AGM Weekly Update

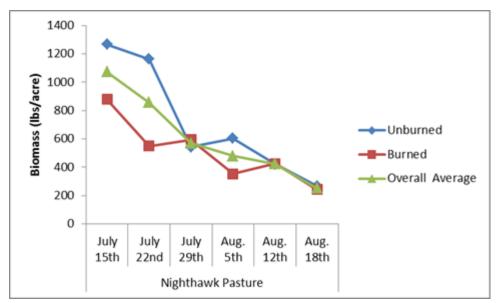
Good Day AGMers,

Another busy week for The Range Unit as the minimum forage threshold was met and the AGM herd was moved to the Highway pasture. The herd had a quick stop at the west corrals in section 15 to switch out the GPS collars. We hope to have one of those awesome maps showing steer movement throughout their stay in Nighthawk soon. We'll also be sending out some photos of the range conditions in Highway as a part of an addendum email, hopefully, later today.

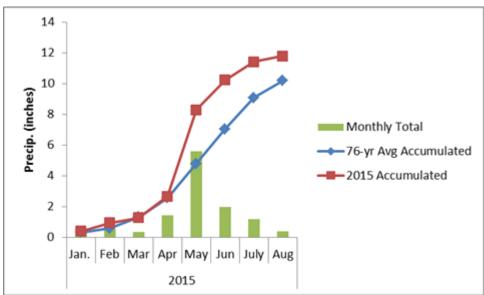
Highlights of Happenings:

- The cowboys report a mostly smooth transition for the AGM herd into the Highway pasture yesterday. They did doctor one steer for an abscess and are keeping an eye on another for a leg issue. Prior to the move, we had a couple of steers escape Nighthawk, indicating that the herd was ready for the move.
- As reported to you earlier on Tuesday, the biomass in Nighthawk dropped below minimum forage threshold prompting the move to Highway yesterday. The pre-grazing VOR for Highway was 4.2 cm or 990 pounds/acre.
- **CPER HQ measured .17 inches of rain this week.** This brings the Aug. total up to .37 inches. The 76-year average for August is 1.67.
- We have more fecal crude protein results in this week (see chart below). We see a slight uptick in the TGM herd but not in the AGM herd going into week 12. It will be interesting to see the crude protein change as the forage levels in Nighthawk crept towards our low forage threshold in the last couple weeks.

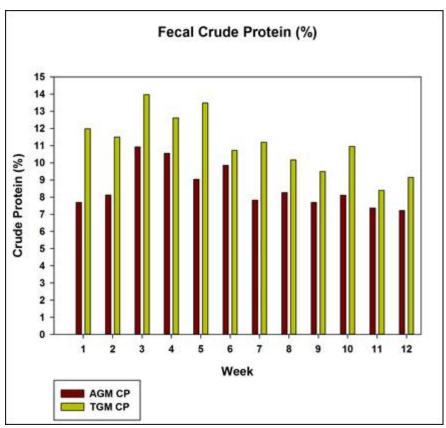
For detailed precipitation data, maps, last year's updates, scientist bios, and AGM documents, see our website: http://www.ars.usda.gov/Main/docs.htm?docid=24218 . Remember to send your questions, concerns, and ideas my way and I do my best to have them addressed in next week's email.



Above: Weekly VORs in Nighthawk for the duration of the AGM occupation. The herd was moved on Aug. 20th following biomass measurements below the minimum forage threshold (300 pounds/acre).

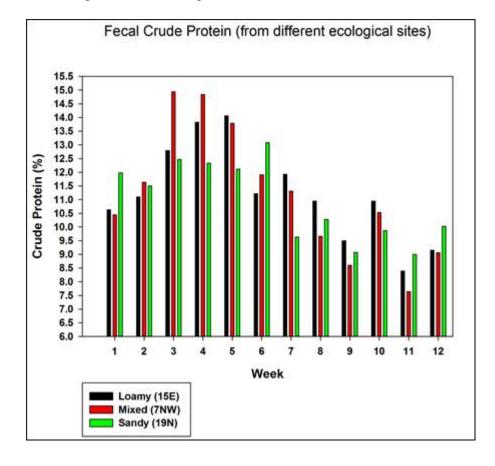


Above: Above: Precipitation for 2015 through Aug. 20th.



Above: Fecal crude protein results comparing the AGM and corresponding TGM herds through week 12 (Aug. 4th). Herd occupation for AGM/TGM each week was as follows:

1st through 3rd week- Snowfence/19N 4th through 9th week- Salt Flat/17N 9th through 12th week- Nighthawk/15E



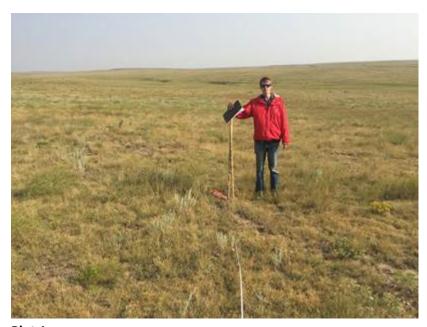
Above: Above: Fecal Crude Protein through week 11 (Aug. 4th) from three ecological sites at CPER.

Photos of the Week



Above: The AGM herd is moved to the Highway pasture on Thurday.

The following are pictures from Highway taken on Aug. 20th, just minutes before the arrival of the AGM steers. We hope that they give you all a visual aid to help interpret the VORs and how we calculate forage biomass. Please don't hesitate to let us know if you have any questions.

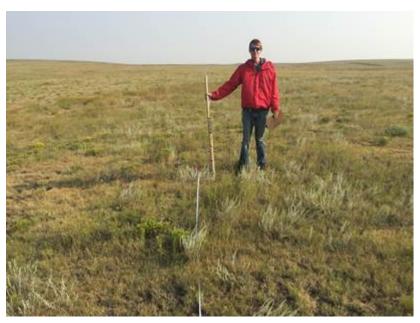


Plot 1

Location: Highway

Dominant plant species: blue grama (60% of VORs) **Estimated forage biomass from VOR**: 900 pounds/acre

Notes: The non-forage species in this plot made up a very small portion of the VORs (8%). Sub-shrubs present include fringed sagewort, spreading wild buckwheat, and broom snakeweed. Cool season grasses include western wheatgrass and needle-and-thread (30% of VOR).



Plot 2 Location: Highway

Dominant species: blue grama (60% of VOR)

Estimated forage biomass from VOR: 760 pounds/acre

Notes: The non-forage species in this plot made up a small portion of the VORs (16%). Sub-shrubs present include fringed sagewort and broom snakeweed. Prickly pear cactus was present but not in abundance (4% of VOR). Cool season grasses include western wheatgrass and needle-and-thread (20% of VOR).



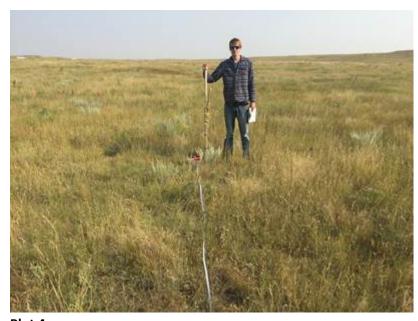
Plot 3

Location: Highway

Dominant species: blue grama (60% of VOR)

Estimated forage biomass from VOR: 1,075 pounds/acre

Notes: The non-forage species in this plot made up a small portion of the VORs (26%). Sub-shrubs present include fringed sagewort, spreading wild buckwheat, and broom snakeweed. Red threeawn was present but not in abundance (4% of VOR). Cool season grasses include needle-and-thread and bottle brush squirrel tail (16% of VOR).



Plot 4
Location: Highway

Dominant species: blue grama (64% of VOR)

Estimated forage biomass from VOR: 760 pounds/acre

Notes: The non-forage species in this plot made up a small portion of the VORs (16%). Sub-shrubs present include fringed sagewort and broom snakeweed. Red threeawn was present but not in abundance (4% of VOR). Cool season grasses include western wheatgrass and bottle brush squirrel-tail (24% of VOR).

On behalf of the USDA-ARS-Rangeland Resources Research Unit, I thank you all for your continued participation in this project.

Nick Dufek