

# Pasture And Hay Planting

North Carolina Practice Job Sheet 512

Prepared for: \_\_\_\_\_

Prepared by: \_\_\_\_\_

Farm: \_\_\_\_\_ Tract: \_\_\_\_\_ Date: \_\_\_\_\_



Over-seeding warm-season pasture with small grains, or ryegrass, keeps fields productive year-round. Light disking, in late summer, prepares this Bermudagrass pasture for over-seeding.



Native warm-season grasses can offset summertime declines in cool-season forage production. Use of a native grass drill helps ensure uniform seed distribution and correct planting depth.

## DEFINITION

Establishing or renovating native or introduced forage species.

## PURPOSES

- Improvement or maintenance of livestock nutrition and health.
- Extending the length of the grazing season.
- Reducing soil erosion caused by wind and/or water.
- Improving or enhancing wildlife habitat.
- Establish adapted and compatible species, varieties, or cultivars.

## CRITERIA

Plant species selection will be made based upon needs and desires of the land user, adaptability to the soil and climate, plant compatibility, and plant resistance to disease and insects common to the site or location.

Site preparation will be the minimum necessary to ensure close contact of seeds or sprigs with the soil and to ensure safe and efficient equipment operation.

Lime and fertilizer will be applied in accordance with soil test recommendations.

Seed will conform to the seed laws and regulations of North Carolina.

All seed, particularly warm season perennial grass seed, should be tested for purity and germination prior to planting. Send a sample of seeds to the North Carolina Department of Agriculture and Consumer Services Testing Lab, or perform the Ragdoll Germination Test (see Appendix 1).

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For recommendation on Pest Control during pasture planting and establishment period, consult North Carolina Extension specialists and/or NC Ag Chemicals Manual available at <http://ipm.ncsu.edu/Agchem/agchem.html>.

Planting rates, depths, and dates are listed on the specification sheet.

Calibrate equipment before planting. Operate planting equipment in accordance with manufacturer's instructions. Plant on the contour or across the predominate slope.

Nurse crop may be helpful when planting on very erosive sites or when the target crop is expected to establish slowly.

### **OPERATION AND MAINTENANCE**

Growth of seedlings or sprigs will be monitored for stress. Stress may be alleviated by reducing weeds, early harvest of any companion crops, and timely irrigation when conditions permit. Replanting may be necessary.

Invasion by undesirable plants will be controlled by cutting, using selective herbicide, or by grazing management by manipulating livestock stocking rates, density, and duration of stay.

Insects and diseases will be controlled when an infestation threatens stand survival.

Newly seeded areas should be protected from grazing until plants are well established. Once established, forage use of plantings should be managed according to NRCS Prescribed Grazing and Forage Harvest Management practices.

### **ACKNOWLEDGEMENTS:**

I agree to install this practice as designed and planned.

Client: \_\_\_\_\_ Date: \_\_\_\_\_

This practice is designed and planned according to NRCS NC Standards and Specifications.

Conservationist: \_\_\_\_\_ Date: \_\_\_\_\_

This practice was installed and maintained in accordance with this job sheet.

Completed by: \_\_\_\_\_ Date: \_\_\_\_\_



## APPENDIX 1

### RAGDOLL TEST

- Use a firm paper towel such as a brown hand towel or equivalent. The soft, very absorbent paper towels often used in a kitchen make poor ragdolls because they allow roots and shoots to penetrate into the fiber, making seedlings difficult to remove during counting. If no other type of towel is available, the soft towel can be used, but it is best to use two layers. These towels often hold too much water which drowns the seeds.
- Wet the towel and allow free water to drip off for a minute. Lay the wet towel flat.
- Count out 100 seeds (50 for larger seeds like corn, peanuts, and soybeans) and place them on one half of the towel. Fold the towel in half and roll into a moderately tight tube. Rolling it around a pencil works well. Place the tube in a jar or sealable plastic bag. *To test the procedure, always place 5-10 seeds of some species you know will germinate such as beans, corn, alfalfa or clover.*
- Position the ragdoll so the tube is upright. Doing this causes roots to grow down and shoots to grow upward so that seedlings are more easily removed during counting. The ragdoll should be kept in a warm place (between 75 and 85° F). A little water in the bottom of the jar or plastic bag will insure adequate moisture.
- Make the first germination count for most seeds in about three days. Open the towel and count the seedlings as you remove them. After another three to four days make another count. If you had 100 seeds, the number of seedlings removed equals the percentage germination.
- You can distinguish hard or firm (dormant) seeds from dead seeds by pushing down on each non-germinated seed with the flat part of a pencil eraser. If the seed does not flatten with gentle pressure, it is considered hard. Dead seed will usually be moldy at the end of the test.