Photo credit: Dr. L.W. Burger, Jr., Mississippi State University

Definition

A strip 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 is used to reduce erosion from wind and water; protect soil and water quality; manage harmful insect populations; provide wildlife food and cover, increase carbon storage and improve air quality.

Where used

Field borders are located at the edges of cropland fields and can connect to other buffer practices within the field. They may also apply to recreation land or other land uses where agronomic crops are grown.

Minimum field border widths are based on local design criteria specific to the purpose or purposes for installing the practice. Field borders consist of adapted species of permanent grass, legumes, and/or shrubs. Native species are desirable. Field borders are more effective and provide more environmental benefits when planted around the entire field. Plants that attract beneficial insects can increase the population of beneficial insects that prey on harmful ones. Photo credit: Dr. L.W. Burger, Jr., Mississippi State University.

Criteria

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 used with contouring, contour strip cropping, cross-slope farming patterns or terraces eliminates the normal planting of end rows or headlands in uphill and downhill directions. It also provides a turning area for farm equipment, which reduces sheet, rill, and gully erosion. If wind erosion control is the primary resource concern, manage mowing, haying or grazing to allow at least 12 inches of regrowth for protection over winter. 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.

Wildlife

Field borders can enhance wildlife objectives. Benefits depend on the vegetative species used and management practiced. Consider using adapted native vegetative species that can provide food and cover for important wildlife. 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. Consider delaying mowing of grassed area until after the nesting season for ground-nesting birds and animals where wildlife is the primary resource concern. Mowing should only occur between Aug.1 – September 1. 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.

Operation and maintenance

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. In wind erosion areas manage mowing, haying or grazing to allow for at least 12 inches of regrowth before winter. In place of mowing, consider other vegetative management techniques such as "wickbar" herbicide applicators or prescribed burning. In areas with adequate moisture, lightly disk the field border on a 2–3 year cycle to promote growth of native vegetation.

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). Use the Upland Wildlife Habitat Management practice standard (645) to determine seeding mixtures.

Field Border – Job Sheet

Landowner_____ Field number_____

Purpose (check all that apply)	
☐ Reduce erosion from wind and water	☐ Management of harmful insect populations
☐ Soil and water quality protection	☐ Provide wildlife food and cover

Layout	Field border 1	Field border 2	Field border 3	Field border 4
Border width (feet)				
Border length along edge of field (feet)				
Area (acres)				
Slope (%)				
Species #1				
Species #2				
Species #3				
Species #4				
Seeding rate (pure live seed – lbs/acre)				
Lime (tons/acre)				
N (lbs/acre)				
P_2O_5 (lbs/acre)				
K_2O (lbs/acre)				

Site Preparation
Prepare a firm seedbed. Apply lime and fertilizer as indicated by soil testing.
Planting Method
Drill grass and legume seed _____ inches deep uniformly over area. Establish vegetation according to the specified seeding rate. If necessary, mulch newly seeded area with _____ tons per acre of mulch material. A small grain crop may be needed as a companion crop at the rate of _____ pounds per acre (clip or harvest before it heads out).
Operation and Maintenance
Maintain original width and length of field border(s). Harvest, mow, reseed, and fertilize as necessary to maintain plant density and vigorous plant growth. Inspect after major storms, remove trapped sediment, and repair eroding areas. Shut off pesticide sprayers when turning on a field border.

Field Border – Job Sheet

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.

Scale 1"=_____ ft. (NA indicates sketch not to scale: grid size=1/2" by 1/2")

Additional Specifications and Notes:

The United States Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication program information (Braille, large print, audiotape, etc.) should contact the USDA Office of Communications (202) 720-2791.

To file a complaint of discrimination write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.