UNIVERSITY OF MARYLAND EXTENSION
Solutions in your community

Pasture Renovation Guide

I. What Forage Should I Plant?

A. Do I Know My Forage Needs?

1. Livestock requirements – grazing for supplemental feed and exercise
2. Hay production – average horse or steer requires ½ bale of hay/day without pasture, and ¼ bale with pasture, as well as supplemental grains and minerals

B. Do I Know My Forage Options?

1. Are my fields limited by agronomic conditions such as soil type, texture, slope, drainage, fertility, etc.?
2. Forage options are based upon current pasture condition – What are the current forage and weed species present?

Knowing the Right Forage Fit
Perennial Grasses

- **Low Endophyte Tall Fescue** – takes management abuses, very good late fall production and quality, quick spring growth, easily established
- **Orchardgrass** – excellent forage or hay, fertility management is crucial at establishment, mixes well with legumes for a high quality hay
- **Timothy** – excellent quality hay, requires a fertile soil, and prefers cool non-droughty areas, may be short-lived
- **Reed Canarygrass** -- tolerates wet poorly drained pasture areas, high quality and productive, hard to establish, very long-lived
- **Kentucky Bluegrass** – high maintenance, prone to disease, excellent for grazing

Summer Annual Grasses

- **Millets** – excellent for summer hay production, drought resistant, pasture transition crop, may be overseeded in declining pasture areas, greatly reduces weed populations, provides excellent cover for no-till planting of forages
- **Sorghum X Sudangrass** -- excellent for summer forage, drought tolerant, great for renovation of pasture, superb weed suppression, not recommended for horses

Winter Annual Grasses

- **Cereal Rye and Wheat** – excellent for late fall and early spring grazing, provides an excellent cover for no-till establishment of forages in spring or late summer

Legumes

- **Red Clover** – excellent companion with orchardgrass or Timothy, easily established, high yields with excellent quality, increases curing time when making hay

- **Ladino Clover** – excellent companion with tall fescue or Kentucky bluegrass, succulent increases quality of hay or pasture
- **Alfalfa** – fairly drought tolerant, high yields, requires high fertility and management, very high quality hay, not well suited to pasturing
- **Birdsfoot Trefoil** – tolerates wet poorly drained pasture areas with lower fertility, excellent companion with reed canarygrass, maintains forage quality as it matures
- **Lespedeza** – very drought tolerant, maintains high quality forage at full maturity,

II. When Should I Plant?

A. Should I Plant in the Spring or Fall?

1. Remember that timeliness is the key to success whether spring or fall planting – Know the narrow window of opportunity
2. Always have a secondary establishment strategy -- Even the best plans may fail
3. Progressive pasture establishment requires a sequence of events to unfold

B. Am I Ready to Plant?

1. Yes, the soil fertility is adequate and weeds are controlled
2. A cropping sequence has been worked out which includes cover crops, herbicide applications, and tillage as required
3. The optimum plan utilizes a "*forage species stacking*" approach instead of the "*shotgun mixture*" approach – Successfully strive to establish one or two species prior to the introduction of the next

III. How Should I Plant?

A. Have I Reduced the Competition?

1. Remember to control broadleaf weeds before attempting to establish a legume, and control grass weeds before establishing a forage grass.
2. Control weeds with herbicides, mowing, and tillage – for herbicide options consult Extension Bulletin 237 – be sure to refer to herbicide grazing and haying restrictions
3. Be sure to suppress the existing forage crop if you are overseeding a companion – an application of Gramoxone 1-1.5 pt/A is excellent prior to no-till drilling
4. If you are renovating the pasture, then a application of Round-Up 1qt/A prior to no-tilling works best to kill existing vegetation
5. Remember that troublesome perennial weeds will still be present if steps are not taken specifically for their eradication

B. Have I Placed the Seed in the Soil Properly?

1. The most important step is putting the seed in the soil, firmly packed and at the right depth -- A no-till drill does this best
2. If tillage is used a culti-packer seeder is highly recommended
3. Remember don't give up on a newly planted field too soon – Be patient!

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