

**University of Hawaii at Manoa**  
Department of Human Nutrition, Food and Animal Sciences, CTAHR  
1955 East-West Road, Agric. Sci. 216  
Honolulu, Hawaii 96822

July 16, 2008

SUBJECT: Western Education/Extension and Research Activity (WERA-110) Annual Meeting  
“Improving Ruminant Use of Forages in Sustainable Production Systems for the Western U.S.”

TO: WERA -110 Participants and Invited Participants/Guests

FROM: James R. Carpenter, Chair of the WERA – 110

It is with pleasure that the Department of Human Nutrition, Food and Animal Sciences, College of Tropical Agriculture and Human Resources (CTAHR), University of Hawaii at Manoa, Honolulu, HI is hosting the 2008 Annual WERA-110 meeting. As host of the meeting, we hope to create an atmosphere that will generate innovative philosophical discussions that build interest and development of regional collaborations among participants. A large component of our meeting will involve not only continuing our brainstorming for topic ideas, location, sponsorship, etc, but we also need to finalize a tentative program and identify key speakers for the 4<sup>th</sup> Livestock Grazing Conference that will attract national and international attention. As planned, this conference will be an independent venue prior to and at a location near the 2010 National ASAS/ADSA/CSAS meetings in Denver, CO.

Another key agenda item for our meeting this year will be determining our desires for the future of the WERA-110 project and establish objectives and discuss plans and organization/writing responsibilities for project revisions and renewal. Attached you will find a meeting agenda which will help guide us to meet our objectives but will also be flexible enough to include additional topics that may arise.

Hopefully the directions to the meeting site and the hotel accommodations have met everyone’s needs. As indicated in previous communications to you I’ve selected the meeting site in Waimea (Kamuela) on the Big Island of Hawaii to put us in a rural setting and in the center of key cattle county here in Hawaii.

As your chair and on behalf of Dean Andy Hashimoto, and Associate Deans C.Y. Hu (Research) and Wayne Nishijima (Extension) from CTAHR, University of Hawaii at Manoa we welcome you to Hawaii and hope you truly enjoy your stay and learn about the uniqueness of our cattle industry, and many of the other tropical fruits/nuts/plants, and the history of Hawaii.

James R. Carpenter, Researcher / Instructor, and Department Chairman  
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## **Western Education/Extension and Research Activity (WERA) 110**

*“Improving Ruminant Use of Forages in Sustainable Production Systems for the Western U.S.”*

**Meeting: May 19 thru 21, 2008**

**Location:** Kamuela Extension Office, 67-5189 Kamamalu Road, Kamuela, HI 96743 (Monday)  
The Anna Ranch Heritage Center, 65-1480 Kawaihae Road, Kamuela, HI 96743 (Tues. & Wed.)

### **Contact Information:**

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Chair WERA-110  
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Chairmen/ Past Secretary: James R. Carpenter (2007 – 2008); University of Hawaii  
Secretary/Chairmen Elect: Bret Hess (2008 - 2009); University of Wyoming  
Administrative Advisor: Ching Yuan Hu (University of Hawaii)  
CSREES Representatives: Gary Cromwell (University of Kentucky)  
Charlotte Kirk Baer (National Program Ldr, Animal Nutrition, Washington DC)

## **Agenda**

### **May 19, 2008 – Hawaii County Cooperative Extension Office Conference Room, Kamuela , HI**

8:00 to 10:30 am – Business Meeting (Donuts, beverages, and fruit provided)

1. Welcome - brief overview of agenda
  2. Old Business
    - a. Reading and approval of 2007 Minutes
    - b. Response to “New Look” station reports
    - c. WERA- 110 budget report (Bret Hess, Pat Hatfield, Jan Bowman)
    - d. Introductions & update of participant contact info (are there new people we should invite to join us?)
  3. New Business
    - a. Communications form Admin. Advisor (Ching Yuan Hu) and CSREES
    - b. Election of New Secretary/ Chairman (2008-2009)
    - c. Station reports (Document key synergistic efforts, impacts and outcomes)
- 10:30am to 12:00 pm WERA-110 Project Revisions/Renewal
- a. Concept and timelines for project revision
  - b. Should it continue as a WERA or should we convert to a Western Region Research Project?
  - c. Discuss pros and cons, desired objectives, and impact/outcomes
  - d. Establish an action plan and make assignments for writing various sections

12:00 to 1:30 pm – Networking & Lunch (Paniolo Country Inn or Kamuela Deli) –  
Informal discussions concerning project renewal.

1:30 to 5:15 pm – Networking Detailed Planning of 2010 4<sup>th</sup> Grazing Livestock Nutrition Conference  
Similar to the previous Livestock Nutrition Conference” Can we use the name??

**Alternate Title: “Consortium of Techniques and Nutritional Elements for Grazing  
Livestock”**

Plans - hold prior to the 2010 National ASAS/ADSA/CASA Meeting in Denver (7/11-  
7/15)

**Will take a mid-afternoon break at opportune time!**

- a. Confirm dates and location (Briefing of potential sites?)
- b. Review/discuss/revise and refine proposed program from 2007
- c. Identify invited speakers (1<sup>st</sup> and 2<sup>nd</sup> priority for each topic)
- d. Assign responsibilities for contacting/inviting speakers
- e. Solidify manuscript review procedures and proceedings lay-out and publication teams
- f. Establish an action plan for advertisement and abstract requests (see JRC Draft Flyer)

6:00 to 9:00 pm – Dinner, discussions and socializing with producers (\$ **Support - R.R. Olson, Div. of  
Walco, Int).**,. **Location: Waimea Ranch House**

### **May 20, 2008 – The Anna Ranch Heritage Center Conference Room, Kamuela , HI**

8:00 am to 12:00 pm – Detailed planning for WERA-110 Project Revisions/Renewal

- a. Confirm decisions from Monday’s session and finalize timelines for project revision
- b. Solidify decision and plans to either continue as a WERA or convert to a Western Region  
Research Project?
- c. Confirm objectives, determine specific needs/requirements for the rewrite and identify desired  
linkages, cooperative efforts and impacts and/or outcomes
- d. Establish a detailed action plan and confirm assignments for writing various sections

**Will take a mid-morning networking break at an opportune time!**

12:00 to 1:15 pm – Lunch and networking in route to the University Mealani Research Station

1:15 to 2:45 pm – Tour of Mealani Research Station

- a. Grazing studies on the station and research/extension projects with producers (Dr. Mark  
Thorne – Livestock and Range Specialist, HNFAS, )
- b. Grass and legume plots at the station, sugar cane aphid work, and Beef Initiatives efforts at  
UH (Mr. Glen Fukumoto – Livestock County Extension Agent, Kona)
- c. Tour of tea and blueberry plots, and the Leucena (Koa Haole) variety trials (Mr. Milton  
Yamasaki – Farm Manager, Mealani Research Station, Kamuela)

2:45 to 3:30 pm – Travel from Mealani Research Station to Kahua Ranch (Mr. Monty Richards)

3:30 to 5:15 pm - Visit Kahua Ranch

5:15 to 5:45 pm – Travel from Kahua Ranch to hotels to freshen up before dinner

6:30 to 9:00 pm – Dinner, discussions and socializing with producers (\$ **Support - R.R. Olson, Div. of  
Walco, Int).**,. **Location: Merriman’s Restaurant**

**May 21, 2008 – The Anna Ranch Heritage Center Conference Room, Kamuela , HI**

8:00 to 10:00 am – **IMPORTANT:** Finalize any key strategic planning issues from previous discussions on the conference in 2010 allied with the ASAS National meeting in Denver, CO

- a. Assignment of member responsibilities
- b. Outline of tasks to complete
- c. Clarify other issues not previously discussed

10:00 to 10:15 am – Networking Break (Donuts, beverages, and fruit provided)

10:15 to 12:00 am – **IMPORTANT:** Finalize planning for the WERA –110 project renewal

- a. Review finalize previous assignments
- b. Focus on coordination of collaborative efforts and measures of impact or outcome statements
- c. Clarify other issues not previously discussed

12:00 to 1:15 pm – Lunch and networking in route to Parker Ranch Headquarters

1:30 to 2:45 pm – Visit with Mr. Corky Bryan and staff at Parker Ranch Headquarters

2:45 pm – Adjourn Meeting (Travel safely)

**Minutes of 2008 Annual Meeting**  
**Western Education/Extension and Research Activity (WERA-110)**  
**May 19-21, 2008**

Monday, May 19 2008

8:10 Chair, Jim Carpenter circulated a list of participants who are attending the meeting and requested that contact information be reviewed and corrected. Those present: Jim Carpenter, Dale ZoBell, Jack Whittier, Jim Sprinkle, Richard Waterman, Bret Hess, Chad Mueller, Shanna Ivey, Mark Petersen, Sergio Soto-Navarro, Travis Mulliniks

Dr. Mark Thorne was introduced, helped set up the meeting room, but then needed to leave for another engagement.

8:20 Meeting called to order by Chair, Jim Carpenter

Agenda Item 1. After welcoming the group, Jim reviewed the hardcopy of the annual report draft (compilation of station reports) and agenda. An overview of activities and stakeholders who will be joining us was also provided. Jim announced that neither our AA nor our CSREES representative will be able to attend.

2. Old Business

- a. Minutes from last year's meeting, as posted on the website, were read and discussed.
- b. Format of station reports discussion: Page 7 of the draft report was sent to participants, and they were asked to follow the guidelines. As illustrated in the draft report, several reports captured the bullets others did not follow the instructions.
- c. Mark suggested that we follow Jack's report as an example. He also suggested that we distribute the example for others to learn how to compile their reports. It was recommended to set up a canned format guide for all participants to plug their information into. Publications should be submitted in JAS style. The question was asked about how we report on activities by participants who are not listed in Appendix E. It was decided to only report on projects/activities in which we have direct involvement.
- d. The budget report was given. There is a balance of \$2,776.99 following a \$220 deposit from last year's surplus registration fees. The deposit was made on June 4, 2007.
- e. Jim asked Sergio, Shanna, Chad, and Travis to introduce themselves and give a description of their background and interests. A discussion revolved around Oregon State's beef program and transitioned into pre-vet students. Richard provided an update on Elaine Grings' situation/new position. The RL position is open for a third time, and will likely go internal if the search fails again. Richard explained that Ft. Keogh has a CRIS project on range and one on animals. Jim Sprinkle updated the group on Arizona's new hire, Doug Tolleson (Extension Range Specialist; V-V Ranch) and suggested to the group that he be invited to join WERA 110. CSU new hires: Food Safety has two new hires; Shawn Archibeque more environmental/waste management. Asst. Extension Director position is open. USU Dale is now representing in Ken Olson's absence. Randy Wiedmeier has taken on many responsibilities since four new vacancies in the department. USU is waiting for new department head position to decide how to fill the positions. Forage kochia project

was discussed. Large forage-based program initiated at a new experimental unit Lewiston, UT (in year 2): long-term lease on a farm, seeded to various forage plots; classic plant breeding work with animal outputs as outcomes. New hire Yun, more on basic side, working on ruminal enzymes. Cloned bull project with JR Simplot was described briefly. UW hired Scott Lake, and he will be joining the group.

### 3. New Business

- a. No report from CY or Charlotte Kirk Bauer; Doug with Hawaii Ag Expt. Sta. sent new NRI programs: Organic Agriculture Research and Extension Initiative; Beginning Farmer and Rancher Development Program; Specialty Crop; Biomass Research and Development.
- b. Jim recommended that we need to consider election of a new secretary for next year. Jim nominated Jack since the Grazing Livestock Nutrition Conference will be held in Colorado, thought it was a good idea to piggy back with the meeting. Jack agreed.

Break at 9:45

- c. Resumed at 10:00 discussing Synergistic Activities

Trace Mineral: HI, AZ, NM, UT, CO, WY, ND

Juniper: NM and TX

Cow Nutrition During Pregnancy Effects on Offspring Growth: WY, MT, NM, OR

Grass-fed Beef: UT, WY, OR, HI?, ND

Rumen Ecology: MT, NM

Low Cost Supplementation (nutrient triggers): AZ, NM, MT,

Burning, grazing communities, grazing distribution- MT, AZ, OR, UT

Dried Distillers- WY, NM, CO, UT, OR

Nutrition x Reproduction- HI, NM, AZ, MT, CO, UT, WY

#### **Outputs**

Results of research-publications-workshops-planning for 4<sup>th</sup> grazing conference

#### **Outcomes**

Range Nutrition Outreach Programs (all states): stakeholders have gained knowledge and have begun implementation of strategies (based on consistent attendance and clientele survey feedback). For example, government agencies are changing policy on leases based on information provided by members of this committee. Data are influencing management decision at both the State and Federal level. Three feed companies are marketing the mineral packaged developed by NMSU.

#### **Impact**

Infrastructure support for educational programming- \$1.5 million to build a center to support related activities at NMSU

Over 1 million acres affected in AZ, OR, UT

#### **Milestones**

Meeting in Hawaii

Planning Grazing Conference continued

Initial planning, proceedings, abstract, potential sites, conference services for registration, Future- Marketing, Sponsors, Identify and Contact speakers

### 3. Project Renewal/Revision

a-c. WERA or MRF (more extensive proposal)

Objective/Key Areas of Research Focus (Specific Aims)

Theme is the Title

Most agreed verbally that we should renew as a MRF, but the group should be comfortable with this decision.

Need to find the common research areas then go from there.

Techniques, such as alkane as a marker would have an output, outcomes, and measurable impacts.

Nutritional profile of the cow throughout the year (milk production, metabolites)

What are the nutrient requirements for a cow losing weight?

Build a budget to predict curve of nutritional requirements.

Rumen Ecology- compounds/secondary metabolites in western forages that influence microbes.

Multispecies grazing- beneficial and detrimental responses.

High cost of harvested feeds, decreasing supplementation costs, minimal supplemental feed input system.

Suggestion was to keep Objectives 2 and 3 and convert Objective 1 into 3 new research objectives.

Timeframe- is this manageable to complete by the Jan. 15 deadline?

Discussion of Title: **Improving Ruminant Use of Forages in Sustainable Production Systems for the Western US**

Specific Discussion on Three New Research Objectives

I. Intake Technique: Alkane as a Marker

NC189 project sent samples, analyzed forage samples, and evaluated repeatability at each station. The lab procedure for alkanes is not repeatable; NMSU could develop/modify the technique then we could determine if we can repeat analytical results among stations.

II. Nutrient Profiles/Mapping Nutritional Calendars Rumen Ecology- Secondary Compounds

III. Manipulation of Input Strategies to Optimize Production: Strategic Supplementation- metabolic triggers/Low Input or Sustainable Management Strategies

IV. Reword current objective 2 to be measurable

V. Keep objective 3 pretty well intact

Break for lunch at 12:35

3. Reconvened at 1:40 to begin discussion of the 4<sup>th</sup> Grazing Livestock Nutrition Conference Dates of ASAS meeting in Denver July 11-15, 2010 so the GLNC will be July 9-10.

Talked about Friday and half day Saturday before the meeting last year, still agree. Q was about other activities, but should be far enough ahead to move forward now.

Jack shared information on the site with some discussion on what to expect at the conference.

Attendees range from 100 to 190. Planning must be 2 years in advance. ~150-175 expected attendance. 30-40 posters; how many in the past? 12-13 posters at SD, should not duplicate ASAS presentations; should relate to central theme; display for sponsors may be in the poster room; bigger resort locations have been challenging for CO cattlemen; Crested Butte site is preferred by Jack but they have been non-responsive; Estes Park is more of a resort or Loveland is less of resort destination; Jack will continue to work with Estes Park; price of \$15/person for UW to handle all details is worth working with conference services, group agreed to have UW handle arrangements.

The potential program was discussed, including original program and then revisions. Breaks may need to be longer for sponsors and poster viewing. Poster viewing may begin on Friday night with a social/conflict with dinner speaker. Dr. Leng as dinner speaker was discussed. Travel expenses have been covered in the past with option of scientist to visit stations. Perhaps have him kick off the session the next morning. Change to social mixer/poster session with dinner on your own.

#### General Topic Areas

Should we eliminate GIS? Could eliminate Stats and Rumen Micro talk; Integration of Digital Remote Measurements. Perspectives on Intake and Grazing Distribution for Session II; John may not be the best speaker to lead off- share the knowledge of long-standing active participants of WERA 110. Richard will contact speakers. It was decided to have a follow-up meet the night before WSASAS, Bret will make the arrangements. Should the opening speaker have unedited proceedings? Emerging Techniques in Assessing Grazing Livestock. Joe Wallace's Western Section Proceedings could be used to refer to history of this group. Mark Petersen was suggested; Tim DelCurto was selected as the primary choice for leadoff speaker because the committee preferred Mark Petersen as wrap-up speaker.

It was decided to allow speakers to produce title and give them direction on what we would like to have them cover.

Session I: title is appropriate.

Speakers on Rumen Microbiology mentioned. Tim McAllister was suggested in addition to Richard's possible presenters. Emerging Methods in Rumen Microbiology = Brian White, Denis Kraus, Tim McAllister. Title: Application of New Rumen Microbiological Techniques to the Grazing Ruminant.

Session II: title "Perspective on Intake and Grazing Distribution": "Emerging Techniques in Assessing Grazing Livestock"; "Grazing Livestock Landscape Interface"

First presentation could remain as it is: Hugh Dove, Eric Vanzant; what are other techniques for indirectly measuring intake (Brosch mentioned but method more on the energy expenditure side); Method for Assessing intake by Mizzou Agronomist. It was decided to attempt to contact



as many speakers as possible before Western Section; Bret will contact Hugh Dove before Western Section. For the evening: Assessing NRC and CSIRO models for Grazing Livestock; co-author with Leng if Dove agrees.

Geospatial Methods and Data Analysis for Assessing Distribution of Grazing Livestock Dean Anderson, Andreas Cibiles; Tim DelCurto and Phil Rasmussen might know of potential speakers.

Session III: new title “Impact of Nutrient Balance on Biological Efficiency and Lifetime Productivity of Grazing Livestock.” Last year was discussion on major nutrients- protein and energy Q/Discussion of well-being, fetal programming should be covered: “Maternal Plane of Nutrition Impacts on Newborn/Offspring;” “Cow Size Impact on Nutrient Balance and Efficiency- Matching the Cow to the Resources?” Environment presents many imbalances according to session title, and matching cows to the resource is a different approach. Should a producer who has applied some of these concepts be invited? Need to lead up to the evening talk, probably not for this conference. What is the proper descriptor of nutrient balance? Other ideas: specific nutrient balance- amino acids (Titgemeyer); signal of proper balance for production (Leng). Decided on “Metabolic Signals Influencing the Beef Cow in Negative Energy Balance” (Dairy Person, Reynolds, Bauman, Bell, Mike Allen?, Beauchemin) Have a beef guy co-author, i.e., Richard Waterman. Mike Allen is the first choice from the dairy. Maternal Plane of Nutrition Impacts on Newborn/Offspring: Concept to finish should be covered. Klopfenstein or NE workers were suggested then WY&NDSU were discussed. Hess and Caton were selected as the first choice. What about excess nutrients leading to imbalance, high-quality forages- Bulter, Hawkins? Kerley or Mizzou Agronomist, Horn was listed a potential speaker, and Kerley was selected as the first choice.

Morning KEYNOTE Speaker: “Application of Requirement Systems for Grazing Livestock; Assessing NRC and CSIRO Systems for Grazing Livestock” Dove to start at 8:30, present until 9:30

Session IV: Supplementation Strategies to Achieve Biological and Economic Efficiency “Strategic Supplementation to Correct for Nutrient Imbalances” Greg Lardy and Rachel Endecott should co-author. Economics Impact Presentation, Allen Torrell, Neil Rimbey, John Tanaka were mentioned.

Final presentation: Dr. Mark Petersen, NMSU

Met for dinner, followed by a presentation from a local producer and feed industry representative

Reconvened at 8:05 a.m., May 20

Jim thanked everyone for being on time

Jim explained the registration fee = \$50/scientist; will be used to cover costs (e.g., room rental fees), excess will be sent to UW for deposit into our account

Richard passed out the GLNC schedule that was hashed out yesterday, and asked to make corrections and return by tomorrow

Checked the agenda to get on track and began discussing the renewal.

First make sure we agree with decision yesterday

Target is to submit for RCIC review by Jan. 15

Reviewed objectives:

1. Intake Technique: Alkane as a Marker
2. Nutrient Profiles/Mapping Nutritional Calendars Rumen Ecology- Secondary Compounds
3. Manipulation of Input Strategies to Optimize Production: Strategic Supplementation  
metabolic triggers/Low Input or Sustainable Management Strategies
4. Reword current objective 2 to be measurable
5. Old objective 3

Started on objective 5 because be the easiest to finish. Suggestion was made to eliminate the second sentence; could be added to the procedure. Need to incorporate the word mentoring somewhere in the objective statement and be careful not to exclude. Settled on the following: Renewal OBJECTIVE 5 will be **“Provide professional development opportunities through networking and mentoring for committee participants, young scientists, stakeholders, and graduate students.”**

Need to revisit current Objective 2; measurable outcome means that implementation must be part of it.

Renewal OBJECTIVE 4 will be **“Disseminate and translate research-based management strategies to stakeholders for improving ruminant use in sustainable forage production systems.”**

Suggested Objective 1 of the renewal; Intake Technique

Renewal OBJECTIVE 1 will be **“Validate the utility and repeatability of the alkane assay for measuring fecal output by grazing ruminant animal.”**

Develop a standard laboratory assay

Usefulness and robustness must be included

Compare with other traditional methodologies, especially as time goes on.

Suggested Objective 2: Nutrient Profiles/Nutritional Calendars/Rumen Ecology-Secondary Compounds.

What does this mean?

Brainstorming Session: Do we want to provide a compilation of results that could be used to modify the NRC's prediction equations? Do we describe what the animals are consuming? What are the passage rates? Do we collect forage samples monthly? Perhaps resurrect old data to summarize. Compile and summarize data to provide information to various groups- need to have a peer-reviewed paper describing forage quality and animal responses under grazing environments. Cow adaptability to their environment? Missing ruminal adaptations? What about body condition score's relation to energy status? Should these topics be presented as suggestions for the Western Section Beef Symposium? The more we feed the less cows adapt. Industry could be misleading the primary user, which could perpetuate the less-adapted-to-stress animal. Should we get back to the essence of ruminant nutrition, what is the best way to approach it? Should this be folded into our latter objectives? Do we have the data, should we initiate a study to address these issues? We need 5 things to accomplish this- BCS, BW, Peak Milk Production, Forage Quality, and Forage Intake/outputs. Peak milk production and milk output were discussed, with no conclusions being reached.

Suggested Objective 3: Manipulation of Input Strategies for Optimizing Production

What are all of the stations known to work on? Small package, co-products, low input, low cost, biologically potent- nutrients delivered readily absorbed and efficiently used. Strategic supplementation = best bang for your buck. Multispecies grazing, logging, burning, resource management and nutrient availability were mentioned in addition to supplementation.

Renewal OBJECTIVE 3: "Determine the effects of various input management manipulations on the biological sustainability of grazing ruminant livestock production systems in the Western U.S."

Implement vegetation manipulations, strategic supplementation, small package metabolic triggers.

Some discussion revolved around inviting other disciplines- probably not now.

Suggested Objective 2 revisited- do we have enough to accomplish? We should disseminate the information before it is too late. Maybe a group paper could be an output. Have paper to present at the GLNC. Update the prediction equations and the list of items mentioned would be the tools. What are the variable that need to be addressed? What are the routine/standard measurements that would aid in development of modified prediction equations? Mark Petersen will summarize and present. He has been working on this and will request information from everybody to use for the proceedings.

Renewal **OBJECTIVE 2: “Identify the shortcoming of the 1996/2000 Beef NRC for cows grazing in Western rangeland environments.”**

Publish a critique on the utility of the NRC, especially since this will be applicable to other environments.

Writing Team Assignments

Objective 1: Mark Petersen & Sergio Soto-Navarro; ask Ken Olson and Eric Scholljegerdes if they are willing to assist

Objective 2: Jim Sprinkle, Mark Petersen, Richard Waterman; ask Jan Bowman if she is willing to assist

Objective 3: Tim DelCurto, Shanna Ivey, Chad Mueller; ask Rachel Endecott, Bill Pinchak and Travis Whitney to assist.

Objective 4: Jack Whittier, Dale ZoBell, Jim Sprinkle

Objective 5: Richard Waterman, Jim Carpenter

Sprinkle asked for a brief e-mail to provide guidelines to be e-mail.

Ask Tim to help Bret compile the renewal. Send to Tim and Bret by Sept. 1; appendix E must be filed by all those mentioned in the renewal so that a table can be generated to illustrate how we will work together to accomplish our objectives.

Terminated discussion on renewal and began brief discussion of current projects at various stations.

USU- Lewiston Research, Forage Kochia Research, Dr. Yun will be working on enzymes to increase forage utilization.

AZ- TM supplementation- cow responses, difficult to have a control group on federal land- apply grazing pressure to improve grazing land

NM- Travis talked about compilation of 2 and 3-year old cow study fed Ca-propionate; small package supplementation of late-gestation cows effects on calf feedlot performance (better for small package vs. other programs)

OR- Bohnert's frequency of supplementation, BCS by late gestational protein supplementation work; DelCurto's Pacific Coast Prairie research- influence of grazing on birds and insects as indicator species, Starky work with elk population and grazing distribution patterns

Discussion ended to break for lunch at 11:45

Station Tour and Ranch Tour took place that afternoon and into the evening

Resumed 8:00 a.m., May 21

Jim collected registration fees

Began discussing the GLNC flyer that Jim revised based on our most current deliberations

Plan to generate a brochure to circulate at a variety of upcoming professional conferences and meetings

Page 12 of the draft report- discuss sponsorship

Bret Hess to be chair of editorial committee

Jack Whittier to chair the site arrangements committee

Need to initiate a sponsorship committee

Discussion revolved around approach to sponsorship- USDA-NRI next year, industry willingness to sponsor an international speaker

Sprinkle will be on the committee.

Request funds from Western Section, especially since they will not be having the Beef Symposium

Sponsors- the group to submit list of contacts so that we all of a role: submit 2 names to contact. Bring this information to our meeting before Western Section.

Richard will help with sponsorship- request and receive

UW will be the clearing house for \$, Sprinkle will circulate a draft letter used for requesting sponsorship

Dale will help with sponsorship.

What is the audience historically? ~25% feed industry, a handful of producers, a few agency personnel, and the remainder have been from academia.

Sprinkle volunteer to contact Ridley Block

\$5,000 for international speaker: flights; vehicle; room & board; gift

Jack and Bret will work together on site and registrations. Jim will assist and Mark suggested allowing Jack and Bret to decide what is best for the conference.

Marketing Committee- Jim to Chair

Potential areas to advertise: South American journals, Australia, Canada, Mexico. Western Section in Canada next year. NMSU will be holding a workshop in Mexico. Range Beef Cow Symposium coming up. Add flyer to packets at this year's Western Section. We should explore the possibility of having an international speaker on the program at ASAS; need to talk with Ruminant Nutrition, Small Ruminant, and Pastures & Forages committees. Jim will take responsibility for this effort.

It was decided to work on many of these aspects again when we meet at Western Section. We will meet for dinner first then officially at 8:00 p.m.

Revisited Leng coming in- good idea to re-include him

Contact speakers?

Should we have one individual make the contact so that they get the same story? US speakers are to pay their own expenses, but all speakers will have a refereed publication. Need a seamless, well-organized meeting so only one contact may do this the best. Have an initial interest contact then one to lead effort thereafter. Need to know from international speakers by Western Section! Richard volunteered to be the speaker coordinator.

Establish first choice speakers.

Chad will ask Tim to do the lead off talk.

Shanna recommended Karen Nelson needs to remain on the list. Denis Kraus was scratched because he is also an international speaker. Karen is trained by classical rumen micro but no animal experience. Go with Brian White first since he has more animal background. Shanna will contact Brian then Karen.

Bret will contact Hugh Dove. Who will be back up? Contact Eric Vanzant as back up.

Mark proposed to contact Andreas and Dean- explain the conference and encourage them to work together; have them co-author a proceedings and split presentation time. Sergio and Mark agreed to make the initial contact.

Hold off on metabolic signals but initial list is Allen, Reynolds, Bauman and have Waterman co-author to balance the beef cow. If we go with Leng then there would not be a co-author. Bret needs to ask Dove if he comfortable working with a co-author (Leng) on the model utility topic

Hess and Caton, Hess to contact Caton

Kerley, Jack to contact; Horn as back-up

Social Mixer- Spouses may be interested in organized events

Spouses from NMSU will take the lead

Sergio to contact Greg, Richard to talk with Rachel

Mark suggested having Torrell and Rimbey co-author. Mark will contact them.

Last Presentation: changed topic to focus on NRC prediction vs. actual information; Challenges of predicting productivity of grazing ruminants- Where to Now?

Break at 9:40

Recommended statement for speaker invitations:

I'm sure you've heard about the Grazing Livestock Nutrition Conference. It will be held prior to ASAS/ADSA/CSAS/AMPA joint meetings in Denver, July 2010. The planning committee has identified you as having the expertise to address a given topic. You will be required to write a paper, which will be peer-reviewed. (For domestic travelers)- You will need to pay your own expenses, but you will have a prestigious conference presentation and a refereed paper. Your registration fee will be covered.

Additional considerations: discussion time to talk after each presentation; need time to interact at breaks; want a good discussion atmosphere.

Proceeding Paper Review

Bret, Tim, Jan have agreed to be the editorial committee

Sequence of publication: must be in print for those attending the meeting; April 2010 absolute deadline for final proceedings and possibly abstracts March 2010. Manuscript will require 6 months; authors should have 45 d prior to submission for revision. November, 2009 was set as a target.

It was suggested to have one of the speakers from the same session serve as one of the reviewers.

Format criteria = JAS manuscripts that will be converted to Western Section Proceedings format before final submission. Call for abstracts at the time of November, 2009 with deadline as March. Abstracts are to be submitted to the editorial committee/review team.

Manuscript review should include two reviews with one more as back-up.

Reviews should be returned to authors by mid-December.

Revisions due mid-February (second document)

Final edits should be minor; editors can work with authors to ensure everything is finalized.

Papers will be submitted to FASS by the editorial board.

Bret was asked to check into whether or not they can do all of the work on editorial side, produce an electronic copy that we can then print and reproduce? In addition, ensure the proceeding is posted to Western Section website.

We need 200 printed copies with spiral binding so that participants can open easily and make notes.

Encourage poster presenters to bring paper copies.

#### Final Comments on Report

Jim and Bret to work on the final report; recommend to follow same procedure, reminded of guidelines on page 7 of the draft; send Jack's report as an example.

What things are undone as for as the project renewal?

Jim will print hardcopy of the secretary's notes over the lunch hour so that everybody has a record of what was covered.

#### Resumed discussion of station reports

Shanna described juniper project, bacteria attachment processes on locoweed; inoculation of calf ruminal microflora, blood samples also collected and will follow through the feedyard

Richard covered grazing distribution of fall-calving herd grazing burning of rangelands; forage characteristics in burned areas grazed by sheep; first vs. third estrus breeding performance; small package supplement with Endecott; changes in ruminal microbes and wall in animals fed 30 or 60% concentrate diets

Jack talked about distillers dried grain for wintering cows and fistula sampling to profile the diet quality at Eastern Colorado Research Center.

Sergio discussed research on wheat pasture and supplementation with tallow & Oklahoma Gold; distillers grains for animals grazing wheat pasture; distillers grains for range cows; lambs fed 80% concentrate plus distillers grains to make a 12% CP diet; vascularity of small intestine in heifers fed different quality diets (carb-protein synchrony); Goetch, Duff, and Sergio proposal to measure energy expenditure of grazing female ruminants, also working with colleagues at NMSU to submit a proposal

Jim is involved with marine mammal research; two Western Section papers to be presented (prediction models and silica influence on digestibility).

Bret mentioned research on fetal programming and camelina co-products as supplements.

The meeting in Hawaii concluded after a roundtable discussion with Mr. Corky Bryan at the Parker Ranch Headquarter

June 23, 2008

Present: Bret Hess, Richard Waterman, Jim Carpenter, Rachel Endecott, Joel Caton, David Bohnert, Chad Mueller, Tim DelCurto, Ken Olson, Mark Petersen, Scott Lake, Eric Scholljegerdes, Shanna Ivey

The meeting began at 8:17 with Richard explaining Jack Whittier's situation with Mark's additions.

Estes Park arrangements- Richard took over for Jack

Richard met with staff and had a walk-through and we have reserved the Grand Ball Room. We can split the room if needed. There is a nice reception area where we can set up posters; cash bars could be set up for the welcome. There's a coat room in close proximity that would work for second-day registration. Reception area also has a deck for a no-host bar. The hotel has 150 rooms- Director of Sales and Catering will reserve the entire Center for \$139 each room. Two international speakers should have suites; Master Account. All food and beverages need to be provided by the Holiday Inn Services. Pets are allowed. At one point they said rooms can be released free of charge 30 days before the meetings but maybe at another point they mentioned 30 days after the call for abstracts- Richard to get clarification. They are willing to offer two days before and two days after for the same price. We are at the contract stage- they will contact us if another request comes in for the same date. If we surpass the 150, Julie will locate a place with comparable rates to meet our rate. She is with the Convention Center not Holiday Inn. Other hotels are within 3-5 miles, mostly farther than walking distance. Spouse activities could be arranged with Julie. We are considered "Proposal



Status” on the rooms. Once we sign a contract the rooms are reserved and cannot be overridden.

Discussion about how many rooms to reserve:

Get clarification about the 30 days versus Jan 1, 2010 before we decide on a number. Financial obligations are scary considering the size of the group if we don't fill. Previously filled 100 rooms to get comp rooms and free meeting rooms. Describe in brochure that there will be a minimum number of rooms to encourage early registration. Need to find out what the minimum block is for comp rooms.

Progress on initial speaker contacts:

Tim agreed to speak on the History of the GLNC

Shanna has contact Brian White and he agreed.

Hugh Dove has agreed to present on both topics as we proposed but was not comfortable co-authoring a paper with Dr. Leng.

Andreas has agreed, Dean Andersen still needs to be asked.

Monty Kerley probably should be contacted- Bret agreed to contact him

Sergio asked Lardy and Rachel was asked by Richard and both agreed.

Caton was contacted by Hess and they agreed to co-author the paper.

Metabolism paper discussion- consensus was that we prefer to invite Dr. Leng. It was suggested that we wait for our discussion with Dr. Miranda regarding the Symposium Grant to determine if we should invite Dr. Leng.

Mark still needs to contact Torrell and Rimbey.

Switched to Sponsorship Contacts then to Level of Funding Required.

The discussion transitioned into costs of the meeting.

Paper copy of proceedings would need to be an added fee.

Rough estimates are \$15,000 without food services included.

Richard used sponsorship of an international speaker \$5,000; \$2,500 for half; \$1,000 for a break; \$500 could be combined for a break; less could be recognition and space to advertise when he talked to sponsors. Easier to handle money if level sponsorship but may garner more interest if allow sponsors to fund a specific function.

We may attract more sponsors if set a minimum limit. Need to list sponsors in proceedings.

Brackets would offer companies certain benefits. We could charge a flat rate- minimum of \$500/sponsor as displaced space. Introduce speaker for \$1,000; banner would be \$2,500.

What could be done for larger sponsors?

It was recommended to put together a formal budget then determine how much each sponsor should pay if divided equally.

If company reps introduce then they should be prepared to ask questions by reading the proceedings in advance. We must have good moderators. Have a combo- introducer and moderator.

Brochure- where else should it be. Range meetings, National meetings, China International Grassland Congress, Toxic Plants in Brazil, Ruminant Physiology Conference, Southwest Nutrition Conference, University Listservs, Website- link to WERA 110, then add link to each website, Southern Meetings, Midwest Meetings, Brazil Contacts, webpage must be developed, use a poster to advertise the conference.

It was decided to allow UW to finish everything that has been initiated with Estes Park.

Announcements and Planning:

Next year's Western Section meeting will be third of June 16-18; Tues-Thurs similar to this year primarily because of flight connections.

Plans for next year's WERA-110 meeting: We have been meeting during the third week of May. The months of April or August were also mentioned as possible times to meet. Most agreed to the week before Memorial Day Weekend, which should be around May 18-20. Possible agenda items include one day to finalize GLNC. We could go to Estes Park so we all have an idea of what's there- maybe 2010 would be better; McGregor Farm at Estes Park was mentioned but many were not in favor; Silver-Spur and other local Ranches and/or UW and USDA, ARS tours were suggested. It was decided to leave it up to Bret to organize the meeting location.

Waterman and Petersen are to meet with the Western Section Executive Committee to request funds for the GLNC; it was recommended to go for the gusto, maybe even request a match from Western Section.

Joel Caton suggested that we consider travel awards to stimulate new interest. \$250 might be a good start, perhaps two levels. Should there be a reduced fee for grad students, with less services. Should we leverage Expt. Sta. support? YES, esp. if we are multistate.

Western SARE travel grants.

Joel, Scott, Eric, Rachel, Ken would prefer to look over the objectives before committing to a particular writing assignment.

Sprinkle put together an Initial Budget

\$1,000 for set up

\$1,600 AV and poster boards (\$555/d)

\$6,500 publication costs no hardcopies

\$5,000 speaker travel and accommodations (may have two)

\$5,000 advertising

\$19,100 total is a rough total because it does not count hardcopies or scholarships

\*\$25/hardcopy as cost need to price at \$30 for income

It was suggested to sell proceedings from previous meetings to generate revenue. Bret will check if there are copies of the 1<sup>st</sup> GLNC at Wyoming. Copies of the other proceedings may be difficult to locate. Should we sell copies of the Bulletin that this group published in 1999-2000?

A meeting is scheduled to be held sometime during the evening of June 24 with Dr. Mark Mirando to learn more about USDA Conference Grants.

Adjourned at 10:15 p.m.

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