

## **ATTRA** Sustainable Agriculture

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## **Grazing Plan Checklist**

This step-by-step guide lists considerations and tasks needed to write a grazing plan, from goals to resource inventory to developing a grazing schedule and monitoring plan. This resource will help graziers ensure that all steps in the process are covered, resulting in a functional grazing plan and schedule.



- 1. Farm description: A description of the farm in terms of things like history of land use, location, mean annual precipitation and distribution, air temperature mean and range, first and last frost, frost-free period, grazing season length, total acreage, soil types, crops and livestock, predominant pasture species, areas of ecological concern, conservation projects, and condition and inventory of infrastructure including buildings, fences, corrals, and watering systems.
  - 2. **Farm goals:** This is a description of your farm leadership structure, your landowner goals (e.g., conservation, pasture species composition and productivity, animal production, and ecological renovation), enterprises, financial performance, and marketing goals.
  - 3. **Resource inventory:** This gives you a starting point in assessing what you'll need to implement your grazing plan.
    - a. *Landscape*: Your total acreage, current number of paddocks or pastures, paddock acreage, estimated dry matter forage productivity, forage species present, weed problems, and percent legumes in pastures.
    - b. *Livestock*: Your total number of animals, animal types, average weight of animals per animal type, and average dry matter forage demand per animal type.
    - c. *Infrastructure*: An assessment of infrastructure will provide you with information to evaluate its use, effectiveness, efficiency, and whether you need to upgrade. Consider:
      - i. Water: source, water tests, pipelines and standpipes, watering points, capacity, water demand
      - ii. Corrals: locations, type, capacity, working condition, chutes, and restraints
      - iii. Fencing: type, construction, age, working condition, appropriateness for livestock species
      - iv. Barns: purpose, condition, use
      - v. Lanes and roads: construction, conditions, layout, efficiency
- 4. **Grazing calculations:** Refer to the *Grazier's Math document* and/or the *Grazier's Calculator*. Here you'll find easy calculations to match animal demand to forage productivity, based on your assessment of animal needs and forage yield. This is the first step in determining your grazing schedule. Start by determining your paddock recovery periods for each period of the grazing season (spring, summer, fall, winter, etc.). This is the most important step and will determine everything else for the rest of the season.
  - 5. **Grazing schedule:** This allows you to chart what happens in each paddock and, combined with monitoring feedback, will help you adapt your grazing throughout the season. If visually represented



on a chart, it can help you plan the year's grazing. Some of the items you might include are: a. Forage yield for each paddock b. Forage height at beginning and end of grazing period for each paddock c. Estimated forage balance after each grazing period d. Grazing period length e. Rainfall amounts f. Calving, lambing, breeding, and weaning dates g. Estimated periods of low forage productivity, with contingency plans 6. Monitoring plan: Monitoring is often the most neglected part of pasture management, and one of the most important. A good monitoring system will allow you to check how your management decisions are working on the ground. It will allow you to determine, for instance, if a particular grazing plan is having the desired effect over time. A monitoring plan will often involve a few important evaluation criteria, such as plant species composition, percent cover, percent bare ground, and frequency of species. Also important are biological tests to collect data on soil health. By comparing these measurements over time, you can start to see trends, and by comparing them to your grazing system, you can alter and adjust where you need to in order to arrive at your goals. Monitoring provides the feedback mechanism to make your grazing schedule work. 7. Weed control: Plan for control of invasive species or other problem weeds. Keep in mind that in a highly complex, biologically diverse pasture, many plants that are considered weeds are highly palatable and nutritious during the vegetative stage. They are valuable plants that occupy different root zones and deliver nutrients from various soil depths. 8. **Drought plan:** Consider these options when forage productivity declines: a. Rotate the livestock through the grazing system at a "slower" than normal pace. This allows for a longer recovery period. b. Plant a small grain in the spring for late spring and early summer grazing. c. Plant summer annuals in one of your paddocks, such as sorghum-sudan or millet for late summer grazing. Have forages tested for nitrates if it's droughty. If nitrates are high, graze later in the day to allow nitrates to metabolize in the plants before grazing, and give access to quality hay.

e. If drought runs for too long, consider grazing hayfields or de-stocking.

as this will usually increase dry matter intake of pasture.

d. If pastures are not growing back and grass is scarce, supplement with quality hay, as this will provide rumen fill and reduce dry matter intake from pasture. Do not supplement with grain,

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