



CONSERVATION ENHANCEMENT ACTIVITY

E327136Z2

CONSERVATION STEWARDSHIP PROGRAM

Establish Monarch butterfly habitat

Conservation Practice 327: Conservation Cover

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

RESOURCE CONCERN ADDRESSED: Fish & Wildlife Inadequate Habitat

PRACTICE LIFE SPAN: 5 years

Enhancement Description

Seed or plug milkweed (*Asclepias* spp.), the Monarch butterfly larval hostplant, and high-value monarch butterfly nectar plants in non-cropped areas such as field borders, contour buffer strips, and associated grasslands.

Criteria

- Habitat areas must be at least 0.5 acres.
- Establish and maintain habitat for monarch butterflies as described below:

A. Monarch butterflies

- Lists of larval host plants and nectar plants suitable for monarch butterfly habitat are provided in the NRCS state technical guides. The lists emphasize the use of as many native species as practical. At least 60% of the seeds in the mix must be from the monarch specific list.
- The habitat planting will include at least one species of milkweed (*Asclepias* spp.) that is native to the area where the habitat is planted. Tropical milkweed (*Asclepias curassavica*) shall not be planted in the continental United States due to potentially disrupting the migration of Monarch butterflies and increasing the rate of disease transmission.



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Waiver: In some regions, a commercial source of native *Asclepias* species is limited or not available. In these situations, the NRCS state conservationist may apply for a waiver, and only require that plantings include monarch nectaring species. In this situation, milkweed seed or plugs are still encouraged to be planted, if possible. If such a waiver is granted, the mix will result in at least 80% of the seed being from the state's monarch nectaring plant list.

- The habitat planting will include monarch nectar plants in bloom when monarch butterflies are present in the state. Ideally, at least three nectar plants will be sown for each season when monarchs are present. Seasons are defined as spring, summer, and fall.
- Any other use of the monarch butterfly habitat area must not compromise its intended purpose.

B. Planting criteria for monarch butterfly habitat

- Site selection should consider existing weed pressures and available methods of control. Delay planting and conduct an additional growing season of weed control if high weed pressure requires aggressive treatment.
- Site preparation and plant establishment shall be accomplished according to the state's specifications for Conservation Practice 327-Conservation Cover.
- Successful establishment is when the planting is providing at least 80 percent soil cover, visually estimated, and that the resultant cover consists of at least 500 milkweed plants per acre (approx. 1 stem per each 100 sq. ft.), and successful establishment of at least two targeted nectar plants per bloom period when monarchs are present in the state. A milkweed plant is defined as a single stem emerging from the ground.
- Insecticides should not be used in the habitat planting area, nor be allowed to drift onto the habitat (this drift includes dust from seeds coated in insecticides).
- 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.



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- After a monarch habitat 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, in the first year post-planting, the entire site may be mowed 8 to 10 inches high to reduce annual or biennial weeds that persist (site should be mowed just before dominant annual weeds flower).

C. Operation and maintenance for monarch butterfly habitat

- Management and/or maintenance activities such as mowing, haying, burning, or grazing must be conducted outside of the season when monarch larvae or adults are present. Maintenance should be done on less than 1/3 of the acreage during any given year, except during the first year post-planting.
- Insecticides should not be used in the habitat planting area. Even non-synthetic botanical insecticides can harm monarchs and other 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:
 - Create 30 foot wide insecticide free buffers between planted area and crop area being treated with insecticides.
 - Use application methods that minimize drift to the adjacent habitat.
- 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 least damaging method, for example, spot-spraying with herbicide or physical removal.

Documentation Requirements

- Conservation Cover (CPS 327) map showing the location and dimension of the habitat areas
- List of planting mix including percent of each species and rates

List of management and/or maintenance activities carried out to manage the habitat areas.