NRCS Natural Resources Conservation Service

Field Border

Natural Regeneration

Conservation Practice Job Sheet 386

Participant Name: _____

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

Definition

Field borders are strips of permanent vegetation established at the edge or around the perimeter of a field. Vegetation consists of adapted grasses, legumes, forbs and/or shrubs.

Purpose

A field border is used to perform one or more of the following:

- Reduce erosion from water
- Protect soil and water quality
- Manage pest populations
- Provide wildlife food and cover
- Increase carbon storage
- Improve air quality.

Where Used

Field borders are located at the edges of crop fields and can connect to other buffer practices within fields. They may also apply to recreational land or on other land where agronomic crops or forage are grown.

Conservation Management System

Field borders are normally established as part of a conservation management system to address the soil, water, air, plant, and animal needs including wildlife and the owner's objectives.

A field border can be used with contour farming, contour strip cropping, cross-slope farming patterns, or rows or headlands in uphill and downhill directions. It also provides a turning area for farm equipment, which reduces sheet, rill, and gully erosion.

Field borders can also provide forage production and improve farm aesthetics. They are most effective when used in combination with other agronomic or structural practices to provide conservation benefits.

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

Wildlife

Field borders can enhance wildlife objectives. Benefits depend on the vegetative species used and management practiced. Increase width, if needed, to provide necessary protection for nesting animals from predators. Also increase width to protect wildlife if a portion of the field border will be used for equipment movement or turn rows. Avoid mowing field borders between May 15st and August 1st which is the primary nesting season for ground-nesting birds and animals. When managing field borders for wildlife, never disturb (such as mowing or disking) more then 50 percent of the field borders surrounding a field in any one year.

Natural Regeneration

If the purpose of the field border is to provide wildlife food and cover then, natural

regeneration can be used for establishing a field border if a 60% ground cover is established and maintained within the first two growing seasons in the planned area.

Competition Control Before Planting

Competition control of unwanted species is critical in ensuring a successful natural regeneration of the field border. Either conventional tillage or herbicide application/s or both may be used to control competition.

Several steps are required to get successful control of existing vegetation when using a herbicide. 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 grazing/hay removal is allowed).

The recommended herbicide program may involve a fall application plus a spring application or one or two spring applications. The herbicide applications must be made while the target vegetation is rapidly growing (preferably at a 4 to 6 inch height).

Table 1 provides some suggested herbicide options for controlling competition prior to planting. 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, only one application could be used in stands of Fescue and other similar species in cases where the planner determines that competition can be controlled with only one herbicide application.

Temporary Seeding

Important: The seeding depth for most species should never exceed 1/4 to 1/2 inch. Avoid planting in wet soil since it may result in placing the seed too deep.

Field Borders planned for natural regeneration must be seeded with a temporary cover. Temporary seeding information is found in the "Establishing Vegetative Practices in Kentucky" document available from the FOTG. Species, seeding rates, and seeding dates will be according to Table 3. Planting must be performed in accordance with the no-till method. In no-tillage planting, a seed drill is used to place seed at a prescribed depth (usually between ¼ and ½ inch below the soil surface) with minimal soil disturbance. 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

Weedy type forbs and grasses are highly desirable for many wildlife species. However, infestations of Johnsongrass and other certain non-beneficial noxious plants should be controlled. Participants should consult with NRCS, Kentucky Department of Fish and Wildlife Resources, or a Technical Service Provider to determine appropriate control measures.

Inspect and repair field borders after storms to fill in gullies, remove sediment, reseed disturbed areas, and take other measures to ensure the effectiveness of the border.

If the field border is being established under a program, the participant must 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 NRCS Field Office Technical Guide. See practice standard Field Border, code 386.

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.

Applied	Option	Current Condition (circle one)	Timing	Method
☑	1 (Single Application)	Cropland Or Grassland	Spring (April/June)	Apply just prior to planting. Herbicide Rate: 26-39 ounces of glyphosate active ingredient (a.i.) per acre.*
☑	2 (Two Applications)	Grassland	Spring (April/June)	Apply first application several weeks before planting and second application should be applied just prior to planting if green up occurs two to four weeks after initial application. • 1st Herbicide Application Rate: 26-39 ounces of glyphosate active ingredient (a.i.) per acre.* • 2nd Herbicide Application Rate: 6.5-13 ounces of glyphosate active ingredient (a.i.) per acre. May be tank-mixed with 1-2 ounces of imazapic a.i. per acre.*
☑	3 (Two Applications)	Grassland	Fall (Sept/Oct) And Spring (April/June)	**Fall** Herbicide Application Rate: 13-20 ounces of glyphosate active ingredient (a.i.) per acre.* **Spring** Herbicide Application Rate: 26-39 ounces of glyphosate active ingredient (a.i.) per acre. May be tank-mixed with 1-2 ounces of imazapic a.i. 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.

Purpose (check all that apply)	
☐ Reduce erosion from water	☐ Protect soil and water quality
☐ Provide wildlife food and cover	☐ Manage pest populations
☐ Increase carbon storage	☐ Improve air quality

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. 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. If shrubs are planned in a field border, see the Tree/Shrub Establishment (612) Job Sheet for technical requirements associated with shrub handling and planting.

Field No.	Border Average Width (ft)	Acres	Species	Lbs./Ac Seed (PLS) or Seedlings/Ac	Total Lbs. (PLS)	Seeding Method (Conv./No-Till)	Seeding Date

Additional Information:

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

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