

Project Number: W1012

Project Title: Improving Ruminant Use of Forage in Sustainable Production Systems for the Western United States

Period Covered: 10-2010 to 9-2011

Date of Report: July 27, 2012

Annual Meeting Date: June 20, 2011

Participants in attendance:

- Hess, Bret, University of Wyoming
- Ivey, Shanna, New Mexico State University
- Meyer, Allison, University of Wyoming
- Mulliniks, Travis (graduate student), New Mexico State University
- Olson, Kenneth, South Dakota State University
- Scholljegerdes, Eric, New Mexico State University
- Soto-Navarro, Sergio, New Mexico State University
- Waterman, Richard, USDA-ARS
- Whittier, Jack, Colorado State University
- Zobell, Dale, Utah State University

Brief Summary of Minutes of the Annual Meeting

The group met in Miles City, MT immediately before the meeting of the Western Section of the American Society of Animal Science.

Treasurer's report (Bret Hess)

- Current Balance is \$13,745.61. The 4th GLNC netted \$10,977.62.
- The current balance is in a revolving account at the University of Wyoming AES office (Bret has access).
- Allison Meyer replaces Bret as treasurer (UW member is treasurer because that is where the account is).
- The treasurer's report was approved as presented

Review of 4th Grazing Livestock Nutrition Conference (Richard Waterman)

- The conference was dedicated to Frank Hinds, Don Clanton, and Joe Wallace in honor of their significant contributions to the founding of the Grazing Livestock Nutrition Conference series.
- We received letter of thanks from Joe Wallace.
 - We discussed the value of the pre-conference tour with Hugh Dove. The consensus was that it was highly productive for all of us that were involved.
- We discussed the proceedings
 - We decided to put Acrobat pdf files of all 4 conferences on the NIMSS web site.
 - We talked about web presence
 - We will continue to use NIMSS as opposed to having our own web site that we have to maintain.

Administrative Advisor update (Bret Hess)

- CY Hu is no longer in AES at the University of Hawaii (he is now in upper admin.), so Bret is our newly appointed AA.

- RCIC is now called Multi-State Review Committee (MRC)
- MRC has agreed to change proposal review
 - 1 submission date per year - January 15
 - We need to start drafting a renewal in year 4 (2013 for us)
 - Our annual report will be due on August 15 (60 d after annual meeting)
 - We need to continue to demonstrate coordination among stations
 - We need to show progress toward objectives, milestones
 - We need to show attendance by participants at meetings.
- China/Mongolia exchange
 - CY would probably still support and help us to coordinate this activity.
 - We briefly discussed the possibility of applying for a NIFA travel grant?
 - Dale Zobell is going to Mongolia in 3 weeks and will make contacts
 - It may be a possibility for him to serve as coordinator of this activity.

NIFA update (Bret Hess)

- Current federal fiscal year funding for Hatch and McEntire-Stennis were increased 10% for Hatch and 13% for McEntire-Stennis
 - Earmarks and special grants were reduced, so this compensated
- Smith-Lever funding was cut by 1.2% - better than the 10% that had been proposed
- Funding to NIFA for AFRI was held steady.
 - Climate change – there won't be \$5 million grants like originally planned – that had been a gamble on increasing level of funding – previous year grants were awarded forward based on expected funding – so now they are short for new projects – there will not be any more big awards – rather a return to integrated or single investigator awards.
 - Global food security was also changed to more single investigator and less big awards.
 - No one knows when current fiscal year RFA will be released
- Funding levels in the upcoming new farm bill look dismal (all of the following compared to fy11):
 - 12% cut for ARS
 - 16% cut for NIFA
 - 12% cut for Hatch
 - 12% cut in Smith-Lever
 - 9% cut in McEntire-Stennis
 - 30.6% cut in AFRI
 - Special grants were reduced by 97% in FY11, another 56% will be cut in FY12
 - \$0 for education grants (Higher Ed Challenge Grants)
 - This has already all passed in House bill, being debated in Senate

Chris Allison presentation

- Chris presented background information and a request for a concern about calculation of animal unit equivalents (AUE) on federal agency (public) land, particularly in Region 3 of USFS. They have a range of AUE that is applied across allotments (ranges from 1.32 to 1.5 AUE per cow-calf pair). How AUE is applied from on allotment to another seems arbitrary and capricious.
- Chris requested that this committee consider a response because of our expertise concerning forage consumption from rangeland by grazing livestock.
- We discussed option for a response from this committee. We are considering a synthesis paper in Rangeland Ecology and Management – Eric We are considering an REM synthesis paper – Eric will develop the details.

Station Reports

- Each of the 4 objectives of this project were discussed with each station indicating their progress toward that objective.

NSF RFA to fund our research

- We discussed submitting an application in 2012
- This RFA is intended to support group research, to support underserved populations, and to work together on a common theme, such as an approach
- Eric will spearhead the process
- Eric will email the link to us.

Elections

- Shauna was elected new secretary

Accomplishments And Impact

Accomplishments

- Important milestones toward each objective include:
 - Objective 1: Equipping the lab at NMSU to analyze samples for alkane content and establishment of diet sample libraries at multiple institutions for alkane analyses.
 - Objective 2: Completion of nutrition experiments that will further contribute to evaluating shortcomings of NRC (2000).
 - Objectives 3 and 4: Several applied experiments and extension programs were conducted that contributed to improved stakeholder and professional knowledge of forage utilization by ruminants.
- Outputs included 21 peer-reviewed journal articles, 1 book chapter, 10 proceedings papers, 20 extension and popular press articles, and 11 abstracts.

Impact

- The conference satisfaction survey for the 4th Grazing Livestock Nutrition Conference was indicative of short-term and medium-term outcomes. Overall, 65% of the respondents strongly agreed and 20% agreed to have gained knowledge from the oral presentations. For the Proceedings of the 4th Grazing Livestock Nutrition Conference, 51% strongly agreed and 21% agreed that the publication will be a valuable reference. Lastly, 60% agreed strongly and 21% agreed that the conference information will be useful in the future.

Publications

REFEREED PUBLICATIONS

COLORADO STATE UNIVERSITY

Peel, R.K., J. C. Whittier, R. M. Enns, A. V. Grove, and G. E. Seidel Jr. 2010. Effect of 6- versus 12-Hour Interval between 2 Prostaglandin F₂ α Injections Administered with 5-Day COSynch + Controlled Internal Drug-Release Protocol on Pregnancy Rate in Beef Cows. *The Professional Animal Scientist* 26:307–312.

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NEW MEXICO STATE UNIVERSITY

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Contreras-Govea, F. E., S. Soto-Navarro, D. Calderon-Mendoza, M. A. Marsalis, and L. M. Lauriault. 2011. Dry matter yield and nutritive value of cowpea and lablab in the Southern High Plains of the USA. *Forage and Grazing Lands Journal.* (Accepted).

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Meyer, A. M., J. J. Reed, K. A. Vonnahme, S. A. Soto-Navarro, L. P. Reynolds, S. P. Ford, B. W. Hess, and J. S. Caton. Effects of stage of gestation and nutrient restriction during early to mid-gestation on maternal and fetal visceral organ mass and indices of jejunal growth and vascularity in beef cows. *J. Anim. Sci.* 88:2410-2424.

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NORTH DAKOTA STATE UNIVERSITY

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SOUTH DAKOTA STATE UNIVERSITY

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NEW MEXICO STATE UNIVERSITY

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NORTH DAKOTA STATE UNIVERSITY

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EXTENSION PUBLICATIONS

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NEW MEXICO STATE UNIVERSITY

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