Forage and Biomass Planting

Conservation Practice Job Sheet (512)
Introduced Grass Planting - Kentucky

Natural Resources Conservation Service (NRCS) September, 2012

Participant Name _____
Contract # _____
Tract # _____

INFORMATION ON THIS JOB SHEET IS CONSIDERED TO BE PART OF THE CONTRACT AND/OR CONSERVATION PLAN.

Definition

This Forage and Biomass Planting job sheet will be used in establishing pure stands of introduced grasses and mixed stands of introduced grasses and compatible legumes and/or forbs as part of a conservation plan.

Purpose

Establish introduced grasses, legumes and forb species to provide forage, hay, or wildlife habitat for grassland dependent species.

Conditions Where Practice Applies

This practice is applicable on cropland, pastureland, hayland, and other lands where introduced grasses are needed for forage, hay, and/or wildlife habitat. (Check program rules to determine if hay removal is allowed).

Establishment Specifications

1. Refer to table 3 of this Job Sheet for seeding rates and planting dates for introduced forage species and seed mixes. The information for this table is derived from USDA Conservation Practice Standard 512 (Forage and Biomass Planting) Criteria and Specifications.

2. Seed will conform to minimum state standards for purity, germination and other features. Seed tags and other pertinent seed information may be requested by NRCS representatives to verify contract compliance.

3. Fertilizer and lime applications, when planned, shall be made according to University of Kentucky recommendations based on a soil test analysis performed consistent with University of Kentucky laboratory soil test procedures.

4. Competition control, seedbed preparation and seeding shall be done according to the following information.

<u>Competition Control Before Planting</u>

Competition control is critical to ensuring a good stand of introduced grasses. In most situations this control should begin prior to the seeding and seedbed operations. Either conventional seedbed preparation or herbicide application/s or both may be used to control competition prior to planting introduced grasses and legumes.

Several steps are required to get successful competition control when using an herbicide to eradicate existing vegetation.

The first step in killing existing vegetation with herbicides is to remove excessive top growth that may be present. Removal can be accomplished by mowing or grazing the area immediately prior to beginning the recommended herbicide application program. If possible after mowing, remove the hay to allow for better herbicide contact. (check program rules to determine if hay removal is allowed).

The recommended herbicide program may involve one or two herbicide applications, depending on the anticipated seedling competition. Two applications are usually necessary when controlling “highly persistent,” perennial species such as Tall fescue, prior to no-till planting. The herbicide applications must be made while the target vegetation is rapidly

growing (preferably at a 4 to 6 inch height) for optimum results.

Table 1 provides some suggested herbicide options for controlling competition prior to planting. These options are presented in order of effectiveness and cost.

Note: Two herbicide applications are normally recommended for dense stands of Fescue or other sod forming species and in other areas where competition may not be controlled by one application. However, option 1 could be used in stands of Fescue and other similar species in situations that permit only one herbicide application. More site specific herbicide application information is provided in Table 2. Always read and follow instructions on the herbicide label.

Seeding and Seedbed Preparation

Important: Regardless of the seeding method used, the seeding depth for most species should not exceed ¼ to ½ inch. Avoid no-till planting or cultipacking planted seedbeds in wet soil since it may result in placing the seed too deep.

No-till establishment is the preferred method since soil disturbance is minimal, thus reducing weed competition and the risk of soil erosion. Conventional seeding may be used for establishment on areas that have been recently cropped, where weedy competition will be lessened and where the risk of soil erosion is minimal.

No-Till Seeding

Cool season grass and clover seed must be planted no deeper than ¼ to ½ inch. Two common mistakes when no-till planting introduced grasses include pulling the drill too fast and not stopping to check seeding depth often enough.

Conventional Seeding

Prepare a seedbed by plowing and disking. After disking, make at least one trip over the field using a cultipacker to firm the seedbed. The importance of a dry firm seedbed cannot be over emphasized to ensure proper planting depth.

Broadcast seed with a drop spreader. After broadcasting, cultipack, or roll the seeded area only once to ensure good seed to soil contact and the proper, shallow seeding depth.

Operation and Maintenance

After planting, competition control remains an important part of establishing introduced grass stands. To control competition and prevent weed seed formation, introduced grass stands may benefit from top clipping as needed during the establishment period. Post-emergent herbicides may also be used to control competition during the establishment period. Refer to AGR-172 (Weed Management in Grass Pastures, Hayfields, and Other Farmstead Sites) for additional information.

If this planting is being established under a program, follow management requirements as outlined on the program specific operation and maintenance job sheets that are attached.

See the additional information section on page 4 of this job sheet for program specific requirements or additional technical recommendations that may be applicable. *Note: The operation and maintenance guidelines in this section may be superseded with program specific information whenever applicable.*

Options	Current Condition	Timing	Method
1 Single Application	Cropland or Grassland	Spring Or Fall	Remove excess vegetation prior to application if needed. Apply appropriate quantity of approved, non-selective herbicide (as described in AGR-172, Weed Management in Grass Pastures, Hayfields, and Other Farmstead Sites) after vegetation has re-growth of at least 4 to 6 inches. Apply just prior to planting.
2 Two Applications	Grassland	1 – 8 months before planting And Just prior to planting	Remove excess vegetation prior to application if needed. Apply appropriate quantity of approved, non-selective herbicide (as described in AGR-172) after vegetation has re-growth of at least 4 to 6 inches. Apply follow-up rate of approved, non-selective herbicide (as described in AGR-172) just prior to planting.

Table 1. The table above contains two options for controlling competing grass and weed vegetation (with burn down herbicides) prior to establishing introduced grasses. If more than one herbicide application is planned, records should indicate that the herbicide was applied accordingly. A double rate of herbicide applied once over a field is not considered to be two separate herbicide applications.

Field No.(s)	Pre-Planting Herbicide Application (Tentative Dates)	Post-Planting Herbicide Application (Tentative Dates)	Comments

Table 2. The table above contains information about a planned herbicide application schedule to be carried out as part of the conservation plan for an introduced grass planting. All pesticide products must be used according to label specifications.

Field No.(s)	Ac.	Species	Lbs/Ac Seed (PLS)	Total Lbs Seed (PLS)	Seeding Method (Conventional or No-Till)	Seeding Date/s	Lime Ton/Ac	N Lbs/Ac	P205 Lbs/Ac	K2O Lbs/Ac

Table 3. Species and seeding rates will be according to the information provided in the table above. If planned, the application of fertilizers and soil amendments shall be made according to University of Kentucky fertilizer and lime recommendations. The recommendations must be made from a soil test that is performed according to University of Kentucky laboratory soil test procedures. If additional room is needed, make copies of this table and attach it to the back of the job sheet.

Additional Information:

Program specific requirements or additional technical recommendations that may apply are as follows.

_____

_____

_____

_____

_____

_____

Certification _____ **Date** _____

Certifications			
Job Sheet	Prepared by:	Title:	Date:
	Approved by:	Title:	Date:
Installation	Meets NRCS standards and specifications.		
	Certification by:	Title:	Date:

USDA is an equal opportunity provider and employer. To file a complaint of discrimination, write to USDA, Assistant Secretary for Civil Rights, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, S.W., Stop 9410, Washington, DC 20250-9410, or call toll-free at (866) 632-9992 (English) or (800) 877-8339 (TDD) or (866) 377-8642 (English Federal-relay) or (800) 845-6136 (Spanish Federal-relay). USDA is an equal opportunity provider and employer.