

ANIMAL & RANGE SCIENCES NEWSLETTER

Volume 7, Issue 2

September 2014

Introduction from Dr. Patrick Hatfield, Interim Department Head



With this latest newsletter, enrollment in Animal and Range Sciences is yet again hitting high numbers. This fall, we have approximately 343 undergraduate students plus 20 graduate students. Classes are in full swing and faculty and staff are committed to ensuring success of our students.

We have several new faces in the department and you can read all about them in this newsletter. Contact information is provided for all of our new faculty and staff so please feel free to say hello.

There are still two positions we are working at filling. Updates on the Extension Sheep Specialist and Animal Physiologist positions can be found on the last page of this newsletter.

Our students continue to work hard and their accomplishments are truly impressive. A special thanks to Rachel Endecott who serves as the Academic Quadrathlon (AQ) team advisor. We are extremely proud to announce the AQ team tied for second place in the National Academic Quadrathlon. Another big thanks to Jane Ann Boles and her work as advisor to the Collegiate Cattlewomen Club who were named Student Organization of the Year for Montana State University. Read about these student highlights and more in this newsletter.

Once again our Awards, Publications and Presentations section of the newsletter is filled with recent accomplishments of faculty, staff and students. There are links to some of the newest publications or if you would like hard copies just contact Susan at (406) 994-3722 or scooper@montana.edu.

If you are in town for any of the upcoming Ag events, MSU Celebrate Ag (November 7-8, 2014) or the MSU John Deere Ag Expo (November 13-15, 2014), please stop by and say hello. If you are just in town for the day stop by and see us also feel free to contact me with any questions or comments (406) 994-4850 or hatfield@montana.edu.

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Welcome New Faculty and Staff



Emily Glunk

Assistant Professor, Extension Forage Specialist

Start Date: June 1, 2014

Emily Glunk is the new Forage Extension Specialist and Assistant Professor in the Animal and Range Sciences Department at MSU. Emily grew up on a small hobby farm in central Pennsylvania, after which she attended Penn State University, earning a B.S. in Animal Bioscience. She then attended North Carolina State, earning a M.S. in Animal Science and Nutrition, with her research focused on pasture utilization by grazing horses. Emily completed her Ph.D. in Animal Science at the University of Minnesota, where her research again focused on the animal-forage interaction. During her Ph.D. work, she was in charge of running a small acreage pasture management program, as well as teaching a course at the University of Wisconsin River Falls entitled Equine Forage Systems. Much of Emily's work has been focused on small-acreage forage utilization and production, and also included some alternative annual forages for use as emergency grazing. Emily hopes to continue focusing on the animal-forage interaction in her work at MSU, as well as starting a research and extension program that focuses on whole system management, starting with soil health and quality, all the way up through proper forage production and management and effects on animal health and production, and annual forage production projects.

Emily's position is a cooperative position between MSU Extension and the MSU College of Agriculture Animal and Range Sciences Department. The primary focus of her position is to provide unbiased, research-based education to Montana's forage producers and users. She will offer education and training on current forage topics to MSU Extension agents. This training will require the use of remote teaching technologies as well as travel throughout the state. Emily will also collaborate with other faculty members in the College of Agriculture to complement and maximize the educational presence in the state. You can reach Emily at (406) 994-5688 or emily.glunk@montana.edu.

Megan Van Emon

Assistant Professor, Extension Beef Specialist

Start Date: August 1, 2014

Megan grew up on a small farm in northeast Indiana. She studied Animal Science at Purdue University and graduated with her bachelors in 2006. Megan continued her education at Purdue University with Dr. Scott Lake, studying ruminant nutrition and graduating with a masters in 2008. The research topic was the optimization of protein quality of dried distillers grains with solubles for ruminants. Megan moved to Hettinger, ND in May of 2009 to begin her Ph.D. in ruminant nutrition with Drs. Chris Schauer and Kim Vonnahme. Using sheep as a model for cattle, her research focus was supplementing metabolizable protein to ewes during late gestation and determining the effects on the offspring. While in Hettinger, she also conducted research in weaning strategies with Angus calves and ram fertility. In May of 2013, Megan graduated from North Dakota State University with her Ph.D. After graduating from NDSU, she moved to Iowa State University as a Post-Doctoral Associate with Drs. Stephanie Hansen and Dan Loy in beef feedlot nutrition. Megan's main research focus at Iowa State University was to determine the effects of feeding algae meal to beef steers on digestibility, preference, and performance.



Megan will serve as one of the nuclei for the department's applied livestock program. She will be an invaluable resource for supporting the "managing grazing livestock" future area of excellence identified by Animal and Range Sciences faculty. Megan will interact with and complement the beef programs on campus and at the USDA-ARS Ft. Keogh Livestock and Range Research Laboratory and with clientele throughout Montana and serve as a resource for beef clientele and Extension agents regarding beef production issues. You can reach Megan at (406) 874-8286 or megan.vanemon@montana.edu.

Welcome New Faculty and Staff (continued)



Hannah DelCurto
Instructor, Animal Science
Start Date: August 16, 2014

Hannah is originally from Cove, Oregon, and growing up was actively involved in 4-H, FFA, and raising cattle. After high school this background led her to pursue a degree in animal science. She continued her education at Linn-Benton Community College in Albany, Oregon, and was a member of LBCC's first national champion livestock judging team. Hannah then transferred to Kansas State University, where she was on the judging team and earned a degree in Animal Science Production Management. Recently, she completed her MS degree from Texas A&M University in Reproductive Physiology. During

her master's she taught animal reproduction labs and conducted research focusing on maternal nutrient restriction and its effects on fetal and placental development using the ewe as a ruminant model.

Hannah will teach several classes including: ANSC 100 Intro to Animal Science, ANSC 215 Calving Management, ANSC 232 Livestock Management Sheep, ANSC 234 Livestock Management Beef, ANSC 308 Livestock Evaluation, ANSC 408 Advanced Reproduction. She will also have an opportunity to provide instruction for NRSM 102 National Resource Conservation Lab, NRSM 235 Range and Pasture Monitoring, and NRSM 236 Small Pasture Management. Hannah will also oversee the steer-a-year program and manage the funds from steer-a-year for use by the judging team and her judging program. Hannah can be reached at (406) 994-3752 or hannah.delcurto@montana.edu.

Philip Merta
Lab Manager
Start Date: June 16, 2014

As our new Lab Manager in Animal & Range Sciences, Phil brings a combination of applied research expertise, project management, and a lifelong interest in agriculture. His passion for biology began on the family farm in East Texas, and progressed to genetics research at the UT Health Science Center (San Antonio) and M.D. Anderson Cancer Center. Subsequently, Phil launched a long and productive applied research career at Abbott Labs, where he played a critical role as a bench scientist and team leader in drug discovery; over 20 research publications document his contributions to drug development in several therapeutic areas, as well as to innovative approaches aimed at minimizing drug side effects. Phil recognizes his new role at MSU as the means to achieve his ultimate career goal: To make a significant contribution to American Agriculture by working with the impressive assembly of researchers in A&RS. He and his wife Betty feel honored and privileged to be a part of this wonderful Montana community.



Phil's primary responsibilities include operating the laboratories and associated facilities, supervising laboratory employees and students, conducting and/or overseeing all analytical procedures, analyzing data, and contributing to ongoing research. Additional responsibilities include maintaining inventories of chemicals and supplies, ensuring research equipment is maintained, collecting laboratory fees and managing the associated budget(s), assisting with research projects, and developing and teaching laboratory procedures and analytical operations to technical staff, and undergraduate and graduate students. Phil can be reached at (406) 994-3779 or philip.merta@montana.edu.

Welcome New Faculty and Staff (continued)

Lance McNew
Assistant Professor of Wildlife Habitat Ecology
Start Date: August 16, 2014

Lance received his Ph.D. in Ecology from Kansas State University in 2010. Since then he has worked as a post-doctoral research associate at K-State and wildlife research biologist at the U.S. Geological Survey in Anchorage, Alaska. Lance's research interests lie in wildlife habitat ecology with a focus on improving the functionality of wildlife habitats in agricultural landscapes and is very excited for the opportunity to work with students and scientists in the Department of Animal & Range Sciences at MSU to develop integrated research that addresses ecological questions of wildlife ecology in the working landscapes of Montana. Lance feels strongly that bringing range managers and wildlife biologists together can produce innovative collaborations that benefit both wildlife and producers.



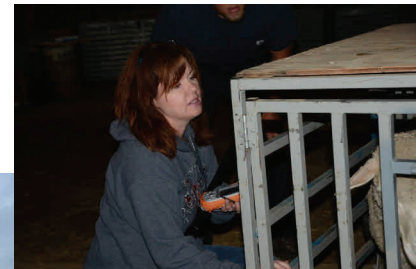
Lance will develop and implement a nationally recognized program in wildlife habitat ecology which will complement and expand existing research and teaching efforts. He will also establish a Montana Agricultural Experiment Station (MAES) project and publish in refereed journals and secure extramural funding. Lance's teaching responsibilities will include courses in wildlife management and wildlife habitat ecology. His teaching component will also include responsibility to advise students and support department and college activities to recruit and retain undergraduate and graduate students. Lance can be reached at (406) 994-6645 or lance.mcnew@montana.edu.

Lamb Weaning at Red Bluff Research Farm

Animal and Range Sciences staff, undergrad and graduate students, along with Red Bluff staff, successfully weaned an estimated 1,000 lambs from 600 ewes. After separation, each lamb and ewe were weighed, examined and inspected. The weaning is an annual event in the late-summer for lambs that were born in the spring at the research ranch. The sheep are the College of Agriculture's livestock and are used for a variety of teaching and research projects. Currently, Red Bluff is home to about 150 head of cattle and 1,200 sheep.



Jillian Hatfield, Chris Brekke-George and Arianne Perlinski recording sheep.



Lisa Surber examining sheep



Ariella Tuttle, Devon Ragen and Chris Brekke-George at Red Bluff.

Photos courtesy of Phil Merta

Youth Horsemanship Schools



Dr. Shannon Moreaux

The MSU Equine Science program teamed up with Windhorse Equine Learning and Gallatin Valley YMCA to provide youths with horsemanship experience and education. Several dozen kids, many of which who had never touched a horse before, had the opportunity to learn about horses from experts, equine science students and volunteer horse enthusiast this summer. The goal of this summer's youth horsemanship programs was to introduce inexperienced children to the wonders of horses and to use the horse as a medium for teaching and learning. Dr. Shannon Moreaux, director of the project, said the main objective was to use horse behavior and the human-horse relationship as a model to teach children self-awareness, leadership skill, communication skills, and develop self-confidence – all valuable life skills. The participants also learned about basic horse husbandry, biology, care and safety. “But of course we wanted the kids to have fun and spend most of their time interacting with and enjoying the horses” said Dr. Moreaux. The Equine Programs Equitation Manager, Andi Shockley, equine science students Sarah Lacart and Missy Hiebert, and Windhorse volunteers facilitated the projects learning activities at MSU's Miller Stock Pavilion.

Administrative Team Highlight: Kayla Polillo

If you have called or stopped by the main office of the Department of Animal & Range Sciences in the past year you probably had the pleasure of talking to Kayla Polillo. Kayla is a student employee and a sophomore at MSU studying Pre-Veterinary Medicine.

Kayla was born in Clovis, NM and lived in Las Vegas, NV for almost 11 years on an air force base. After her dad retired from the military her family moved to Livingston, MT where they have lived for 7 years. Kayla graduated from Park County High School.

In addition to her college life, Kayla was a member of the 2014 National Shooting Sports Invitational which was held June 24-29 in Grand Island, Nebraska. Kayla has competed in this event for three straight years, quite a feat considering participants are allowed to go to nationals only once in a given discipline, meaning Kayla, 19, was able to qualify for nationals three consecutive years in three separate events. This year Kayla was part of the Montana Muzzleloaders team, helping them to a fifth-place finish, one of the best finishes ever for a Montana team at the competition. Kayla also placed 13th overall individually. Her plan is to go back next year as a national pistol coach, as well as coaching for her local shooting sports club. She is also training for the Junior Olympic tryouts in March for air pistol to represent the state of Montana.



Kayla Polillo holds ribs she won as a member of the Montana Muzzleloaders team at the 2014 National 4-H Shooting Sports Invitational.

Awards, Publications & Presentations

New publication: Whilham, N.J., J.M. Warren and **M.R. Frisina**. 2014. [Effects of cattle grazing on small mammal communities at Red Rock Lakes National Wildlife Refuge, Montana](#). Intermountain J. of Sci. 19(1-4): 9-21.

New Publication: Hallan, P., **M. Lachman**, S. Malfatti, A. Sczybra, B. Knierim, M. Auer, S.G. Tringe, R.I. Mackie, **C.J. Yeoman**, and M. Hess. 2014. [Temporal dynamics of fibrolytic and methanogenic rumen microorganisms during in situ incubation of switchgrass determined by 16S rRNA gene profiling](#). Front. Microbiol. 5 (307): 1-11.

New Publication: Dassa B, I. Borovok, V. Ruimy-Israeli, R. Lamed, H.J. Flint, S.H. Duncan, B. Henrissat, P. Coutinho, M. Morrison, P. Mosoni, **C.J. Yeoman**, B.A. White, and E.A. Bayer. 2014. [Rumen cellulosomes: divergent fiber-degrading strategies revealed by comparative genome-wide analysis of six ruminococcal strains](#). PLoS One 9: e9221.

New Publication: **Yeoman C.J.** and White B.A. 2014. [Gastrointestinal tract microbiota and probiotics in production animals](#). Annu. Rev. Anim. Biosci. 2: 469 – 486.

New Publication: Walther-Antônio MR, P. Jeraldo, M.E. Berg Miller, **C.J. Yeoman**, K.E. Nelson, B.A. Wilson, B.A. White, N. Chia, and D.J. Creedon. 2014. [Pregnancy's stronghold on the vaginal microbiome](#). PLoS One 9: e98514

Carl J. Yeoman was an invited speaker for the Bortree Seminar Series at Penn State University, PA held February 12. Presenting a talk entitled “Investigating the vaginal microbiome in sexual health and reproduction”

Carl J. Yeoman was an invited speaker for the Poultry Breeders Roundtable at Kansas City, MO held April 30 – May 2. Presenting a talk entitled “Gut and reproductive tract microbes: Important drivers of nutrition, health, and reproductive performance”

Carl J. Yeoman was an invited speaker at the Genesis Vaginal Microbiome and Bacterial Vaginosis Conference at Hamilton, NJ held June 18-20. Presenting a talk entitled “Exploiting multiple molecular methods to develop a more robust mechanistic understanding of BV”

Carl J. Yeoman was an invited teacher for Iowa State Universities NUTRS 505 The Microbiome in Nutrition, Health and Disease: Friends with Benefits held July 14 – 18 at Iowa State University, Ames, IA.



Carl Wambolt (center) being presented with the W. R. Chapline Research Award by Merrita Fraker-Marble and Clayton Marlow (who nominated Carl for this award).

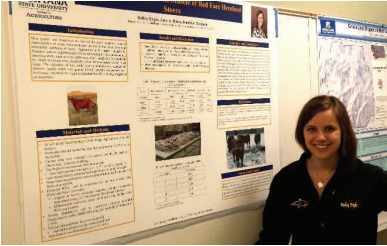
Dr. Carl L. Wambolt, Professor Emeritus received the W.R. Chapline Research Award at the Society for Range Management's (SRM) 67th Annual Meeting held in Orlando, Florida, February 8 – 13, 2014. This award gives special

recognition to members of the Society for exceptional and sustained research accomplishments in range science and associated disciplines, including biology, morphology, physiology, and the ecology of specific range species, ecosystems, relating plant environments, wildlife and domestic livestock on such lands. Carl was nominated for this prestigious award by Merrita Fraker-Marble and Clayton Marlow. Merrita and Clayton were able to present the award to Carl at a reception in the Animal Biosciences Building in Bozeman on May 8, 2014. For more information click on this [press release from SRM](#).

Mike Frisina was an invited speaker for the Charles M. Russell National Wildlife Refuge Community Working Group in Malta, MT on June 17, 2014. Mike presented “Livestock Grazing on Wildlife Refuges.”

James (Jim) Berardinelli presented research work at this year's Western Section of the American Society of Animal Science held at Angelo State University in San Angelo, TX, July 27, 2014. Jim's presentation was titled: “Temporal patterns of metabolites, metabolic hormones, and progesterone concentrations and lambing rates in Rambouillet ewes selected for high and low reproductive rate.”

Awards, Publications & Presentations (continued)



Bailey Engel presenting research work at the First Annual Undergraduate Poster Competition at this year's

Western Section of the American Society of Animal Science held at

Angelo State University in San Angelo, TX, July 27, 2014. The title of her poster presentation was "Gene expression of skeletal muscle of red face Hereford steers." The research was conducted, and Bailey was mentored, under the direction of **Jane Ann Boles** and **Jennifer Thomson**.

New publication: **Swartz, J.D., J.G. Berardinelli, J.M. Thomson, M. Lachman, K. Westveer, M.R. Herrygers, R. W. Kott, P.G. Hatfield, and C.J. Yeoman**.

2014. "Temporal patterns of metabolites, metabolic hormones, and progesterone concentrations and lambing rates in Rambouillet ewes selected for high and low reproductive rate." Proc. West. Sect. Amer. Soc. Anim. Sci. 65: 98-101.

New publication: **Hatfield, P.G.** 2014. "Putting ruminants back into crop farming: Systems level thinking and production for the future." Proc. West. Sect. Amer. Soc. Anim. Sci. 65: 1-7.

Knight, James E. 2014. Effectiveness of modifying fences to exclude ungulates from high value pastures. Research Bulletin No. 4603. MSU, Bozeman, MT

Knight, J.E. 2014. Modifying fences to protect high value pastures from deer and elk. Extension MontGuide MT201401AG.

New publication: Browsing the Literature by **Jeff Mosley** in the [August 2014](#) issue of the journal Rangelands.

New publication: **McNew, L.B., L.M. Hunt, A.J. Gregory, S.M. Wisely, and B.K. Sandercock.** 2014. [Effects of Wind Energy Development on Nesting Ecology of Greater Prairie-Chickens in Fragmented Grasslands.](#) Conservation Biology 28:1089-1099.

New grant: **Mike Frisina** and **Bok Sowell** along with Vanna Boccadori, from the MFWP, were awarded \$9,000 from RMEF, MFWP and Skyline Sportsmen's Assoc. for a nutrition study at Mt. Haggan WMA.

Upcoming Dates

September 26-27, 2014	MSU Homecoming
November 4, 2014	Election Day (No Classes, Offices Closed)
November 6, 2014	Department of Animal & Range Sciences Advisory Committee Meeting
November 6-7, 2014	American Farrier Association (AFA) Certification Prep Course (Contact Bryce Kawasaki, (406) 994-2648 or brycekawasaki@yahoo.com)
November 7-8, 2014	MSU Celebrate Ag
November 11, 2014	Veteran's Day (No Classes, Offices Closed)
November 13-15, 2014	MSU John Deere Ag Expo
November 26-28, 2014	Thanksgiving Day Holiday for Students
November 27-28, 2014	Thanksgiving Day Holiday for Faculty and Staff
December 5, 2014	MSU Classes End
December 25-26, 2014	Christmas Holiday (Offices Closed)

Dr. Shannon Moreaux's Mongolian Equi-humanitarian Trip



Shannon working with veterinary students in Mongolia.

Dr. Shannon Moreaux, recently traveled to Mongolia with BioRegions International to develop a service learning course for animal science, range science, first year veterinary students and honors students, and coordinate collaborative research efforts with the Mongolian State University of Agriculture and the Department of Animal and Range Science at Montana State University.

For many years Mongolian agriculture officials and Montana State University have been working toward a mutually beneficial relationship and many Mongolian students are enrolled in graduate programs at MSU, including one Fulbright scholar.

BioRegions International, founded by MSU Professor Emeritus Cliff Montagne, has fostered relationships between MSU faculty and Mongolian pastoralist herders, environmentalist, biologist and health officials to promote public health, environmental preservation, education, and sustainable economic development. Dr. Moreaux is the latest addition to the BioRegions team. His expertise in animal science and veterinary medicine were well integrated in the holistic, locally-based projects approach BioRegions is known for.

Dr. Moreaux provided continuing education for veterinarians, herders and horse trainers and developed plans for returning next year with a group of graduate and undergraduate students to continue this important equi-humanitarian effort. Additionally, Dr. Moreaux contributed to ongoing brucellosis research being conducted in Mongolian sheep, cattle and herders, and coordinated a plan to develop several collaborative projects with veterinary and agriculture research faculty at Mongolian State University of Agriculture and School of Veterinary Medicine.



Shannon working with colt.

Department of Animal & Range Sciences Back to School Barbeque



Photos courtesy of Denise Thompson



Recent Events Held in the Animal Bioscience Building

April 3, 2014	US Green Building Council Meeting
April 5, 2014	Expanding Your Horizons
April 14-May 26, 2014	Gallatin Co. Extension Small Acreage Mgmt. Workshops (Monday evenings)
April 18, 2014	Nursing Students NCLEX Review
April 21, 2014	Montana Feed Association Interviews for Scholarships
April 23, 2014	4-H Horseless Horse Club
April 24, 2014	College of Agriculture Sr. Ag Coffee
April 25, 2014	Health Professions Advisory—Spring Gala
April 25, 2014	Gallatin County Extension 4-H Mentoring
May 2, 2014	Department of Animal & Range Sciences Graduation Party
May 6-8, 2014	HACCP Training
May 14, 2014	MSU Safety & Risk Management CPR Class
May 19, 2014	MSU Research Expansion Review Committee Meeting
May 25, 2014	Extension Ag Specialist Meeting
June 6, 2014	Gallatin Co. 4-H Meeting
May 30, 2014	College of Agriculture Quarterly Administrative Associates Meeting
June 16-19, 2014	A Step Ahead
June 24, 2014	Orientation
June 30-July 2, 2014	MSU Data Training Camp
July 15, 2014	Orientation
July 24, 2014	Scientific Vendor Show
August 11, 2014	Extension New Agent Orientation
August 12, 2014	Renne Library Staff Retreat
August 21, 2014	Orientation



Other News

The College of Agriculture at Montana State University has a new Montana Grasses identification app for smart phones and tablets. The app provides images, species descriptions, range maps, and other information for more than 100 grasses and grass-like plants inhabiting the agricultural landscapes in Montana and adjacent states and provinces. <http://www.appszoom.com/android-app/montana-grasses-kmukb.html>.

The 2014 Montana Nutrition Conference and Livestock Forum was held in Bozeman on April 22-23. The conference is a joint effort between the Department of Animal and Range Sciences and the Montana Feed Association. Rachel Endecott organized this conference with help of a planning committee made up of Montana Feed Association representatives. This year's theme was "Racing to the Future."

The planning committee would like to thank Dr. Paul Grieco for his continued support of the lectureship series. Ryan Goodman (Montana Stockgrowers) and Carrie Mess (Wisconsin Dairy Farmer) were this year's Grieco Beef Cattle Lecture Series speakers with the topic of "Social Media: Understanding the Power of Reaching Our Customers."



Winners of the annual graduate student poster competition (sponsored by the Montana Feed Dealers Association) were Jasmine Westbrook (1st place), Bob Sager (2nd place) and Kaitlyn Spence (3rd place). The first undergraduate poster winner was Bailey Engle (award sponsored by ZINPRO Corporation).



Dr. Jim Knight, Extension Wildlife Specialist, is completing reviews, evaluations and the final reports for his Western SARE (Sustainable Agriculture Research and Education) project titled, "Wildlife Damage Control for Traditional and Organic Farmers-Tools for Trainers". This 3-year project provided training for Extension Agents and NRCS personnel in Montana and Idaho. In addition to the field and on-line workshops for the agents, development of a web page provides wildlife damage information for agricultural producers. An on-line workshop covering 11 wildlife species and the basics of wildlife damage control is available at <http://animalrange.montana.edu/extension/wildlife.htm>. Ten videos were produced covering various aspects of wildlife damage control including use of bait stations and trapping for ground squirrels and pocket gophers and setting live traps for skunks. A handbook, "Wildlife Damage Control for Organic Farmers, focus on the available options for this group of ag producers. All materials will be available on the MSU Extension Wildlife website and on the national eXtension websites http://www.extension.org/wildlife_damage_management and http://www.extension.org/organic_production. Funding for the project was from WSARE and MSU Extension. Cooperators include Montana and Idaho Extension Agents, Indian Reservation educators and farmers, and traditional and organic farmers in Montana and Idaho.

James (Jim) Berardinelli has been elected to serve as the 2015 President of the Western Section American Society of Animal Science (WSASAS). Jim has been an active member in the American Society of Animal Science (ASAS) and Western Section (WS) since 1974 and 1982, respectively. He has served on the ASAS Editorial Board numerous times, the ASAS Physiology and Endocrinology Award Committee (1993-96 and 2006-07), and the ASAS Centennial Committee (2005-08). In the past, he has served the Western Section as a member and Chairman (1988) of the Graduate Student Competition Committee (1987-89 and 2003-05), and member of the Awards Committee (1997-2000; 2013), Membership Committee (1985-87), and Resolutions Committee (1989-91), Advising and Coordinating Committee (2012-2014). He was elected and served as Secretary-Treasurer of the WS for 2012 (2012-2013), President-Elect of the WS in 2013 (2013-2014) and President I this year (2014-2015). Dr. Berardinelli received the 2012 "Distinguished Teaching Award". Jim has been and continues to be a strong proponent of the missions of the ASAS and WSASAS. He will oversee the new 3-yr "Strategic Plan" for the WSASAS during his tenure as President this year.



Student Highlights

Academic Quadrathlon

After winning the Western Region Academic Quadrathlon (June 25-27, 2014 in San Angelo, TX), four students from the Department of Animal and Range Sciences at Montana State University tied for second place in the National Academic Quadrathlon, held July 20-21 in Kansas City, MO and Manhattan, KS.

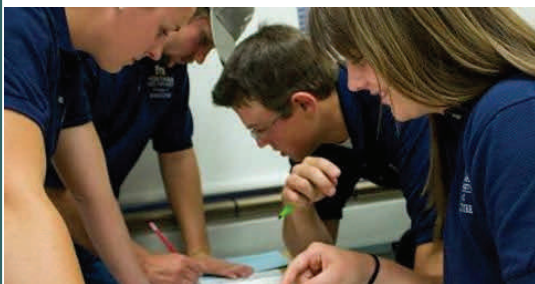
Anna Downen of Columbia Falls, Preston Kiehl of Winnett, Jessica Roloff of Bozeman and Ben Stokes of Pflugerville, Texas, competed in a four-part contest that consisted of a comprehensive written exam, impromptu oral presentation, hands-on lab practicum and double-elimination quiz bowl tournament.

The MSU team competed with three other universities, including Ohio State University, Pennsylvania State University and Texas A&M. The MSU team won the oral presentation and took second in the lab practicum.

“Anna, Preston, Jessie and Ben did a fantastic job representing MSU at the contest. I’m extremely proud of the them and their hard work. It’s exciting that MSU holds our own with much larger schools. It only increases our confidence that our program is turning out students who are well-prepared for their future careers.” said team advisor Rachel Endecott.



Team members: (L to R) Ben Stokes, Anna Downen, Team Advisor Rachel Endecott, Jessica Roloff and Preston Kiehl. (Photo from the American Society of Animal Science).



Three of the four students graduated in May. Kiehl has one semester remaining and plans to return to his family ranch. Downen now lives in Fairview and works at a Sidney veterinary clinic. Roloff is working on a ranch near Lewistown, and Stokes is starting a master’s degree at Iowa State University.

The national contest was held in conjunction with the 2014 joint annual meeting of the American Society of Animal Science, American Dairy Science Association, and Canadian Society of Animal Science.

Collegiate Cattlewomen

Congratulations to the Collegiate Cattlewomen who were named Student Organization of the Year for Montana State University. We would also like to extend a big thank you to the Collegiate Cattlewomen’s advisor, Jane Ann Boles. The Collegiate Cattlewomen were recognized at the 91st Annual Day of Student Recognition on April 8, 2014.

The Collegiate Cattlewomen's organization is open to women enrolled at MSU who are interested in the future of beef, agriculture, and their communities. Their goals include public education and promotion of the business of agriculture. The club also assists Montana Cattlewomen and the Montana Beef Council in their efforts to promote the welfare of the beef industry. The club offers women an opportunity to expand their communication and leadership skills while working with their peers to educate the community.

Student Highlights (continued)

MSU Driving Team (Club) Drives to Educate



Wagon's Ho! The driving team made a spectacular showing this summer at the 2014 Gallatin County Fair, Big Sky Thunder Draft Horse Events! Six MSU students displayed their skills both driving and riding MSU's Big Horses! The events were mostly just for show, but of course the students were competing against one another while they performed in their exhibitions!

This event was organized to promote and educate the general public about driving, and heavy horses. There were demos on shoeing big horses, pulling the vehicles they pull, and even a "Draft Horse 101" information session. The exhibitions and demonstrations used a combination of the really tall (18+ hands) show style "hitch" horses, the somewhat shorter (16-17 hand) stockier work style horses, our 16 hand riding/driving combination horses, some warmbloods, Haflingers (draft ponies), and mules. I think the only things missing were minis! The hitch horses were hooked as singles, team, tandem (one in front of the other) unicorn (two behind one in front), 4-up (two in front two in back), 4-abreast (all side by side), and 6-up (same as 4-up just two more in front).

Another educational goal of ours was to demonstrate that one can drive through different courses/patterns with various types of carriages/carts/wagons and with differing numbers of horses hooked to the front of the carriage. In what I termed the "fun events" we had a single horse, some teams/pairs (including both of MSU's) a 3-abreast, and a 4-in-hand (this is the same as a 4-up just different terminology than that of heavy horses, also has to do with the style of driving one is participating in). These events were a combination of speed and precision.

A special thanks to Andi Shockley, the Driving Team advisor. If you would like to contact Andi regarding the Driving Team you can reach her at (406) 994-6878 or ashockley@montana.edu.

Student Highlights Continued - Student Internships

Below are some examples of undergraduate student's recent internship experiences. These internships are a crucial part of the learning experience for the Department Animal Science students. If you would like more information on the internship program please contact Pat Hatfield at hatfield@montana.edu or by phone at (406) 994-4850.

Student Internship - Kelsey Haughian

Senior Animal Science student, Kelsey Haughian, spent her summer internship on a remote cattle station in South Central Queensland, Australia. Kelsey had the opportunity to work with the world's largest herd of Wagyu cattle as well as elite Brahman/Santa Gertrudis/Bonsmara/Senepol/Charolais composite herds owned by Australia's Agriculture Company. She is very thankful to have been given this unique chance to explore agriculture abroad and couldn't have done so without the support financially from family and from MSU's Exc.e.ed Grant.

Student Internship - Miriah Reynolds

Miriah did an internship at a Dairy Goat Farm in North Kingstown, RI. She was involved in milking goats, taking care of gardens, farm management, CSA programs, farm shares, vegetable production, and soap/cheese making.

Student Highlights (continued)

Student Internship - Jeremiah Jansen

My name is Jeremiah Jansen and I am a senior at MSU majoring in Animal Science-Livestock Management and Industry Option, currently finishing up a Range Nutrition Internship at Fort Keogh the Livestock and Range Research Laboratory located outside of Miles City, MT. This summer has been a busy one and I can't believe that it is almost over. I have gotten to participate in all sorts of research from the livestock side to the range side. I have had the opportunity to work with sixteen canulated cows this summer, using them in studies looking at effects of utilization and what effects timing and intensity of that grazing will have on the plant community. I never would have thought I would be sticking my hand into the rumen of a cow and taking out the diet she just consumed so that I could freeze, freeze dry it, grind it, weigh it into bags and then put them back in, just to repeat most of the process over again and then run tests on the sample to determine the forage quality and how digestible that forage is to livestock.

As a Range Nutrition intern the entire job description is related to range work, and I spent at least half of my summer on the range crew clipping plots to monitor and measure production, diversity as well as many other things. As you may know it was a pretty good sweet clover year and clipping exclosures with six and a half foot tall sweet clover is an interesting job. I was very happy to get to work on the exclosures due to the increased push for decreased, or even no grazing on public lands. This study could provide the scientific research and evidence that grazing is beneficial to range lands. How this is being done is that paired plots established in 1995, with one being grazed and the other being left ungrazed, are identical in soil type, aspect and many other things, these sites are now clipped every other year to measure production, diversity and other rangeland health indicators. Hopefully this and all the other research that is being conducted at the Fort will turn out being very beneficial to all of its consumers, which is probably everyone reading this article. Thanks for taking the time to read about what I have been up to this summer and just a few of the many important projects I have gotten to work on.

Student Internship - Kelly Deaton

Kelly Deaton is an undergraduate in Animal Science and did her internship with Progenesis Embryo Transfer that works in various US states in the NW region. Kelly's duties included learning to identify the specific equipment and supplies used for bovine embryo transfer, learning the embryo transfer procedure so she can be helpful during the process of flushing, sorting and implanting embryos, assisting with the logistics of travel and scheduling ranch visits, assisting in flushing and preparing recipients, and helping with inventory control and restocking.

Student Internship - Auxane Maine

Auxane Maine is an undergraduate student in the Equine Science option and did her internship with Bluebonnett Feeds, Inc., in Ardmore, OK. Auxane is exploring career opportunities in the equine nutrition research, production and consulting industry in the Western Performance Horse capital of the world. During this extraordinary internship she has participated in consulting and sales calls in Texas, Oklahoma, Arkansas and Missouri, implemented a small nutrition study and learned to apply an integrated quality control protocol as well as operating digital control feed measuring and mixing instruments and assisting with an organization analysis and business improvement plan.

Student Highlights (continued)

Student Internship - Rory Bauer

Rory Bauer is an undergraduate in the Equine Science option and Montana raised scholarship athlete. Rory did his internship with Hoffman Performance Horse Training out of Belgrade, MT. Rory has been able to participate in the daily operation and management of a progression horse training facility. In addition to assisting with and evaluating the horse care and welfare protocol for Hoffman Performance Horse Training, Rory also assisted with daily management of cattle and buffalo used in training activities. Other experiences included assistance with horse training regimens, horse training and colt starting clinics and client lessons. Rory also was able to practice ideologies learned in courses at MSU and integrate new methods and knowledge.

Student Internship - Shaelyn Meyer

This internship was an incredible experience that opened up some great opportunities. I gained a clearer view of my strengths and weaknesses and feel even more motivated professionally because of the challenges I was faced with this summer. My time at Park County extension was cut short because I was offered a position as an interim Ag agent in Madison-Jefferson County to finish out the summer. I began the new position July 7th and was given the task of helping to plan their fair and handle all situations that would normally fall on the Ag agent who had recently left her position.

My internship prepared me for stepping into the interim position by introducing me to the role an extension agent plays in the community and tools that can be used in helping people. I gained confidence in myself that can only come through experience.

I learned how to develop quality programs that benefit the community outside those that directly participate. I gained leadership experience through teaching and collaborative opportunities that also challenged my communication skills. I forged some valuable professional relationships that will only benefit me in the future if I am able to continue working in extension.

I was able to better my computer skills as well and familiarize myself with programs that I may be using in the future. My organizational and planning skills were tested throughout the summer as well. This prepared me for the task of planning the fair and assisting volunteers with their responsibilities. My agricultural knowledge base was constantly being tested by practical questions from local producers. It was a really great way to learn and find practical applications for all the classroom education I have received.

I would absolutely recommend an extension internship for those looking to gain Agricultural, as well and Family and Consumer Science, programming experience. Personally, I was nervous about graduating and feeling like my career opportunities would be limited. I didn't think of myself as someone that could succeed in this kind of position but I really feel like some doors have been opened and I have a tangible direction and goals, not to mention confidence that I lacked before.

My favorite thing about this type of position is that continuing your education is not only allowed, it's encouraged. I would love to find myself in a position where I'm expected to further my education and follow my interests and then take that knowledge out into the community and help others do the same.

Current News: Update on Position Searches



The Animal and Range Sciences Department at Montana State University is growing, and currently has the following searches in progress. Updates on these searches are outlined below:

Extension Sheep Specialist (Assistant/Associate Professor of Sheep and Wool Production)

On-campus interviews September 29 - October 7, 2014

Animal Physiologist (Assistant/Associate Professor)

Applications have been screened and the Search Committee is proceeding

If you have further questions please contact the Animal and Range Sciences Department at 406-994-3721 or Susan Cooper at scooper@montana.edu.

Facebook

We would like to invite you to “Like us” on Facebook and keep up with the latest postings on the Department of Animal Sciences. You will find job postings, internship opportunities, award announcements, upcoming events, etc.

You can find our page at: <https://www.facebook.com/MSU.Animal.Range.Sciences>



Help Support Animal and Range Sciences

A gift to the department is a great way to support student and faculty endeavors. Donations can be earmarked for student scholarship funds, faculty research, the new Animal Bioscience Building, and more.

For more information about making a donation to the department contact:

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Animal Bioscience Building

