

Field Border

Cutback Field Borders for Wildlife

WV Conservation Practice Job Sheet

Code 386



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, and/or shrubs.

Purpose

A field border may be used to reduce soil erosion from wind and water, protect soil and water quality, manage harmful insect populations, or provide wildlife food and cover.

Field borders are normally established as part of a conservation management system to address wildlife, and the owner's objectives. In addition, field borders can provide forage production and improve farm aesthetics.

Where Used

They may also apply to recreational land, odd areas or on other land where agronomic crops are grown. They are most effective when used in combination with other

agronomic or structural practices to provide conservation benefits.

Frequently the edges of crop fields become invaded by undesirable trees that grow to a size of no value to edge species and shade out plants of benefit. Also, roots and branches of large trees that extend into a crop field sharply reduce production along its edges. In these situations, cutting, or otherwise removing most trees will provide several benefits.

Cutback borders can be developed to create valuable cover and food resources for wildlife that depend on brushy habitats, such as bobwhite quail, fox, rabbits, cardinals and small mammals. Well-managed field borders may also provide foraging opportunities for typical forest wildlife, such as ruffed grouse, bobwhite quail and wild turkey. These areas may increase the availability of foods and provide critical winter, escape and nesting cover for a variety of wildlife.

Criteria

This job sheet will help you design cutback borders that provide early successional wildlife habitat.



Cutback borders create a “softer” edge and better transition zone from woodland to open areas. This method may be effective within forested areas adjacent to permanent food plots, logging roads and landings or other settings where wildlife is a primary concern.

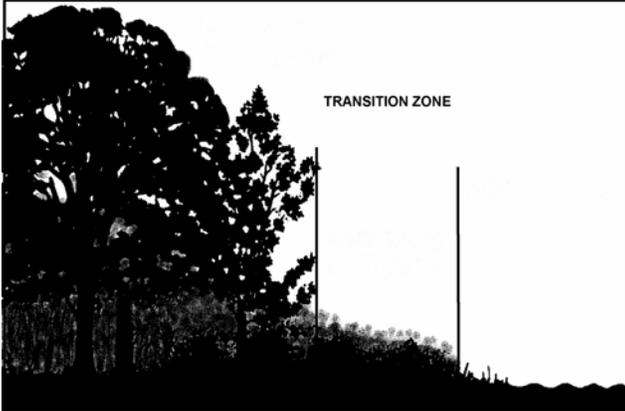
As the term implies, cutback borders are usually created by felling trees with a chainsaw. Other methods include, killing selected trees with a basal application of herbicide or using a bulldozer or other means to push the trees away from the field edge.

When sawed, some hardwoods will quickly sprout at the stump and form a brush border in one or two growing seasons.

This practice may be particularly useful when “daylighting” or enhancing the habitat surrounding narrow forest trails or harvest roads and existing log landings.

Some general criteria apply to establishment of cutback field borders:

- Where existing herbaceous field borders occur along woodland edges, they may be widened and enhanced by cutting woodland edges back to encourage growth of shrubs and other wildlife food-bearing plants. This creates a “softer” edge and better transition zone from woodland to open areas. This method may be effective within forested areas adjacent to permanent food plots, logging roads and landings or similar woodland type settings.
- Leaving cut slash and woody material on the ground along woodland border edge cuts provides additional wildlife cover and may deter browsing of new sprouts.
- Cutback borders will be at least 30 feet wide and extend along as much of the field edge as possible
- Cut back borders may be established at different times throughout the property; or a portion of a field’s edge may be established each year to provide various stages of regrowth.
- When cutting borders, leave trees or shrubs of special benefit. Species such as dogwoods, viburnums and serviceberry are examples of species that should be retained.
- The width of the border may vary throughout its length and not be uniform. The width may be increased depending on management goals and objectives. Generally, the wider the area the better the habitat it provides. Narrow borders are susceptible to heavy predation on animals that inhabit these transition areas.
- Shrubby vegetation may also be planted within and along cut-back borders which may serve to supplement existing species to provide a specialized food or cover type (e.g. conifer planting for winter cover).
- Some important considerations on how these areas will re-establish once cut are: the amount of sunlight received each day, the seed source available, climate, aspect and the existing vegetation.



Cut-back borders provide a smoother transition from woodland to grassland. This is achieved by cutting woodland edges back to encourage growth of shrubs and other wildlife food-bearing plants.

Installation Methods

Cutback borders may be established several different ways. Three different ways are described below.

A. Single Tier Method - The simplest method is to cut all woody stems within the designated width and length and allow natural revegetation to establish the desired community. A few trees or shrubs that provide special sources of food or cover may be left standing within the border. Species such as dogwoods, conifers, certain oaks, viburnums and serviceberry are a few examples.

B. Triple Tier Method - To maximize wildlife values in cutback borders the following guide produces a tiered or layered result:

1. Cut all plants in the first 10 feet (minimum) of the border that are greater than 1 inch d.b.h. For wildlife benefits, the slash may be piled but could be left where cut. If windrowed brush piles are desired, refer to the WV Job Sheet (647) *Early Successional Habitat Management/ Development – Brush Piles for Wildlife*.
2. Within the next 10 feet (minimum) cut (and pile if desired) trees over 2 inches d.b.h.
3. The next 10 feet (minimum) cut and remove all trees and shrubs over 4 inches d.b.h., unless the tree or shrub is producing a desired kind of food.

C. Selective Tier Method - Another method of obtaining a high quality "tiered" cutback border is to cut all trees in a selected strip that are of a height that if felled in the direction of the field would extend beyond the edge. This method results in cutting progressively larger trees as you move from the field into the woodland.

Herbicides may also be used to create cutback borders. Contact the West Virginia Division of Forestry for herbicide recommendations suitable for this purpose.

Operation and Maintenance

Inspect cutback borders to ensure that the desired community is establishing, control invasive plants and take other measures to ensure the effectiveness of the border.



Cutback borders consist of adapted species of small trees, shrubs and some herbaceous plants. They are more effective and provide more environmental benefits when established around the entire field. Plants that attract insects can serve as food sources for wildlife and create a "softer" edge and better transition zone from woodland to open areas

Observe proper safety when felling trees and using equipment. Herbicides used for establishment purposes and for control of noxious or invasive species must be used in accordance with all labels and precautions.

The ideal cutback border will appear unkempt and be composed of a variety of shrubby and some herbaceous plant species. After a long period, cut back borders may mature to the point of losing the effectiveness. Periodic pruning or thinning may be required. Although re-establishment may eventually become necessary, not more than 50% of all border habitats should be disturbed in any one year. In addition, never disturb the entire border habitat around a single field in the same year.

Cutback borders should never be disturbed during the nesting season (March 15 – July 15) to protect nesting wildlife.

Typically, supplemental nutrients are not necessary for the establishment of this practice. Nutrients may be applied to any tree or shrub species planted within the border as required. Refer to the individual species requirements and the operation and maintenance for those species as identified in the (612) *Tree/Shrub Establishment* standard or associated job sheet.

Specifications

Site-specific requirements are listed on the specifications sheet. Additional provisions are entered on the job sketch sheet. Specifications are prepared in accordance with the NRCS Field Office Technical Guide and the Field Border practice standard (386).

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Client:	Farm #:
Field(s):	Tract #:
Designed By:	Date:

Purpose (check all that apply)	
<input type="checkbox"/> Provide early successional food and cover for wildlife	<input type="checkbox"/> Enhancement of an existing herbaceous field border
<input type="checkbox"/> Planned in association with the construction of brush piles or forest openings (Refer to 647 - Brush Piles for Wildlife or Forest Openings Job Sheet(s))	<input type="checkbox"/> A component practice associated with a wildlife management plan (Refer to 645 Upland Wildlife Habitat Management)
<input type="checkbox"/> Other (specify)	

Planned Area (check all that apply)	
<input type="checkbox"/> Adjacent to woodland, roads timber trails or log landings	<input type="checkbox"/> Adjacent to pasture, hay fields or other grasslands (i.e. permanent food plots)
<input type="checkbox"/> Adjacent to annually cropped fields	<input type="checkbox"/> Other (specify) _____

Layout	Field Border 1	Field Border 2	Field Border 3	Field Border 4
Field Number				
Date Planned				
Width (ft)				
Length Along Edge of Field (ft)				
Total Area (acres)				
Slope (%)				
Method of Establishment ¹				
Installation Method ²				
Supplemental Planting Planned				
Target or Planted Species ³				
Target or Planted Species				
Target or Planted Species				
Retained Species ⁴				
Retained Species				
Retained Species				

¹ Identify how the border will be established: **Mechanical** (chainsaw, heavy equipment, etc.) or **Chemical** (herbicide application). Contact the WV Division of Forestry for herbicide recommendations appropriate for this purpose.

² List the method used to install the cutback border. Methods are listed as **Single Tier Method**, **Triple Tier Method**, or **Selective Tier Method**; and are found under the section of this document entitled Installation Methods.

³ List the target (desired) species that will likely re-establish within the border. If supplemental planting is planned, list the species that are to be planted within the cutback border. Refer to the West Virginia Conservation Practice standard (612) Tree/Shrub Establishment and associated job sheets for species, quantities and methods.

⁴ List any existing desirable species to retain during establishment of the border. If none, list as **N/A**.

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If needed, an aerial view or a side view of the practice can be shown below. Other relevant information, complementary practices and measures, and additional specifications may be included.

Operation and Maintenance and Additional Specifications:

Maintain original width and length of field border(s). Inspect periodically for invasion of noxious plant species and control as required by mechanical removal or herbicide application. Once the cutback border is fully mature or the transition zone becomes abrupt, it may be necessary to maintain or re-establish the border. As a general rule, when the trees and shrubs in at least 50 percent of the border exceed 15 feet in height, the cutting and removal process should be repeated. Do not disturb more than 50% of all border habitats in any one year. Do not disturb the entire field border habitat around a single field in the same year. Field borders should not be disturbed during the nesting season (March 15 – July 15) to protect ground-nesting wildlife. Appropriate precautions should be taken to ensure the safety of construction and maintenance crews.

Additional requirements:

For information concerning the establishment or maintenance of this practice contact:

_____ at _____

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