



CONSERVATION ENHANCEMENT ACTIVITY

E512I

CONSERVATION STEWARDSHIP PROGRAM

Establish pollinator and/or beneficial insect and/or Monarch habitat

Conservation Practice 512: Forage and Biomass Planting

APPLICABLE LAND USE: Pasture, Associated Ag Land, Farmstead

RESOURCE CONCERN: Animals

ENHANCEMENT LIFE SPAN: 5 years

Enhancement Description

Establishing adapted and/or compatible species, varieties, or cultivars of herbaceous species that can provide nectar for Monarch butterflies and/or pollinators and forage and other habitat values for wildlife and livestock, particularly at times when targeted nectar, forage supply and quality, cover, and shelter are not available in other pastures.

Criteria

- This enhancement is acceptable for use when converting from degraded pastureland sites that require NRCS Conservation Practice Standard Forage and Biomass Planting (Code 512) in order to stabilize the site to address a resource concern.
- Select native, perennial, grass/forb/legume plant species and their cultivars based on climatic conditions, soil condition, landscape position and resistance to disease and insects, and will meet the nectar needs of specified, pollinating insects (and/or Monarch butterflies) at times when they will be present and foraging. These plants need to also provide forage or other habitat values for wildlife and livestock.
- Recommendations for planting rates, methods, depths, and dates from land grant/research institutions, plant materials program, extension agencies, or agency field trials will be followed.

E512I- Establish pollinator and/or beneficial insect and/or Monarch habitat	July 2019	Page 1
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CONSERVATION STEWARDSHIP PROGRAM

- Seeding medium that does not restrict plant emergence will be provided, and planting will take place when soil moisture is adequate for germination and establishment.
- Federal, state, or local noxious species will not be planted.
- Plant nutrients and/or soil amendments for establishment purposes will be applied according to a current soil test. Legume seed will be pre-inoculated or inoculated with the proper viable strain of Rhizobia immediately before planting.
- Plants will be selected that help meet nectar requirements for Monarch butterflies during times that the Monarch will be present. Plant selection will help to increase scores on the state's approved NRCS Monarch butterfly habitat evaluation.



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Documentation Implementation Requirements

Participant will:

- Prior to implementation, select a perennial forage species or grassland mixture for establishment. *If livestock are included in the system, forage species selected will meet the desired level of nutrition for the kind and class of the livestock to be fed.* (NRCS will provide technical assistance, as needed.)

Species	Forage category (grass, legume, forb)

- Prior to implementation, select planting technique, seeding rates and timing appropriate for the site and climatic conditions. (NRCS will provide technical assistance, as needed.)

Planting date	
Planting method	
Seeding rate	

- If livestock are included in the system, prior to implementation a grazing plan must be developed to keep grazing periods sufficiently short to allow for forages to recover before re-grazing occurs.*
- If livestock are included in the grazing system, during implementation in areas where animals congregate, establish persistent species than can tolerate close grazing and trampling.*



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- During implementation, keep the following documentation:
 - Records and photographs of planting preparation and any materials purchased or materials on hand used for the implementation of the enhancement.
 - Documentation of seed (Pure Live Seed) and any fertilizer or soil amendments used for the implementation of the enhancement.
 - If livestock are included in the grazing system, documentation and photographs of turn in/turn out grazing records for each field.*
- After implementation, make the forage planting and grazing records available for review by NRCS to verify implementation of the enhancement.

NRCS will:

- Prior to implementation, complete the state's approved NRCS Wildlife Habitat Evaluation Guide (WHEG). **Target Pollinator Species:** _____
WHEG score before implementation: _____
WHEG score after implementation: _____
- Prior to implementation, provide and explain NRCS Conservation Practice Standard Forage and Biomass Planting (Code 512) as it relates to implementing this enhancement.
- As needed, prior to implementation, NRCS will provide technical assistance:
 - Planning site preparation and establishment specifications meeting NRCS Conservation Practice Standard Forage and Biomass Planting (Code 512).
 - Prepare specifications for applying this enhancement for each site using approved specification sheets, job sheets, technical notes, and narrative statements in the conservation plan, or other acceptable documentation.
 - If livestock are included in the system, develop a grazing plan to keep grazing periods sufficiently short to allow for forages to recover before re-grazing occurs.*

E512I- Establish pollinator and/or beneficial insect and/or Monarch habitat	July 2019	Page 4
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CONSERVATION STEWARDSHIP PROGRAM

- During implementation, evaluate any planned changes to verify they meets the enhancement criteria.
- After implementation, verify the planned perennial grassland mixture was established to specifications developed for the site.

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



**IOWA SUPPLEMENT TO
CONSERVATION ENHANCEMENT ACTIVITY**

**CONSERVATION
STEWARDSHIP
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Additional Criteria for Iowa

- Use the Iowa Pollinator Habitat Job Sheet for guidance to apply this activity. The Pollinator Habitat Job Sheet contains a list of plants suitable for pollinator habitat, information on pollinator food sources, identification of existing beneficial insect habitat and guidance on establishment and management of pollinator habitat.
- Develop seeding plans with the use of the Native Prairie Seeding Calculator. Use the “pollinator mix check sheet” contained within the Seeding Calculator to ensure the mix meets Iowa pollinator habitat guidance.
- Plants listed in the Iowa Pollinator Habitat Job Sheet and the Native Prairie Seeding Calculator will serve to identify appropriate plants for pollinator and beneficial insect habitat in Iowa. Plant flowering periods are found in both locations.
- Follow practice standard Conservation Cover (327) along with the Conservation Cover job sheet for site preparation and seeding methods. A reference for the successful establishment of native plants is [Establishing and Managing Native Prairie](#) under Iowa NRCS publications.
- Participant with guidance from a Conservation Planner will inventory existing conditions on their farm to identify locations of existing insect habitat. Select location/s for the seeding to improve existing habitat conditions.
- Conservation planners and participants are encouraged to include milkweed (*Asclepias* species) in the mix to provide habitat for Monarch butterflies.
- Insect and pollinator information can be found at the NRCS website:
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/pollinate/>



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- Livestock Exclusion is required until plants are well established. This will be when a vigorous stand is obtained and the plants are in head. Refer to Iowa State University Extension Publication [PM569](#) section “Management During Establishment” for guidance.
- The seed mix for animal congregation areas should include tolerant grasses such as Tall Fescue, Smooth Brome, or Kentucky Bluegrass and tolerant legumes such as White (Ladino) Clover or Red Clover. This will be different than the seed mix for the rest of the enhancement area.
- Use [Iowa Wildlife Working Lands Habitat Evaluation](#) for the WHEG.
 - For Pasture use Grassland Habitat - Permanent Pastureland.
 - For Associated Ag Land use Grassland Habitat – Idle Grasslands.