

Adaptive Grazing Management Stakeholder Meeting
Cliffnotes
Tuesday, April 26, 2016
Semi-arid Grassland Research Center, Nunn, CO
Notes by: Maria Fernandez-Gimenez, Lauren Porenksy, John Wendt, Hailey Wilmer

Stakeholders:

Leonard Ball, Jason Kern, Steve Anderson, Andy Lawrence, Scott Timm-Crow Valley (only 4 ranchers vote)
Terri Shultz- TNC
Rachel Murph- NRCS
Ted Toombs- EDF
Angela Dwyer- BCR
Matt Pollart-CO State Land Board

Absent: Kim Obele-USFS

Researchers and Staff:

David Augustine, Justin Derner, Lauren Porenksy, Jeff Thomas, Jake Thomas, Craig Lawrence, Melissa Johnston, Matt Mortenson,- ARS
Maria Fernandez-Gimenez, Marshall Frasier, John Wendt, Hailey Wilmer- CSU

Summary

At the meeting, Justin provided a weather outlook, the group reflected on the process and data of the project and made a list of suggested action items, including a summer data day, and decisions for a 24 max days threshold and cattle behavior triggers for cattle movement for the 2016 grazing season were confirmed. The group also discussed the implications of faster or slower rotations. No field tour was conducted because it had snowed.

- 1) Introductions and Updates to Stakeholder Group Membership (Fernandez-Gimenez and Derner)
- 2) Seasonal Weather Forecast (Derner)
 - a) Above average precip in 2016, but watch for drought and La Nina conditions in 2017
- 3) Stakeholder Focus group
 - a) Overview of social side of AGM research, review of recent stakeholder interviews (Wilmer)
 - i) 4 main themes: Issues with collaboration, data overload problem, clarifying objectives and trade-offs between objectives.
 - b) Facilitated Discussion: Project review, roles of stakeholders and uncertainties in how the system works (See focus group summary for more details on the focus group discussion, stakeholder concerns and researcher responses)
 - i) Issues pertaining to meeting facilitation, "playing the game" and group dynamics...How should the group work together? What interests should folks represent?

Suggestions/Actions:

- (1) **VOTE:** The group decided (complete consensus vote) to agree to try to meet all the objectives, despite (or building from) our different biases and perspectives and to make sure to clarify the impact of a decision on all three areas (beef production, vegetation and wildlife objectives) before each decision is made.
- (2) Social researchers will draft potential social objectives with help from Ted
- (3) Justin and Maria discussed scale of social research, how research is conducted and data analyzed.

- ii) Issues with ecological learning, data overload and the role of stakeholders and scientists in addressing ecological learning.

Suggestions/Actions:

- (1) Group proposed a list of items to go on a summary sheet of actions and outcomes to help clarify if/when objectives are being met
- (2) Group set June 30 (*Changed from June 29*) as an optional field tour (AM) and data analysis/data day (PM) at CPER. Watch for emails on this day.
- (3) Group would like annotated bibliography of key research related to AGM project
- (4) Group told scientists that they should guide the stakeholders, make suggestions about where management would benefit a specific species, provide more information about the patch size needed for specific species, and correct incorrect interpretations of the data

- iii) Clarifying objectives and project side-boards

Suggestions/Actions:

- (1) Some clarity may be needed around the scale (time/space) of objectives.
- (2) Multiple reasons AGM cattle not gaining as much discussed, including density, competition, speed of rotation.
- (3) Project may need to clarify goals in drought related to pulling cattle off in drought in the future.
- (4) Augustine handed out worksheet for stakeholders to begin to think through pasture level objectives to make the spatial and temporal scales of objectives more explicit. Please fill this out and send it/email it to the scientists. It will be discussed at September meeting.

- iv) Trade-offs between the objectives

- (1) Cattle weight gains discussed as key uncertainty in the system but need more time to see results
- (2) Justin discussed additional work to be done at CPER, including an experiment to examine the role of stock density on cattle weight gains, as well as an agreement to sample soils each year with NRCS for an assessment of soil health. There may be a soils presentation from NRCS at a future meeting.
- (3) Action:** In lieu of a field tour on this snowy day, the group completed a worksheet and had a discussion of various options to change the speed of rotation would impact project outcomes.

- 4) Recap of Decisions made at January 2016 meeting (Augustine)

- a) Drafted grazing sequence and triggers for moving cattle between pastures

- i. Ridgeline, Elm, South, Crossroads, Hilltank, Highway, Snowfence, Headquarters (10 days at end of grazing season)

- ii. Rest: Saltflat and Nighthawk

- iii. Triggers: (Passed with consensus vote in Jan 2016)

VOR of 450 lbs/acre for Loamy

VOR of 500 lbs/acre for mixed

VOR of 550 lbs/acre for Sandy

NOTE: if 75% or less of normal precipitation by June 15, then thresholds moved to drought threshold levels of:

VOR of 300 lbs/acre for Loamy

VOR of 400 lbs/acre for mixed

VOR of 450 lbs/acre for Sandy

- ii) Increase stocking rate by 5% (This passed by consensus after second vote in Jan 2016)
 - iii) Photo monitoring points – Written Protocol has been developed by ARS
 - (1) 80 Photo monitoring points will be done once in June, comparison photos in AGM/TGM during grazing season.
 - iv) Proposed refinements to animal behavior triggers (CPER crew)
 - (1) Activity and distribution data will be recorded
 - (2) ACTION:** Group agreed to adopt CPER crew's proposed cattle trigger spreadsheet, noting that a "2" would trigger movement out of that pasture.
- 5) Forage Calculator scenarios (Augustine)
- a) Stakeholders had asked for a comparison of predicted and actual biomass for past years.
 - b) DA Presented comparison of past forage calculator predictions by pasture. The predictions are sensitive to a lot of assumptions, and not incredibly precise, but get in the ballpark. The calculator tends to under predict forage, particularly in loamy pastures. 50lb/acre increase in loamy pastures sets us about right for grazing 8 pastures.
- 6) Discussion of maximum days threshold in each pasture (Augustine)
- a) The question of whether to set a maximum days threshold for cattle movement was left unresolved at the January 2016 meeting. 21 days had been suggested.
 - b) The group did decide (at January meeting) to move cattle to a fresh pasture for the final 10 days of the grazing season to prepare them for shipping.
 - c) The group discussed the need to get cattle to higher quality forage, the concern that the cattle are estimated to stay in early pastures for a long time while 2/3 of pounds are put on early in the grazing season.
 - d) ACTION VOTE:** The group voted (complete consensus vote) to set a 24 day maximum threshold across all the pastures.
 - i) Set day=24 as insurance against low quality
 - ii) Moving early enough to get to the next best available (forage)
 - iii) Effects on C3- benefit Ridgeline, not negative for other pastures
 - iv) Effects on birds- no negative for Ridgeline birds, lack of obvious downside.

Next Meeting Date:

No date was decided. Next get together is the summer field/data day on June 30.

A summary of items for follow-up:

- 1) Focus groups summary will be compiled and sent out by Hailey ASAP. Stakeholders are invited to continue to provide feedback/insight and to help author a paper on group learning. Contact Hailey if you are interested.
- 2) June 30 field/data day- optional CPER visit ***NOTE CHANGE IN DATE**
- 3) Social Objectives: Drafts to be presented at next meeting (Hailey, Maria, Ted, others welcome)
- 4) Pasture Level Objectives: Discussion at September meeting
- 5) Summary sheet- one pager simple table and narrative to document actions and outcomes
- 6) Annotated bibliography