



United States Department of Agriculture
Natural Resources Conservation Service

Wildlife Enhancement Activity - Pollinator Areas (EHM42)

Pollinator Areas Overview

Habitat for pollinators can be encouraged by the use of nectar producing plant corridors in non-cropped areas such as field borders, vegetative barriers, contour buffer strips, waterways, shelterbelts, windbreaks, riparian forest and herbaceous buffers.

Agricultural productivity is directly dependent on pollinators. Approximately 75% of all cultivated crops require pollination to produce seed and fruit. The majority of pollinators are insects but some birds and bats also play a major role. The services of native pollinators are worth an estimated \$4.1 billion dollars a year to U.S. agriculture. Both native and domestic pollinators are disappearing, largely due to habitat loss. Nectar corridors can provide the proper habitat for pollinators as well as other resource benefits.

Benefits

Increased habitat for pollinators will increase plant health and vigor, improve fruit set and overall quality, increase fruit size, increase productivity per acre, increase biodiversity, increase the population of beneficial insects, decrease the use of pesticides, enhance wildlife habitat, and increase the prey base for many wildlife species.

Criteria for Pollinator Areas Enhancement Activity

This enhancement requires site preparation and the planting of flowering trees, shrubs, forbs, legumes, and vines. It will also require management and maintenance of the activity.

Planting and Maintenance

Pollinator habitat areas will be at least ½ acre in size and include a minimum of ten (10) flowering plant species including forbs, legumes, vines, shrubs, and/or trees, which will comprise at least 50% of the seeding rate (by number of seeds/sq. ft., not by weight). Plantings will be composed of native species. The planting will include as a minimum three early, three mid and three late flowering species from the NRCS state list.

Some plants produce toxins that are poisonous to pollinators. California buckeye (*Aesculus californica*) and several species of rhododendron are known to produce toxic nectar and should not be used in plantings.

All site preparation and plant establishment shall be accomplished according to the appropriate NRCS conservation practice standards and specifications.

Once established, management or maintenance activities such as mowing, haying, burning, or grazing must be conducted outside of the growing season or period of bloom.



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Insecticides kill pollinators and should not be used in the habitat area. Herbicides destroy plants that provide food and shelter for pollinators. Even natural herbicides and botanical insecticides can harm bees. If pesticides are used in adjoining fields, consider applying them in the evening when most insect pollinators are not active.

The habitat areas will be regularly inspected for presence of invasive or noxious plants or other weeds which may comprise the intended purpose. Invasive species should be controlled using the least intrusive method.

Any use of the Pollinator Habitat area must not compromise its intended purpose.

References:

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Terborgh, J.W. 1989. *Where Have All The Songbirds Gone?* Princeton University Press, Oxford.

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Wildflowers (forbs) for Dry Sites

Common Name	Scientific Name	Color	Sunlight needs*	Height	Blooming Season
Black-eyed Susan	<i>Rudbeckia hirta</i>	yell/brn	f-p	1-3 ft	Jun-Aug.
Butterfly weed	<i>Asclepias tuberosa</i>	orange	f-p	2-3 ft	July-Aug.
Common milkweed	<i>Asclepias syriaca</i>	purple	f-p-s	3-5 ft	June-Aug
Gray-headed coneflower	<i>Ratibida pinnata</i>	yellow	f	3-5 ft	July-Sept.
Hairy Beardstongue	<i>Penstemon hirsutus</i>	wht/lav	f-p	1-2 ft	May-July
Lance-leaved coreopsis	<i>Coreopsis lanceolata</i>	yellow	f	1-2 ft	May-Aug.
Leadplant	<i>Amorpha canescens</i>	violet	f	2-4 ft	June-July
Maximillian sunflower	<i>Helianthus maximillani</i>	yellow	f	2-5 ft	Aug.-Oct.
New England aster	<i>Aster novae-angliae</i>	purple	f	1-4 ft	Sept.-Oct.
Prairie milkweed	<i>Aslepias sullivanti</i>	rose-purple	f	2-5 ft	June-July
Purple coneflower	<i>Echinacea pupurea</i>	purple	f-p	2-4 ft	July-Aug.
Rattlesnake master	<i>Eryngium yuccifolium</i>	white	f	3-5 ft	July-Sept.
Rough blazingstar	<i>Liatrus aspera</i>	purple	f-p	2-4 ft	July-Sept.
Round headed bushclover	<i>Lespedeza capitata</i>	white	f-p	2-3 ft	Aug-Sept.
Smooth aster	<i>Aster laevis</i>	lavender	f	2-3 ft	Aug.-Sept.
Stiff goldenrod	<i>Solidage rigida</i>	yellow	f	1-3 ft	July-Aug.
Wild bergamot	<i>Monarda fistulosa</i>	pink-lav	f	2-3 ft	June-July
Wild lupine	<i>Lupinus perennis</i>	blu-lav	f-p-s	1-2 ft	June-July



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Wildflowers (forbs) for Dry/Moist Sites

Common Name	Scientific Name	Color	Sunlight Needs*	Height	Blooming Season
Black-eyed Susan	Rudbeckia hirta	yell/brn	f-p	1-3 ft	June-Aug.
Blazingstar	Liatruss spp.	purple	f-p	2-4 ft	July-Sept.
Butterflyweed	Asclepias tuberosa	orange	f-p	2-3 ft	July-Aug.
Hairy beadstongue	Penstemon hirsutus	wht/lav	f-p	1-2 ft	May-July
Lance-leaved coreopsis	Coreopsis lanceolata	yellow	f	1-2 ft	May-Aug.
Leadplant	Amorpha canescens	violet	f	2-4 ft	June-July
New England aster	Aster novae-angliae	rose/purp	f-p-s	1-4 ft	Sept.-Oct.
Ox-eye sunflower	Heliopsis helianthoides	yellow	f	2-3 ft	July-Sept.
Pale purple coneflower	Echinacea pupurea	rose	f-p	2-4 ft	July-Aug.
Stiff goldenrod	Solidago rigida	yellow	f	2-5 ft	Aug.-Sept.
Wild bergamot	Monarda fistulosa	lavender	f	2-3 ft	June-July
Wild lupine	Lupinus perennis	blu-violet	f-p-s	1-2 ft	June-July
Yellow coneflower	Ratibida pinnata	yellow	f	2-3 ft	June-July

Wildflowers (forbs) for Wet Sites

Common Name	Scientific Name	Color	Sunlight Needs*	Height	Blooming Season
Blue vervain	Verbena hastata	blu/purp	f-p	2-4 ft	July-Sept.
Boneset	Eupatorium perfoliatum	white	f-p	3-4 ft.	July-Aug.
Cardinal flower	Lobelia cardinalis	red	f-p	2-4 ft.	July-Sept.
Great blue lobelia	Lobelia siphilitica	blu-violet	f-p	1-4 ft	Aug-Sept.
Marsh marigold	Caltha palustris	yellow	f	1-2 ft.	Apr.-June
New England aster	Aster novae-angliae	rose/purp	f-p-s	1-4 ft	Sept.-Oct.
Spotted Joe pye-weed	Eupatorium maculatum	rose	f	2-6 ft	July-Sept.
Swamp milkweed	Asclepias incarnata	lavender	f	2-4 ft	July-Aug.
Wild iris	Iris shrevei	purple	f	2-3 ft	June



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CSP Enhancement Certification Sheet

Pollinator Areas (EHM42)

Client's Acknowledgement Statement:

- I agree to apply this enhancement under the terms and conditions of my CSP contract and understand the requirements of the activity.
- I certify that any benchmark activities listed below are already in place on my operation.
- I will establish the new activities below during my contract period. I understand that I will not receive a CSP enhancement payment until the activity is implemented.
- I agree to keep receipts for any materials, parts, equipment or services used to implement this activity.
- I agree to perform site preparation, purchase of seed or plants, establishment and maintenance of the plantings as specified by NRCS.
- I will consider permitting NRCS staff or their representatives access the site to document species attracted to the pollinator area.
- I understand that it is my responsibility to obtain all necessary permits and to comply with all laws, regulations and ordinances pertaining to the application of these activities.

Documentation

Enter the total number of acres of the enhancement activity that will be implemented and maintained under the CSP contract in the table below. Enhancement activities receiving financial assistance from other federal programs will not receive a CSP payment until they are no longer required in that contract.

Attach a plan map showing the location of the field(s) where the Pollinator Areas Enhancement is being implemented.

Compensation will be per acre basis as described in my CSP contact.



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CSP Enhancement Certification Sheet

Tract	Field	Plant Name	Plant ID (release name, accession #)	Acres	Year Applied

I agree that the following information will be provided to NRCS upon request:

1. Written documentation of the activity performed.
2. Copies of dated receipts for equipment or services purchased.

I understand that it is my responsibility to obtain all necessary permits and to comply with all laws, regulations and ordinances pertaining to the application of these activities.

Accepted by: _____ **Date:** _____