

Define rotational grazing

- A controlled grazing tactic
- It's a system where a large pasture is divided into smaller paddocks
- And livestock are moved from one paddock to the other
- Using this method, the entire cattle herd is concentrated on a smaller area of the pasture for a few days where they graze to a certain point, and then are moved to another section of pasture.

Benefits of rotational grazing

- Soil Fertility
 - Since we're confining cattle to a specific area at a time, the manure stays in that area, making it more effective in fertilizing the pasture.
- Forage Production
 - Is anyone here a gardener? If you are, you know that pruning plants actually helps them grow bigger and stronger. Grazing is similar.
 - In between grazing periods, we're allowing plants to regrow. By having cattle graze to a certain point (~leaving about 3-4 inches) it's actually triggering that fescue to grow deeper roots, and focus on growing tall again.
 - It's a balance to keep the plants focused on growth - not regrowth (eg due to overgrazing), and not letting them get too large/go to seed (e.g. not grazing soon enough)
 - In the case right now in a drought, we need to leave a bit more forage height than usual so it can better recover, and let it rest longer (since it's not growing as quickly)
- Improved drought management
 - Encourages plants to grow more roots, which retain water. That helps for drought tolerance
 - The roots also mean there's less run off of top soil, which is important to growing more and better fescue.
- Higher Quality of Forage
 - There's a nutritional sweet spot for fescue, and rotational grazing helps us better hit that timing for more nutritious plants that will benefit the cattle.
 - Usually when something reaches anything taller than 18-24 inches, it's better for hay
 - Mature plants mean higher fiber. Fiber digests slowly, so a cow won't eat as much
 - A better roots system and healthier fescue will help to naturally choke out some of the weeds and help keep them under control. It's never going to remove them completely, but will help us manage them much better.

- Controlled forage utilization / less wasted forage
 - Continuous grazing (where the cows roamed freely/selectively and had their choice of forage) typically results in only 30-40% of the forage being used.
 - What they don't use matures, becomes less nutritious or unpalatable to where they don't want to eat it
 - Available forage gets wasted because it's trampled or covered with urine/manure
 - Pasture rotation improves this. A slow rotation (larger paddocks, moved 7-10 days) bumps it to 40-55%. A faster rotation (smaller paddocks, fewer days) bumps it up to 55-70%. Some systems that move animals once or twice a day can reach up to 70-80%.
 - In theory, we'll also reduce feed costs because they are utilizing much more of the pasture and not as reliant on hay or other supplements.

- Other benefits
 - Consistent animal monitoring - we're checking in on the herd frequently to see when they need to move. We're getting a clearer idea of their intake.
 - Extended grazing periods - because the grazing is being managed vs. continuous, we can hopefully extend grazing a bit longer into the year

Challenges

- Weather
 - The drought periods this year were challenging because the fescue was growing slower
 - Doing our best in these initial months, but it's not perfect
 - It'll be our first winter with rotational grazing, and that will come with its own challenges
- Water Source
 - Ideally, we'd have a few water sources set up throughout the farm. Getting a system like that is expensive, and we didn't want to wait for the *perfect* scenario. Sometimes it's important to take the first step, and continue moving forward from there.
- Gauging when to move them