

Collaborative Adaptive Rangeland Management



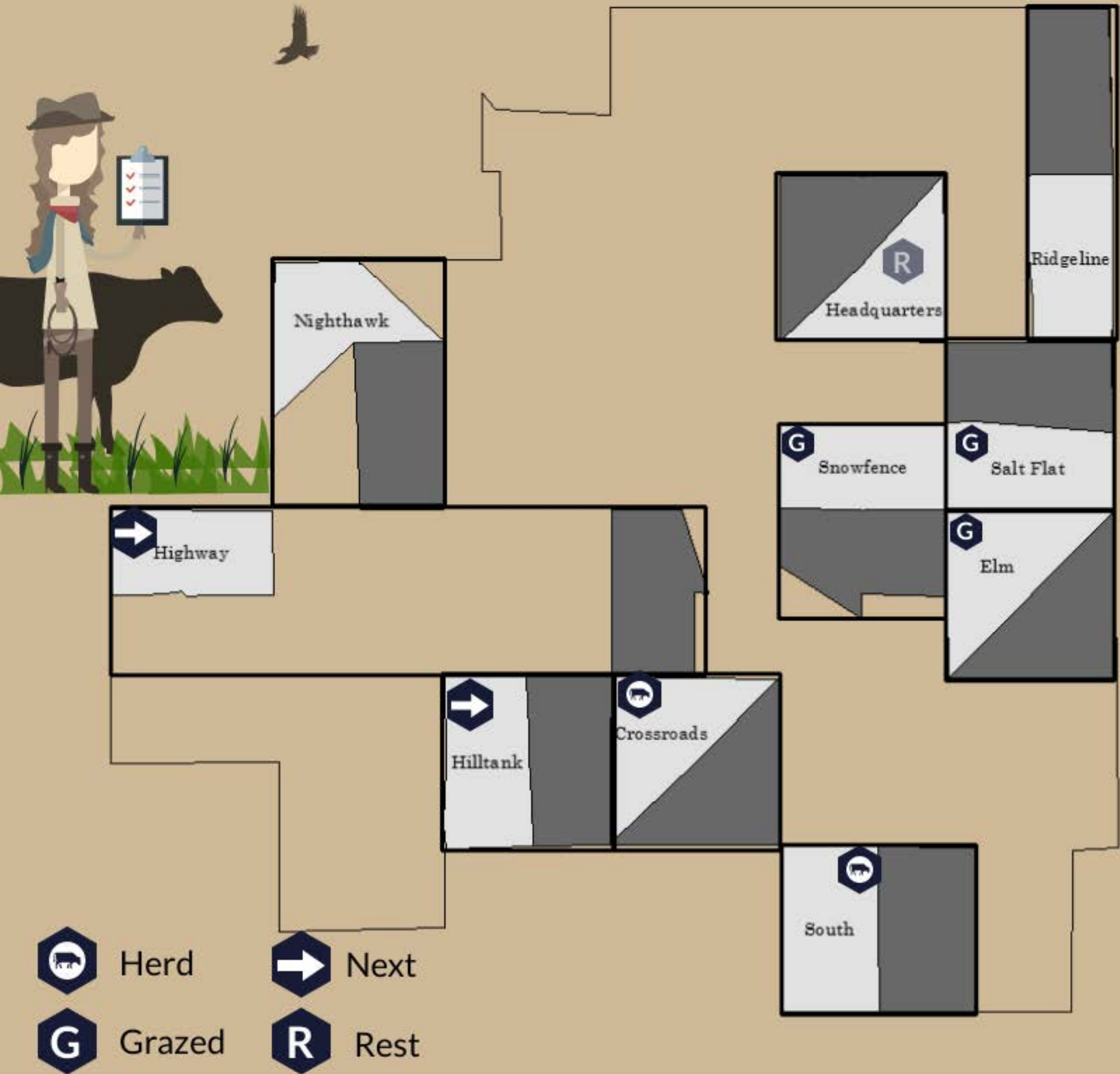
Where it all began





Dive into the details...

Now managing CARM under the drought plan.



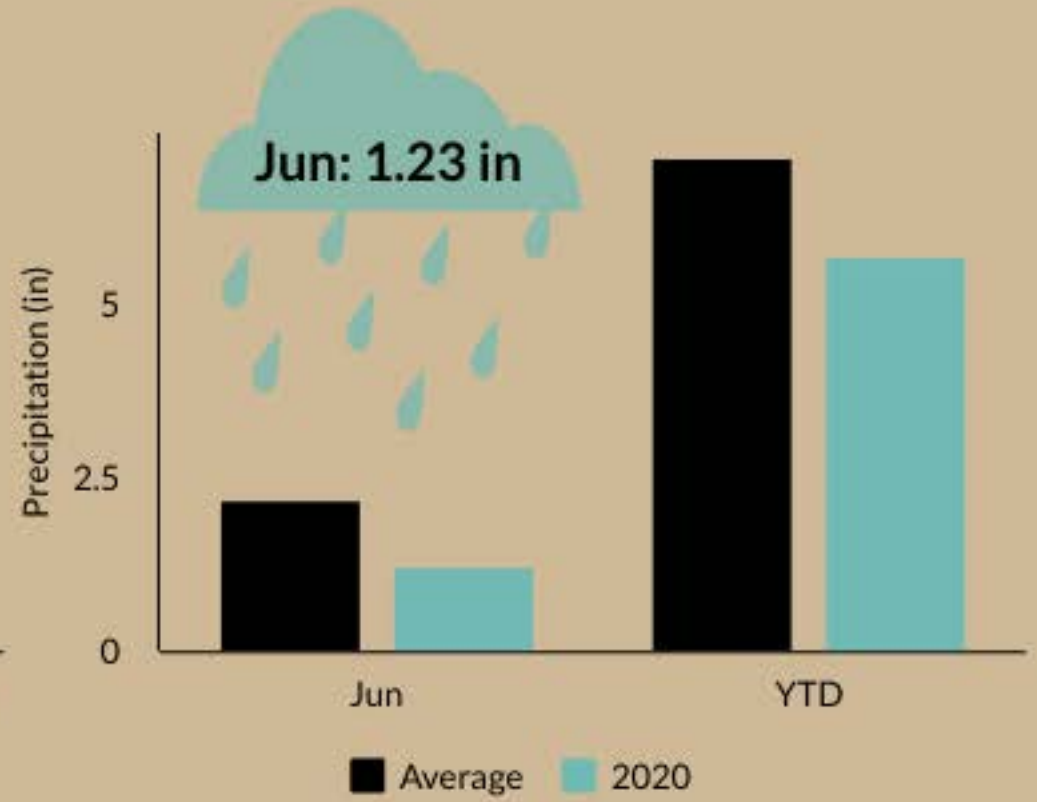
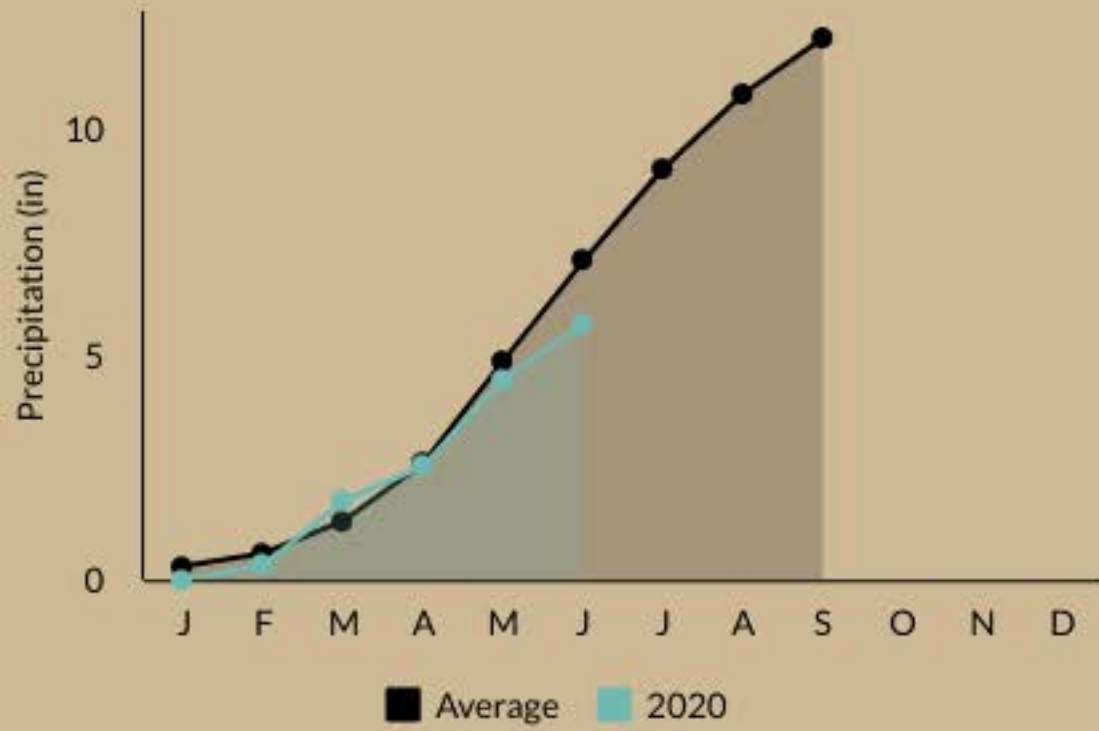
South | Crossroads

- Mixed Soils
- Warm & Cool Season Grasses
- Vegetation Threshold 400 pounds/acre

- Mixed Soils
- Warm & Cool Season Grasses
- Vegetation Threshold 400 pounds/acre

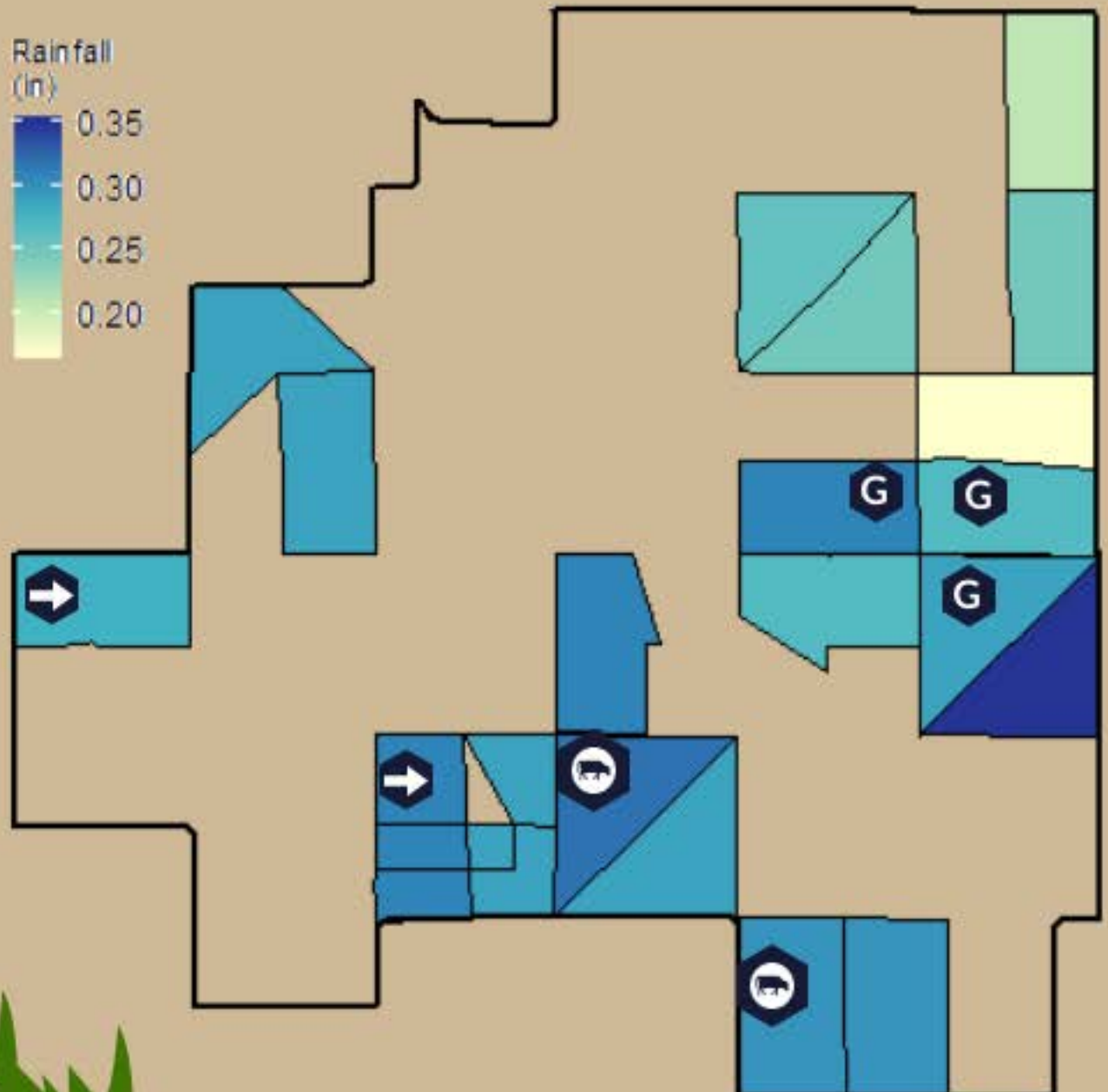
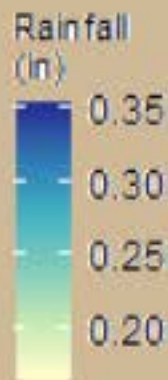
Highlights of Happenings

Rainfall Totals



Total Rainfall

2020-06-14 to 2020-06-21



Rainfall Distribution

Drought Monitor

Grass-Cast



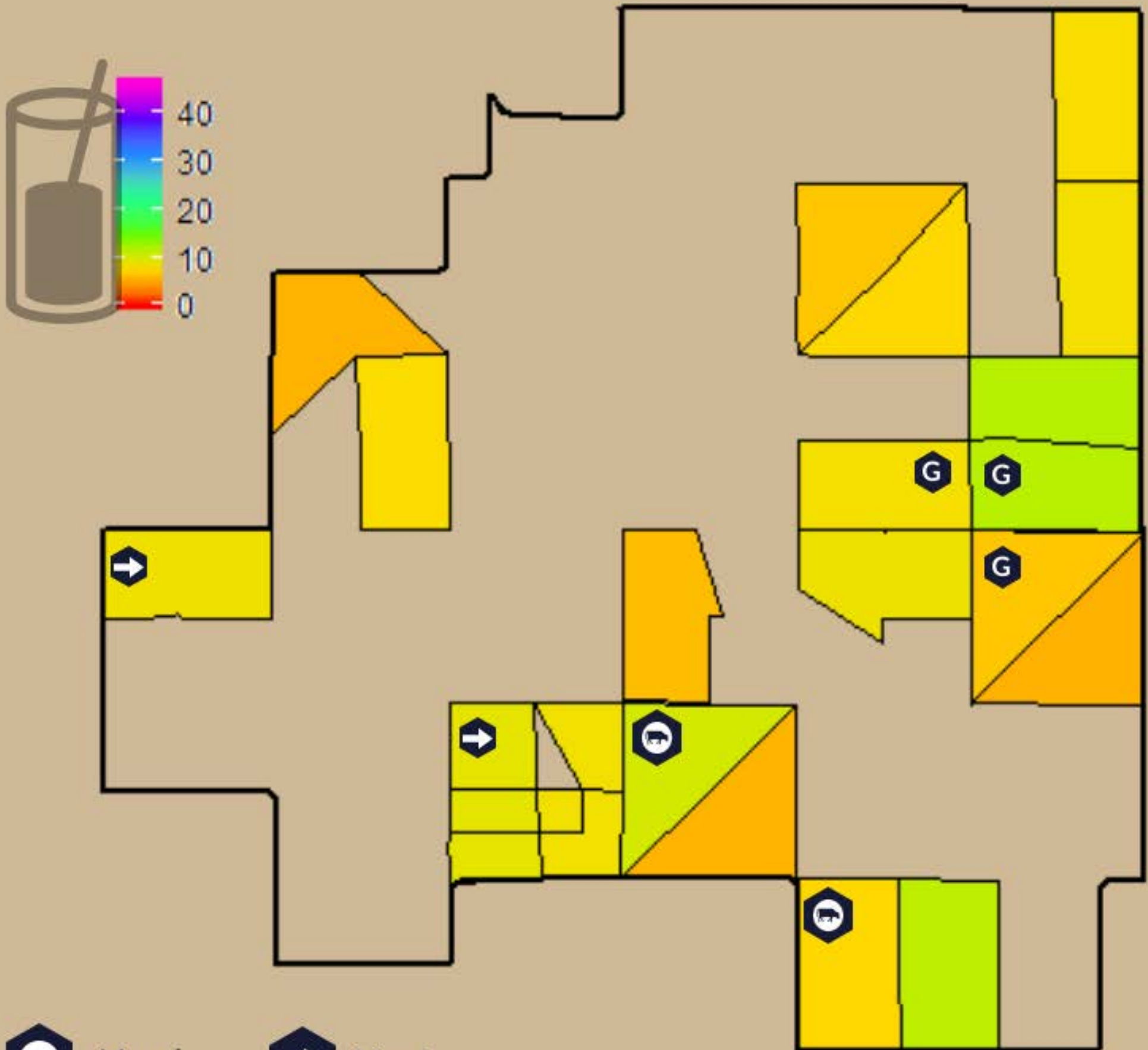
Soil Moisture Distribution

What's in our cup?

It has been worse, but it could be better.

Current Soil Moisture

2020-06-21

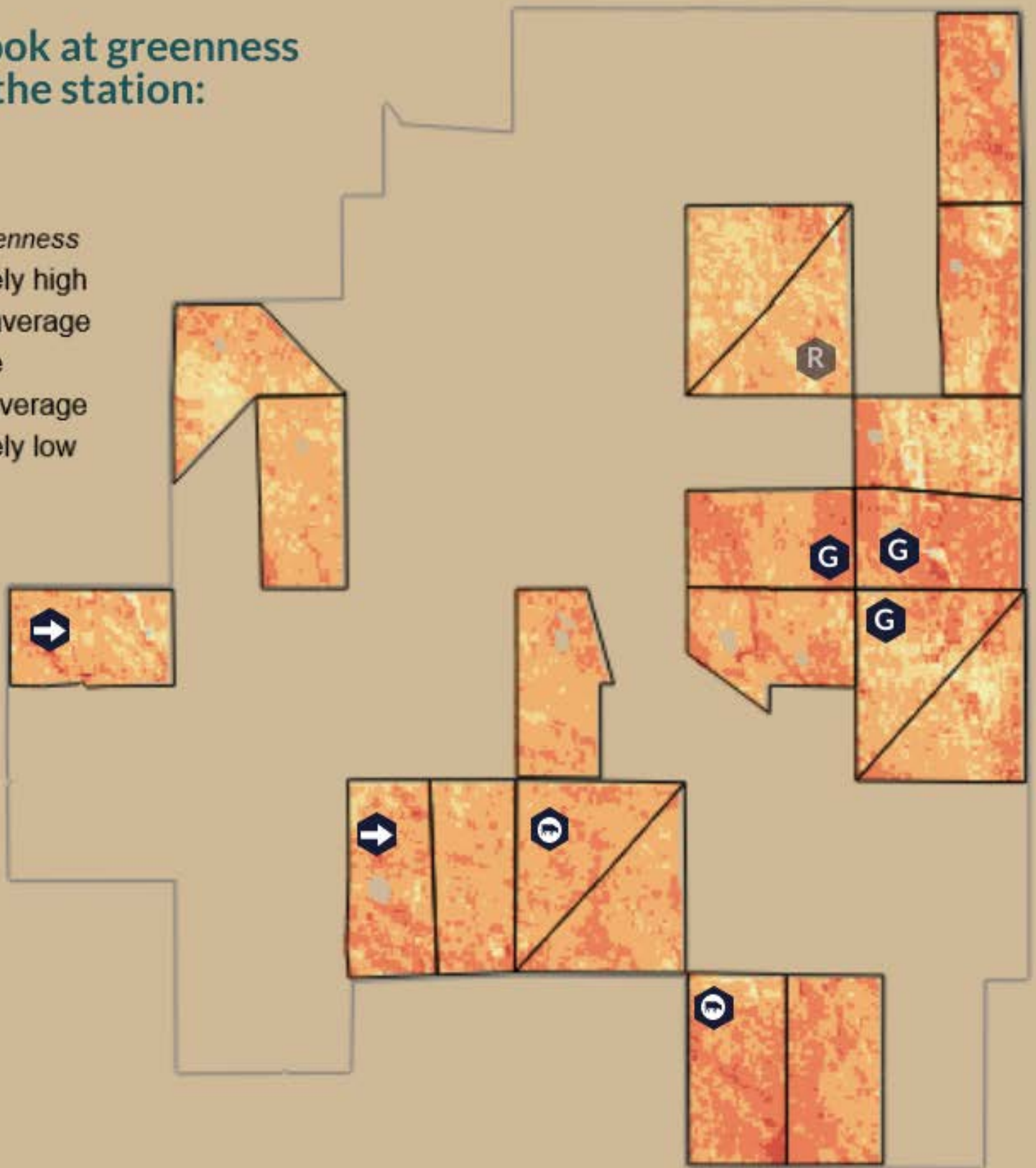


- Herd
- Next
- Grazed
- Rest

A detailed look at greenness across the station:



- Relative greenness*
- Extremely high
 - Above average
 - Average
 - Below average
 - Extremely low



-  Herd
-  Next
-  Grazed
-  Rest

Forage Recap:

So, we've experienced something new to CARM; drought conditions.



The grass height was there, but the dried, rolled leaves influenced a very low VOR reading (skewing the pounds/acre).

So, the grass crew quickly remeasured VOR & clipped biomass to fine-tune the regression.

Drought conditions call for adaptive strategies indeed.

Keep in mind!

We still have the cattle observation thresholds, the cattle look happy & grazing in large groups, despite the low VOR.



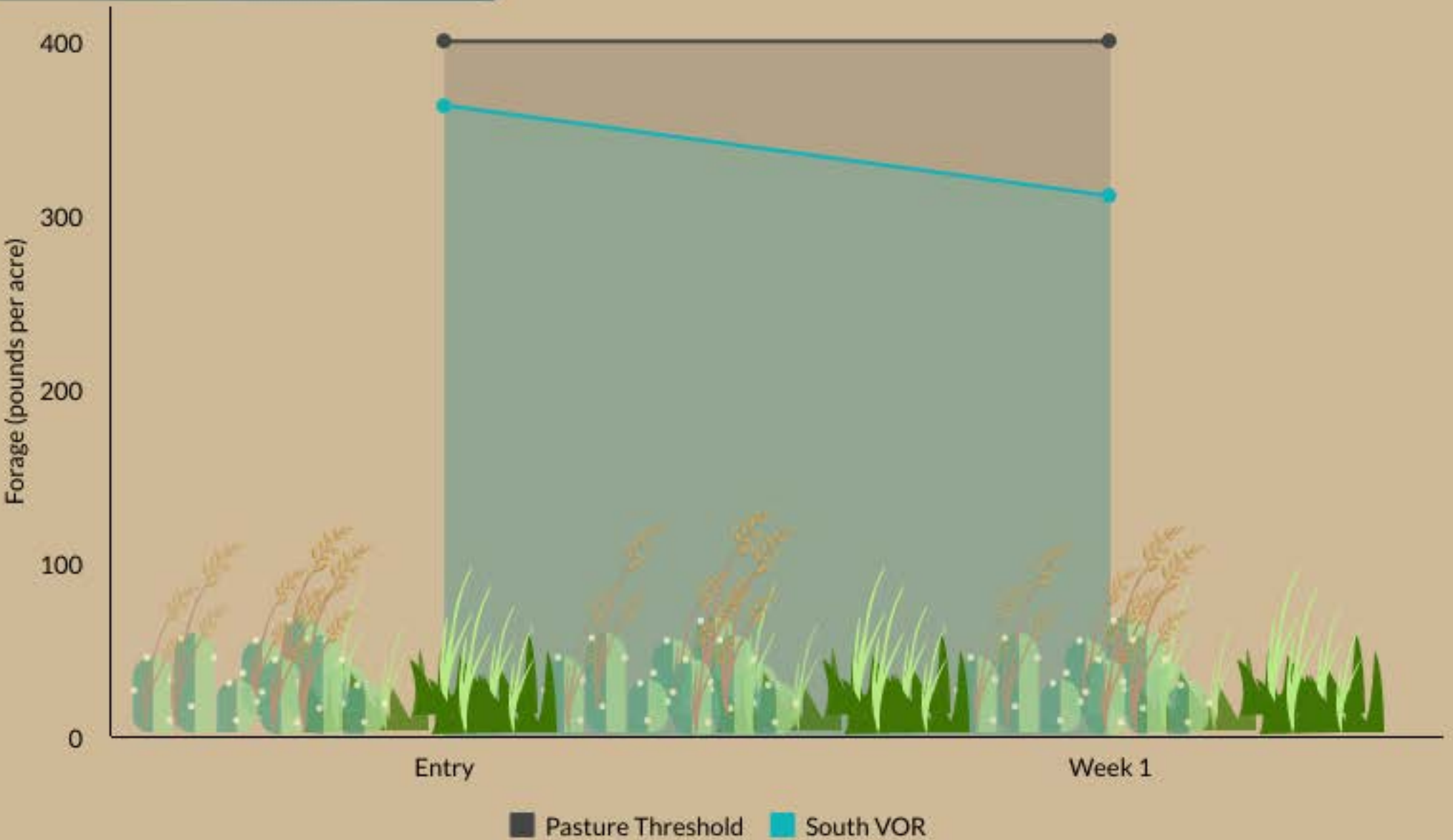
South



312 lbs/acre
1.5 cm

There's a good bit of Western Wheat on the southern end, glad to see these steers lounging around.

Latest on the ground...

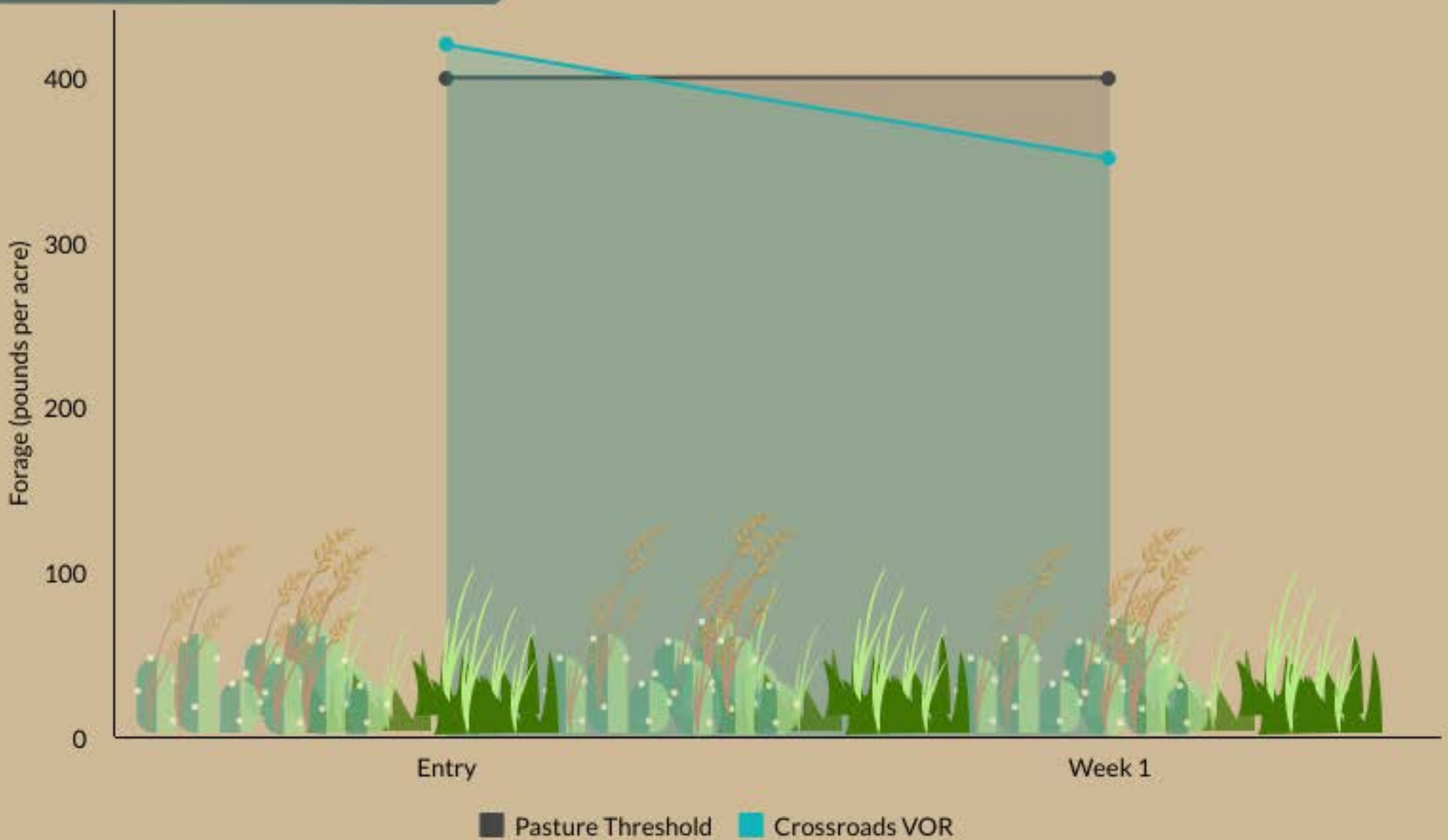




The cattle are covering some ground for the good stuff.



Latest on the ground...





South

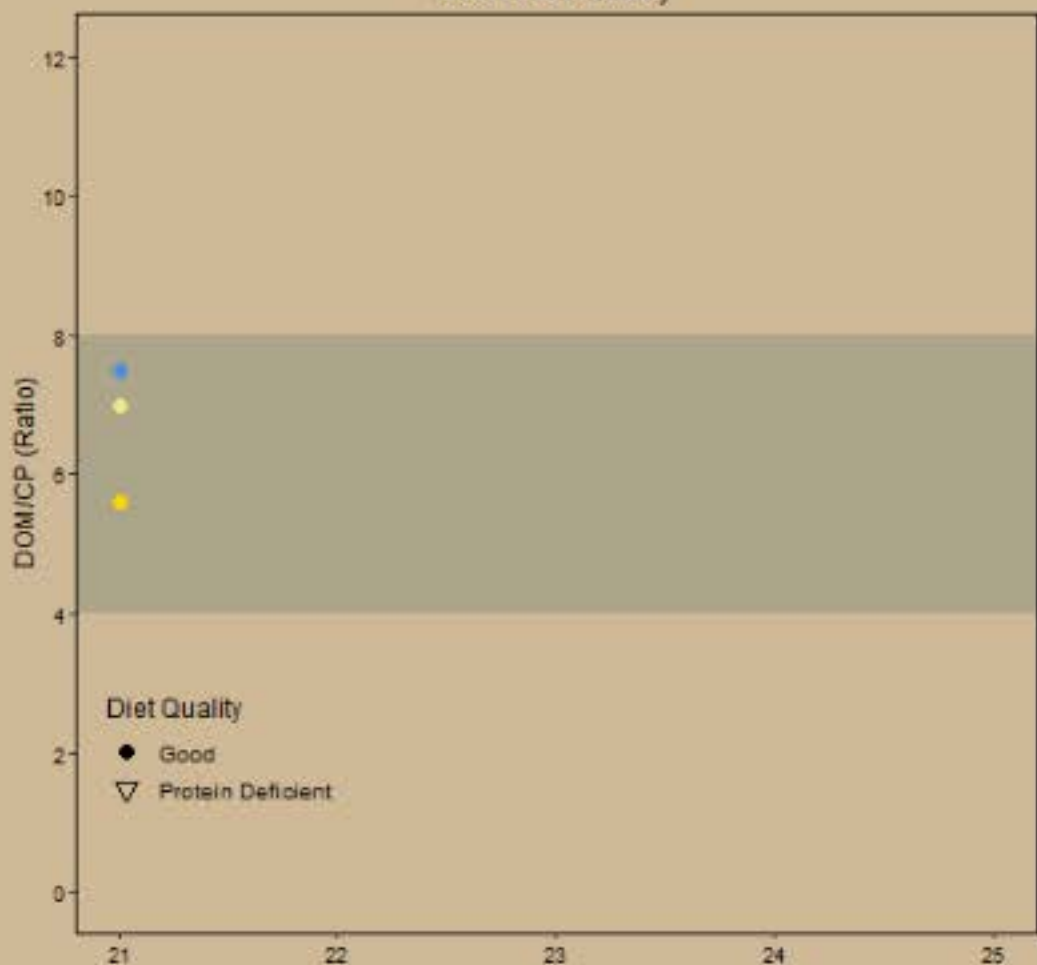


last week

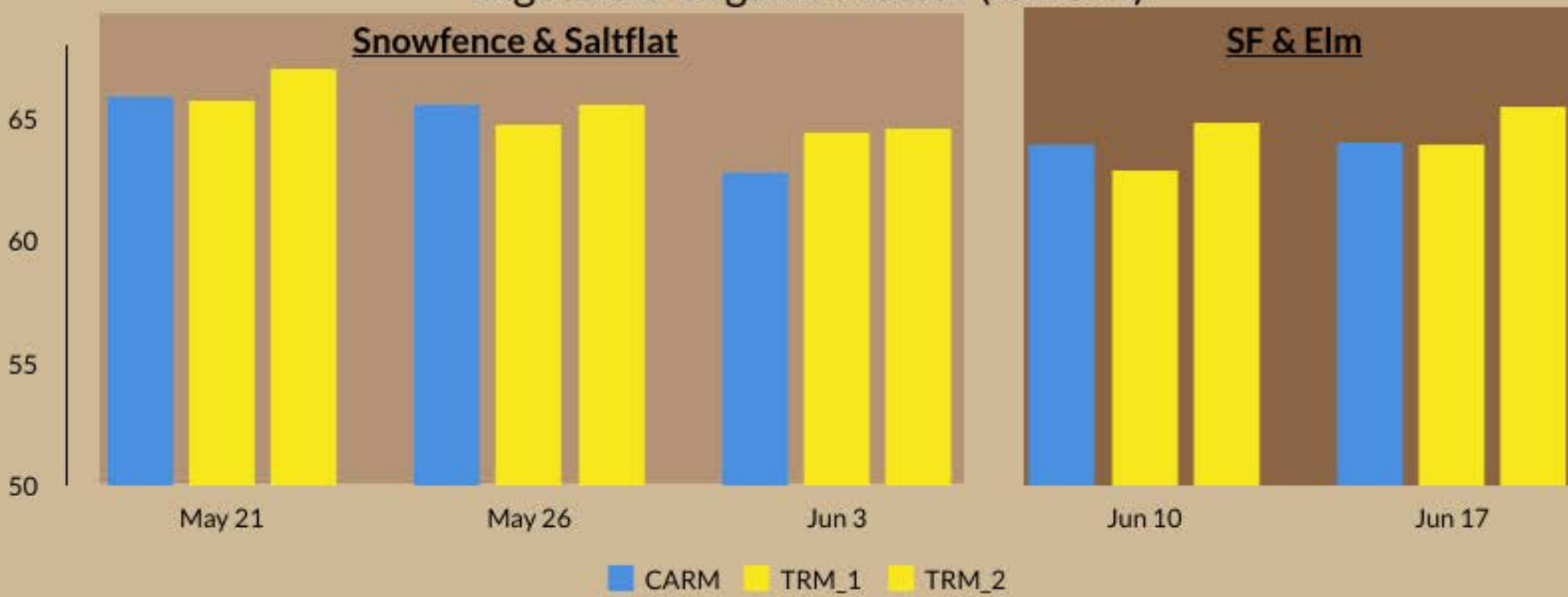




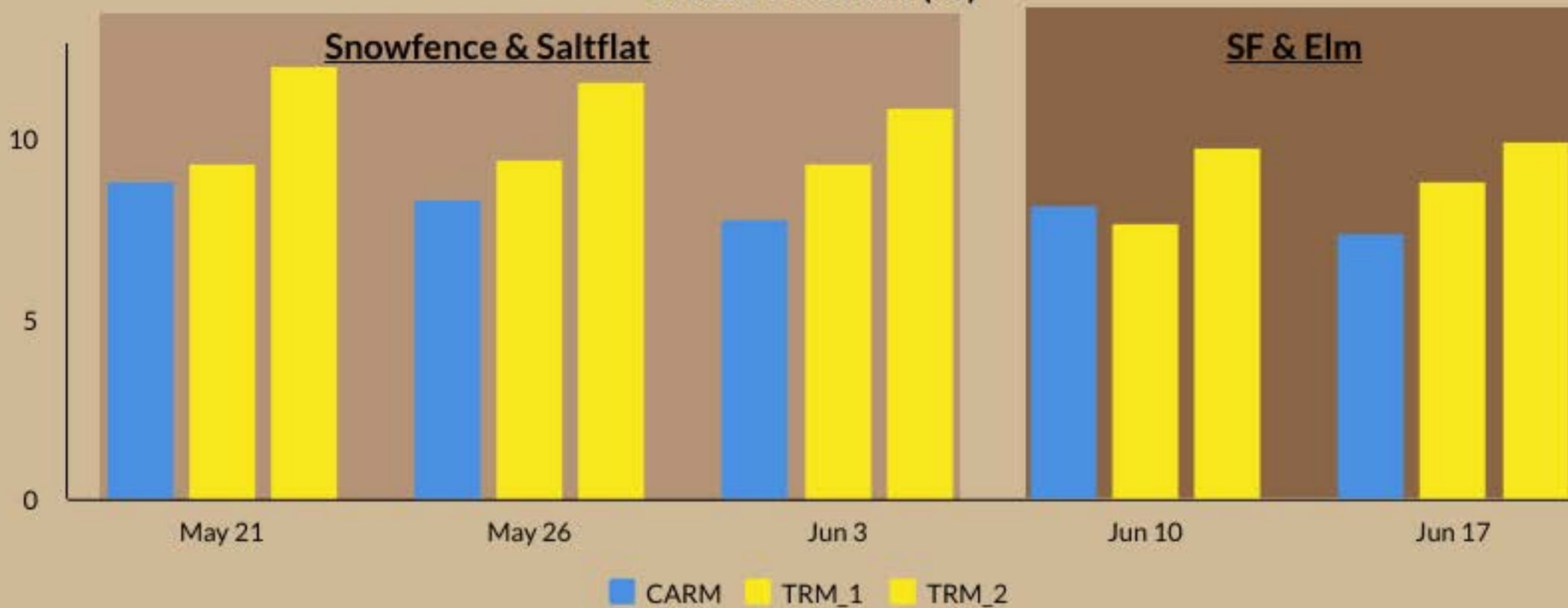
2020 Diet Quality



Digestible Organic Matter (%DOM)



Crude Protein (%)





Decision Recap

Stakeholders voted on some big changes this April!

Rotation 3:
 Start Date: June 30
 Max Days: 42
 VOR trigger: Same
 Split herd into two herds; CARM1 in Crossroads and CARM2 in South. Help reach shortgrass goals in South. Reminder: Continue to monitor and evaluate costs of this approach.
Each pasture will get 122 steers.

Pasture	What we wanted to happen	What actually happened			
	Notes from April	Date In	Date Out	Trigger Used	Notes
1) Snowfence & Saltflat	Gates open between, Shoot for 21-24 days, measure VOR separate & use average to gauge veg trigger, cattle gains, 5/15 - 6/8	15-May	4-Jun	Max Days	
2) Saltflat & Elm	Gates open between, Shoot for 21-24 days, measure VOR separate & use average to gauge veg trigger, cattle gains, 6/8 - 6/29	4-Jun	18-Jun	VOR Threshold	Left almost two weeks earlier than planned.
3.1) Crossroads	Reduce VO for MCLO (< 5cm) 6/29-8/10	18-Jun			
3.2) South	Reduce VO for MCLO (< 5cm) 6/29-8/10	18-Jun			
4.1) Highway	Reduce VO for MCLO (< 5cm) 8/10 - 9/21				
4.2) Hilltank	MCLO 8/10 - 9/21				
5.1) Nighthawk	9/21 - end of easeon				
5.2) Ridgeline	9/21 - end of easeon				
6) Headquarters	Rest				



Up & Coming

- Forage in-take monitoring
- Veg monitoring, completed.
- Collar battery & SD card swap.
- 1/3 Season weights for CARM
- CARM 1 will move from Crossroads to Highway
- CARM 2 will move from South to Hilltank

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

Happy Trails!



For detailed precipitation
data, maps, last year's
updates, Scientist bios, and
CARM documents, see our
website:



ALL access data!