

AGM Weekly Update

Greeting AGMers,

Well...I survived the office-season with enough brain cells intact to bring you, yet again, your weekly update on all that is Adaptive Grazing Management at the Central Plains Experimental Range. We have a few new things in store for everyone this year as well as some new additions to the stakeholder group. So before I forget, on behalf of the whole ARS-Range Unit crew, I extend a warm, sunny, and productive welcome to Gillian Bee of the Rocky Mountain Bird Observatory and Terri Schulz of The Nature Conservancy.

We bring this communication to you on a weekly basis for the purpose of reporting progress, methods, results, and discussion of the AGM experiment, as it happens. We do our best to educate, have fun, and provide you with a means to participate throughout the experiment. I strongly encourage everyone to share questions, comments, concerns, and suggestions with me or the entire group. It's all of you that make this experiment so special and we look forward to hearing from each and every one of you. I'm *serious* this year, AGMers! If I don't hear from all of you, at least once, there will be NO desserts at the next AGM meeting! I'm sorry that it has to be this way.

Highlights of Happenings: Preseason Edition

- We officially welcome our experimental steers to CPER on Monday, May 11th. Throughout next week, our bovine friends will be weighed, tagged, and sorted into their respective pastures according to weight, and attitude towards science. A big “thank you” to the Crow Valley Livestock Cooperative for providing us with such fine animals. I will, hopefully, get plenty of video footage of the process and photos to share in next week's communication.
- The pastures are looking delicious, especially the burned areas (see photo below), while wind mills, solar pumps, water tanks, and hydrants are prepared to deliver all our water needs in 2015. As always, the CPER crew has been hard at work to ensure smooth ranching operations and scientific support for this year's grazing season and beyond.
- What's new in 2015?
 - We are proud to welcome Jake Thomas and Craig Lawrence to the CPER crew this year. Jake and Craig both grew up in and around CPER and we're honored to add their knowledge of the land and cattle handling talent to the crew.
 - Pasture movements for the AGM herd will be determined by weekly visual obstruction readings (VORs) alone, without a number-of-days threshold. We will report the weekly VOR with every weekly email.
 - Fecal analysis will include DNA test for plant species ingested. The DNA testing will be held to the end of the year (need to do them all in one batch sample. We are however, taking weekly fecal samples from steers in a representative Loamy, Sandy and mixed pasture each week (so we can show temporal trends associated with different ecological sites). We will be taking fecal samples from individual steers every two weeks (the ones with GPS collars and pedometers – new in 2015) as well to showcase variability between grazing animals.
 - We may be reporting pasture-specific precipitation and soil moisture this year, thanks to some automated rain gauges and soil moisture sensors that were installed this spring. I haven't worked out all the details on this yet, but I will do my best.
 - We will be testing out GrazeKeeper, a new computer application designed to help us monitor rangeland health and animal condition. We will see how such tools could be useful to land managers for making informed AGM decisions.

Photos From While We Were Away



Above: Jules shows us how to hover over a shovel while helping to install automated soil moisture sensors.



Above: Fall fire at CPER from Nov. 2014.



Above: April 2015 green-up at CPER as a result of fall fire.

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

Nick Dufek