

Establishing Cool-Season Annual Grasses

Vanessa A. Corriher
Extension Forage Specialist
Overton, TX

Cool-Season Annual Grasses Establishment Options:

	Seeding Rate (lb/ac)	Planting Depth	Months of Use
Ryegrass Only	25-30	0-0.5 in.	Feb to May
Small Grain Only (Oat, Rye, Triticale, Wheat)	80-120	1-1.5 in.	Dec to April
Ryegrass and Small Grain	20-25 ryegrass + 80-120 small grain	See above	Dec to May
Ryegrass and Legume*	15-20 ryegrass + 2/3 of pure stand seeding rate legume	0-0.5 in. (ryegrass) 0-1.0 in. depending on legume	Feb to May

* For legume establishment see "Forage Legume Management Guide."

Planting Date, Method and Fertilization

1. Prepared Seedbed
 - Obtain a soil test to assess needs of limestone, nitrogen, phosphorus, and potassium, or nutrients.
 - Destroy existing vegetation by disking and then rolling (packing) to provide firm seedbed for planting and moisture retention.
 - Phosphorus and/or potash fertilizer can be applied before or at time of planting.
 - Plant cool-season grasses from mid-September to early October before a good chance for rainfall.
 - Nitrogen fertilizer is usually split-applied, and depending on soil test recommendations, may require 1 to 3 split applications at 50-60 lbs N/ac. Delay initial N application until after grass emergence.
2. Light Disking (1-2" deep)
 - Provides loose soil to cover seed and reduces warm-season grass competition.
 - Use on bermudagrass and bahiagrass pastures.
 - Warm-season grass needs to be short (less than 4"; grazing, hay harvest, mowing, etc.).

- Plant cool-season annual grasses 4 to 6 weeks before the average first killing frost, which usually occurs in November.
 - Seed are planted with a drill or broadcast followed by some type of pasture drag to cover seed
 - Phosphorus and potash fertilization should be based on soil test recommendations and applied 2 to 3 weeks post emergence if not applied prior to or at time of planting.
 - Initial nitrogen fertilizer application should be delayed until after the cool-season grass is established and cool temperatures have reduced warm-season grass growth.
 - Nitrogen fertilization is dependent on soil test and may be split in 1 to 3 applications of 50-60 lbs/acre.
3. Overseeding or Sodseeding into Undisturbed Sod
- Warm-season grass needs to be short (less than 4"; grazing, hay harvest, mowing, etc.).
 - Planting date is several weeks later than other planting methods to reduce warm-season grass competition.
 - Requires sod seeder (no-till drill) if planting small grain or may be accomplished with fertilizer truck.
 - Broadcasting into an undisturbed sod is usually limited to annual ryegrass and small seeded clovers (ball, white, etc.).
 - If broadcasting cool-season grasses, the seeding rates should be increased 25% to 30%.
 - Initial fertilizer application should be delayed until after the cool season grass is established and cool temperatures have reduced warm season grass growth.
 - Nitrogen fertilization may be split in 1 to 3 applications of 50-60 lbs/acre.
 - Phosphorus and potash fertilization should be based on soil test recommendations.

Utilization

- Best use is by young growing animals (stocker calves, replacement heifers, first calf heifers, creep grazing fall calves.).
- For fall calving cows, limit graze (2 hrs/day or 4 hrs every other day) during fall and winter as a protein and energy supplement. Increase hours/day on pasture as growth rate increases in early spring.
- Can be used for fall or winter calving cows.
- Should NOT use for dry, mature cows due to high costs.

For more details on legumes see "Forage Legume Management Guide." For more details on winter pastures see "Annual Winter Pastures for East Texas." SCS-2006-05. Or visit our websites at: <http://soilcrop.tamu.edu> or <http://overton.tamu.edu>.