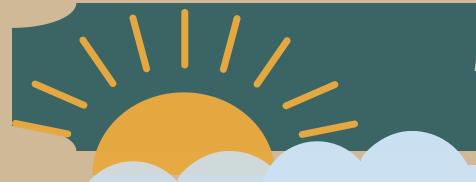
Collaborative Adaptive Rangeland Management

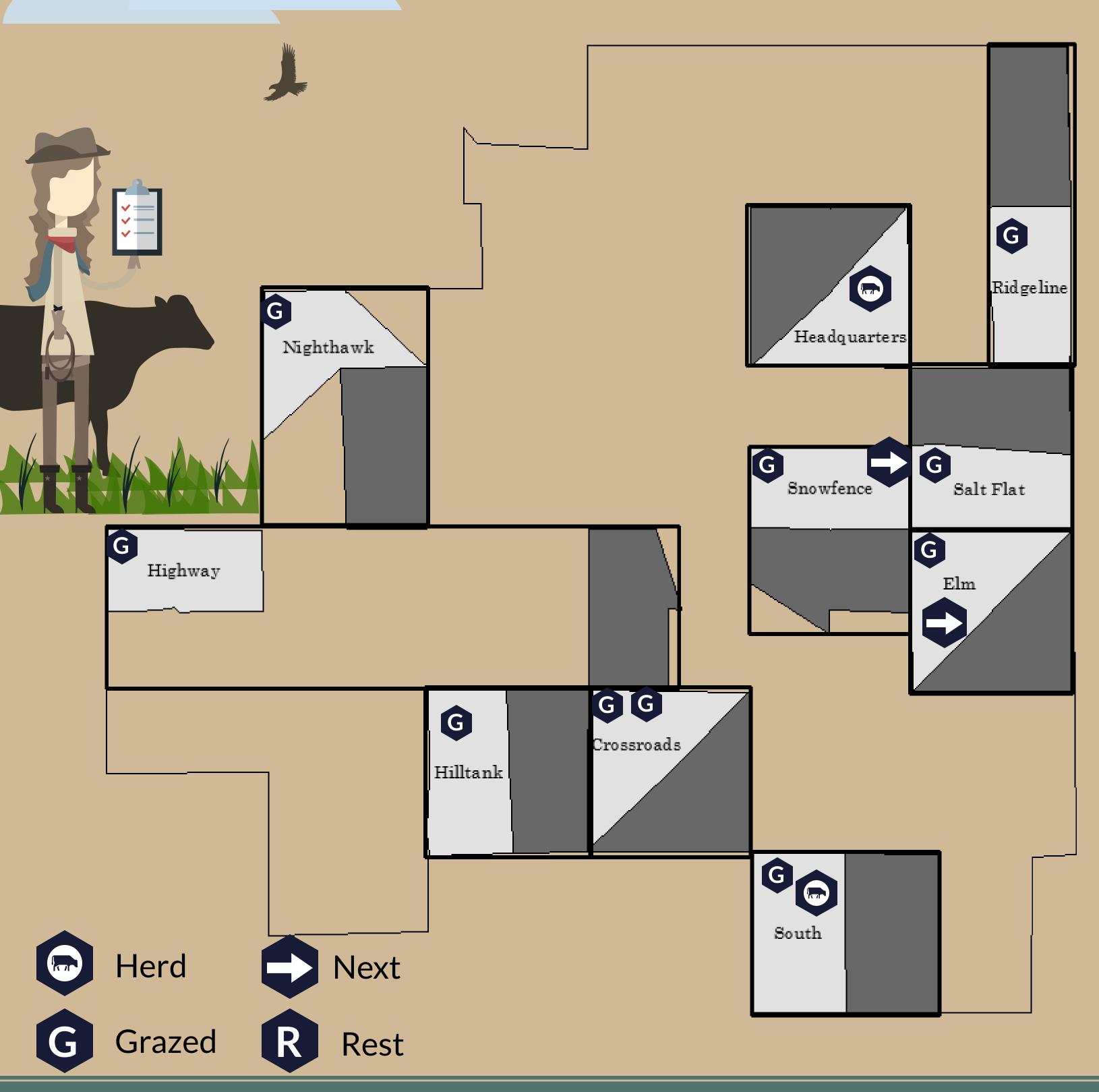






Dive into the details...

And we're back online!



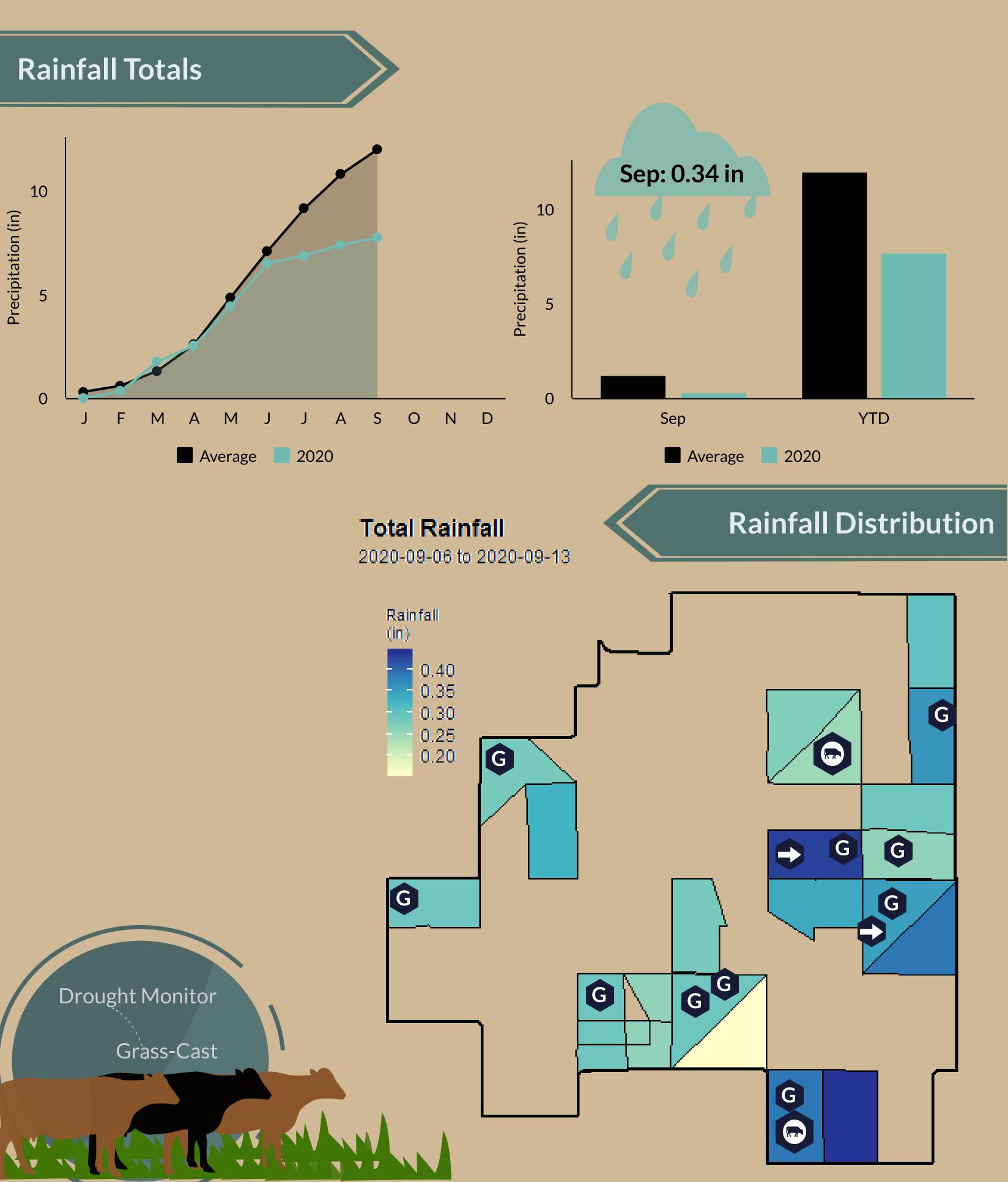
South

- Mixed Soils
- Warm Season Grasses
- Vegetation Threshold:
 - 400 pounds/acre
- Grazed 6/18 7/1, now regrazed

Headquarters

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

Highlights of Happenings



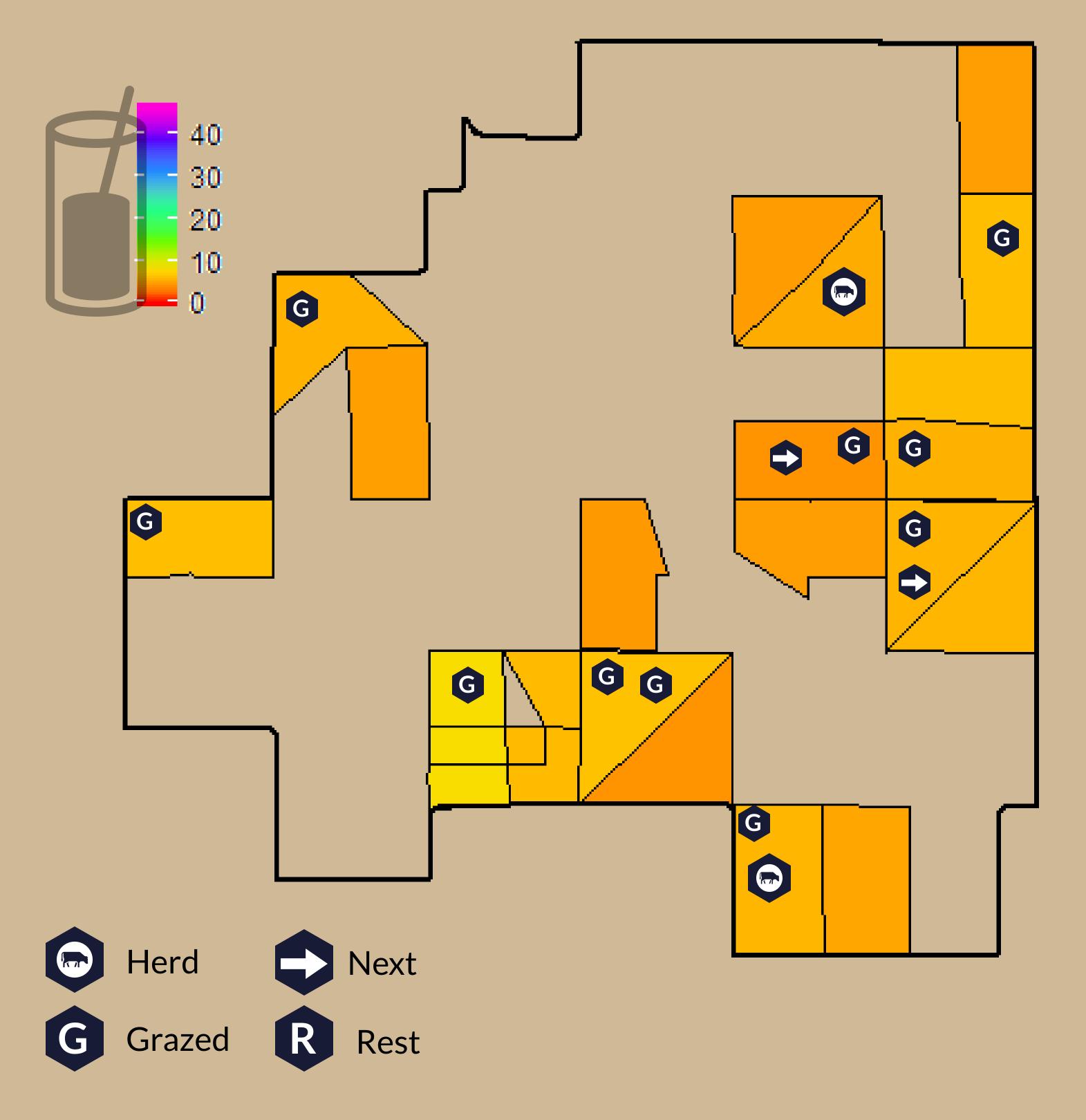
Soil Moisture Distribution

Current Soil Moisture

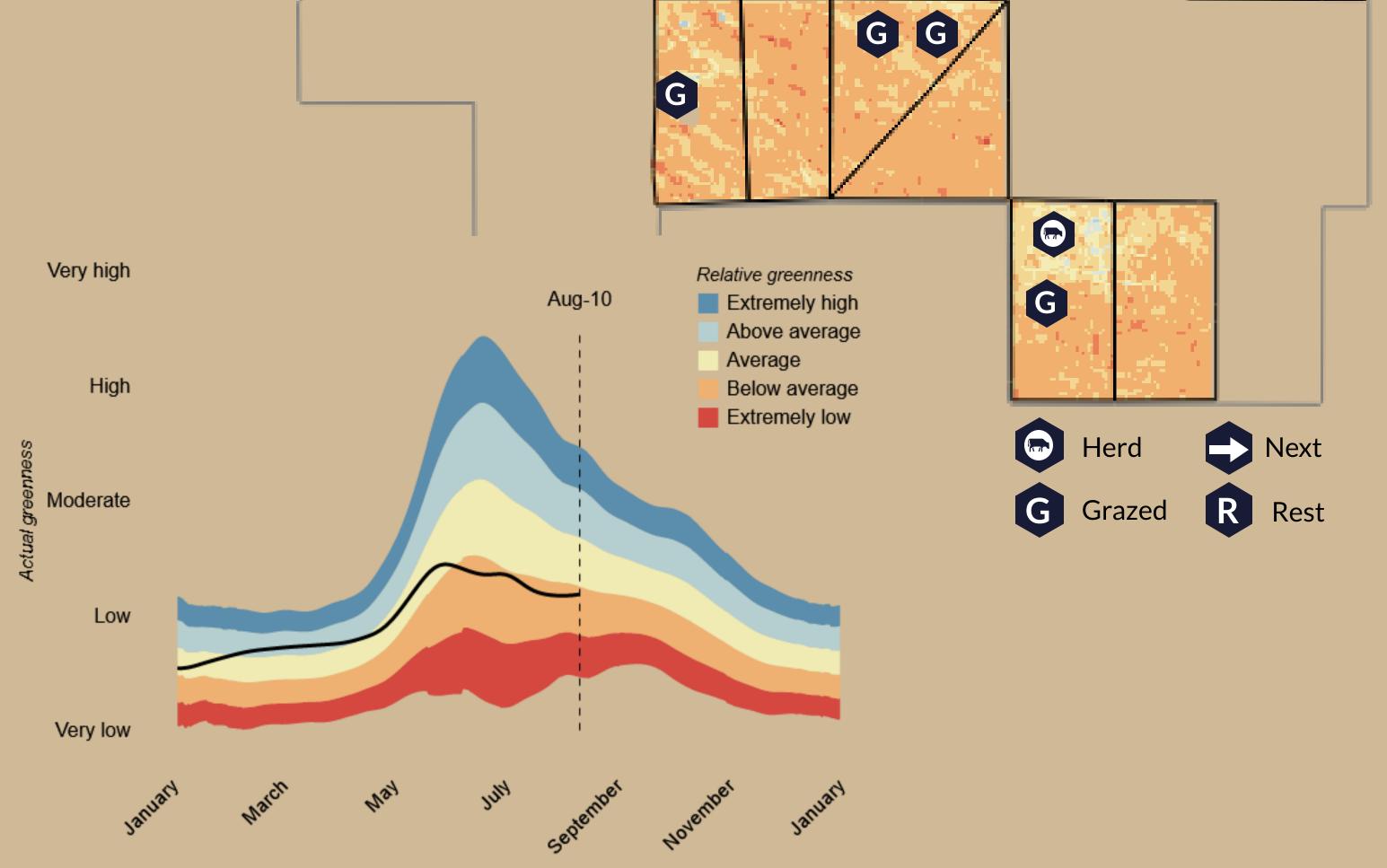
2020-09-13

What's in our cup?

It will be interesting to see how much of this week's rain will end up in our cup.



Greenness Distribution







Lots to keep track of here:

- 1) <u>CARM 2 grazed South from Jun 18th July 1st</u>
- 2) <u>CARM 1</u> moved into South: Sep 15th
- 3) Re-grazed Entry VOR: 376 lbs/acre

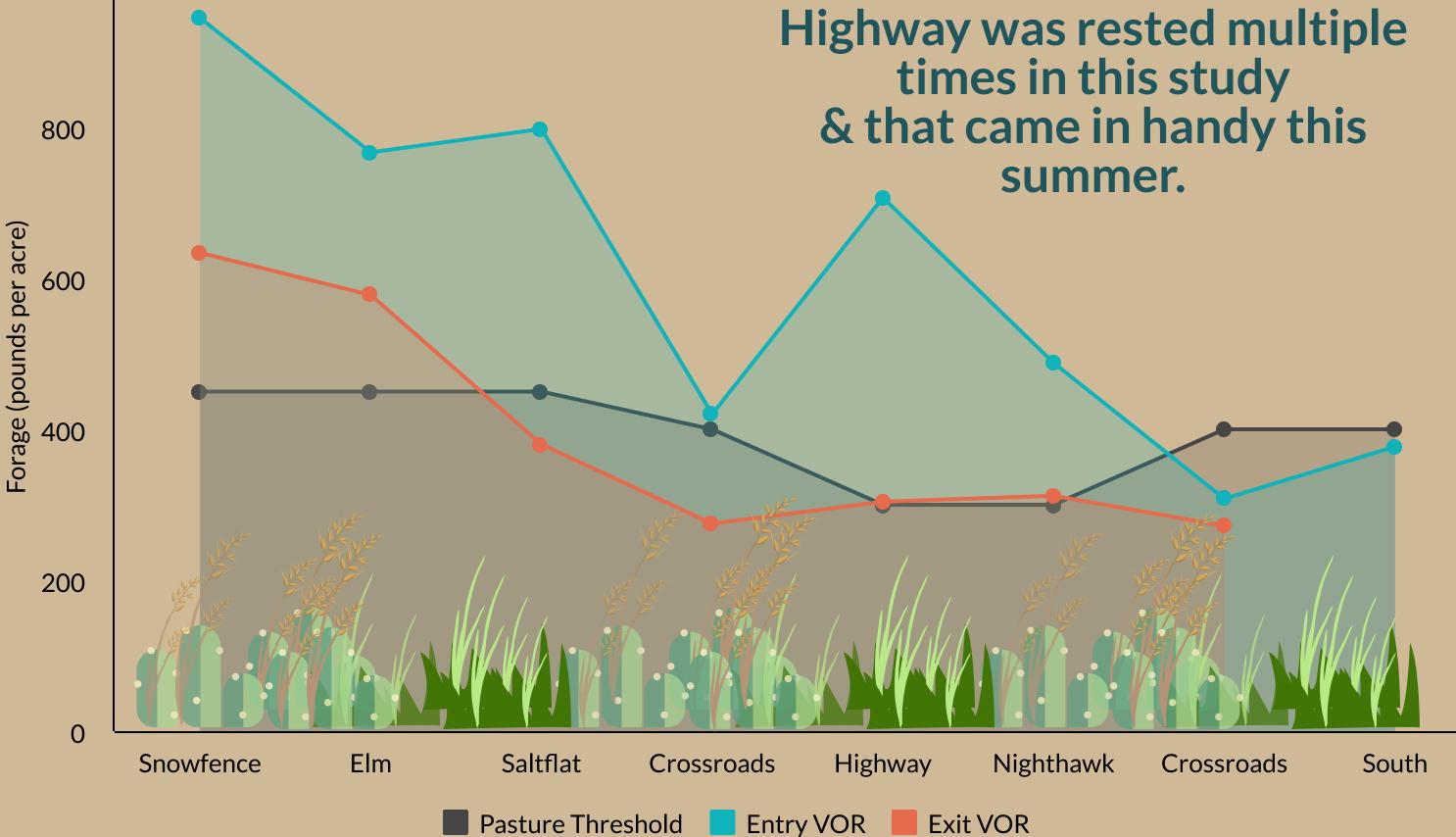
Note: Yes, it is below the drought threshold.

However! BOTH - the remote sensing & on-theground measurements indicated re-growth had occurred.

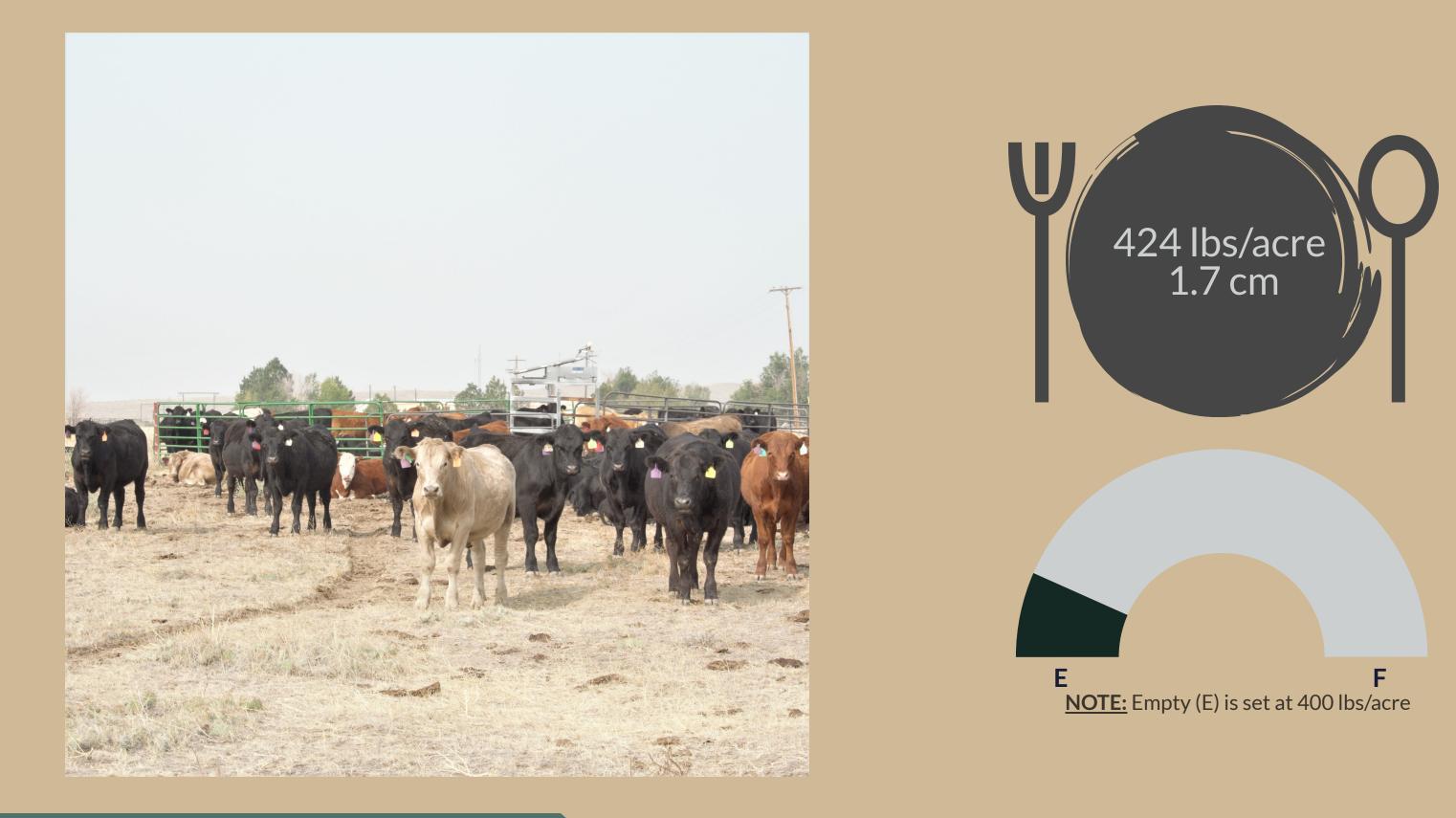
AND - Stakeholder's agreed that re-grazing pastures with short-structure grass requirements to meet Bird Objectives was an appropriate decision.

We're managing under Max-Days / Cattle-Observation triggers now.

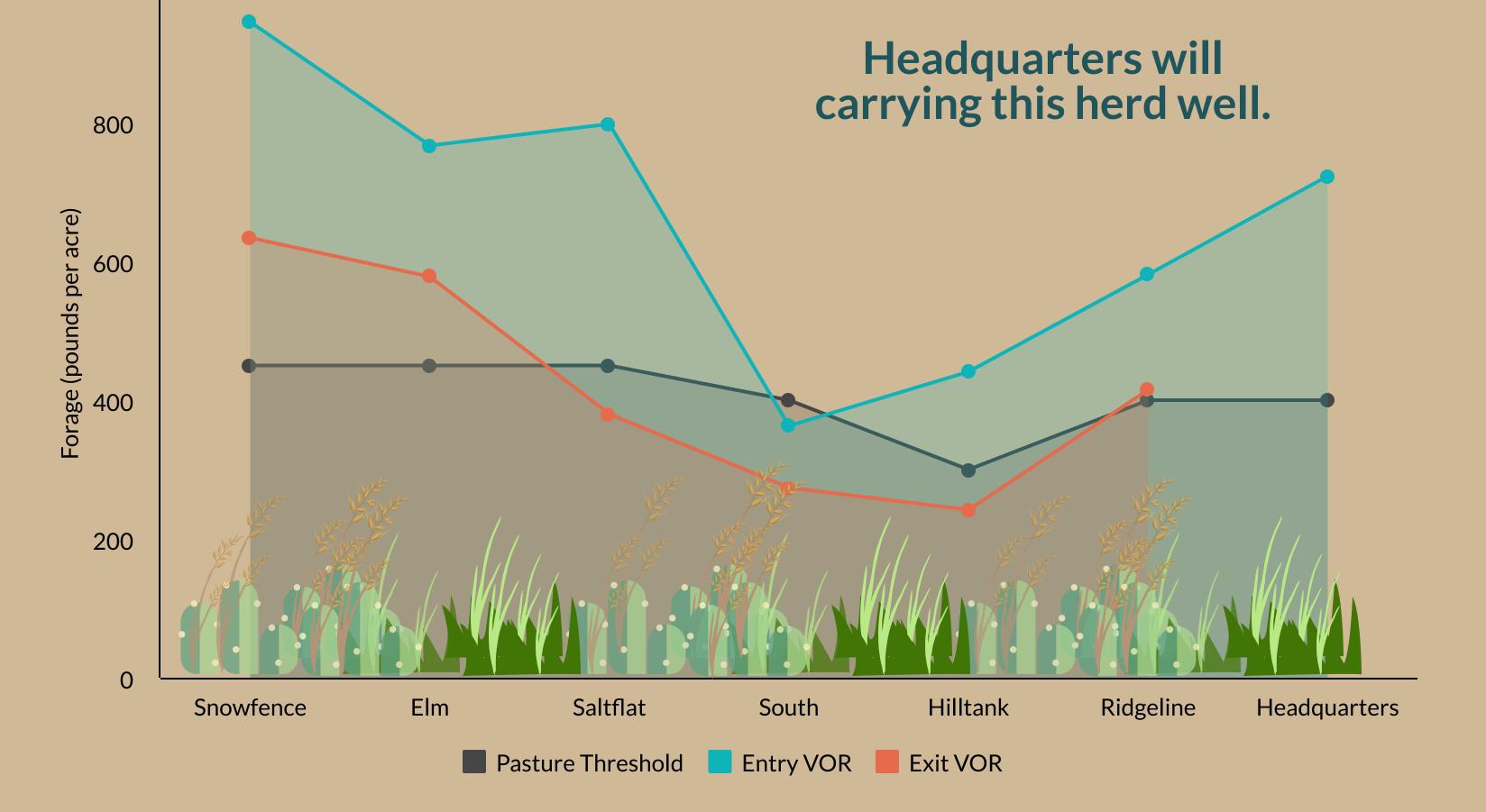
Let's track CARM-1 VOR

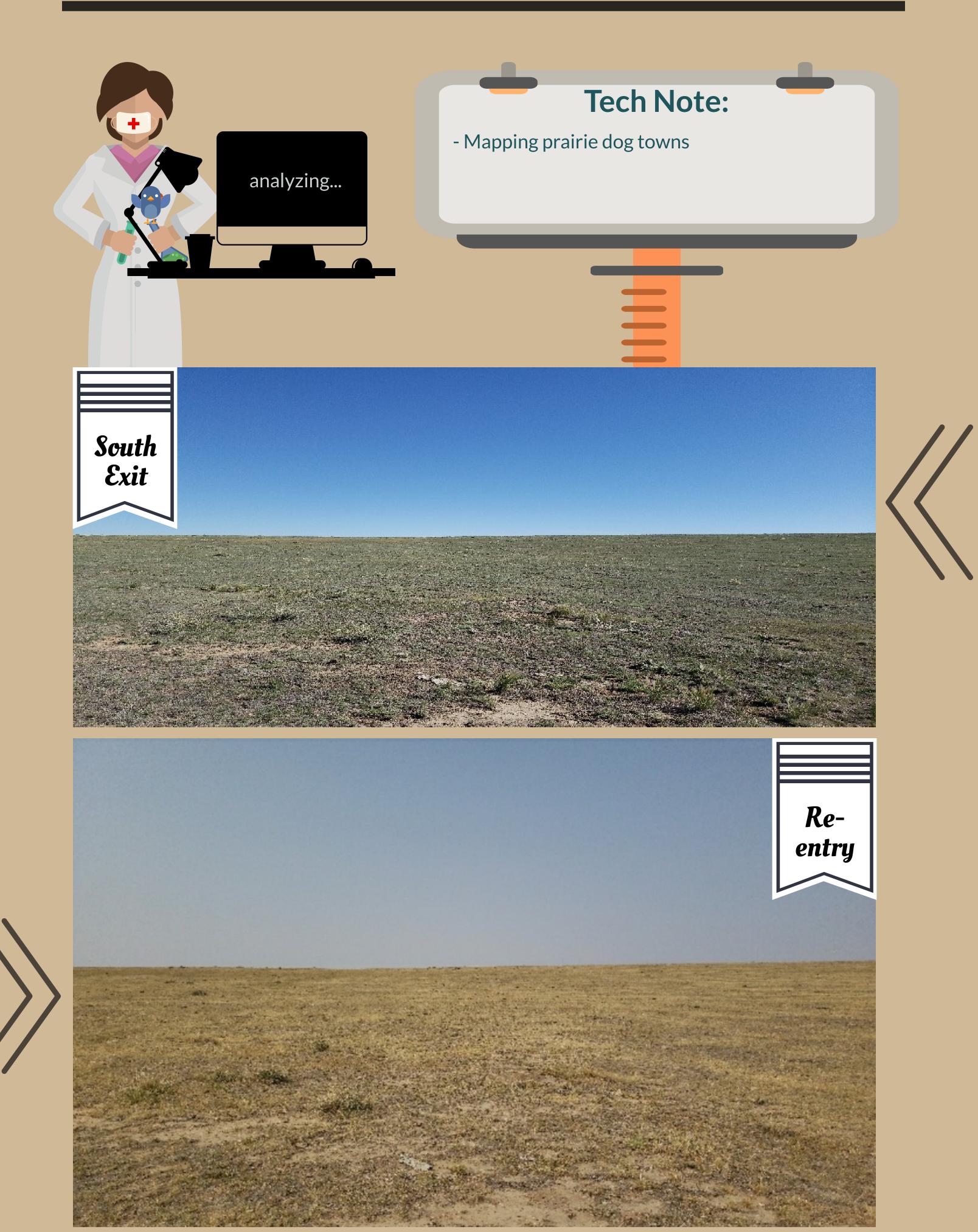


Headquarters - CARM 2



Let's track CARM-2 VOR



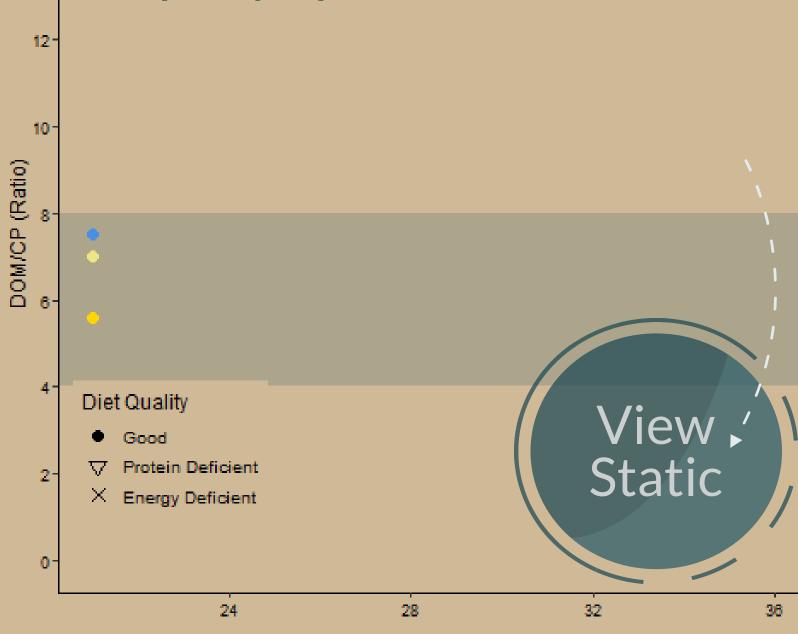






2020 Diet Quality

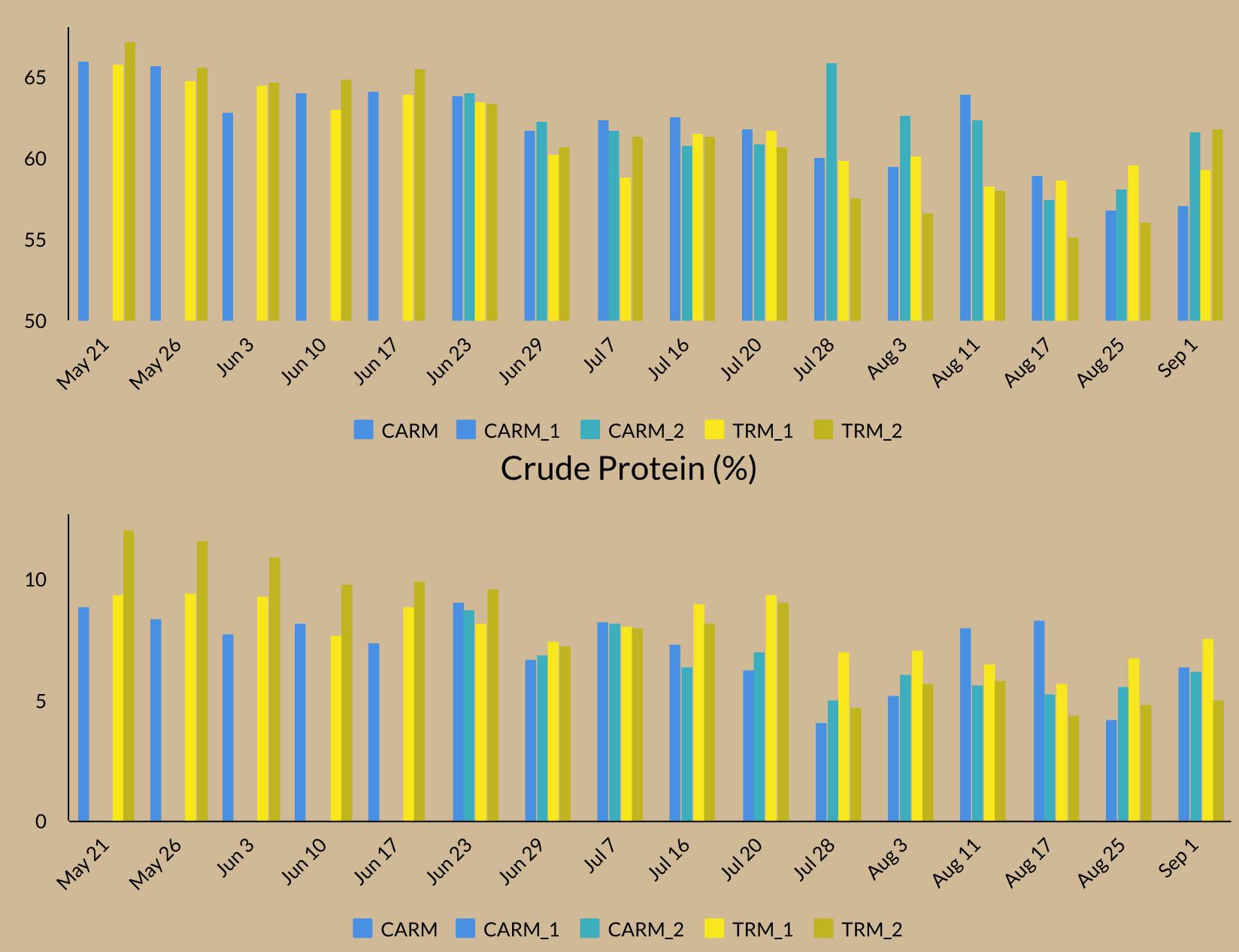
Late season diet quality is poor.



The Scoop on Poop

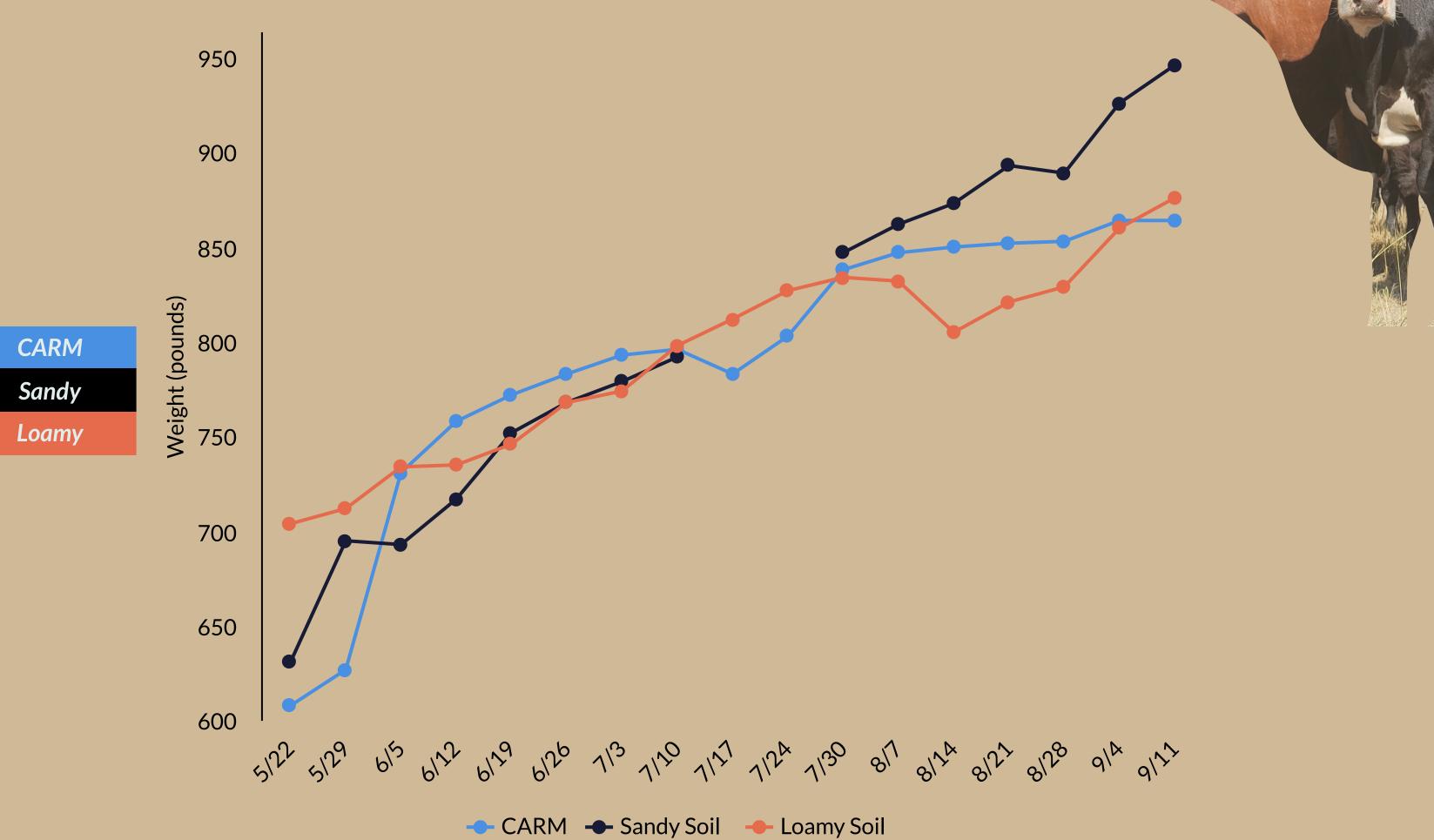


Digestible Organic Matter (%DOM)



Remote WOW

Walk-over Weigh Scale Data





Stocking Rate

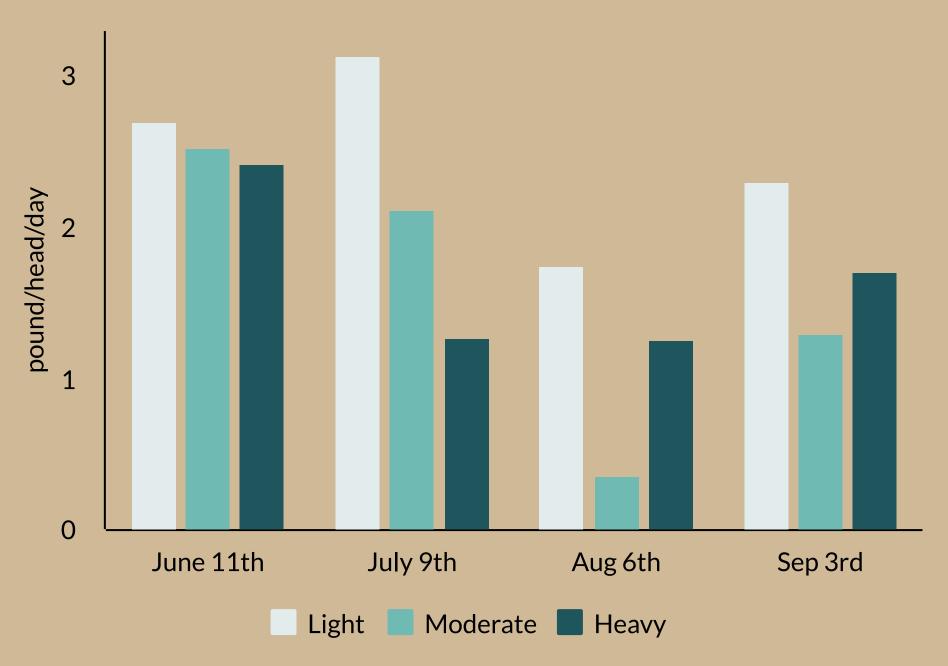
Light: 17 head

Moderate: 23 head

Heavy: 34 head

Steers per 320 acres

Average Daily Gains (28 Days)



Review 2019 vs 2020



| Treatment | 2019 | 2020 | | |
|--|------|------|--|--|
| Light stocking: 1 st 28 days | 4.3 | 3.2 | | |
| Moderate stocking: 1 st 28 days | 3.8 | 3.0 | | |
| Heavy stocking: 1 st 28 days | 3.7 | 2.8 | | |
| | | | | |
| Light stocking: 2 nd 28 days | 3.8 | 3.1 | | |
| Moderate stocking: 2 nd 28 days | 3.4 | 2.1 | | |
| Heavy stocking: 2 nd 28 days | 3.9 | 1.3 | | |
| | | | | |
| Light stocking: 3 rd 28 days | 1.0 | 1.7 | | |
| Moderate stocking: 3 rd 28 days | 2.2 | 0.4 | | |
| Heavy stocking: 3 rd 28 days | 1.3 | 1.3 | | |
| | | | | |
| Light stocking: 4 th 28 days | 2.3 | 3.0 | | |
| Moderate stocking: 4 th 28 days | 1.3 | 2.2 | | |
| Heavy stocking: 4 th 28 days | 1.7 | 0.6 | | |

| Treatment | 2019 | 2020 | |
|--|------|------|--|
| CARM: first third of grazing season (about 45 days) | 3.4 | 2.4 | |
| CARM: second third of grazing season (about 45 days) | 1.7 | 1.9 | |
| | | | |
| Low-High-Low: Low-stock density gains (about 80 days) | 2.8 | 2.1 | |
| Low-High-Low: High-stock density gains (about 30 days) | 1.8 | 0.7 | |





Decision Recap

Current Rotation --->

ADAPTIVE!

Under current conditions we're now running on a plan determined by stakeholders in August.

CARM 1 - Will regraze Crossroads, South, & Elm

CARM 2 - Will graze planned rested pasture Headquarters & regraze Snowfence

| | | What we wanted to happen | What actually happened | | | |
|------|----------------------|---|------------------------|----------|---------------|---|
| | Pasture | 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 | 1-Jul | VOR Threshold | Used drought threshold |
| 3.2) | South | Reduce VO for MCLO (< 5cm) 6/29-8/10 | 18-Jun | 1-Jul | VOR Threshold | Used drought threshold |
| 4.1) | Highway | Reduce VO for MCLO (< 5cm) 8/10 - 9/21 | 1-Jul | 6-Aug | VOR Threshold | Used drought threshold |
| 4.2) | Hilltank | MCLO 8/10 - 9/21 | 1-Jul | 20-Jul | VOR Threshold | Used drought threshold |
| 5.1) | Nighthawk | 9/21 - end of season | 6-Aug | 3-Sep | VOR Threshold | Used drought threshold |
| 5.2) | Ridgeline | 9/21 - end of season | 20-Jul | 26-Aug | VOR Threshold | Used drought threshold |
| 6.1) | Headquarters | Rest | 26-Aug | | | CARM 2 herd |
| 6.2) | Crossroads | Regrazed | 3-Sep | 15-Sep | Days | |
| 7.2) | South | Regrazed | 15-Sep | | | |



Up & Coming

- Oct 3rd/4th Station Gather
- Oct 5-7th Final season weigh
- Oct 15th CARM meeting

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



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



ALL access data!