



## CONSERVATION ENHANCEMENT ACTIVITY

# CONSERVATION STEWARDSHIP PROGRAM

### E327A

Conservation cover for pollinators and beneficial insects

Conservation Practice 327: Conservation

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

RESOURCE CONCERN: Animals

ENHANCEMENT LIFE SPAN: 5 Years

#### Enhancement Description

Seed or plug nectar and pollen producing plants in non-cropped areas such as field borders, vegetative barriers, contour buffer strips, grassed waterways, shelterbelts, hedgerows, windbreaks, conservation cover, and riparian forest and herbaceous buffers.

#### Criteria

- Habitat areas must be at least 0.5 acres for each 40 acres of the selected land use. Where the selected land use is less than 40 acres, the required amount of habitat will be reduced according to the ratio of 0.5 acres to 40 acres. Where the selected land use is greater than 40 acres, the 0.5-acre habitat areas(s) may be a single site or interspersed sites in the larger land use areas as agreed to by the NRCS State Biologist.
- Establish habitat for pollinators (A) and beneficial insects (B) as described below:

#### A. Pollinators

- NRCS at the state level will develop lists of plants suitable for pollinator habitat.

The lists must emphasize as many native species as practical.

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2. The habitat planting will include (as a minimum) three early, three mid, and three late flowering species from the NRCS state list including forbs, legumes, vines, shrubs, and/or trees. Plants that produce toxic nectar will not be planted.
3. Any other use of the pollinator habitat area must not compromise its intended purpose.

### B. Beneficial insects

1. Identify pest species and associated beneficial insects targeted for control.
2. Inventory existing conditions on the farm to determine habitat needs of selected beneficial insects, including:
  - (a) Permanent insectary sites,
  - (b) Augmentation of existing hedgerows, field borders or other odd areas adjacent to fields, and/or
  - (c) Trap crop areas.
3. Plant selection should be matched to attract identified beneficial insects.
4. Beneficial insect habitat may include either annual or perennial cover. If annual cover is used, the cover must be replanted each year during the life of the contract.
5. NRCS at the state level will develop lists of plants suitable for beneficial insect habitat. The lists must emphasize as many native species as practical.

### C. Planting criteria for both pollinators and beneficial insects

1. Site selection should consider existing weed pressures and available methods of control, delay planting if high weed pressure requires aggressive treatment.
2. Site preparation and plant establishment shall be accomplished according to the appropriate NRCS conservation practice and specifications.
3. Successful establishment is when the planting provides at least 80% soil cover



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when visually estimated and the resultant cover consists primarily of the early, mid, and late blooming species planted for pollinators and/or other beneficial insects.

4. Insecticides should not be used in the habitat planting area.
5. Herbicides are allowed during site preparation (prior to planting) when it is necessary to eliminate competing weeds from a planting area in order for nectar and pollen producing plants to establish.
6. After a pollinator enhancement has been planted, herbicides may be spot-sprayed to remove broad-leaf weeds, or grass-selective herbicides may be applied to larger areas to eliminate persistent weedy grasses. Similarly, the entire site may be mowed in the first year post-planting to reduce annual or biennial weeds that persist (site should be mowed just before dominant annual weeds flower).

## D. Operation and maintenance for both pollinators and beneficial insects

1. Management and/or maintenance activities such as mowing, haying, burning, or grazing must be conducted outside of the growing season or bloom period. Maintenance should be done on less than 1/3 of the acreage during any given year, except during the first year post-planting.
2. Insecticides should not be used in the habitat planting area. Even non-synthetic botanical insecticides can harm beneficial insects. If adjacent crop areas are treated with insecticides use one or more of the following actions to limit insecticides in the pollinator habitat area:
  - (a) Create insecticide free buffers in the first 25 feet of crop area,
  - (b) Use application methods that minimize drift to the adjacent habitat,
  - (c) Apply active ingredients in the evening when most insect pollinators are not active.
3. The planted habitat areas must be regularly inspected for invasive and/or noxious plants or other plants that may compromise the purpose of this enhancement. Undesirable species should be controlled using the method least damaging method, for example, spot-spraying with herbicide or physical removal.



4. If habitat is part of an organic farming operation, only materials allowed according to the USDA National Organic Program's National List of Allowed and Prohibited Substances may be used.

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### Documentation and Implementation Requirements

Participant will:

- Prior to implementation, develop a map showing the location of proposed habitat areas with notes on land use adjacent to proposed habitat areas to discuss with NRCS staff.
- During implementation, purchase specified seed mix or plant materials that meets pollinator-specific seeding or planting requirements provided by NRCS.
- During implementation, follow habitat establishment guidance provided by NRCS in the state specifications for NRCS Conservation Practice Standard Conservation Cover (Code 327).
- After implementation, provide for review by NRCS a list of management and/or maintenance activities carried out to manage the habitat areas and the dates on which those activities occurred.
- After implementation, take and provide for review photographs as documentation of pollinator habitat area condition.

NRCS will:

- Prior to implementation, discuss with participant the proposed habitat areas to verify they are in locations suitable for the enhancement.
- Prior to implementation, provide participant with suitable plant lists.
- Prior to implementation, provide and explain State specifications for NRCS Conservation Practice Standard Conservation Cover (Code 327).
- Prior to implementation, provide participant with a recommended seed mix and planting specifications per above criteria (grass/forb ratio; number of forb species per bloom period for pollinator habitat plantings)
- After implementation, verify successful establishment (per planting criteria above) by review of documentation and photographs.



**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.

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Participant Name \_\_\_\_\_ Contract Number \_\_\_\_\_

Total Amount Applied \_\_\_\_\_ Fiscal Year Completed \_\_\_\_\_

\_\_\_\_\_  
NRCS Technical Adequacy Signature

\_\_\_\_\_  
Date





## SOUTH DAKOTA (SD) SUPPLEMENT TO CONSERVATION ENHANCEMENT ACTIVITY

## CONSERVATION STEWARDSHIP PROGRAM

### E327A

#### Additional Criteria for SD

In addition to the criteria specified in the national job sheet E327A, the following additional criteria apply in SD:

- Habitat areas must be at least 0.5 acres, regardless of the size of the selected planning land unit (PLU) within the Landuse. It may be useful to install longer, narrower, habitat areas (minimum of 100 foot wide) along the border of crop fields to benefit spatial distribution.
- Protection from direct application and/or drift of insecticides, fungicides, and herbicides shall be addressed by site selection and ongoing management. If pollinator plantings are next to a treated crop field/area, then a 30 foot buffer is required, (100 foot buffers are recommended). Buffers shall be maintained a flower free areas. Leaving 30-100 foot of crop rows untreated near field borders can serve as a buffer.
- Consult the local Natural Resources Conservation Service (NRCS) office to determine proper seedbed preparation, seeding methods, rates, and dates.
- Acceptable pollinator and beneficial insect forb species and bloom periods: See Biology Tech Note 15 (**Bloom Period and Site information for Common SD Native Plants Table Beginning on Page 77**).
- To determine which native perennial plants are suitable to the site consult the local NRCS office. Species categorized as native forbs and native legumes on the SD seeding tool are appropriate for use as native wildflowers for this enhancement. Bloom periods for native forbs and legumes can also be found in the SD seeding tool.
- April through October is the general growing season/bloom period. For species that can bloom in multiple months, these species may be counted more than once.



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- Acceptable pollinator and beneficial insect tree species and bloom periods:
  - Big Sagebrush – mid (June)
  - Black currant – early (April)
  - Black Walnut - early (May)
  - Boxelder - early (April)
  - Bur Oak - early (May)
  - Chokecherry – early (May)
  - Common Hackberry - early (May)
  - Downy Hawthorn - early (May)
  - Dwarf Indigo -mid (June)
  - Early Wild Rose – mid (June)
  - False Indigo – mid (June)
  - Fringed Sage – late (August)
  - Green Ash - early (April)
  - Golden Currant – early (April)
  - Honeylocust - mid (June)
  - Juneberry – early (April)
  - Leadplant -mid (June)
  - Missouri River Willow - early (April-May)
  - Peachleaf Willow - early (April-May)
  - Plains Cottonwood - early (April)
  - Prairie Crab Apple - early (May)
  - Prairie Rose – early (May)
  - Redosier Dogwood – early (April)
  - Silver Maple - early (April)





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