Grazing & Pasture Management

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Forages

- Those of us in the cattle business need to be really good at managing and grazing forages.

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Grass Growth

- In order to manage grass harvest properly, we need to understand how the plant grows and what it needs to remain healthy.

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Grass Growth

- Grass plants survive through the winter on energy stored in the roots and stems of the plant. Think of this as the plant's gas tank.

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Grass Growth

- In the spring when the temperature, moisture and day length is correct the plant starts to grow. The plant uses stored energy to grow until there is enough leaf area to begin Photosynthesis. It then begins to produce energy of it's own.
- Negative energy flow

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Grass Growth

- When the plant is big enough, there is more energy produced than is needed and the plant stores this energy back in the roots (gas tank)
- Positive energy flow

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Grass Growth

- Why worry about positive or negative energy flow?

- If the plant is grazed too early or too long and late in the grazing period, the plant will have to use stored energy and will go into the dormant period in a weakened state.
- If this is repeated year after year – the plant dies.

Important to Have a Grazing System and Manage Well

If you own livestock and a pasture, you already have some type of grazing system.

What type of system do you have?

Is it working well?

How healthy is the pasture?

Do the livestock perform well?

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Designing a Grazing System

No one system is perfect or the “best” system. If you are happy with your current system, stay with it. If not change your plan.

Need to consider the following:

System Design

Timing of Grazing

Avoid repeated grazing during critical stages of plant growth. (new growth). Allow 4 to 6 inches of height before grazing begins.

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Frequency of Grazing

Avoid grazing too often during a single growing season. A plant can be grazed several times if given a chance each time to replenish energy.

Not enough grazing can reduce production from choking.

Severity of Grazing

Avoid removing too much of a plant's leaf area. Leaves are the main sites of energy production for the plant. (**solar panel**) If too little leaf area remains, a plant will be unable to grow and replenish its energy reserve.

Severity of Grazing

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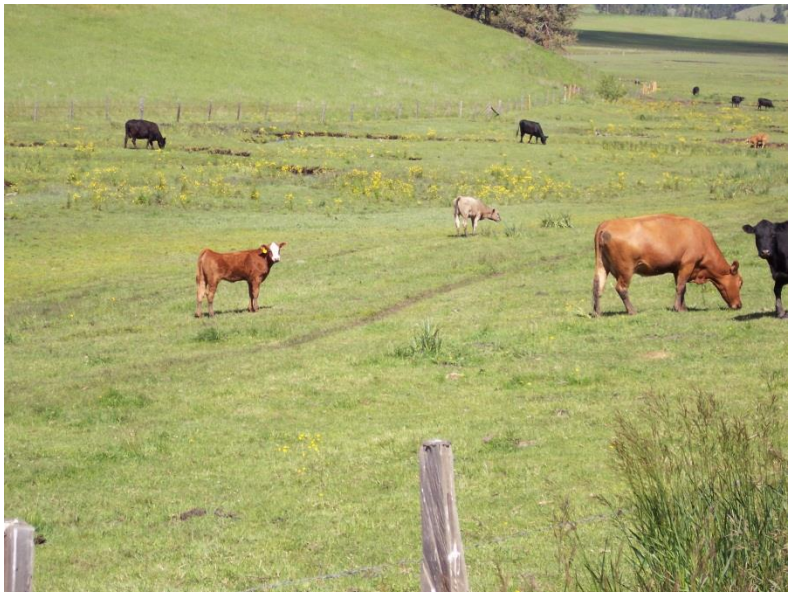
Selectivity

Livestock will eat most desirable plants first and leave objectionable ones. Can result in crowding out of good grasses.

Selectivity



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Types of Grazing Systems

- Continuous Grazing
- Deferred
- Rest Rotation
- ***Rotation Grazing***

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Rotational Grazing Test

- 16 head of replacement heifers – in weight 560 avg.

- In on April 21, 2018
- 20 acre pasture
- Out on Aug 11,2018

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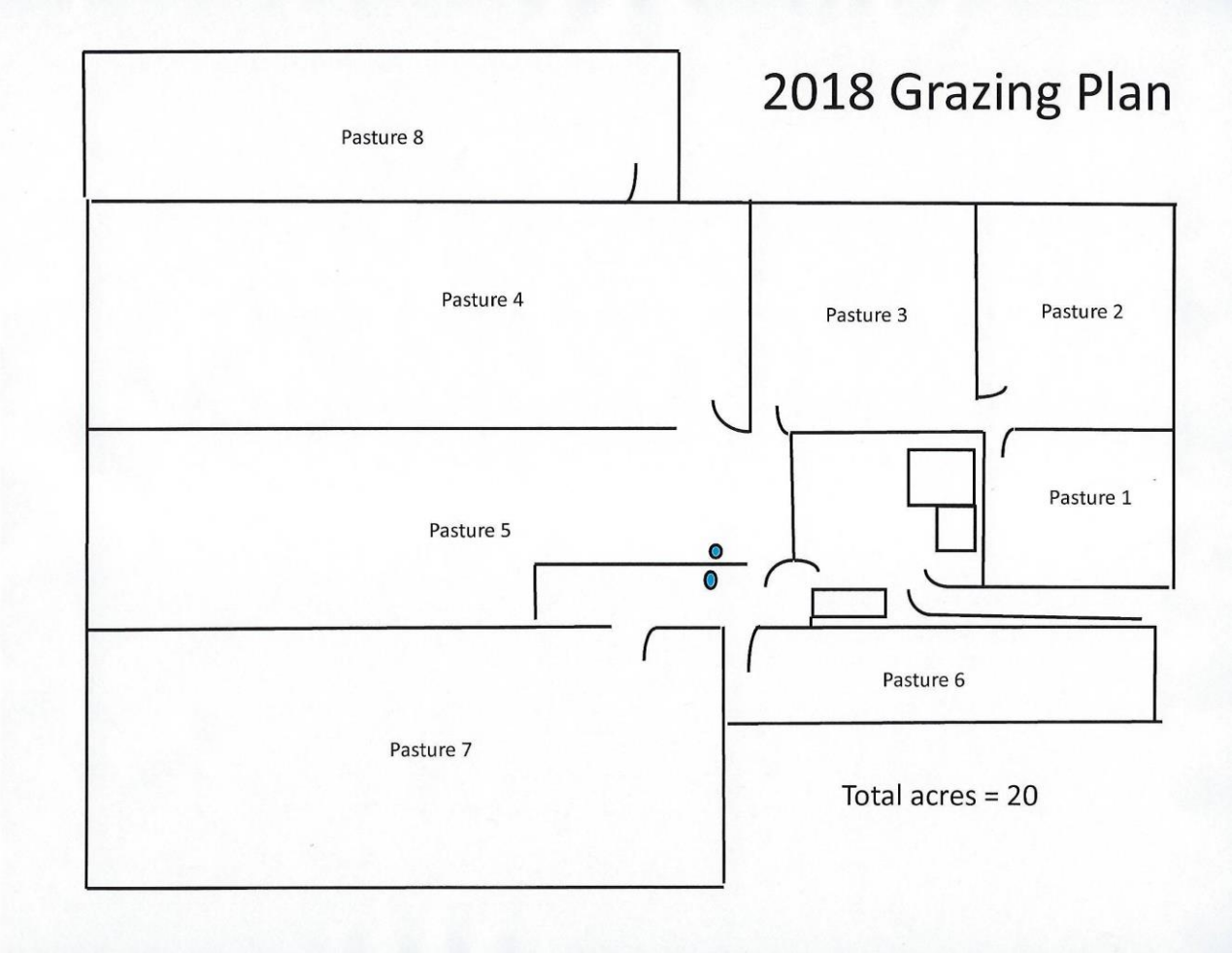
Rotational Grazing



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Rotational Grazing

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Rotational Grazing

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Moving Cattle

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Results 2018

- 112 days on pasture
- 3,932 pounds of beef produced on 20 acres
- 197 pounds per acre
- 16 head ADG = 2.2 pounds per day
- Avg start wt = 560
- Avg out wt = 808

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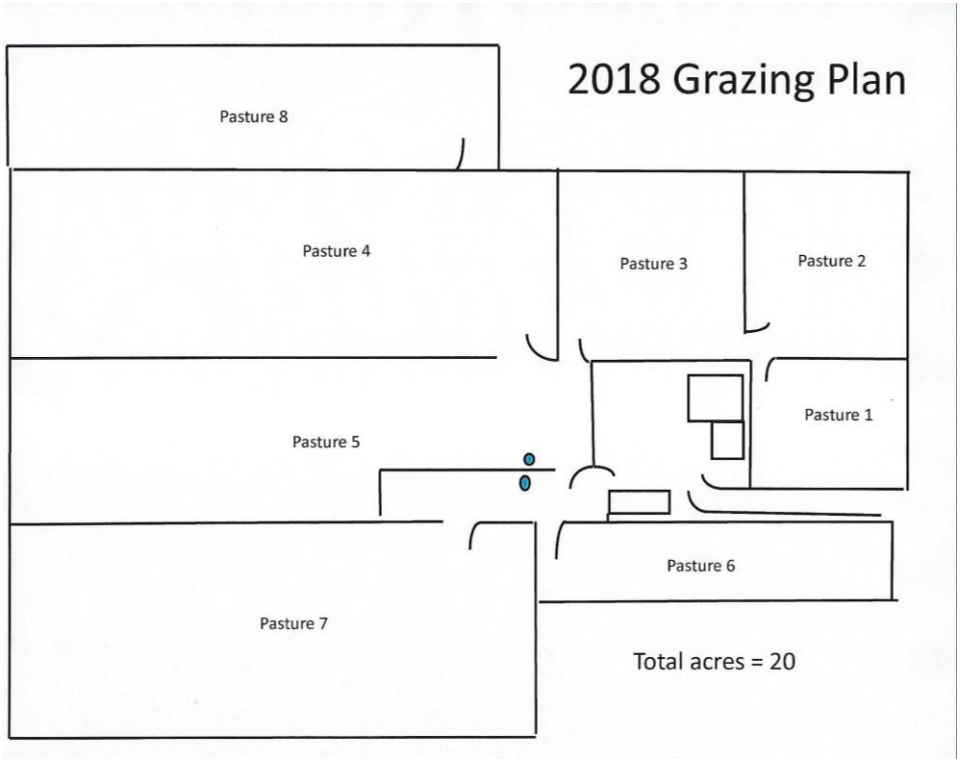
Results 2018

- Number of days grazing each paddock = 18 days

Last 13 days had access to all paddocks except for #8



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Results 2019

- 98 days on pasture
- 3,565 pounds of beef produced on 15 acres
- 238 pounds per acre
- 15 head ADG = 2.43 pounds per day
- Avg start wt = 537
- Avg out wt = 775

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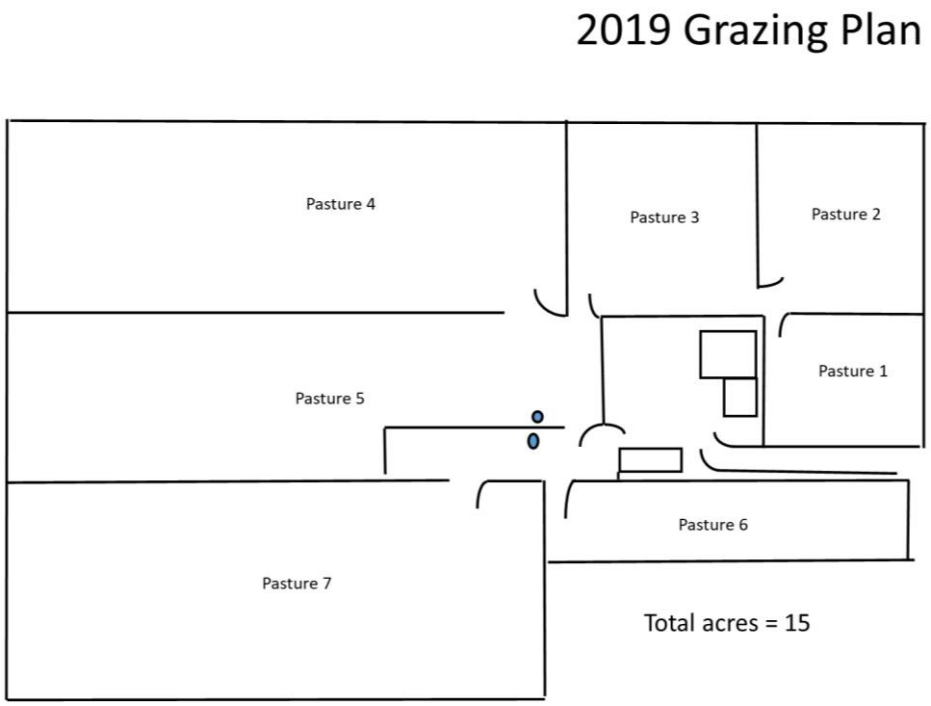
Results 2019

- Number of days grazing each paddock = 16 days

Last 11 days had access to all paddocks



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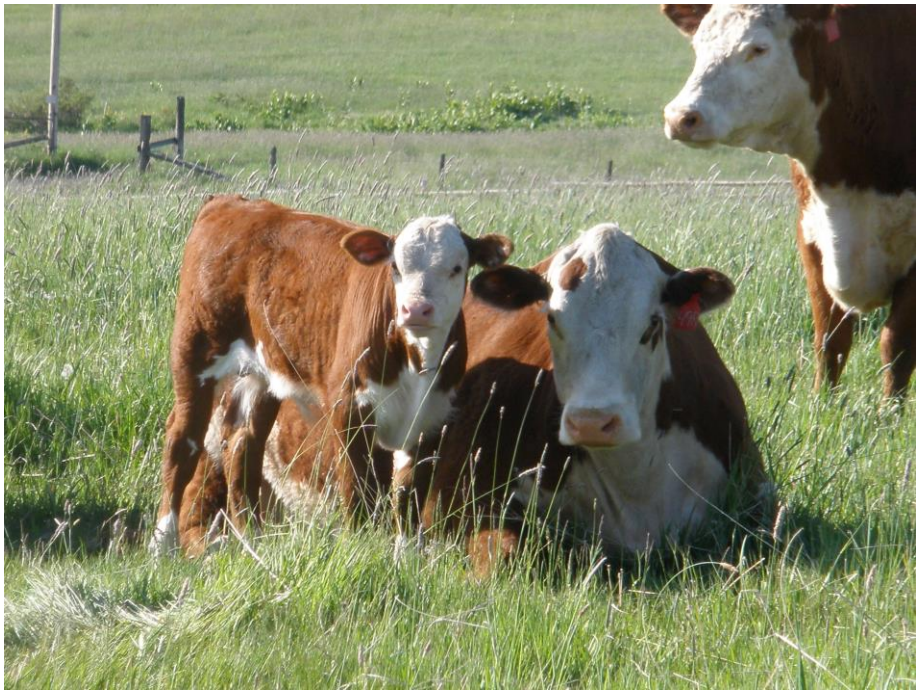
Pasture Records



- Let’s look at a spreadsheet.

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Keys to Intensive Rotational Grazing

- Divide pasture into paddocks – size of paddocks will be determined by pasture size and # of cattle. (stocking rate)
- Graze for no longer than 5 – 7 days. Shorter period better.
- Allow paddocks to rest for at least 21 days before going back.

How Long Was the Grazing Season Each Year on the Pasture?

100 days – Approx.

Then what?

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Extending the Grazing Season

- How?

1. Stockpiled Forage
2. Crop aftermath
3. Cover crop grazing
4. Bale grazing

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Cover Crop Grazing

What we have learned:

- Seed - late April – early May.
- Various seed mixes available.
- Mixes - cereals, legumes, turnips, radish, canola. Millet, sorghum sudan, etc.
- Soils/rainfall play big role.

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Cover Crops

What we have learned:

- Forage quality is very good:
- Conducted forage tests at turnout time: (3rd week of June)

Crude Protein% = 16% to 19%

TDN% = 56.9% - 58.5%

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Available Forage

What we have learned:

- Varies – Most producers have had 3 to 4 tons of forage available.

- Lowest – 1.5 tons

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Turnout Time?

What we have learned:

- Depends on cover crop growth – let crop get ahead of the cattle.

Late June – early July

Paddock fencing

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Paddock Fencing Cont:

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Swath and Windrow Graze

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Windrow grazing

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Windrow Grazing

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Bale Grazing

Option:

Bale extra forage:

1. Graze in field
2. Feed in winter

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Water Source

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What About Big Operations?

- Can use this rotational grazing principle.
- Look to divide big open ranges – rotate.
- No opportunity to fence into smaller pastures? Move cattle – with riders, salt, water source, etc.
- Look for grazing opportunities late fall & winter

Summary

- Grass business – treat your grass well
- Allow grass to recover
- Use some kind of rotational grazing
- Have a forage source for later season grazing

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Questions

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Matching the Cow to the Resource

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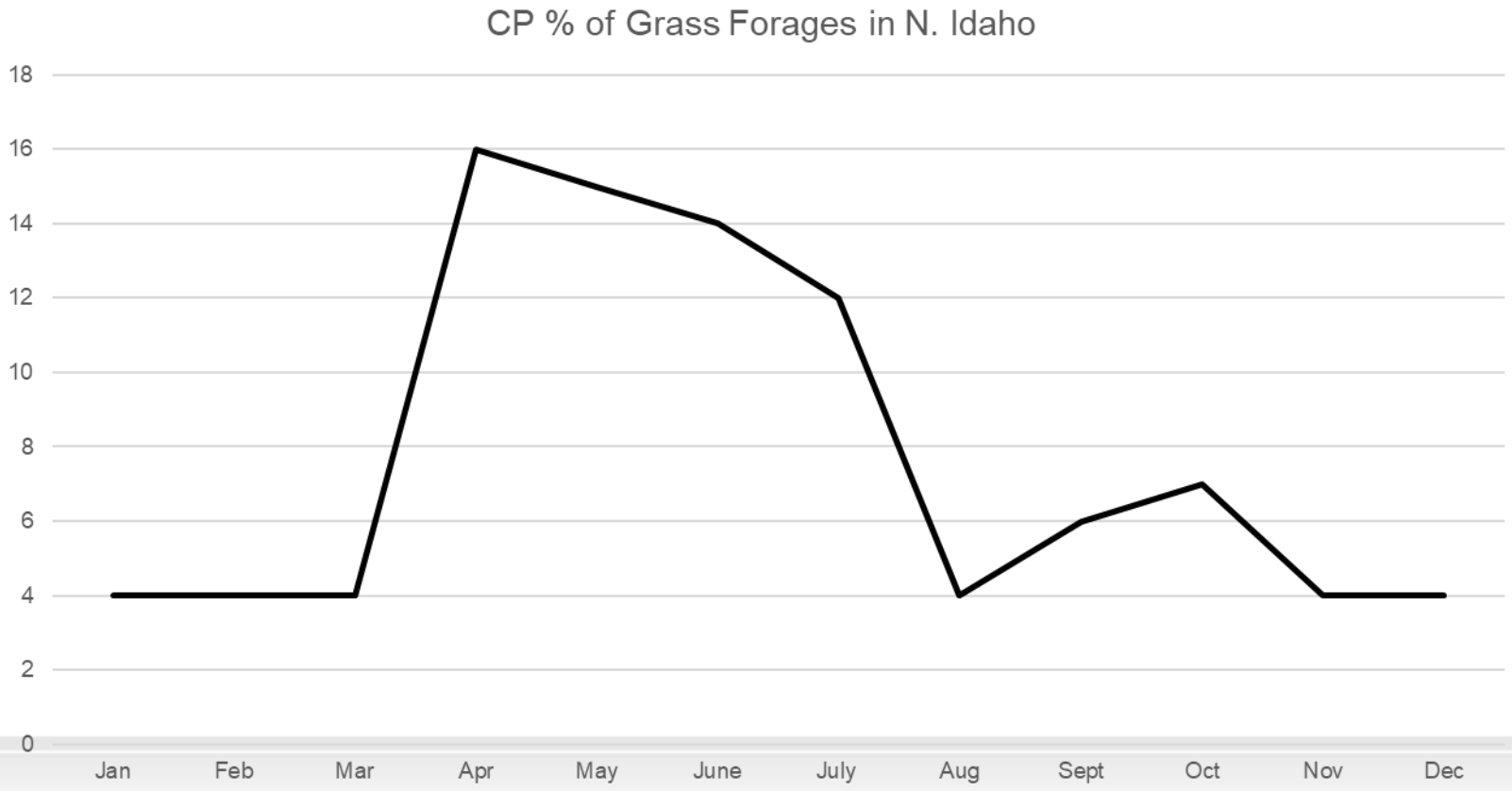
Crude Protein Levels of Grass Forages



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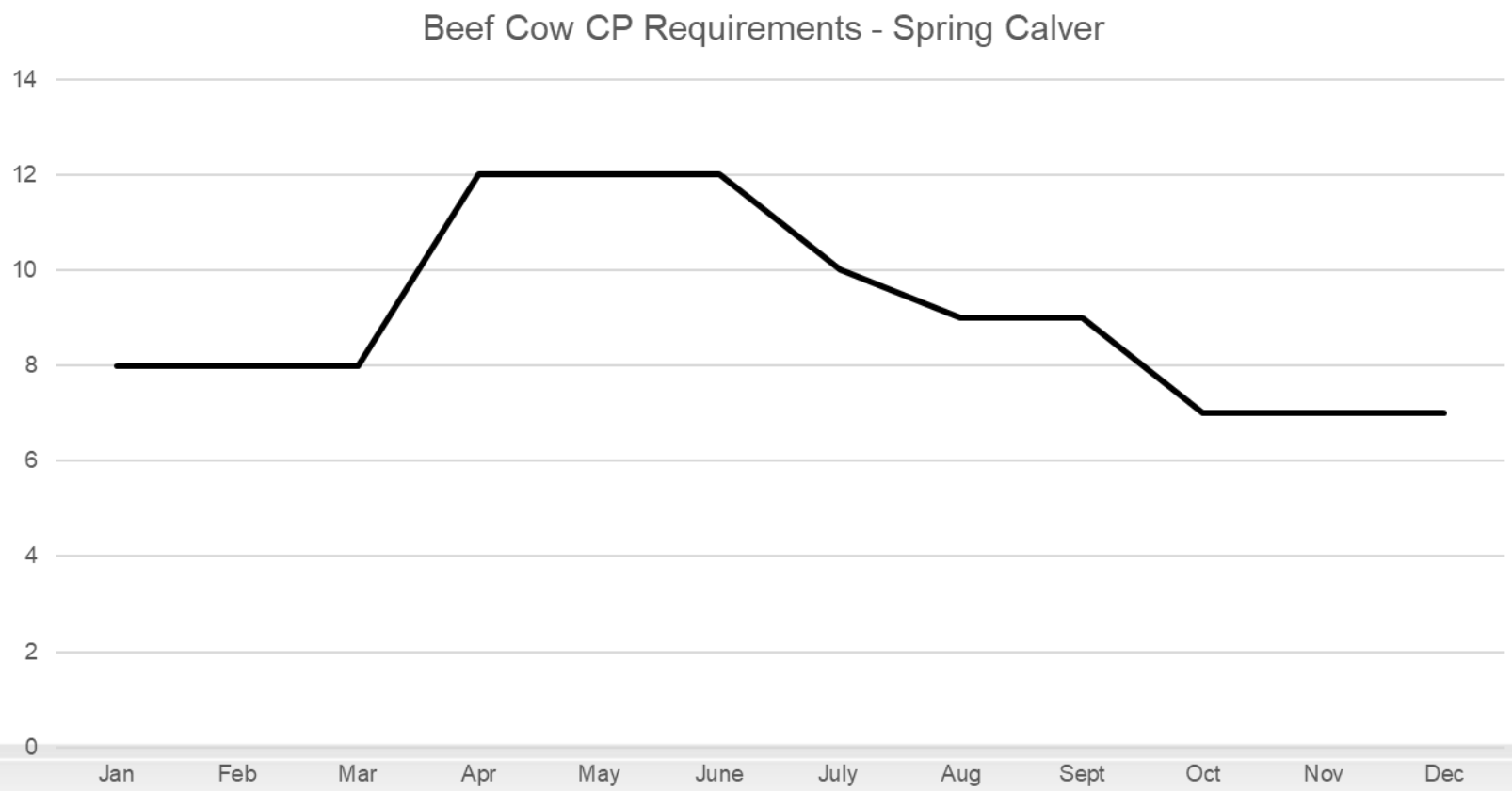
Cow Requirements - Spring



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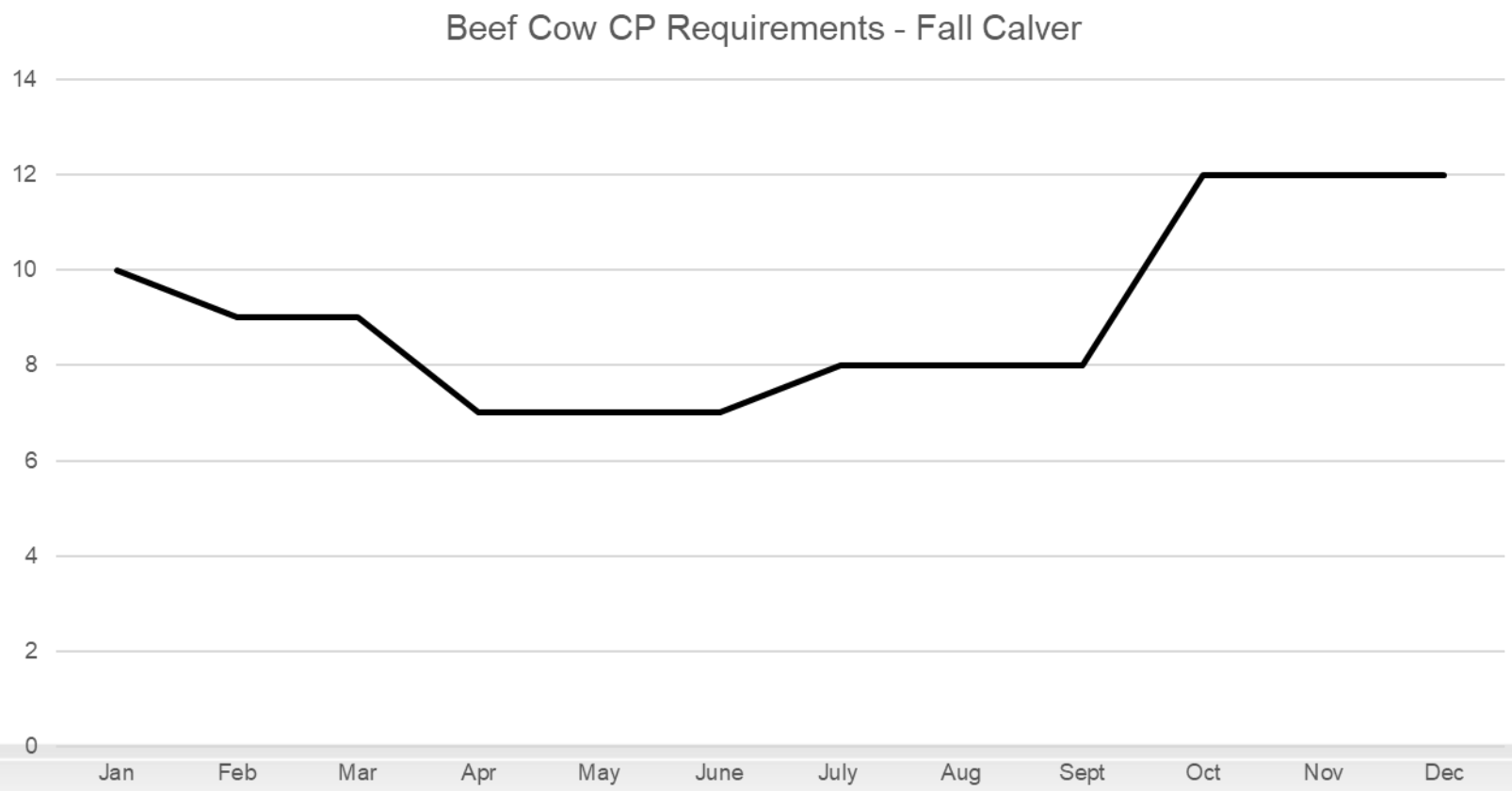
Cow Requirements - Fall



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