

## Grazing System Options and Details

### Basic Grazing Systems

A prescribed grazing plan may include one or all of the following types of grazing systems. Each one can be used to meet the 528 Prescribed Grazing Standard. Each plan should contain the system(s) needed to meet the goals of the livestock producer and general criteria of the standard including “stop grazing” heights.

There are many modifications and variations of the grazing methods and all are important in the development of the prescribed grazing plan. All of the methods must have enough grazing units, or paddocks, and/or acreage to allow for appropriate rest periods. The fewer the paddocks available, the more difficult it is to manage for proper rest resulting in a lower harvest efficiency. If the number of grazing units is not sufficient for proper rest periods, then the animals must be totally or partially removed at necessary intervals to ensure adequate forage and ground cover.

**Set-Stock or Continuous Grazing** – A method where a fixed number of livestock are grazed on a specific unit of land with unrestricted access throughout the time period when grazing is allowed. Animal numbers and grazing efficiency are minimized because available forage must last for the entire grazing period.

**Set Paddock or Low Intensity Rotational Grazing** – A method that uses recurring periods of grazing and rest among two or more paddocks in a grazing management unit throughout the period when grazing is

allowed. Rotation of animals is through two or more pastures. Paddocks are generally close to the same size or similar in production. A rest period follows each grazing period. Refer to Table 1 for suggested rest periods.

**Table 1. Rest periods for cool-season pastures**

Season	Weather Conditions	Growth Rate	Rest Period
Spring	Cool, moist	Fast	10-14 days
Spring	Warm, dry	Medium	14-20 days
Summer	Hot, moist	Slow	30-35 days
Summer	Hot, dry	Very slow	45-60 days
Fall	Cool	Medium	14-20 days

**Variable or High Intensity Rotational Grazing** – Is an efficient method of allocating small amounts of forage for short periods of time (generally several hours or up to one or two days). Larger permanent paddocks or fields are divided creating long linear fields which allow for extreme variability in size according to intensity and duration. These paddocks are then subdivided accordingly in strips with the use of temporary fencing. This system allows for the most flexibility in altering paddock size based on forage growth and livestock need. Excess forage can be baled for hay or ideally stockpiled for later use.

### Additional Options

These additional options are enhancements to the above mentioned Grazing Systems. They can be used with any of the systems. They are more intensive and require a greater level of management.

**Leader-Follower** – Involves two livestock groups, usually of the same species. First grazers utilize one half or less of available forage and then rotate to another paddock followed by the second grazers to graze the remaining forage to the desired stop grazing height. First grazers will be the highest performance livestock (such as lactating dairy or meat production livestock). This group should take half or less of the total available forage. Directly follow with maintenance livestock (second grazers), such as non-lactating females, on the same paddock to utilize remaining available forage within the recommended stop grazing heights.

**Co-Grazing**- This option is characterized by two or more species of livestock grazing the same unit of land at the same time. Typically animal species with different plant preferences are used in this system to achieve more even grazing of the plant components. This is best achieved with the use of a more “grazing” type animal such as beef, dairy or equine combined with a more “browsing” type animal such as sheep or goats. Both classes do some grazing and browsing.

**Stockpiling or Deferred Grazing** – Grazing is delayed during part of the grazing season to provide later grazing or provide additional needed rest for the forages. Tall fescue is very well suited for stockpiling. The grazing season can be extended by stockpiling, planting summer or winter annual grasses and legumes for grazing, and planting brassicas either for summer, fall, or early winter grazing as the forage species allows and need dictates. Long-term deferment of grazing, 90 days or longer, allows plants to regain carbohydrate reserves and increase density.

**Creep Grazing** – Allows passage by smaller animals to higher quality forage in a rotational system. This usually applies to younger animals of the same species and is

achieved using temporary fence at a height or a specialized gate/opening that allows passage of young animals but restricts adults. This can aid in early weaning.

**High Density, Short Duration Grazing** – A high management level of grazing where livestock are grazed at high densities (generally 50,000+ lbs live weight per acre) for very short durations (less than 1 day) allowing them to consume the best forages and leave the rest. Longer rest periods are needed following the grazing period, often greater than 45 days. This system can improve soil health and add diversity to the system but has to be monitored very closely. Utilization rates can be poor in this system; up to 60% of the vegetation should remain on the soil surface when grazing mature stands. The purpose is often to address carbon and nutrient recycling via slowly building the percentage of organic matter in the soil and increasing availability of nutrients from increased micro-flora, increased root mass, concentrated manure and urine distribution, and increased infiltration through grazing density and duration management. In this case, livestock are the tool. This is best suited for maintenance animals but under conditions can be utilized for growing animals if very closely monitored.

### References

Indiana Field Office Technical Guide (FOTG) Standard (528) Prescribed Grazing  
*Management-Intensive Grazing in Indiana, Purdue Extension Publication AY 328*