



CONSERVATION ENHANCEMENT ACTIVITY

E386D

CONSERVATION STEWARDSHIP PROGRAM

Enhanced field borders to increase food for pollinators along the edge(s) of a field

Conservation Practice 386: Field Border

APPLICABLE LAND USE: Crop (Annual & Mixed); Crop (Perennial); Associated Ag Land

RESOURCE CONCERN: Animals

ENHANCEMENT LIFE SPAN: 10 years

Enhancement Description:

Enhance existing field borders to a width of at least 40 feet and establish a mixture of species that provide food for pollinators along the edge(s) of the field.

Criteria:

- Field borders shall be established along selected field edges at a width of at least 40 feet.
- Locate borders to eliminate sloping end rows, headlands, and other areas where concentrated water flows will enter or exit the field.
- Field borders shall be established to a mixture adapted species of permanent grass, forbs and/or shrubs that accomplish the design objective.
- **The NRCS at the state level will develop lists of plants suitable for pollinator habitat. The lists must emphasize as many native species as practical.**
- Plants selected for field borders will have the physical characteristics necessary to produce pollen during multiple seasons.

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- No plant listed by the state as a noxious or invasive species shall be established in the field border.
- Seedbed preparation, seeding rates, dates, depths, fertility requirements, and planting methods will be consistent with approved local criteria and site conditions.
- Ephemeral gullies and rills present in the planned border area will be eliminated as part of seedbed preparation. If present, ephemeral gullies and rills located immediately upslope from the planned border area need to be treated to ensure more of a sheet flow into the planned border area.
- Operation and maintenance requirements:
 - Repair storm damage.
 - Remove sediment from above, within and along the leading edge of the field border when accumulated sediment either alters the function of the field border or threatens the degradation of the planted species.
 - Shut off sprayers and raise tillage equipment to avoid damage to field borders.
 - Shape and reseed border areas damaged by animals, chemicals, tillage, or equipment traffic.
 - Do not use the field border as a hay yard or machinery parking lot for any extended period of time, especially if doing so will damage or impair the function of the field border.
 - Schedule mowing, harvest, weed control, and other management activities within the field border to accommodate reproduction and other life cycle requirements of target wildlife species. Vehicle traffic should be avoided in the field border area.
 - Maintain desired vegetative communities and plant vigor by liming, fertilizing, mowing, disking, or burning and controlling noxious and invasive weeds to sustain effectiveness of the border.
 - Repair and reseed ephemeral gullies and rills that develop in the border.
 - When managing for wildlife, maintenance activities that result in disturbance of vegetation should not be conducted during the primary nesting, fawning

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and calving seasons. Activities should be timed to allow for regrowth before the growing season ends whenever possible.

- Periodic removal of some products such as medicinal herbs, nuts, and fruits is permitted provided the conservation purpose is not compromised by the loss of vegetation or harvesting disturbance.
- Avoid vehicle traffic when soil moisture conditions are saturated.
- Maintain records of the field border maintenance as needed by the land user.





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Documentation and Implementation Requirements:

Participant will:

- Prior to implementation, prepare the planned acres for vegetation establishment. Refer to NRCS Conservation Practice Standard Field Border (Code 386). (NRCS will provide technical assistance, as needed.) Total planned amount of field border extension = _____ feet

- Prior to implementation, select adapted species of permanent grass, forbs and/or shrubs that accomplish the design objective and are best suited to site conditions. (NRCS will provide technical assistance, as needed.)

| Species | Seeding Rate (lb/ac pure live seed) | Note specific species characteristic(s) |
|---------|-------------------------------------|---|
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- Prior to implementation, determine liming and fertilizer requirements, select planting technique and timing appropriate for the site and soil conditions. (NRCS will provide technical assistance, as needed.)

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| Planting Date | |
| Planting Technique | |
| Lime and Fertilizer Requirements | |

- During implementation, install and maintain erosion control measures as needed for the site. (NRCS will provide technical assistance, as needed.)
- During implementation, notify NRCS of any planned changes to verify changes meet NRCS enhancement criteria.
- During implementation, protect the planting from plant and animal pests and fire.
- After implementation, maintain and protect the planting from plant and animal pests and fire.



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- After implementation, verify the total amount of field border implemented. Total implemented amount of field border extension = _____ feet

NRCS will:

- Prior to implementation, verify the enhancement is planned within the field(s) or farm boundary.
- Prior to implementation, provide and explain NRCS Conservation Practice Field Border (Code 386) as it relates to implementing this enhancement.
- Prior to implementation, verify the enhancement is planned for acres that have been appropriately prepared for vegetation establishment. Total planned amount of field border extension = _____ feet
- Prior to implementation, verify no plants on the Federal or state noxious weeds list are included.
- As needed, prior to implementation, NRCS will provide technical assistance:
 - Planning site preparation meeting NRCS Conservation Practice Standard Field Border (Code 386).
 - Selecting the adapted species of permanent grass, forbs and/or shrubs that accomplish the design objective and are best suited to site conditions.
 - Selecting planting techniques and timing appropriate for the site and soil conditions.
 - Planning the use of additional erosion control, as needed for the site.
 - Preparing specifications for applying this enhancement for each site using approved state implementation requirements, national technical notes, appropriate state technical notes, and narrative statements in the conservation plan, or other acceptable documentation.
- During implementation, evaluate any planned changes to verify they meet the enhancement criteria.

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- After implementation, verify the vegetation was established to specifications developed for the site.
- After implementation, verify the planting is protected from pests and fire.
- After implementation, verify all erosion control needed for the site is functioning and is maintained to specifications developed for the site.
- After implementation, verify the total amount of field border implemented. Total implemented amount of field border extension = _____ feet

NRCS Documentation Review:

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

Participant Name _____ Contract Number _____

Total Amount Applied _____ Fiscal Year Completed _____

NRCS Technical Adequacy Signature

Date

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2024 CSP ENHANCEMENTS – GUIDANCE & PERFORMANCE CERTIFICATION

E386D – Enhanced Field Borders to Increase Food for Pollinators Along the Edge of Fields

Conservation Practice 386: Field Borders

BRIEF DESCRIPTION OF ENHANCEMENT: This enhancement will be used to plant mixes which will be excellent pollinator and beneficial insect habitat.

Some important things to note:

- **Minimum Required Treatment:** A minimum of one-half acre (1/2 ac) of planting must be completed for every 40 acres of open land in the CSP application with no less than ½ acre planned on any tract. (1.25% of open land acres or ½ acre, whichever is less)
- Field border width must be a minimum of 40 feet. Maximum width no more than 150 feet OR width that will include no more than half the acres in the field.
- This enhancement is not eligible for fields that will be taken out of crop production during the contract period.
- Select plants from the attached plant list. Three must be planted from each bloom period, with a total of 9 forb species to be planted along with 2 native grasses.
- NO fertilizer or lime will be applied to the site at planting.
- Area should be treated with appropriate herbicides prior to establishment of pollinator habitat if johnsongrass, cogon grass or other hard to eradicate species such as bahia, tall fescue or Bermuda grass is present.
- Maintenance shall be completed on these areas beginning the second winter after establishment. Some form of maintenance must be completed on all acres at least once every 3 years. The best regime is to implement maintenance on 1/3 of the acreage annually. Prescribed burning is the recommended form of maintenance, but mowing high (12 inches) is acceptable. Mowing could allow a duff layer to develop and potentially limit pollinator plant growth and survival. Therefore, if mowing is the main form of maintenance, then either fire or light disking must be used at least once every 3rd maintenance cycle to break the duff layer. Light disking means scratching the surface of the soil, but not going deeper than 3 inches at any one point.
- Spot spraying invasive and woody plants to stop encroachment is recommended during the life of the practice. Ensure herbicide label directions are followed.
- These field borders should not be used as storage areas.
- Take care not to allow overspray onto borders while spraying field crops.

ATTACH COPIES OF REQUIRED DOCUMENTS AS NOTED BY THE ENHANCEMENT JOB SHEET. CHECK THE BOX OR OTHERWISE IDENTIFY THE SUPPORTING DOCUMENTATION.

Alabama Supplemental Guidance for CSP Enhancement

- MAPS OF THE AREA or LOCATION(S) WHERE THIS PRACTICE WAS APPLIED
- PROVIDE SEED INVOICE SHOWING TYPE AND AMOUNT PURCHASED FOR THIS PRACTICE.
- REPRESENTATIVE DIGITAL IMAGES/PHOTOS OF THE AREA AND INDICATE AREA ON MAP
- DATES OF COMPLETED ACTIVITY

The attached documents support the full implementation of this Conservation Stewardship Enhancement.

CSP Participant Name

Date

Conservation Stewardship Program

Pollinator Habitat Plant List

Choose a Minimum of 9 Forbs (3 Per Flowering Period) **AND** 2 native grasses (scroll to bottom)

Early Flowering Species (Choose 3)

| | |
|---|------------------------------------|
| Smooth Beardtongue (<i>Penstemon digitalis</i>) | $\frac{3}{16}$ pound pls* per acre |
| Butterfly Weed (<i>Asclepias tuberosa</i>) | $\frac{1}{4}$ pound pls per acre |
| Lanceleaf Tickseed (<i>Coreopsis lanceolata</i>) | $\frac{1}{2}$ pound pls per acre |
| Blue False Indigo (<i>Baptisia australis</i>) | 1 pound pls per acre |
| Common Milkweed (<i>Asclepias syriaca</i>) | $\frac{1}{4}$ pound pls per acre |
| Plains Coreopsis (<i>Coreopsis tinctoria</i>) | $\frac{3}{16}$ pound pls per acre |
| Purple Prairie Clover (<i>Dalea purpurea</i>) | $\frac{3}{16}$ pound pls per acre |
| Pale Purple Coneflower (<i>Echinacea pallida</i>) | $\frac{1}{4}$ pound pls per acre |
| Spotted Beebalm (<i>Monarda punctata</i>) | $\frac{1}{8}$ pound pls per acre |
| Black-Eyed Susan (<i>Rudbeckia hirta</i>) | $\frac{1}{4}$ pound pls per acre |
| Golden Alexander (<i>Zizia aurea</i>) | $\frac{1}{4}$ pound pls per acre |

Mid-Season Flowering Species (Choose 3)

| | |
|--|-----------------------------------|
| Large Flower Partridge Pea (<i>Chamaecrista fasciculata</i>) | $\frac{1}{4}$ pound pls per acre |
| (Do NOT use Lark Selection large partridge pea) | |
| Small Flower Partridge Pea (<i>Chamaecrista nictitans</i>) | $\frac{1}{4}$ pound pls per acre |
| Slender Mountain Mint (<i>Pycnanthemum tenuifolium</i>) | $\frac{1}{8}$ pound pls per acre |
| Illinois Bundleflower (<i>Desmanthus illinoensis</i>) | $\frac{1}{2}$ pound pls per acre |
| Purple Coneflower (<i>Echinacea purpurea</i>) | $\frac{1}{2}$ pound pls per acre |
| Blue Verbena (<i>Verbena hastata</i>) | $\frac{5}{16}$ pound pls per acre |
| Yellow Giant Hyssop (<i>Agastache nepetoides</i>) | $\frac{1}{4}$ pound pls per acre |
| Golden Wave Tickseed (<i>Coreopsis basalis</i>) | $\frac{1}{8}$ pound pls per acre |

Alabama Supplemental Guidance for CSP Enhancement

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| Rattlesnake Master (<i>Eryngium yuccifolium</i>) | $\frac{3}{8}$ pound pls per acre |
| White Prairie Clover (<i>Dalea candida</i>) | $\frac{1}{4}$ pound pls per acre |
| Boneset (<i>Eupatorium perfoliatum</i>) | $\frac{1}{8}$ pound pls per acre |
| Roundleaf Thoroughwort (<i>Eupatorium rotundifolium</i>) | $\frac{1}{8}$ pound pls per acre |
| Lance-Leaved Goldenrod (<i>Euthamia graminifolia</i>) | $\frac{1}{16}$ pound pls per acre |
| Rosemallow (<i>Hibiscus moscheutos</i>) | $\frac{1}{4}$ pound pls per acre |
| Violet Lespedeza (<i>Lespedeza violacea</i>) | $\frac{1}{4}$ pound pls per acre |
| Spiked Blazing Star (<i>Liatris spicata</i>) | $\frac{1}{4}$ pound pls per acre |
| Lupine (<i>Lupinus perennis</i>) | $\frac{5}{8}$ pound pls per acre |
| Bergamot (<i>Monarda fistulosa</i>) | $\frac{1}{8}$ pound pls per acre |
| Mexican Hat (<i>Ratibida coumnraris</i>) | $\frac{1}{8}$ pound pls per acre |
| Greyheaded Coneflower (<i>Ratibida pinnata</i>) | $\frac{1}{4}$ pound pls per acre |
| Clasping Coneflower (<i>Rudbeckia amplexicaulis</i>) | $\frac{1}{4}$ pound pls per acre |
| Passion Flower (<i>Passiflora incarnate</i>) | $\frac{1}{2}$ pound pls per acre |
| Wild Quinine (<i>Parthenium integrifolium</i>) | $\frac{3}{16}$ pound pls per acre |

Late Flowering Species (Choose 3)

| | |
|---|-----------------------------------|
| Joe-Pye Weed (<i>Eupatorium fistulosum</i>) | $\frac{1}{8}$ pound pls per acre |
| Sweet Joe-Pye Weed (<i>Eupatorium purpureum</i>) | $\frac{1}{8}$ pound pls per acre |
| Swamp Sunflower (<i>Helianthus angustifolius</i>) | $\frac{3}{16}$ pound pls per acre |
| Maximilian Sunflower (<i>Helianthus angustifolius</i>) | $\frac{3}{16}$ pound pls per acre |
| Cardinal Flower (<i>Lobelia cardinalis</i>) | $\frac{1}{8}$ pound pls per acre |
| Butterfly pea (<i>Centrosema virginianum</i>) | $\frac{1}{8}$ pound pls per acre |
| Heath Aster (<i>Aster pillosus/Symphotrichum pilosum</i>) | $\frac{1}{8}$ pound pls per acre |
| Wand Goldenrod (<i>Solidago stricta</i>) | $\frac{1}{8}$ pound pls per acre |
| Pine Barren Goldenrod (<i>Solidago fistulosa</i>) | $\frac{1}{8}$ pound pls per acre |
| Tall Goldenrod (<i>Solidago altissima</i>) | $\frac{1}{8}$ pound pls per acre |
| Gray Goldenrod (<i>Solidago nemoralis</i>) | $\frac{1}{8}$ pound pls per acre |

Alabama Supplemental Guidance for CSP Enhancement

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| Rough Goldenrod (<i>Solidago rugosa</i>) | 1/8 pound pls per acre |
| Swamp Milkweed (<i>Asclepias incarnata</i>) | 3/8 pound pls per acre |
| Smooth Aster (<i>Aster laevis</i>) | 1/8 pound pls per acre |
| Showy Tickseed (<i>Bidens aristosa</i>) | 3/8 pound pls per acre |
| Tall Tickseed (<i>Coreopsis tripteris</i>) | 1/8 pound pls per acre |
| Florida Beggarweed (<i>Desmodium floridanum</i>) | 5/16 pound pls per acre |
| Dixie Tick Trefoil (<i>Desmodium tortuosum</i>) | 5/16 pound pls per acre |
| Perplexed Tick Trefoil (<i>Desmodium perplexum</i>) | 5/16 pound pls per acre |
| Pine Barren Tick Trefoil (<i>Desmodium strictum</i>) | 5/16 pound pls per acre |
| Indian Blanket (<i>Gaillardia pulchella</i>) | 3/8 pound pls per acre |
| Sneezeweed (<i>Helenium autumnale</i>) | 1/8 pound pls per acre |
| Evening Primrose (<i>Oenothera biennis</i>) | 1/8 pound pls per acre |
| Yellow Wingstem (<i>Verbesina alternifolia</i>) | 5/16 pound pls per acre |
| White Wingstem (<i>Verbesina virginica</i>) | 5/16 pound pls per acre |
| Iron Weed (<i>Vernonia altissima</i>) | 3/16 pound pls per acre |
| Alabama Iron Weed (<i>Vernonia noveboracensis</i>) | 3/16 pound pls per acre |

Native Warm Season Grasses (Choose 2)

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| Big Bluestem (<i>Andropogon gerardii</i>)** | 1/2 pound pls per acre |
| Purple Top (<i>Tridens flavus</i>) | 1/2 pound pls per acre |
| Yellow Indiangrass (<i>Sorghastrum nutans</i>)** | 1/2 pound pls per acre |
| Switchgrass (<i>Panicum virgatum</i>) (Do not use Alamo switchgrass) | 1/2 pound pls per acre |

*PLS = Pure Live Seed (% purity x % germination = % pure live seed)

Example: Where Purity is 90% (meaning 90% of the weight being purchased is actual seed) and where Germination is 70%, (meaning 70% of the actual seed are guaranteed to be viable). In this Example **PLS = .90 X .70 = 63 percent**

So, in this example, every 100 pounds of bulk seed you get actually contains 63 pounds in pure, viable seed.

As you can see, PLS is NOT the same as bulk seed. Buyer should ensure pricing is based on pls pounds!

** It is recommended that these species are purchased in “debearded” form with the fluffy awn removed.