

# ANIMAL & RANGE SCIENCES NEWSLETTER

Volume 2, Issue 3 July 2009

## Introduction from Bret Olson, Interim Department Head



Welcome to the Department of Animal and Range Sciences via our fourth newsletter. Designed as a quarterly publication, this newsletter highlights events and accomplishments of the last three months and the next three months. I hope you find the enclosed activities and accomplishments interesting and informative. Our previous newsletters are archived on our web page: <http://animalrange.montana.edu/>

As I write this (late July), campus is relatively quiet, although we have had three sessions to “orient” incoming freshmen which makes campus buzz during those days. Are the freshmen getting younger or am I getting ...no? There have always been two jokes in Bozeman about summer: “we have nine months of winter, three months of visiting relatives” or “we have nine months of winter, three months of construction”. To focus on the latter, one of the main arteries on the west side of campus (South 19<sup>th</sup>) is being widened from two lanes to five. On campus, Gaines Hall (where you would have taken your chemistry classes) is undergoing a MAJOR renovation, and then there is our Animal Bioscience Building which is almost completely finished on the exterior: <http://ag.montana.edu/info/abs.htm>. The east wall shown in the web cam image is the last one to be “bricked”.

About a year ago, work began on the 40,000 square-foot Animal Bioscience Building, which will offer animal science and natural resources/rangeland ecology students state-of-the-art classrooms and laboratories for instruction and research. The building is scheduled to be completed next August, just in time for the class of 2014 to move in with us. The Animal and Range Sciences Advisory Committee had their early summer, bi-annual meeting on June 1<sup>st</sup>. Besides interesting discussion, we toured the building (see photo at right). Committee members in the image (left to right) are Barbara Landgraf-Gibbons, Betty Sampsel, Vinita Shae, Taylor Brown, Debbie Drews (MSU Facilities Services Project Mgr. and our tour guide), Keith Stevenson, Jim Hagenbarth, Diana Alkire, myself, and Bob Hanson. I think it is safe to say all were energized by what they saw. Note the OSHA unapproved safety rail in the photo. Remaining members of the committee are Kurt Alt, Derek Manseau, John Helle, Dave Kelsey, Bob Lee, Carol Sparks, Turk Stovall and Randy Tunby.



At the end of June, Dr. Mike Tess officially retired from the department although he will maintain office space and continue his scholarly activities with the American Simmental Association and the Bair Ranch Foundation. And Dr. Wayne Gipp, Extension Swine Specialist, retired at the end of July. If you know either of these fine gentlemen, please contact them and wish them the best. As you may have remembered from earlier newsletters, we have a few other vacant faculty positions that we hope to fill in the near future. The status of Montana’s economy is not helping at the moment, but Montana State is doing relatively well compared with land grant universities in other western states which are facing major cuts or tuition increases.

Students graduating from the department in May are taking attractive jobs inside and outside Montana. Congratulations to all of our Spring 2009 graduates, and best wishes in your future endeavors. It is always nice to come across former students of the department at professional and commodity group meetings, and various events. I usually take the opportunity to ask them how our programs have helped them in their careers, and what might have been a “gap” in their education at MSU. Along those lines, faculty in Animal and Range Sciences are having a series of meetings this summer to discuss how we need to revise/update our curriculum to meet the needs of a student graduating in 2014 or 2015. We are welcoming your input at this time. You can contact a faculty member that you know, or contact myself (406 994-3721, [bolson@montana.edu](mailto:bolson@montana.edu)). I look forward to hearing from you - we work for you!

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## Upcoming Dates

August 7	MSU Summer Classes End
August 31	MSU Fall Semester Begins
September 7	Labor Day Holiday
September 17	Miles City Ram Sale
October 22-23	International Mountain Section—Society for Range Management Mtg. (Pincer Creek, Alberta, Canada)
November 13-14	Ag Appreciation Weekend

## Other News



**Dr. Mike Tess** retired from the Animal and Range Sciences Department after 21 years of service, at the end of June. Although Mike will still be a presence here in the Department we wish him and his family well.



**Dr. Wayne Gipp** retired from the Animal and Range Sciences Department after 29 years, at the end of July. As with Mike, Wayne will still be a presence here in the Department and we wish him and his family all the best.



The Animal and Range Sciences Department hosted 28 participants from three different states in the Basic Meat Microbiology and HACCP Training course taught by the Montana HACCP Training group. The Training group includes **Dr. Jane Ann Boles**, Animal and Range Sciences, Dr. Lynn Paul, MSU Food and Nutrition Extension Specialist, Carol Olmstead and Mike Finnegan of the Department of Livestock, Meat and Poultry Inspection Bureau, and Christine Cox from the Montana Department of Health and Human Services. HACCP training introduces the Hazard Analysis Critical Control Points (HACCP) approach to preventing microbial, physical and chemical contamination of meat products. This training course covers information about basic meat microbiology and participants develop HACCP plans that are required by all inspected meat processing plants. The participants were from inspection, meat plants, pasta processors, vegetable growers and extension.



**Dr. Bret Olson** met with a delegation from China to discuss fostering relationships with MSU and China. Mike Ragsdale, Director of Operations at Country Classic Dairies in Bozeman was host to the visitors. Bret and the group discussed animal agriculture and they were given a tour of the Bozeman Agricultural Research and Teaching Farm (formerly known as Towne Farm) and the O.O. Thomas Nutrition Center.



**Dr. Rachel Endecott** has passed the retention review procedure through Montana State University and will be retained as a member of the MSU Faculty. Rachel is an Assistant Professor, Animal Science (Extension Beef Cattle Specialist—stationed at Ft. Keough, Miles City).



**Dr. Rachel Frost** has been an instructor for the BLM Integrated Pest Management Training Program, giving educational presentations on Targeted Grazing for Weed Control to BLM employees from all of the nine western states. She has instructed sessions in Boise, Salt Lake City and Denver. Rachel's presentations highlight research by Montana State University faculty and cooperating institutions on using domestic livestock grazing to control weeds.

## Horseshoeing School at Montana State University

### Tom Wolfe, Director

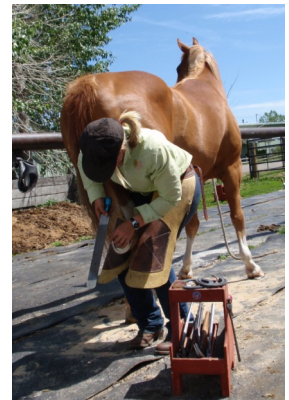


*Tom Wolfe & Student*

Tom Wolfe is the Director of the Montana State University (MSU) Horseshoeing School. Tom has been a professional farrier for 38 years, working with all breeds and types of horses. Prior to his appointment at MSU, Tom practiced in Albuquerque, New Mexico where he was licensed with the New Mexico State Racing Commission as a race plater and was the farrier for the Albuquerque Police Department Horse Patrol. Tom has been the official farrier for many western, hunter-jumper, Arabian, and all-breed horse shows. Tom is a member of the American Farrier Association (A.F.A.) and served for three years on that organization's executive committee. In addition, he is certified with the A.F.A. as a journeyman farrier. Tom's educational background includes a Bachelor of Science degree in Biology from the University of New Mexico as well as completing the Advanced Farrier Science curriculum at New Mexico State University. Tom's sound technical background, practical experience, national reputation and teaching aptitude provides for an outstanding MSU Horseshoeing School.

The horseshoeing school is affiliated with MSU's College of Agriculture, Department of Animal & Range Sciences, but is completely self-supporting, down to the instructor's salary, overhead and supplies. MSU's program is well-known for its reputation and longevity. The original Montana Agricultural College taught blacksmithing in the late 1800s, but when the automobile replaced horses as primary transportation in the early 20<sup>th</sup> century, the courses were discontinued. In the 1950s, when the horse population resurged, MSU considered bringing the program back. After a trial run in 1970, the school was officially started in 1971 by Bob Miller (after whom MSU's horse pavilion is named) and Jack Catlin, a local veterinarian, along with others from the College of Agriculture. Classes were first held at the old pea cannery near Oak Street in Bozeman. The first instructor was Scott Simpson. The second and current instructor is Wolfe.

Wolfe estimates there are about 40 similar horseshoeing programs in the U.S., many private, some associated with community colleges. Cornell is the only other four-year university offering a program similar to MSU's.



*Student working outside during Spring 2009 session*

The MSU Horseshoeing School caters to those who want to shoe for a living. A typical day includes an hour of classroom time before working the rest of the day on horses. Some students trim, others practice their metalwork on the forge. Sometimes the class visits a veterinarian or travels to a location offsite.

MSU's location is ideal for a horseshoeing school – “a good horse anything school,” said Wolfe – with access to an ample population of horses. (Wolfe estimates Gallatin County has an astounding 32,000, or about one horse for every two residents.) Students also tend to the university's herd, as well as horses from Yellowstone Park and several local guest ranches.



*Student working inside during Spring 2009 session*

“Horses are a big part of the agricultural community,” said Wolfe. “The school fits well here in the old sense of the Land Grant University.”

Wolfe said the school's demographics have changed little in his 25 years of teaching; the average age has remained steady at 31. The youngest-ever student was 17; the oldest, a retired dairy farmer from New York, was 68. And 30 percent are women, up from 15 percent in the early days. Just one in 10 students is from Montana.

A map on the classroom wall shows students from across the globe: South Africa, Italy, England, Chile, Japan, and Australia. The school's national and international reputation leads to continuously full classes. The school accepts 10 students into each of its three yearly sessions, and Wolfe said only three classes in the school's history haven't been full.

For more information on the MSU Horseshoeing School go to: <http://animalrange.montana.edu/horseshoe.htm>.

## Administrative Team Highlight: Anita Gray



Anita Gray was born and raised just over the hill in Livingston and has worked for Animal and Ranges Sciences for eight years. If you've ever attended the Annual Livestock Forum and Nutrition Conference, you've seen her greeting people at the registration table and handing out name tags. Her assistance is valued by John Paterson, Extension Beef Specialist, and his assistant, Mo Harbac. They recognize and appreciate her capable handling of mailings and registrations.

For the past several years, she has also provided administrative support for Jeff Mosley, the Range Management Specialist, and Tommy Bass, the Livestock Environment Associate Specialist. Her organizational skills are also put to use planning and registering participants for the Montana Ag Lenders Range School held annually each June. Keeping track of very busy schedules for all these specialists is almost a full-time job in itself.

Ten years before coming to MSU, Anita worked in and supervised the Capitol Operator Office in Helena under Governor Marc Racicot's administration. This background enables her to handle phone calls in a pleasant and efficient manner.

Anita's life centers round her family. Her daughter Bekki and son Ken have produced six grandchildren for her to enjoy. They range in ages from 21 to 4. She has a special relationship with each of them and follows them in their sports and other activities, which keeps her quite busy at times.

## Awards, Publications & Presentations

The following A&RS personnel gave these presentations at the 2009 Annual Meeting of the Western Section American Society of Animal Science (WSASAS) held June 16-18, in Fort Collins, Colorado:

**Ty McDonald**, Graduate Student, "The effects of starch or fiber based supplements on nutrient digestion by wethers and feeding behavior by heifers."

**Jyme Peterson**, Graduate Student, "Metabolic and physical effects of psyllium supplementation on Quarter Horses." Jyme won third place with this presentation.

**Dr. Rodney Kott**, Prof., Animal Science, Extension Sheep Specialist, and **Lisa Surber**, Research Scientist, Animal Science, "Targeted Grazing."

**Dr. Jim Berardinelli**, Prof., Animal Science, "Reproductive performance of beef heifers exposed to bulls during an estrus synchronization protocol that included a 14-d CID, PGF2, and timed AI and GnRH."

**Shaun Tauck**, recent PhD Graduate, "Use of either a 7 or 14 d CIDR treatments in an estrus synchronization protocol that included PGF2, and timed AI and GnRH in postpartum, suckled beef cows."

**Dr. Jan Bowman**, Prof., Animal Science "In situ disappearance of high and low amylose pea varieties and their effects on forage digestibility in vitro."

**Shaun Tauck**, recent PhD Graduate, "Duration of daily bull exposure on resumption of ovulatory activity in primiparous, postpartum, anovular, suckled beef cows."

**Dr. Rachel Endecott**, Asst. Prof., Animal Science (Extension Beef Cattle Specialist), "A self-fed, small-package protein supplement for post-weaning beef cows."

**Aimee Halfa**, recent MS Graduate, "Winter cereals as a pasture-hay system in Montana."

## Awards, Publications & Presentations (cont'd)

More presentations from WSASAS:

**Mike Borgreen**, Graduate Student, “Reproductive performance of Bison (*bison bison*) at the National Bison Range.”

**Jesse Olsen**, Graduate Student, “Duration of daily bull exposure on leptin concentrations during resumption of ovulatory activity in primiparous, postpartum anestrous beef cows.”

Presentations at the Equine Science Society (ESS) meeting in Keystone, Colorado included:

**Jyme Peterson**, Graduate Student, placed third in the graduate student competition for presenting her research on “Metabolic and physical effects of psyllium supplementation on Quarter Horses”.

**Morgan McElwee**, Undergraduate Student, placed first in the undergraduate student competition for her presentation entitled “Characterization of *Staphylococcus aureus* in horses and horse personnel in Southwest Montana.”

## Animal & Range Sciences Extension Highlight: Tommy Bass



Tommy arrived at MSU in July of 2007 when his wife began her appointment as an Assistant Professor in the College of Business. However, Tommy was not a stranger to MSU; he completed his masters degree here in 2000. From 2001 to 2007 Tommy held a joint appointment in Animal and Dairy Science, and Bio and Ag Engineering at the University of Georgia. During that time, Tommy was the state specialist for animal waste management.

2007 was an important year for owners of animal feeding operations. The U.S. Environmental Protection Agency and Montana’s Department of Environmental Quality were on the cusp of releasing modified regulations, permits and requirements for nutrient management plans. With vast experience in dairy, beef, swine and poultry, Tommy hit the ground running as a Livestock Environment Extension Associate with MSU. In the last two years, Tommy has assisted many Montana producers respond to changing environmental regulations and waste management issues, and implement voluntary conservation practices to enhance production and protect water quality.

Some specific interests of Tommy’s include alternative waste treatment systems, composting, and mortality management. Additionally, Tommy has conducted programming on agricultural security and emergency preparedness across Montana and the United States. Mortality management has been an issue that connects environmental management to emergency preparedness and security. Dead animals need to be managed properly to protect water quality, prevent odors, deter nuisance animals and predators, and to protect human and animal health. Tommy has also raised the profile of MSU in the area of livestock environmental management and agricultural emergency preparedness by participating in several national projects and by publishing in agricultural and academic press. Additionally, he has successfully received \$200,000 in grant money since his arrival.

The favorite aspect of his job, by far, is working directly with producers and county agents around the state. Tommy says, “When I show up at a place, I have the responsibility of maintaining 100 plus years of trust in MSU Extension for confidential, science based information and advice. If I don’t have an answer, I am not afraid to say so, but I will get back to you as soon as possible.” Tommy’s philosophy is to serve producers and county agents by understanding local issues and the implications of national and state policy on individual producers. His goal is to help agriculture remain a profitable, sustainable industry and way of life for Montana and the U.S.

Please do not hesitate to contact Tommy at 406.994.5733 or by e-mail at [ymbass@montana.edu](mailto:ymbass@montana.edu). Or visit his websites at [www.afostewardship.org](http://www.afostewardship.org) and [www.mtagwatch.org](http://www.mtagwatch.org).

## Dr. Carl Wambolt's Summer Course: Yellowstone Range Ecology (ARNR 480)



*Dr. Carl Wambolt*

Yellowstone Range Ecology (ARNR 480) was first offered in 1993 in response to a call by the College of Agriculture to have a presence in MSU's summer course offerings. Carl Wambolt was excited about sharing the information that he had acquired over three decades of research on the Northern Yellowstone Range, but, due to research commitments, was hesitant to teach in the summer. He came up with the idea of offering the course in a brief, but, intensive interval of a week. At that time it was unheard of for a course to be offered over only one week for two credits (although more time is needed to allow students to follow-up with several assignments to complete the course). Interestingly, this schedule has become the model for similar courses at MSU in recent years.

The course has proven popular to a cross-section of interests. Over the years the largest numbers of students in the course have probably come from the ranks of teachers across the nation. Often they are working towards a graduate degree in the Master of Science in Science Education program at MSU. Students have come from states as far away as Alaska, Hawaii, South Carolina, and Missouri in the last couple of years alone to take this course.

This course describes the native communities of the internationally prominent northern Yellowstone winter range (NYWR) for wild ungulates. The ecology of many plants and animals are studied. Plant identification skills are incorporated with an emphasis on recognizing the northern range's flora and its importance as wildlife habitat. Ecosystem inter-relationships form the basis for understanding the ecology of the range and interpreting the consequences of management alternatives.

The course relies heavily on two one day field trips to enhance the learning opportunity. Field observations are made on all of the above topics. Students greatly appreciate the course and the experiences it offers.



*ARNR 480 class in Yellowstone Park*



*ARNR 480 class in Yellowstone Park*

### Student Quotes:

"Thanks for an interesting, yet disturbing, look at Yellowstone. It is always good to know the truth."

"I will never look at the Park the same way again, and that's a GOOD thing! Thanks again for a great course...you MUST keep teaching it!"

"It was one of the best educational experiences I've ever had."

"Great instructor, very stimulating, entertaining with great teaching techniques and field experience."

## Student Awards and Scholarships

The Department of Animal and Range Sciences is pleased to announce the recipients of the 2009-2010 scholarships and awards:

**Martin Burris Scholarship:** Lisa Hall, Animal Science (Lewistown, MT)

**A.B. Cobb III Memorial Scholarship:** Austin Switzer, Animal Science (Richey, MT)

**Gallatin Cattlewomen's Scholarship:** Erin Gernaat, Animal Science (Conrad, MT) and Kelsey Gibbs, Animal Science (Fallon, MT)

**Grieco Animal Science Award:** Tanner Ripley, Animal Science (Highwood, MT)

**Hilger Ranch Memorial Scholarship:** Casey Willmore, Animal Science (Roy, MT)

**Chuck & Penny Jarecki Scholarship:** Brandon Hartz, Natural Resources & Rangeland Ecology (Bozeman, MT)

**Chuck McGlothlin Outstanding Range Belt Buckle:** Stephen Smith, Range Science (Bozeman, MT)

**Dr. E.I. Moody Memorial Scholarship:** Cody O'Donnell, Animal Science (Cardwell, MT)

**Northern Great Plains Section SRM Gerald Sharp Memorial Scholarship:** Kailee Bickford, Natural Resources & Rangeland Ecology (Havre, MT)

**Payne, Ryerson, Taylor Range Scholarship:** Heather Wofford, Natural Resources & Rangeland Ecology (Corvallis, MT)

**Don Ryerson/Ag Lenders Scholarship:** Tristram Munsick, Natural Resources & Rangeland Ecology (Dayton, WY) and Robyn Wanken, Natural Resources & Rangeland Ecology (Shelby, MT)

**Sitz Ranch Management Team Endowment:** Blake Hauptman, Animal Science (Drummond, MT)

**Oscar O. & Carol H. Thomas Memorial Scholarship:** Hillary Carroll, Animal Science (Great Falls, MT)

**Verl H. Thomas Memorial Scholarship:** Jennifer Keithly, Animal Science (Lakeport, CA)

**Fred S. & Violet E. Wilson Scholarship:** Prairie Rosaaen, Animal Science (Richey, MT)

**Ray Woodward Incoming Freshman Scholarship:** Karli Clark, Animal Science (Choteau, MT) and James Woodring, Animal Science (Townsend, MT)

## Help Support Animal & 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.

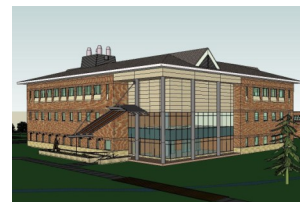
For more information about making a donation to the Department contact:

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*Newsletter edited & compiled by: Susan Cooper*

*With special thanks to the entire A&RS Administrative Team*



Drawing of the new Animal Bioscience Building

