase and $223.73 more profitable if assuming a 2-ton/acre yield increase for the Roundup Ready system.

Authors are Associate Professor Chris Bastian, Assistant Professor John Ritten, and research scientist Brian Lee, who is based at the James C. Hageman Sustainable Agriculture Research and Extension Center, in the agricultural economics department, and assistant Professor Andrew Kniss in plant sciences.

Implementing methods to ask questions, planning dialogue, and helping members reach decisions as a group is a goal of a facilitator. Tara Kuipers, community development educator with University of Wyoming Extension, found those participating in facilitated sessions:

- Better understood what was to be accomplished,
- Were more interested and engaged,
- Interacted openly and productively,
- Thoroughly addressed agenda items, and
- Felt satisfied with the outcomes.

Kuipers is based in the Cody extension office.

Other research stories in the magazine examine:

- High tunnel efforts to increase vegetable production,
- The relationship between amphibians in Wyoming and beaver,
- How long-term research benefits agricultural producers,
- How a legume-grass mix can increase field productivity,
- If sainfoin is glyphosate resistant,
- The best cool-season perennial grass for Wyoming,
- The best drought-tolerant turfgrass,
- How state and federal researchers study effects of new pesticides at reduced rates,
- How citizens can become engaged in scientific discovery, and
- Whether or not using remotely sensed data can help producers determine what areas of their fields are less productive and
WATCH A VIDEO FROM PAGE 4 THROUGH YOUR SMARTPHONE!

You can view a video about the amphibian-beaver connection described in the 2013 Reflections using your smartphone. It’s free. It’s simple.

Here’s how:
1. Download and install the free Aurasma app from Play Store or iTunes Store to your phone or tablet.
2. Click on the Aurasma icon.
3. Click the magnifying glass at bottom of your screen and type “Extension” in the Search box at the top of the screen. Click on University of Wyoming, then choose Follow.
4. Click on the open square symbol at the bottom of the screen. Point your phone or tablet at the photograph of the Reflections magazine on page 4 and watch the video. Double-clicking enlarges the video to full screen and enables watching the video away from the Aura image.

The 2013 Reflections magazine has several auras that can be watched through your smartphone. Look for the Aurasma icon.

at what time in the season productivity is lowest.

Reflections is available at UW research and extension centers at Powell, Sheridan, Laramie, and the James C. Hageman Sustainable Agriculture Research and Extension Center near Lingle, and at UW Extension offices. Copies can also be obtained via mail or by calling the AES office at (307) 766-3667 or at aes@uwyo.edu.

POWELL RESEARCH AND EXTENSION CENTER FIELD DAY

There were 75 attendees at this year’s Powell Research and Extension Center field day in July.

Featured research included:
• Effects of Limiting Water on the Yield, Water Productive, and Forage Quality of Alfalfa
• Automated Monitoring of Soil Moisture on Irrigated Alfalfa
• Effect of Planting Date and Early Termination of Irrigation on Grain Yield and Quality of Confection Sunflowers
• Effect of Phosphorus Fertilization on Sainfoin
• Phosphorus Rates and Formulations in Sugar Beets
• 2012 Dry Bean Performance Evaluation
• Water Responsive Corn Leaves
• Breeding Winter-Hardy Feed Pea for Wyoming

Winter-hardy grape rootstock research, soil erosion and cover crops were also discussed. Poster sessions included Wyoming AgrAbility and forage seed yield potential. See pages 2-3 in the August Agademics at http://bit.ly/precphotos
The University of Wyoming College of Agriculture and Natural Resources’ outstanding alumni, research/outreach partner, legacy award, and VanVig distinguished faculty recipients for 2013 will be honored September 13-14 as part of Ag Appreciation Weekend – a celebration of the importance of agriculture to Wyoming’s history, culture, and economy.

Ag Appreciation Weekend events include:

Friday, September 13
Dean’s Ag Appreciation Dinner. Attendance by invitation only.

Saturday, September 14
31st annual Ag Appreciation Day Barbecue – Noon-1:30 p.m. at Tailgate Park. Tickets can be purchased at the event or prior by contacting Kelly Wiseman in the Office of Academic and Student Programs at (307) 766-4135.

College of Agriculture and Natural Resources student organizations prepare and serve the meal. Proceeds provide scholarships for College of Agriculture and Natural Resources students and help fund various agricultural college student organizations. Sponsors include the college, local businesses, agricultural groups, and individual donors.

**Football Tickets**
The UW vs. University of Northern Colorado football game begins at 2 p.m. The college has reserved Ag Appreciation Weekend group football tickets. Go to http://bit.ly/foruwtickets and enter the promotional code AGDAY and follow the prompts. Tickets are $28 for adults and $13 for youth.

Outstanding alumni recipient Jim Neiman says he received a master’s after he left the College of Agriculture and Natural Resources’ classrooms – but you won’t see that hanging on a wall or tucked away somewhere.

More about that later.

Neiman, a former University of Wyoming trustee, received a range management degree in 1974 and heads Neiman Enterprises Inc., a wood products businesses headquartered in Hulett and with facilities in Hill City and Spearfish, South Dakota, and Montrose, Colorado.

The company’s sustainability practices, promoted by Neiman, draws praise from the forestry arena.

“Neiman Enterprises has been a regional and national leader in the forest products industry even during the economic downturn of 2008,” says Robert Means, Wyoming Bureau of Land Management state forester and climate change coordinator.

“The company has implemented the Sustainable Forestry Initiative program by training all of its resource foresters and logging contractors to meet this standard, which involves third-party audits to ensure that all forest practices undertaken meet sustainability goals,” he notes. “The labeling of forest products with the SFI certification increases Neiman’s forest products profitability and marketability and ensures that forests are sustainably harvested.”

**Fifth-generation Ranch**

Neiman says that effort of sustainability arose from two directions: his family and its fifth-generation ranch and his experience with a renowned UW entomologist with the iconic last name of Beetle – Professor Alan Beetle.

Beetle was Neiman’s adviser, and that relationship opened the door to forestry rather than range.

Sustainability came about because agricultural producers are in the business for the long haul, he says, despite assertions by some conservation groups.
And, he says, “there is something about your alma matter. You have to lead by example. How do you go from success to significance? How do you help others? That’s an important part of it.”

The Master’s Experience

Which is where that master’s comes in. “The experience I gained as a trustee where I had a chance to serve on the enhanced oil recovery commission and help another natural resources world, and setting on the Rucklehaus board for a few years helped broaden my perspectives,” Neiman says. “I really felt as a trustee, by going down there and serving, I was getting my master’s. You feel like you gain more than you give. That’s why I almost feel guilty about it (receiving the award). That creates a foundation where you gain more than you give.”

“There are two groups in the environmental community out there,” Neiman says. “I’ll be blunt and bold. It took me a few decades to realize there are some really good environmental groups out there like Nature Conservancy (and others not). When you look at families and the next two generations, one of the motives isn’t just surviving but how do you pass that on to the next generation? You start looking differently than a company on the New York Stock Exchange seeking short-term profits but rather how you can be sustainable. You are looking out two generations.”

The deepest recession since the Great Depression and the explosion of mountain pine beetle across the Intermountain region could have made changing his business’ sustainability course tempting. “It’s tough, and it does add costs,” he says. “But you bring yourself back to, ‘What do I want this forest to look like in 10 or 50 years?’ Once you get that as the cornerstone foundation of what you are doing, your principles stay intact.”

Education Important

Neiman says education – either at the local level or at UW – has been his particular passion, and says some environmental groups have tried in schools to rewrite history and paint a picture of the forest industry as money hungry, big corporation America.

“I think we have one of the best generations ever in front of us,” he says. “If provided a balanced education and both sides, they’ll figure it out.”

Neiman has a long list of service to the state and university (see bottom right) having served on the UW Board of Trustees for 12 years and two years as president.

“He was one of the most sure-handed, effective, and respected board presidents I have seen during my 14 years in Old Main,” says Myron Allen, former UW Provost. “Two attributes mark Jim’s terms as a trustee: a deep commitment to the institution and a real depth of character.”

Neiman values the comparative advantage UW has in providing education, research, and extension support for sustainable resource management, notes Tom Thurow, Emeritus Professor in the Department of Ecosystem Science and Management, in his nomination letter. Not only for existing programs, says Thurow, but also where UW could do better.

“He was happy to hear that we established a bachelor’s of science minor in forest resources,” says Thurow. “So much so, he took the initiative to create a scholarship jointly funded by him and the Society for American Foresters to be awarded to a student pursuing a forest resources minor.”

And, he says, “there is something about your alma matter. You have to lead by example. How do you go from success to significance? How do you help others? That’s an important part of it.”

ON RECEIVING THE AWARD

Neiman says he thinks he is not deserving of the outstanding alumni honor.

“There are so many good people in this state,” he says. “To sit in with that group is humbling. I think I’ve got a long ways to go. The good news is it challenges me to give more.”

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Neiman is a past member of the Wyoming Occupational and Safety Commission, the Wyoming Economic Development and Stabilization Board, the Independent Forest Product Association, the Enhanced Oil Recovery Commission, chairman of the School of Environmental and Natural Resources, past UW Board of Trustees member, past president of the trustees, and a former director with Summit National Bank. He’s a past member of the W.D. Ruckelshaus Institute Board, Friends of the American Heritage Center, Campus Advisory Board, and is on the Agricultural Dean’s Advisory Board.
You can take the boy out of the country but …

Doug Stark wanted to return to his family’s dairy farm near Riverton in 1980 after having in hand his bachelor’s degree in agricultural business from the college. Instead, he joined Farm Credit Services of America (FCSAmerica) and would rise to its president and CEO in 2005.

“I would have loved to have returned,” says Stark, who is one of two recipients of this year’s Outstanding Alumni Award. “At the time, it wasn’t an option. Our operation was not big enough to allow me to come back into it.”

That might have happened in the greener pastures of today’s agricultural landscape.

Stark oversees a loan portfolio of more than $18.5 billion with 60,000 producers, says Associate Professor Roger Coupal in the Department of Agricultural and Applied Economics in his nomination letter. FCSAmerica serves Wyoming, Iowa, Nebraska, and South Dakota.

Young Farmers, Ranchers

Stark said earlier this year he believes more young people are wanting to come back to the farm or ranch than seen in a long time.

“I think a little bit of it is a generational thing,” says Stark, who became FCSAmerica regional vice president in 1986 supervising eight branch offices during that decade’s farm crisis.

“It was such a tough time for producers in that cycle,” he notes. “Farmers were cautioning their children from getting into agriculture because it was so challenging. Now, ag is in a much better position. Ag is much more profitable and as a result young people see a future in it.”

Lessons from the ’80s strengthened the industry.

“Producers got to the point they pulled in their belts and gutted it out and as a result they learned some things – as did our company,” Stark says. “Coming through that time made all of us better in our services. Farmers were more efficient. Lenders were more efficient. It was a challenging time period, but out of those challenges came the experiences and strength to be better and more effective.”

Doug Stark can point to a handful of events during his career that took him to new levels or opened his eyes to opportunities for leadership.

“I think we all have those turning points in our lives,” he says. “I have a great quote one of my leadership coaches told me. ‘When the student is ready, the teacher appears.’ When the heart and mind is open for learning, whether in our careers or personal development, someone will show up in life to help fill the void and take you to another level. I’ve found that to be the case in my career. When looking for that opportunity, even if it was consciously or not, somebody would come into my life who helped take me to another level. That’s just the way it works.”

Doug Stark, right, with Bill Schilling, left, and Jim Magagna during a leadership program for students through the College of Agriculture and Natural Resources.
Collaborates with College

Stark has maintained ties with the college during his time at FCSAmerica. He co-teaches a leadership class with Dean Frank Galey for students, and last year invited the association’s board of directors and executive leadership team to the university for their annual summer planning meeting.

FCSAmerica also has been an important collaborator in faculty member research and outreach projects.

“The data and information FCSAmerica has graciously shared with faculty members over the years has been used to fund research including graduate student projects and extension work,” notes Coupal. “Some of the extension work that was based on FCSAmerica input is still in demand by banks, agencies, and producers. Some of the research work has produced still highly cited journal articles.”

Read enough about Stark and his emphasis on leadership is clear.

“I reflect on my career at UW and the incredible opportunity (higher education) has to shape young lives,” he notes about his collaborations with the college. “I wished I had more insight into leadership earlier in my career than I did. My hope is to provide some experiences I have had over my career and give the students (knowledge) that took me years of experience to gain.”

Leadership Advocate

Stark is an advocate for personal and professional development and models the way through his own developmental approach, notes members of the FCSAmerica executive leadership team, which also nominated him for the alumni award.

“He frequently conveys his desire for each of us to not only be better team members but also better family members, friends, and citizens,” team members stated.

His is not the carrot and hammer approach but focuses on the goals of the individual and organization.

“It’s a passion I have,” he says. “One of the essences of being an effective leader is inspiring a shared vision. It’s really about getting people to care. Leading is not about a title or position — it’s about action and purpose that really can apply anywhere in any business and in any line or career line of business.”

That made an impression upon Peter Burgess, a graduate student in the Department of Agricultural and Applied Economics and who participated in Stark and Galey’s leadership class.

“He spoke passionately about integrity and its importance — not just professionally but in all of our spheres of influence,” wrote Burgess. “He described a true leader as having the ability to model the way and encourage the heart.”

Leadership is about helping people and the organization maximize their potentials, Stark says. “Imagine what the world would be like if everybody performed at their maximum capability. I think that is exciting and intriguing.”

ON RECEIVING THE OUTSTANDING ALUMNI AWARD

“I was humbled to be chosen for this recognition,” says Stark.

“While proud of my career, I’m only successful because a lot of people have either supported or guided me. In most of my successes in career and life, a lot of people rallied around to help me or that activity I was involved in be successful.”

raca CEO, maintains ties with college
AG APPRECIATION

VANVIG AWARD RECIPIENT CAN TELL YOU A LOT ABOUT ACHIEVEMENT

But always-unassuming Dale Menkhaus probably wouldn’t

Don’t expect this year’s Andrew Vanvig Lifetime Distinguished Faculty Achievement Award recipient to walk willingly into the limelight.

Don’t let his usual blue jeans and ball cap deceive.

“His unassuming nature and quiet leadership have garnered him the lasting respect of countless students, administrators, and colleagues within the university and the agricultural economics discipline,” says colleague, department head, and Associate Professor Roger Coupal in nominating Menkhaus.

“There are few teachers in a student’s life who have a profound impact and ultimately change a student’s path because of his devotion as an educator,” says Jody Levin, former student and now small business owner. “For me, Dr. Menkhaus is that person, and I credit my success as a graduate student and as a professional to his influence.”

Rich Research

Research? He’s only a handful of agricultural economists at land-grant universities to have articles in the *American Economic Review*, which has an acceptance rate of 10 percent, notes Coupal.

“Moreover, Ph.D. agricultural economists statistically average less than one publication in the *American Journal of Agricultural Economics* during their careers,” he says. “Only 5 percent of Ph.D. agricultural economists ever author or coauthor five articles in the AJAE – Dale will publish his ninth article in that journal this year.”

Menkhaus received his Ph.D. from Purdue University and accepted an assistant professor position in the Department of Agricultural Economics at UW in October 1973.

Forty years later, he’s:
- Published 80 refereed journal articles.
- Been cited 847 times in literature.

Dale Menkhaus specializes primarily in market economics and agricultural price analysis in the livestock and beef sectors.

In one of his first journal articles in 1976, and with a coauthor, he used regression techniques to analyze the impact of breed, sex, lot size, and weight on feeder calf prices.

“This work was the precursor to countless hedonic studies (reduces item being researched into its characteristics then estimates the value of each) and now published in literature that estimates premiums and discounts associated with various cattle attributes, such as breed and weight and associated with production practices, such as vaccination programs and third party certifications,” says Associate Professor Roger Coupal, head of the Department of Agricultural and Applied Economics.

He was a mentor to Kalyn Coatney, a graduate student, whose thesis dealt with the interdependencies of cattle characteristics on price in a hedonic system. Published in 1996, it was most recently cited in the literature in 2012 in the *Journal of Agricultural and Resource Economics*.

Another graduate student he mentored investigated the impact of the beef packer concentration on cattle prices. The thesis also resulted in a journal article. “That article was one of the first to address industrial organization issues in the beef sector and has been cited 35 times, most recently in a 2001 book chapter discussing the implications of industrial organization and food processing,” says Coupal.

In the mid-1980s, Menkhaus and others in the college of agriculture addressed depressed cattle prices brought on by a declin-
Weekend

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**Professor Dale Menkhaus**

- Received nearly $1.5 million in extramural funding as principal investigator or co-PI.
- Mentored 27 graduate students as committee chair.
- Served on an additional 61 Ph.D. and master's student committees.
- Received numerous teaching awards.
- Was selected a Fulbright Scholar.

- Received national and regional awards for outreach and scholarship and has been recognized for his contributions to the Wyoming economy.

**Credits Menkhaus for Success**

Levin’s abysmal score on her first exam took her to Menkhaus’ door for help. “I believe he recognized in me a sincere desire not to fail and embarked upon hours of one-on-one instruction to help me grasp the course material,” she says. “After discovering that I enjoyed economics, Dr. Menkhaus did the unthinkable and encouraged me to pursue graduate school in agricultural economics.”

He often builds the road that leads to success and nudges students to take that first step, says Levin, who did attend graduate school, obtained her master’s (Menkhaus was the first person she asked to be on her committee), and later became owner of a small business.

Twenty years later, she reflects on how her career as a student and how her studies may have been different if Menkhaus had not opened the door when asked for help.

“In many respects, the experience is similar to a domino where one small action causes a series of actions to take place. His one small gesture of taking additional time to teach a student changed everything about my course in life,” Levin says. “I am fortunate to have had him as an instructor and delighted to still call him a mentor and friend.”

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**Of Experimental Economics**

...ing demand for beef due to health concerns. They developed and tested grass-fed beef, later branded as Wyoming Lean Beef.

“How do you determine a product’s acceptance and market price when such products are not on the market and there is no data for analysis?” asks Coupal. “Dale was one of the first in the agricultural economics discipline to use laboratory test market techniques to answer this important question.”

Menkhaus and other members of the group, which included associate dean and director of UW Extension Glen Whipple, studied the potential value and consumer acceptance of beef offered in a vacuum skin package.

They used experimental auction techniques in several major U.S. cities to elicit values from beef consumers for this new type of packaging, says Coupal.

“This was the first study of its kind to use experimental economics to value food attributes or products, and this study firmly planted Dale as a leader in the agricultural economics discipline using experimental economic methods,” notes Coupal.

Another mentoring of a graduate student drew the attention of a Russian delegation interested in learning about markets and pricing when Eastern Europe was moving from centrally planned economies to market-based economies.

The USDA Economic Research Service tapped his expertise to use experimental economics to assess the impacts of alternative policy mechanisms on market outcomes.

“This work investigates how the structure of various subsidy mechanisms impact commodity and related factor markets,” says Coupal.
The Wyoming Mining Association (WMA) has been selected as the 2013 Research/Outreach Partner of the Year by several departments within the college. The association has worked directly with the Department of Agricultural and Applied Economics and others for many years on annual publications, major projects, and reclamation technology.

“Consistent goals have created long-lasting partnerships between the College of Agriculture and Natural Resources and the WMA membership,” notes Roger Coupal, department head of agricultural and applied economics.

In its mission statement, the WMA identifies goals such as “building a healthy environment that co-exists with a healthy mining industry” and promotion of “consistent, rational and prudent rules and regulations.”

John Tanaka, head of the Department of Ecosystem Science and Management, also expressed pleasure at the nomination. “The Department of Ecosystem Science and Management is very pleased to be part of the recognition of the Wyoming Mining Association for continued support and collaboration with faculty and students,” Tanaka says.
Contributions by Victor McMurry to the Dean’s Excellence Fund is helping college researchers address agricultural issues facing Wyoming residents.

McMurry, a Phoenix resident, is recipient of this year’s Legacy Award.

“This generous support from Vic McMurry is the lead gift for the Dean’s Excellence Fund in the College of Agriculture and Natural Resources,” says Dean Frank Galey. “Thanks to Vic, the college will be able to pursue new initiatives to address important issues facing Wyoming’s agriculture, renewable resource base, and rural communities.”

Although his father was in the construction business, McMurry chose to attend the College of Agriculture and Natural Resources. He transferred to UW from Casper College in fall 1967 and graduated with a bachelor’s degree in farm and ranch management in 1970.

“It was a wonderful place. I was entirely comfortable,” says McMurry. “And it’s now even more focused on trying to provide what people across the state need. The UW college of ag is the top in the country as far as I’m concerned.”

The fund supports speaker presentations, panel discussions, guest lectures, short courses, and public forums that make science-based information available to the public.

The college’s scope is much broader than might be realized - in addition to traditional areas of animal, plant, and veterinary science, the college encompasses applied economics, ag communications, family and consumer sciences, microbiology and molecular biology, renewable resources, and the Wyoming Reclamation and Restoration Center.

“I asked Frank, ‘What do you need?’” says McMurry. “I wanted to help provide funds utilized by people on the ground, where it would do the most good. Every generation has to do their part as part of the human race. I learned that from my father.”

Land use, stewardship of natural resources, community development, and sustainability are issues at the forefront in Wyoming. The Dean’s Excellence Fund helps address these challenges through research and outreach.

“I think Frank Galey is doing a great job,” says McMurry. “He is a great asset to the university and to the college of ag, and he’s truly someone I’ve enjoyed getting to know. The goal of the college is to create vibrant, sustainable rural communities in order to “Build the Wyoming We Want,” and the Dean’s Excellence Fund is a huge step in the right direction.”

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Dean Frank Galey
By Carolyn Anne Hageman  
Intern, College of Agriculture and Natural Resources

The rangeland ecology and watershed management (REWM) degree program has reached the top.

The undergraduate program in the Department of Ecosystem Science and Management became the largest enrolled program of its type in the nation in 2012 with 114 students.

The program has built itself up and has become appealing to students at the university. "I can understand why it is the highest enrolled program," says alumna Katelyn Schade, who graduated this year with a REWM degree. "Majoring in REWM allows a student to get field and lab experience in all of the crucial components that make up functioning rangelands."

The best part of the program is the diverse classes (majoring in REWM allows study of soils, vegetation, watershed interaction, and the livestock and wildlife aspects) and the professors, says Schade, a Fort Sumner, New Mexico, native. "This program has some of the most amazing professors and staff members at the University of Wyoming."

Her goal freshman year was to work with the Wyoming Natural Resources Conservation Service (NRCS) or with a private consulting company. "After interning with NRCS for two summers, I decided to pursue a career after graduation, and I am currently working with the Worland field office."

Many Different Focuses

The range management field incorporates so many different aspects that the field is ever-changing and complex, says senior Amanda O’Donnell of Spring Creek, Nevada. "The complexity and uniqueness of each situation is something that I truly enjoy. It presents an opportunity to learn more about the system and try new techniques," she says.

"The fact that the range program has surpassed all other range programs in the country is amazing. I was quite excited when I heard this. I am part of UW’s history, and my efforts today can only help to improve the program for future students."

Many Opportunities After Graduation

The program has great opportunities for students after graduation. Students can look into careers with the Bureau of Land Management (BLM), U.S. Forest Service, NRCS, and many others. "These are just some of the top ones," says Professor John Tanaka, who adds the support from the college and the state of Wyoming has helped this program grow.

Tanaka has been head of the department for four years and says he has strived to make it the best program possible for undergraduate and graduate levels. "There are more jobs than there are students both nationwide and in Wyoming," he says. "Most students who want a job can (Continued on page 20)"
Family and Consumer Sciences

Lecturer Treva Sprout Ahrenholtz led a textiles study tour to Italy in May. Four undergraduate students in textiles and merchandising and one student majoring in art participated, notes Associate Professor Bruce Cameron, head of the department. Four of the students who traveled to Italy received College of Agriculture and Natural Resources Beyond the Classroom grants. The tour included visits to Florence, Rome, Venice, Milan, and Lake Como. While in Florence, students visited museums and fashion sites and took a day trip to the Tuscany towns of Sienna, Pisa, and San Gimignano. In Venice, students visited the islands of Murano (famous for glass production) and Burano (famous for lace manufacturing), and toured Venice museums and St. Mark’s Square. In Rome, the group had a tour of the Coliseum and other major sites, and the Vatican City and its museums. In Milan, students had the opportunity to tour the city’s major sites, including the Galleria Vittorio Emanuele II, which is the oldest shopping mall in the world.

Mika Dubbe, Jessica Los and Desiree Orchard, seniors in textiles and merchandising, attended NeoCon in Chicago in June. All three received Student Engagement and Networking Drive awards from the college. NeoCon is the largest design exposition and conference in North America for commercial interiors. While at NeoCon, students had the opportunity to interact with architecture and design professionals and explore hundreds of exhibitor showrooms displaying thousands of new and innovative interior products for government, corporate, institutional, retail, hospitality, healthcare, and residential environments. Jenna Hotovec and Laura Kelley, seniors in human development and family sciences, attended the American Association of Family and Consumer Sciences (AAFCS) annual conference in Houston in June. While at AAFCS, they had the opportunity to network with other professionals in the field as well as other AAFCS students – gaining leadership development experiences and attending content-based workshops.

The Wyoming Chapter of Gamma Sigma Delta, the honor society of agriculture, selected Emily Schroeder, a junior in textiles and merchandising, as one of two recipients of the Outstanding Junior Award in the College of Agriculture and Natural Resources. Jessica Los was also nominated for the same award. Los and Kailin McClung, a sophomore in human nutrition and food, were elected as College of Agriculture and Natural Resources Student Ambassadors for the 2013-2014 academic year.

Molecular Biology

Assistant Professor Dan Levy has received a $405,105 National Institutes of Health grant for “Mechanisms of Steady-State Nuclear Size Regulation in Xenopus,” notes Associate Professor Mark Stayton, chair of the department.

The nucleus is the compartment within each cell that contains the genetic information directing how the cell grows and behaves, says Levy. “Although pathologists use an enlarged nucleus to diagnose cancer and determine what stage it has reached, we presently know very little about what causes large nuclear size or what the consequences are for the cancer patient. Similar systems regulate cell growth in humans and frogs. In fact, proteins from human cells often work in frog cells. Xenopus (African clawed frog) research has been important in studying congenital heart disease, progeria, colorectal cancer, and Fanconi anemia, to name a few. Discoveries about nuclear size control in Xenopus will translate to humans, producing useful and important information for the cancer community.”

The Levy lab is using Xenopus embryos to understand how nuclear size is controlled during embryo development. “In many ways, the uncontrolled growth of cancer is similar to the growth of developing embryos,” notes Levy. “In fact, cancer may arise from reactivation of embryonic growth programs in otherwise normal cells. Understanding nuclear size regulation in embryos will therefore inform cancer. To translate our findings in Xenopus to humans, we are directly altering nuclear size in cancer cells. We will test if reducing the size of the nucleus slows cancer cell growth and metastatic potential. Our studies will shed...
light on how nuclear size contributes to cancer development and progression. Novel approaches to cancer diagnosis and treatment that target nuclear size will be suggested, and new cancer susceptibility factors associated with altered nuclear size could be identified to aid in prevention. The proposed basic biomedical research on nuclear size regulation will provide the foundation for cancer diagnosis, treatment, and prevention.”

**Plant Sciences**

The Department of Plant Sciences is excited to welcome Assistant Professor of agroecology Randa Jabbour, who joined the department in August. Jabbour has a bachelor's degree in biology from the Rochester Institute of Technology and a Ph.D. in Ecology from Pennsylvania State University. Before joining the faculty at UW, Jabbour served as a postdoctoral research associate in the Department of Plant, Soil, and Environmental Sciences at the University of Maine and also in the Department of Entomology at Washington State University. Jabbour has also served as a teaching fellow in the NSF-funded initiative FIRST IV, which trains biology post-docs in the practice of scientific teaching. The overall goal of Jabbour’s research program is to utilize ecological interactions to design sustainable agricultural systems. More specifically, she researches soil quality and pest management tradeoffs in organic agriculture, the effect of biodiversity and habitat heterogeneity on ecosystem services, and the role of farmer decision-making in organic management in collaboration with social scientists.

The department is also saddened to bid farewell to office associate Thoa Pham. However, she plans to remain as part of the plant sciences family, returning as a full-time student in the undergraduate program in agroecology. We wish Thoa continued success in this changing role within the department, and look forward to a continuing relationship with her.

**Veterinary Sciences**

Professor Donal O’Toole, along with three other board-certified North American veterinary pathologists, provided a four-day course in the pathology of farmed livestock to veterinarians in the Dominican Republic this past July, notes Professor Will Laegreid, head of the department. The 50 attendees included food animal veterinarians, clinicians, slaughterhouse veterinarians, and students. The course was held under the auspices of the Charles Louis Davis DVM Foundation – an organization that sponsors meetings worldwide to promote the use of morphological pathology for the study, diagnosis, and control of disease. O’Toole’s lectures covered gross lesions of aborted cattle, diseases between birth and weaning, and lesions in post-weaned and adult animals. Other pathologists addressed the lesions of common diseases in pigs (Ana Alcaraz, Western College of Health Sciences), gross pathology of poultry and of toxic plants (Leslie Woods, UC-Davis and California Animal Health and Food Safety (CAHFS) Laboratory System), clostridial diseases of farm animals (Paco Uzal, also from UC-Davis and CAHFS), and bovine tuberculosis (Elpidio Chamizo, Universidad Central del Este). Part of the course involved a demonstration of performing necropsies on pigs, calves, and avian species. The Minister of Agriculture for the Dominican Republic closed out the course, which was very well received by the participants.

The department was host to two excellent interns this summer: Shelley Gerstner, Tensleep, and Tessa Sustacha from northern Nevada, says Laegreid. Both externs are junior veterinary students at Washington State University. They rotated through the various diagnostic sections in the Wyoming State Veterinary Laboratory as well as participating in departmental research including radio telemetry tracking of deer in the Laramie range, epidemiologic studies of ovine progressive pneumonia, and genomic sequencing of a novel viral pathogen of deer and elk. Shelley, a University of Wyoming graduate, is this year’s recipient of the Kelly Palm Memorial Externship.

Dave Edmunds, who just defended his doctoral thesis in the department, presented an invited talk at the 62nd International Conference of the Wildlife Disease Association in Knoxville, Tennessee. His presentation, which led the Cervid Diseases Section, was entitled “White-tailed Deer Demography in a High Prevalence CWD Endemic Area of Wyoming” and represents part of his thesis research under major adviser Associate Professor Todd Cornish.
Agricultural Experiment Station

The Wyoming Agricultural Experiment Station (AES) is proud to report that all of its affiliated research and extension (R&E) centers hosted field days this past summer, notes Bret Hess, associate dean and AES director.

“For brevity’s sake, this issue’s program note concentrates on the Sheridan R&E Center field day because it has been a number of years since such an event was in Sheridan,” says Hess.

An event is definitely what it was with a field tour beginning in the morning at Wyarno followed by another tour of the newly acquired property on the south end of the Sheridan College, lunch, and an afternoon filled with presentations.”

The afternoon program included two concurrent sessions: a rancher/farmer’s track and a homeowner’s track. The Sheridan R&E Center Field Days Bulletin at http://bit.ly/sheridanfieldday includes many of the projects that were presented. Additional projects not summarized in the field days bulletin are described in the center’s pamphlet (http://bit.ly/sheridancenter). Slides from presentations delivered during the concurrent session are also available for viewing at http://bit.ly/sheridanslides. AES is pleased to make the information presented at the Sheridan R&E Center field day available to all, notes Hess.

UW Extension

Joey Johnson joined the extension team in Hot Springs County June 1 as the 4-H educator. Johnson served as a vocational agriculture teacher and FFA adviser for more than 16 years. Most recently, he was employed by Park County School District No. 16 in Meeteetse, where he was awarded Teacher of the Year for 2013. He also served as the livestock judging coach and manager of the Paul Stock Agricultural Pavilion for Northwest College in Powell. A UW graduate, Joey and his wife, Melissa, have three sons and reside outside of Thermopolis.

Lincoln County welcomed Miriam Feeley as the new 4-H educator based in the Kemmerer office May 30. Feeley has a bachelor’s degree from Utah State University in agricultural education. She brings experience as a program coordinator for a recreation center and has worked as a substitute teacher and FFA adviser.

Caleb Carter began August 30 as the Southeast Area educator for Profitable and Sustainable Agriculture with emphasis in crops. Carter, based in Goshen County, finished his master’s degree in agronomy at the University of Wyoming this year. He conducted research on irrigation at the Powell R&E Center with Associate Professor Axel Garcia Y Garcia. Carter grew up in Montana and also brings experience working with youth as a wilderness instructor.

Brenda McKinzie began August 26 as the 4-H educator in Platte County. McKinzie graduated in 2011 from Utah State University with a bachelor’s degree in agricultural education. A native of Sheridan, she served as a 4-H intern in Johnson County and also as interim extension educator last fall. Following completion of her degree, she taught agricultural education for one year in Denton, Montana.
Ecosystem Science and Management

Assistant Professor Melanie Murphy was selected to receive the North American Colleges and Teachers of Agriculture Teaching Award of Merit, notes Professor John Tanaka, head of the department. Gamma Sigma Delta selected Kelsey Welter as the Outstanding Freshman, Vicky Zero as the Outstanding Master’s Student, and Eric Wald as the Outstanding Ph.D. student. The department recognized Catherine-Jane Angwin as an outstanding junior and Amanda O’Donnell as an outstanding senior. The department also awarded Graduate Student Certificates of Merit to Ben Wolfe (soil science), Doug Smith (entomology), and Amarina Wuenschel (rangeland ecology and watershed management). Chris Kirol was selected as the recipient of the University of Wyoming Outstanding Master’s Thesis Award for 2013.

Chris’ thesis title is “Quantifying habitat importance for greater sage-grouse (Centrocercus urophasianus) population persistence in an energy development landscape” and was completed under the direction of Associate Professor Jeff Beck. Guinevere Jones was selected for the John P. Ellbogen Graduate Assistant Teaching Award.

There have been several changes over the past few months. Steve Williams and Tom Thrown really did retire and are now emeritus professors in the department. Steve plans to remain in Laramie and active in research and writing. Tom and his family have moved to a farm in Wisconsin where he will continue to write and get involved in other activities.

Denise Manore, office associate, also resigned over the summer. Denise worked primarily with our undergraduate students. Her experience and knowledge of undergraduate programs across campus will be missed.

Mengqiang “Mike” Zhu will be joining the department this fall as an assistant professor of soil chemistry. Mike comes to us from the University of Delaware and has been working as a post-doc at the Lawrence Berkeley Lab in California.

Academic and Student Programs

On behalf of the college, the academic and student programs office thanks Mandie Corcoran, our recruitment coordinator, for her excellent service to the College of Agriculture and Natural Resources over the past two years, says Donna Brown, associate dean and director of the office. Cororan’s husband accepted a position at the University of California, Berkley, and she left to join him early August. “Mandie remains part of the UW family, though, in her new position as a recruiter for the UW Admissions Office in northern California,” says Brown.

Before leaving, Corcoran provided the following update on the Summer Orientation program:

“As a college we participated in four events for Transfer/New Student Orientation May 29—June 26. We participated in the College Connect (approximately 37 professors attended - eight sessions); Resource Fair (two tables – 10 sessions); Parent Reception – eight sessions); and Advising (approximately 150-175 students – 10 sessions). We advised students from every major in our college and were very successful at recruiting an additional 25 undecided students during the College Connect and Resource Fair events. We also held an orientation Welcome Lunch this year, prior to orientation, where we trained approximately 15 faculty and staff members on the changes with orientation and how to use the new Destination-UW screens. Destination-UW is the new student WyoWeb portal that includes a student checklist that helps the students prepare for attending UW and allows staff and faculty to better assist students being advised from a distance. We will have one more session to wrap up the summer on August 22 for International Students. To sum everything up, Orientation 2013 was a great success. We had great student turnout and immense support from the faculty and staff. Thank you for all of your hard work!”
The college is very proud of our scholarship program and the recipients of these awards. This academic year, we awarded $360,000 in Brand of Excellence scholarships. Rather impressive when you consider that the college’s total enrollment this past year was 1,013.

During my years at UW, I have been fortunate to work with donors who established scholarships and with some of the students who receive awards. Students have told me not just once or twice but multiple times over the years how these scholarships allowed them to graduate debt-free. Given the weekly media reports on the growing level of student loan burden, this is a lasting gift to the younger generation. While many of our students also work part-time, they credit College of Agriculture and Natural Resources scholarships, together with other UW scholarships, for making their college education an affordable reality. Some have gone onto professional schools or to graduate schools. The freedom of not having a huge undergraduate student loan burden is a tremendous boost for these young people as they start their careers. If you ever wonder if scholarships make a tangible difference, let me assure you they do. Our average award is $1,750 with our highest undergraduate awards being $4,500.

I hope to see some of you at this year’s scholarship banquet. It is always inspiring to me to hear Professor Donna Brown describe each student’s accomplishments and shares with the audience some of her or his dreams for the future. I usually end the evening feeling like an underachiever! Once I was talking with an alum who had received the Leroy Maki Scholarship as an undergraduate and was now establishing their own scholarship for students majoring in microbiology. They asked if the college still gave coffee mugs to all the recipients at each banquet. The answer is yes. The alum also shared that they still had the coffee mugs from each of their scholarship banquets. Their gift was now helping someone else start their own mug collection.
Rangeland ecology and watershed management program hits high water mark in nation

(Continued from page 14)

find one. There are also summer jobs and permanent jobs after graduation.”

This is an important degree for many reasons.

“Some, if not many, students graduating with degrees in range science or range management will eventually be responsible for the sustainable management of much of the rangeland in the western United States including those in the Great Plains,” notes Rick Peterson, NRCS state rangeland management specialist. “It is critical that these students have a sound understanding of rangeland ecology and the effects of management and natural disturbances of these ecosystems.”

Adds Peterson, “Students with these skills will be valuable assets to land management agencies, consulting firms, and the ranching industries.”

O’Donnell wants to return to her home state after graduation to implement what she’s learned to improve the rangelands of northern Nevada.

“I would particularly like to work with private landowners to help them improve their rangeland management,” says O’Donnell. “The ESM department and its program’s success are largely connected to the college. The college’s welcoming air and openness to its students is what has allowed the range program to expand. The college can reach a larger audience, and the department provides more detailed information.”

Opportunities for Student Involvement

The department also offers an abundance of undergraduate student organizations such as the Range Club, Reclamation Outreach and Research, Entomology Club, Soil and Water Conservation Society Student Chapter, and the Agroecology Club.

“The ESM department is quite involved in the activities of the Range Club and is very supportive,” says O’Donnell, secretary of the Student Range Club.

The degree program is so hands-on and interactive that, when asked if the enrollment numbers were expected to increase, Tanaka says, “Yes and no. I think there is potential for them to grow, but we are reaching the capacity in the core classes. We do a lot of outdoor research so the space is limited.”