



Designing a Grazing Plan That Guides Decisions

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A grazing plan is more than a schedule - it is a decision-making guide that helps producers match forage supply with livestock demand while protecting long-term rangeland health. The most effective plans are structured, simple to update, and flexible enough to adjust when weather, production, or operational needs shift.

Why a Grazing Plan Matters

A well-designed grazing plan:

- Supports plant recovery and long-term productivity.
- Improves animal performance by aligning forage quality with nutritional needs.
- Reduces stress during drought, wet springs, or variable growing conditions.
- Creates a clear framework for decision-making across the entire grazing season.

Grazing plans work best when they guide choices – they are not meant to lock producers into rigid timelines.

Key Components of an Effective Grazing Plan

1. Inventory your resources

A good plan starts with an honest picture of what the land can support. Identify pastures, water sources, infrastructure, ecological sites, and sensitive areas. Include:

- Current pasture condition
- Residual vegetation and litter (soil armor!) levels
- Known problem areas or areas of heavy use

2. Outline your goals

Your plan should reflect what you want the land and animals to accomplish.

Examples include:

- Improving uniformity of use
- Increasing carrying capacity over time
- Protecting riparian areas
- Enhancing wildlife habitat

3. Match livestock demand to forage supply

Determine herd size, class of livestock, and expected grazing duration.

Estimate forage availability using:

- Past production history
- Early-season growth indicators
- Forage production estimates from NRCS or SDSU Extension

4. Establish rotation and rest periods

Remember, movement to the next pasture should follow plant growth – not the calendar. Plan grazing sequences based on:

- Desired rest intervals
- Growth stages of key species
- Seasonal forage curves



A grazing plan helps support and manage both animal performance and forage production.



Inventorying your resources such as clipping forage to estimate forage production is a valuable tool.



Identifying and knowing the growth stages of key species, such as western wheatgrass, can help you plan a grazing sequence.

5. Build flexibility into the plan

Flexibility ensures the plan works in both average and highly variable years. Identify trigger points for adjusting stocking rate or rotation speed:

- Rainfall or soil moisture thresholds
- Grass height or forage availability
- Animal performance indicators

6. Tips for Successful Implementation

- Start simple. A basic, workable plan is more valuable than a complicated one that's hard to follow.
- Monitor regularly. Short, consistent checks outperform occasional, detailed assessments.
- Document changes. Notes create a feedback loop for improving future plans, and allows you to actively practice adaptive management.
- Review annually. Update based on what worked, what didn't, and what conditions changed.

Summary

An effective grazing plan clarifies expectations, strengthens decision-making, and builds resilience into livestock and rangeland systems. When producers tie their plan to real observations and remain flexible, they create a foundation for both ecological and economic sustainability. For help developing a customized grazing plan, contact your local NRCS or SDSU Extension office.

Examples and Practical Applications

Example 1: Planning for early-season rest

A producer managing mixed-grass prairie notices during a winter assessment that several key pastures show shortened stubble height on western wheatgrass. Based on this, the grazing plan designates those pastures for full rest until mid-June. The rest period allows cool-season grasses to reach reproductive maturity, improving vigor and increasing total production for the year. This adjustment also prevents compounding stress from consecutive early defoliation.

Example 2: Matching herd demand to forage production

A cow-calf operation anticipates average moisture but plans conservatively. Their grazing plan starts the season stocked at 80% of typical capacity, with yearlings held in reserve. If May precipitation meets their trigger threshold and grass height indicators look strong, the operation adds yearlings to match increased forage availability. This keeps stocking aligned with real-time conditions and reduces risk.

Example 3: Creating effective rotation and rest periods

A ranch with five main pastures uses a deferred-rotation system (i.e., multiple pastures are used in sequence, but at least one is left deliberately ungrazed (deferred)). In the previous year, the north pasture was grazed early. This year's plan defers that pasture until late summer, allowing it a full cycle of early-season recovery. Photo points and weight assessments help monitor progress. Over several years, this simple adjustment results in healthier root systems and increased carrying capacity.

Example 4: Building flexibility with trigger points

A producer establishes clear decision benchmarks by using trigger dates/points:

- If green needlegrass does not reach 6-8 inches by June 10, delay entry into early-season pastures.
- If rainfall totals fall 30% below average by May 15, initiate a 15% destocking plan.
- If animal performance drops below target gains, evaluate forage quality and adjust rotation speed.

Ultimately, these predefined triggers simplify decision-making during stressful conditions and help remove any emotional attachment.

Example 5: Using monitoring to improve next year's plan

Throughout the season, a rancher documents rotation dates, cattle behavior, forage conditions, and rainfall. In the fall, she reviews her notes and notices that two pastures consistently show heavier use near water sources. The following year's grazing plan includes new mineral placement sites and temporary fencing to improve distribution and hopefully produce more even grazing across the pasture.

Bringing It All Together

A grazing plan gains its strength from clarity and adaptability. By pairing structured planning with real-world observations and flexible responses, producers create a resilient system — one that supports healthy rangelands, productive livestock, and sustainable operations year after year. For help refining your plan, or for additional worksheets and tools, contact your local NRCS or SDSU Extension office.