

Riparian Herbaceous Cover

Conservation Practice Job Sheet

390

Participant Name:

CRP Practice If Applicable:

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

Definition

Riparian Herbaceous Cover is a strip of permanent vegetation established and managed between upland and aquatic habitats. Vegetation consists of adapted grasses, legumes, and forbs.

Purpose

This practice is used to accomplish one or more of the following purposes:

- Provide or improve food and cover for fish, wildlife and livestock,
- Improve and maintain water quality.
- Establish and maintain habitat corridors.
- Increase water storage on floodplains.
- Reduce erosion and improve stability to stream banks and shorelines.
- Increase net carbon storage in the biomass and soil.
- Enhance pollen, nectar, and nesting habitat for pollinators.
- Restore, improve or maintain the desired plant communities.
- Dissipate stream energy and trap sediment.
- Enhance stream bank protection as part of stream bank soil bioengineering practices.

Where Used

Riparian Herbaceous Cover is planned adjacent to perennial and intermittent watercourses and water bodies where herbaceous cover is needed to meet planning objectives. This practice will be placed according to the plan map and this job sheet.



Establishment Specifications

1. Species, seeding rates, and seeding dates will be according to the 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. For introduced species, certified seed is required unless there is a documented statewide shortage and the use of uncertified seed is approved by the State Resource Conservationist.
4. Apply fertilizer and lime according to University of Kentucky recommendations based on a soil test analysis performed consistent with University of Kentucky laboratory soil test procedures.
5. Competition control, seedbed preparation and seeding shall be done according to the following information.

Competition Control Before Planting

Competition control is critical to ensuring a good stand of introduced grasses/legumes. 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 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 prior to application(s) of the recommended herbicide. If possible after mowing, remove the hay to allow for better herbicide contact. If hay removal is not possible, the area may be raked so the hay and thatch is moved off the area that will be planted. (Hay removal is not allowed if the area is currently under a CRP contract.)

The recommended herbicide program may involve a fall application with a follow-up spring application or one to two spring applications. The herbicide applications must be made while the target vegetation is rapidly growing and once 6 to 8 inches of new growth has occurred to ensure good herbicide uptake.

Table 1 and 2 provide suggested herbicide options for controlling competition prior to planting. Two herbicide applications are required for dense stands of Fescue or other sod forming species and in other areas where competition may not be controlled by one application. A single herbicide application can be used in stands where the conservation planner determines that competition will be controlled with only one application.

Seeding and Seedbed Preparation

Important: Regardless of the seeding method used, the seeding depth for most species should never exceed 1/4 to 1/2 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.

Conventional Tillage

A seedbed may be prepared by disking two or more times to make a clean, firm seedbed. As a general guide, a seedbed is considered firm when footprints leave no more than a half-inch deep depression. Roll or culti-pack immediately prior to and after seeding to ensure good soil-to-seed contact. Seeds are usually broadcast.

No Tillage

Planting by no-till method uses a seed drill to place seed at a prescribed depth (usually between 1/4 and 1/2 inch below the soil surface) with minimal soil disturbance. Care needs to be exercised when setting these drills to ensure that planting depths are set correctly. Two common mistakes when no-till planting cool season grasses include pulling the drill too fast and not stopping to check seeding depth often enough.

Operation and Maintenance

Competition control remains an important part of grass/legume establishment for up to two years after planting. Control competition and prevent weed seed formation in introduced grass/legume stands by top clipping during this period as recommended by NRCS, Kentucky Department of Fish and Wildlife Resources, or a certified Technical Service Provider. Post-emergent herbicides like may also be used to control competition during the two-year establishment period when recommended by one of the above technical service providers.

Inspect and repair areas planted to riparian herbaceous cover after storms to fill in gullies, reseed disturbed areas, and take other measures to ensure the effectiveness of the practice.

Avoid mowing areas planted to riparian herbaceous cover between May 15st and August 1st which is the primary nesting season for ground-nesting birds and animals. In addition, to improve wildlife and pollinator habitat, try not to disturb more than 50 percent of the area in any one year.

Areas enrolled in the Conservation Reserve Program (CRP) shall not be used for forage, turn rows, roads or for storage of crops or equipment.

Areas where riparian herbaceous cover is

being established under a Farm Bill program will require the participant to follow management requirements as outlined in the program specific Management and Maintenance Job Sheet that is attached.

Specifications

Site-specific requirements and additional provisions are listed on the next pages. Specifications are prepared in accordance with the Riparian Herbaceous Cover (390) practices standard in the NRCS Field Office Technical Guide.

Table 1. This table contains several options for controlling competing grass and weed vegetation with burn down herbicides* prior to planting introduced grasses. Remove excess vegetation prior to application if needed. Apply herbicide after vegetation has re-growth of at least 4 to 6 inches. Two herbicide applications are required for dense stands of Fescue or other sod forming species and in other areas where competition may not be controlled by one application.

Applied	Option	Current Condition (circle one)	Timing	Method
<input checked="" type="checkbox"/>	1 (Single Application)	Cropland Or Grassland	Spring (April)	Apply just prior to planting. Herbicide Rate: 2.0 – 3.0 quarts of glyphosate per acre.*
<input checked="" type="checkbox"/>	2 (Single Application)	Cropland Or Grassland	Fall (Sept/Oct)	Apply just prior to planting. Herbicide Rate: 1.5 quarts of glyphosate per acre.*
<input checked="" type="checkbox"/>	3 (Two Applications)	Grassland	Spring (April)	Apply first application will be several weeks before planting and second application should be applied one to two weeks prior to planting. <ul style="list-style-type: none"> • 1st Herbicide Application Rate: 2.0 – 3.0 quarts of glyphosate per acre.* • 2nd Herbicide Application Rate: 2.0 pints of glyphosate per acre.*
<input checked="" type="checkbox"/>	4 (Two Applications)	Grassland	Fall (Sept/Oct)	Apply first application will be several weeks before planting and second application should be applied one to two weeks prior to planting. <ul style="list-style-type: none"> • 1st Herbicide Application Rate: 1.5 quarts of glyphosate per acre.* • 2nd Herbicide Application Rate: 2.0 pints of glyphosate per acre.*
<input checked="" type="checkbox"/>	5 (Two Applications)	Grassland	Spring (April) And Fall (Sept/Oct)	Spring Herbicide Application Rate: 2.0 – 3.0 quarts of glyphosate per acre.* Fall Herbicide Application Rate: 1.5 quarts of glyphosate 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. Specifically, from the *Pasture Renovation or Replacement of Endophyte-Infected Tall Fescue* section. Additional information pertaining to vegetation control can be found in publication AGR-172. Note: Ammonium Sulfate 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 introduced grass/legume 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. 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. 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.	Buffer Width (ft)	Buffer Length (ft)	Acres	Species	Lbs./Ac Seed (PLS)* or Seedlings/Ac	Total Lbs. (PLS)*	Seeding Method (Conv./No-Till)	Lime per Soil Test (tons/acre)	N Fertilizer per Soil Test (lbs/acre)	P ₂ O Fertilizer per Soil Test (lbs/acre)	K ₂ O 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:

Certifications

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