

Introduction to Pasture and Forage Management

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Key concepts, goals, and practical steps for maintaining productive grazing lands.

1. Why Pasture & Forage Management Matters

Objective	Benefit
Animal Nutrition	Provides consistent, high-quality feed → better growth, milk, meat production
Soil Health	Maintains organic matter, improves structure, reduces erosion
Environmental Stewardship	Minimizes nutrient runoff, protects water quality, enhances biodiversity
Economic Viability	Reduces feed-purchase costs, optimizes stocking rates, prolongs land lifespan

2. Basic Terminology

Term	Definition
Pasture	Land planted with grasses and legumes intended for grazing
Forage	Any edible plant material (live or cut) that livestock consume
Grazing Pressure	Number of animal units per unit area over a given time
Rest Period	Time a pasture is left ungrazed to allow regrowth
Carrying Capacity	Maximum number of animal units the land can sustain without degradation
Species Diversity	Variety of grasses, legumes, and other forbs in a stand

3. Core Principles of Management

- Balance Supply & Demand** – Match animal intake with forage growth rate.
- Rotate Grazing** – Move livestock among paddocks to allow rest and recovery.
- Maintain Species Diversity** – Mix grasses (e.g., orchardgrass, fescue) with legumes (e.g., alfalfa, clover) for higher protein and nitrogen fixation.

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4. **Control Weed & Invasive Species** – Early detection and targeted control keep productive species dominant.

Management

5. **Monitor Soil Fertility** – Regular soil tests guide lime, nitrogen, phosphorus, and potassium applications.

6. **Protect Water Resources** – Buffer strips, proper drainage, and controlled stocking prevent runoff.

4. Step-by-Step Management Cycle (Annual)

Phase	Timing	Key Activities
1. Planning	Early spring (or before season start)	• Set production goals (milk, meat, wool) • Estimate herd size & grazing days • Map paddocks, water points, shade • Collect composite soil samples
2. Soil Testing & Amendments	Late winter – early spring	• Apply lime (if pH < 6.0) • Fertilize based on N?P?K recommendations • Choose species suited to climate & soil
3. Seeding / Renovation	Early?mid spring (cool?season) or late summer (warm?season)	• Use proper seeding rates (e.g., 15–20?lb/acre for grasses) • Consider overseeding legumes to boost protein • Begin light grazing (10–15?% of biomass)
4. Establishment & Early Grazing	4–8 weeks after emergence	• Avoid grazing during rapid vegetative growth • Divide pasture into 4–8 paddocks • Follow a 2?day grazing / 30?day rest schedule (adjust for growth)
5. Rotational Grazing	Throughout grazing season	• Record grazing dates & animal numbers

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Phase

Timing

Key Activities

Management

6. Monitoring & Adjustments

Ongoing

Visual pasture assessments (height, color, density)
• Weigh animal performance (average daily