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Five Basic Steps to Successful Perennial Pasture Grass Establishment From vegetative Cuttings

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Producers lost several thousand acres of bahiagrass pastures from mole cricket infestation, prolonged drought, and multiple freezing temperatures during the past year. Replanting damaged pastures with alternative improved grasses such as stargrass, bermudagrass or limpograss is expensive and will normally cost \$250-\$300/A. The purpose of this report is to provide guidance on successful perennial grass establishment.

1) Preparation of a clean seedbed: One reason for preparing a seed bed is to control undesirable weeds. Preparing a clean seedbed for perennial grass planting can take several forms. One option is to moldboard plow, disk, and plant a fall ryegrass crop on a pasture that needs renovation. The following April, when ryegrass dies and dry conditions prevail, the land should be clean tilled at 2-3 week intervals until planted to the desired perennial grass. Another land prep choice is to spray at least 2 lb/A of Roundup® on the deteriorated pasture in early spring (March), followed by tillage practices during the dry season. A third method would be to completely turn over the sod with a moldboard plow in April to dessicate the sod, followed by repeated disking until planting.

2) Preconditioning pure grass planting material: Planting material should be obtained from a pure grass stand with no common bermudagrass or weeds and preconditioned as follows: a) Apply 500 lb/A 20-10-20 (N-P2O5-K2O) in March to increase biomass production. b) Two to three weeks before cutting plant material apply 50 lb N/A to initiate growth of axillary buds (shoots) at the base of each leaf. Axillary buds develop

into new plants faster when planted. One acre of preconditioned plant material should cover 13-15 planted acres.

3) Time your planting for good soil moisture: It is best to wait for at least 2-3 inches of rainfall before vegetative planting of perennial grasses. General good rainfall should prevail in the immediate period after planting. In south Florida early July plantings work in most years.

4) Adoption of good planting techniques: Preconditioned grass material must be cut and baled fresh within 5 minutes. Baled material must be loosened and uniformly spread on a prepared seedbed (1500 lb/A) the same day and followed within 15 minutes by disking or crimping material into the soil with a crimper machine also called a "pizza cutter". Finally, the land should be rolled firmly in two directions. The objective of step 4 is to minimize drying of planting material and improve plant-soil moisture contact at planting.

5) Implementation of good weed control and fertilizer program after planting: Spray newly planted grass fields with Weedmaster® at 1 lb/A, 7 days after planting. Weedmaster will control seedlings of sedges and broadleaf weeds in vegetatively planted stargrass, bermudagrass, and pangolagrass. Young limpograss is killed by Weedmaster, hence, 0.75 lb/A of Banvel® herbicide should be applied to control sedges and broadleaf weeds in newly planted limpograss. Fertilize newly planted grasses 7 days after planting with about 350 lb/A 10-10-10 (N-P₂O₅-K₂O) and an additional 50 lb N/A 35 days after planting.

The steps outlined allows new stargrass and bermudagrass fields to be grazed or harvested for hay 60-70 days after planting. They will ensure long-term, clean, pure fields if managed properly thereafter. Additional information may be obtained from 863-735-1314.