NRCS Natural Resources Conservation Service

Conservation Cover

Native Grass Planting

Conservation Practice Job Sheet *327*

Participant Name

CRP Practice If Applicable

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

This Conservation Cover Job Sheet will be used in establishing pure native warm season grass stands and mixed stands of native grass and compatible legumes and/or forbs as part of a conservation plan.

Condition Where Practice Applies

This practice applies on land that needs permanent protective cover. This practice does not apply to plantings for forage production or to critical area plantings. (Check program rules to determine if forage harvesting is allowed).

Establishment Specifications

1. Species, seeding rates, and seeding dates will be according Table 3.
2. Seed will conform to minimum state standards for purity, germination and other features. Seed tags and other information may be requested by NRCS representatives to verify contract compliance.
3. Soil amendments, when planned, shall be made according to University of Kentucky fertilizer recommendations. Typically, fertilization is not recommended on native grass plantings for conservation cover. See Table 3 for more detail on soil amendments.
4. Competition control, seedbed preparation and seeding shall be done according to the following.

Competition Control Before Planting

Competition control is critical to ensuring a good stand. Conventional seedbed preparation, herbicide application or both may be used to control competition prior to planting.

Several steps are required to get successful competition control when using herbicide especially on fescue stands. The first step in killing fescue is to mow the area in late summer for a fall herbicide burn down or in late Fall or early spring for a spring herbicide burn down. If possible after mowing and prior to herbicide application, remove the hay to provide a better seed bed and allow for better herbicide contact with vegetation. (Hay removal is not allowed if the area is currently under a CRP contract.)

Burning is also a viable option for reducing potential weed competition. Burning must be done with an approved burn plan from KDFWR.

If needed, a second herbicide application should be planned. This application should occur just prior to native grass planting and after the remaining vegetation has regrown to a 4 - 6 inch height. All herbicide applications shall be made when vegetation is actively growing.

A second herbicide application is required for dense fescue or orchard grass stands and other areas where competition may not be controlled by one herbicide application. Table 1 provides some options for controlling competition prior to planting.

Seeding and Seedbed Preparation

Important: Regardless of the seeding method used, the seeding depth for most species

should never exceed ¼ inch unless specifically recommended. Avoid no-till planting or cultipacking planted seedbeds in wet soil since it may result in placing the seed too deep. Having some seed on the soil surface is better than having it too deep.

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

☐ No-Till Seeding

Smooth seeded species like Switchgrass can be planted using a no-till drill with the legume box set to place the seed ¼ inch deep.

Fluffy seeded species will need to be seeded with a no-till drill specialized to plant these seeds. These specialized drills have seed boxes with dividers and agitators, picker wheels, and oversized drop tubes. Specialized drills are also designed so they can be adjusted to ensure shallow planting depths. Some conventional no-till drills have been retro fitted with a fluffy grass seed box. Care needs to be exercised when setting these drills to ensure that planting depths are no deeper than ¼ inch. Two common mistakes when no-till planting native grasses include pulling the drill to fast and not stopping to check seeding depth often enough.

☐ Conventional Seeding

A seedbed may be prepared by disking two or more times to make a clean, firm seedbed. 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 fluffy seed with a drop spreader. When using a cyclone type spreader, a carrier should be used to help distribute the seed. The following carriers may be used: pelletized lime at a 200 lbs/acre rate; or oats at 32 lbs./acre rate. Since fluffy seed will only broadcast as far as the carrier, make sure your passes overlap to ensure even coverage. If oats or other cereals are used as a carrier, mow prior to seed head formation.

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

☐ Eastern Gama Grass Planting

Eastern Gama grass may be planted into a conventionally tilled seedbed or into grass sod using a corn planter. Since some corn drills do not handle the seed as well as others a trial run should be conducted prior to the planting operation. Planting depth for Eastern Gama grass shall not be deeper than 1-1½ inches.

Wildlife

Conservation Cover can enhance wildlife objectives. Benefits depend on the vegetative species used and management practiced. Consider using adapted native vegetation that **c**an provide food and cover for important wildlife. Increase width, if needed, to provide necessary protection for nesting animals from predators. Mowing is not allowed between May 15th and August 1st which is the primary nesting season for ground-nesting birds and animals. When managing conservation cover, never disturb (such as mowing or disking) more than 50 percent of the field in any one year.

Operation and Maintenance

Competition control remains an important part of native grass establishment for up to two years after planting. To control competition and prevent weed seed formation, native grass stands may be top clipped during this period as recommended by NRCS, Kentucky Department of Fish and Wildlife Resources, or a Technical Service

Provider. Post-emergent herbicides may also be used to control competition during the two-year establishment period when recommended by a Certified Crop Advisor (CCA), Kentucky Department of Fish and Wildlife Resources (KDFWR) or a Technical Service Provider (TSP). All planted species must be taken into consideration when implementing a herbicide treatment. For example, do **not** use a broad spectrum broadleaf weed herbicide to control ragweed only to kill all the forbs that were planted also!

If conservation cover is being established under a program, follow management requirements as outlined on the program specific operation and maintenance job sheets or as outlined in the Addition Information Section located at the end of this document.

Table 1. This table contains options for controlling competing vegetation with burn down herbicides* prior to planting native grasses/forbs. Eastern Gamagrass, Switchgrass, Virginia Wild Rye, and some forbs/wildflowers may not be compatible with the active ingredient, imazapic. If imazapic-containing herbicides will be used, check the label to determine which forbs/legumes are compatible with imazapic prior to species selection. Remove excess vegetation prior to application if needed. (For land currently under a CRP contract, vegetation can only be mowed and may not be removed.) Apply herbicide after vegetation has re-growth of at least 6 - 8 inches.

Applied	Option	Current Condition (circle one)	Timing	Method
☐	1 (Single Application)	Cropland Or Grassland (excluding tall fescue orchardgrass)	Spring (April/June)	Apply just prior to planting. Herbicide Rate: 2.0 – 3.0 quarts of glyphosate per acre. May be tank-mixed with 4-8 ounces of imazapic per acre.*
☐	2 (Single Application)	Cropland	Spring (April/June)	Apply just prior to planting. Herbicide Rate: 4-8 ounces of imazapic per acre.*
☐	3 (Two Applications)	Grassland	Spring (April/June)	Apply first application several weeks before planting and second application should be applied just prior to planting after 4- 6 inches of re-growth occurs three to four weeks after initial application. • 1st Herbicide Application Rate: 2.0 – 3.0 quarts of glyphosate per acre.* • 2nd Herbicide Application Rate: 1.0 –1.5 quarts of glyphosate per acre. May be tank-mixed with 4-8 ounces of imazapic per acre.*
☐	4 (Two Applications)	Grassland	Fall (Sept/Oct) And Spring (April/June)	**Fall** Herbicide Application Rate: 1.5 – 2.0 quarts of glyphosate per acre.* **Spring** Herbicide Application Rate: 1.5 - 2.0 quarts of glyphosate per acre. May be tank-mixed with 4-8 ounces of imazapic per acre.*

* These rates are directly from the University of Kentucky publication "Weed Management In Grass Pastures, Hay Fields, and Other Farmstead Sites" (AGR-172) and based on a 41% a.i. formulation; Washburn, B. E. and Barnes, T. G., 2000, "Native Warm-Season Grass and Forb establishment using imazapic and 2, 4-D", *Native Plants Journal*, Vol. 1, No. 1, pp. 61-69; and the University of Tennessee publication "Native Warm-Season Grasses: Identification, Establishment and Management for Wildlife and Forage Production in the Mid-South" (PB1752). AGR172 was specifically referenced from the *Pasture Renovation or Replacement of Endophyte-Infected Tall Fescue* section. Additional information pertaining to vegetation control can be found in the above listed references. Note: Methylated soybean oil (MSO) or other additives may be used according to the label.

Table 2. The following table contains information about a planned herbicide application(s) to be carried out as part of the conservation plan for native grass plantings. Some herbicide applications will be made prior to planting (pre-planting) to burn down existing vegetation. Other applications may be made after planting (post-planting) to help control competition during establishment. All herbicide products must be used according to label specifications.

Field No.	Option (from Table 1)	Pre-Planting Application (Tentative Date)	Post-Planting Application (Tentative Date)	Comments

Table 3. Species and seeding rates will be according to the information provided in the table below. If planned, the application of soil amendments shall be made according to University of Kentucky fertilizer and lime recommendations. All recommendations must be made from a soil test that is performed according to University of Kentucky laboratory soil test procedures. Typically, soil amendments are not planned for native grass/forb plantings. If additional room is needed on the tables below or above, make copies of this page and attach it to the back of the job sheet.

Field No.	Acres	Species	Lbs./Ac Seed (PLS)* or Seedlings/Ac	Total Lbs. (PLS)*	Seeding Method (Conv./No-Till)	P_2O Fertilizer per Soil Test (lbs/acre)	K_2O Fertilizer per Soil Test (lbs/acre)	Seeding Date

* Native grass recommendations are made on a Pure Live Seed (PLS) basis.

Additional Information:

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