

Pasture Establishment & Renovation and Extending the Grazing Season

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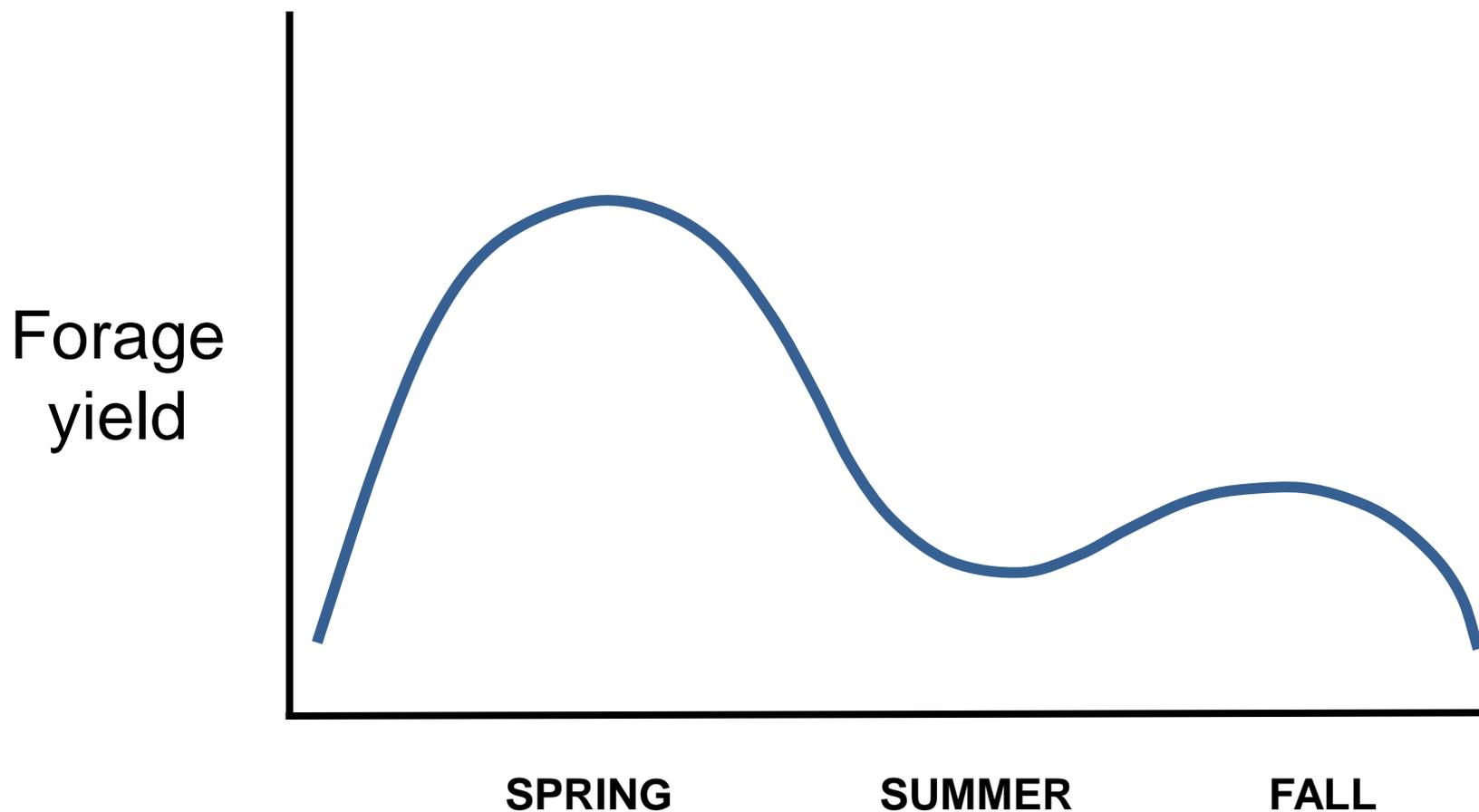
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Pasture renovation: principles and guidelines

- Grass and legume seedlings do not compete well with established grasses.
 - Legumes are temporary citizens of the pasture.
 - Long-term persistence of introduced grasses depends primarily on soil and climate.
1. Correct other pasture problems first (fertility).
 2. Reduce competition from existing pasture plants (fall grazing).
 3. Put seed in contact with soil in early spring.
 4. Manage for renovated pasture.

Grass	Advantages	Disadvantages
Kentucky bluegrass	Tolerates short residue height; fills soil gaps	Lowest yield; sensitive to drought; summer dormant
Tall fescue (improved)	Improved palatability; stress tolerance; suitable for stockpiling	Palatability issues (?)
Orchardgrass	High yield; good seasonal yield distribution; adapted to mixtures	Becomes clumpy (low tiller density); may mature early; rust potential
Meadow fescue	High digestibility and palatability; adapted to mixtures; winter hardy	Less stress tolerance than tall fescue, 10% less yield than orchardgrass
Smooth brome grass	Early spring growth; winter-hardy; rhizomatous	Excessive spring growth; sensitive to residue height in spring
Reed canarygrass	Tolerates poor drainage, drought; rhizomatous; adapted mixtures	Abundant stems; invasive to wetlands; sensitive to residue height
Timothy	Adapted to wet soils and mixtures; high palatability; winter hardy.	Sensitive to grazing management; slow regrowth; sensitive to drought

Legume	Advantages	Disadvantages
Alfalfa	Highest yield, N fixation, and drought tolerance	Less tolerant of poorly drained soils, and low pH and fertility
Red clover	Highest seedling vigor (adapted to frost seeding); pollinator species	Persists 2 – 3 years
White clover	Tolerates short residue height; highest digestibility; stolon growth	Lower yield; lower drought tolerance
Birdsfoot trefoil	Tannins (no bloat); tolerates low pH	Does not tolerate short residue or frequent grazing; difficult establishment
Kura clover	Best persistence; adapted to range of management after established	High seed cost; difficult establishment



“There are really two approaches for incorporating annuals into your farm. The first is using them as a renovation tool. The second is designating a portion of your grazeable acres for annuals and keeping them that way.”

Daniel Olson
Graze Magazine

Extending and supplementing the grazing season (strip-grazing)

- ***Spring:*** wheat, rye, triticale (fall planted), Italian ryegrass (spring planted).
- ***Summer:*** BMR (brown midrib) sudangrass or sorghum-sudangrass, teff, millet.
- ***Fall:*** stockpiled tall fescue, small grains, brassicas (rape and turnips).
- ***Winter:*** stockpiled tall fescue (other perennial grasses?), small grains, brassicas, BMR sudangrass.