

**Plant Enhancement Activity – PLT01 – Establish pollinator habitat**



**Enhancement Description**

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

**Land Use Applicability**

Cropland, pastureland, rangeland and forestland

**Benefits**

Increased habitat for pollinators will improve fruit set, size and quality, productivity per acre, biodiversity, beneficial insect populations, and the food base for many wildlife

species. The increased plant diversity of pollinator habitat will enhance wildlife habitat and may increase populations of other beneficial insects, reducing the need for pesticides.

**Criteria**

Pollinator habitat areas must be at least ½ acre in size for each 40 acres of cropland, pastureland, rangeland or forest land. Where the applicable land use is greater than 40 acres, the 0.5 acre habitat areas must be interspersed in the larger land use areas. For example, for an 80 acre cropland parcel, the required 1 acre of habitat should not be located in one corner of the 80 acre field. The pollinator habitat areas must include a minimum of nine flowering plant species including forbs, legumes, vines, shrubs, and/or trees.

1. Lists of plants suitable for pollinator habitat will be developed by NRCS at the state level. The lists must emphasize as many native species as practical.
2. The habitat planting will include (as a minimum) three early, three mid, and three late flowering species from the NRCS state list. Plants that produce toxic nectar will not be planted.
3. Site preparation and plant establishment shall be accomplished according to the appropriate NRCS conservation practice and specifications. 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.
4. Insecticides and herbicides should not be used in the habitat planting area. Even natural herbicides and botanical insecticides can harm bees and other pollinators. If adjacent crop areas are treated 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 minimizing drift to the adjacent habitat,



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2011 Ranking Period 1

- c. Apply active ingredients in the evening when most insect pollinators are not active.
5. 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.
6. Any other use of the pollinator habitat area must not compromise its intended purpose.

**Documentation Requirements**

1. A map showing the location and dimension of the pollinator habitat areas
2. A list of pollinator species planted
3. List of maintenance activities carried out to manage the pollinator habitat areas

## Indiana CSP Enhancement Supplemental Information

### PLT01 - Establish Pollinator Habitat

#### Pollinator Forb/Legume Mix

Forbs and Legumes <sup>1</sup>	Moisture Regime	Flowering Period	Seed Rate PLS (oz./acre)	Remarks
Beardtongue, Foxglove ( <i>Penstemon digitalis</i> )	PD - WD	May-July	1.0	White/pink flower
Coneflower, Purple ( <i>Echinacea purpurea</i> )	MWD - ED	June-August	4.0	Purple flower
Weed, Butterfly ( <i>Asclepias tuberosa</i> )	MWD - ED	June-September	1.0	Orange flower
Prairie Clover, White ( <i>Dalea candida</i> )	MWD - ED	June-October	1.0	White flower Legume
Bundle Flower, Illinois ( <i>Desmanthus illinoensis</i> )	MWD - ED	July-August	2.0	White flower Legume
Prairie Clover, Purple ( <i>Dalea purpureum</i> )	MWD - ED	July-August	2.0	Purple flower Legume
Gayfeather ( <i>Liatris spicata</i> )	PD - WD	July-September	1.0	Lavender flower
Lespedeza, Roundhead ( <i>Lespedeza capitata</i> )	MWD - ED	July-September	1.0	Green flower Legume
Wild Bergamot or Bee balm ( <i>Monarda fistulosa</i> )	SPD - WD	July-September	1.0	Lavender flower
Aster, New England ( <i>Aster novae-angliae</i> )	PD - WD	July-October	1.0	Violet flower
Goldenrod, Rigid or Stiff ( <i>Solidago rigida</i> )	SPD - ED	Sept-November	1.0	Yellow flower
<b>TOTAL</b>			<b>16.0</b>	

<sup>1</sup> Substitute forb and legume species (from the appropriate [CSP Wildlife Plant Species](http://www.in.nrcs.usda.gov/programs/CSP/csp2010/2010%20CSP%20Wildlife%20Plant%20Species.doc) tables <http://www.in.nrcs.usda.gov/programs/CSP/csp2010/2010%20CSP%20Wildlife%20Plant%20Species.doc>) with matching flowering periods are acceptable.

#### Pollinator Shrub Mix <sup>2</sup>

Shrubs <sup>3</sup>	Moisture Regime	Ave. Mature Height (ft.)	Flowering Period	Remarks	
Serviceberry ( <i>Amelanchier arborea</i> )	MWD - WD	30	March - April	White flowers with purplish fruits.	
Spicebush ( <i>Lindera benzoin</i> )	VPD - WD	9	March - May	Yellow/green flowers with small red fruit.	
Redbud ( <i>Cercis Canadensis</i> )	MWD - WD	30	April - May	Reddish-purple flowers. Legume.	
Pick 1 or 2	Arrowwood ( <i>Viburnum dentatum</i> )	MWD - WD	9	April - July	White flowers
	Blackhaw ( <i>Viburnum prunifolium</i> )	MWD - WD	20		
	Highbush Cranberry ( <i>Viburnum trilobum</i> )	VPD - WD	9		
	Nannyberry ( <i>Viburnum lentago</i> )	SPD - WD	18		
Chokeberry, Black ( <i>Aronia melanocarpa</i> )	SPD - WD	10	May - June	White flowers with dark-purple fruit.	
Elderberry ( <i>Sambucus Canadensis</i> )	VPD - WD	9	May - July	White flowers with Purple-black fruit.	
Pick one or two	Dogwood, Alternate Leaf ( <i>Cornus alternifolia</i> )	SPD - WD	18	May - July	White flowers with blue-black fruit.
	Dogwood, Flowering ( <i>Cornus florida</i> )	MWD - WD	30		White flowers with glossy red fruit.
	Dogwood, Gray ( <i>Cornus racemosa</i> )	SPD - WD	8		White flowers with white fruit
	Dogwood, Red Osier ( <i>Cornus stolonifera</i> )	VPD - WD	10		White flowers with white fruit
	Dogwood, Rough Leaved ( <i>Cornus drummondii</i> )	PD - WD	18		White flowers with white fruit
	Dogwood, Silky ( <i>Cornus amomum</i> )	VPD - WD	10		White flowers with Bluish fruit
Sumacs ( <i>Rhus spp.</i> )	MWD - ED	8 - 15	May - Sept.	Yellow-green flowers with reddish fruit.	

<sup>2</sup> Substitute forb and legume species (from the appropriate [CSP Wildlife Plant Species](http://www.in.nrcs.usda.gov/programs/CSP/csp2010/2010%20CSP%20Wildlife%20Plant%20Species.doc) tables <http://www.in.nrcs.usda.gov/programs/CSP/csp2010/2010%20CSP%20Wildlife%20Plant%20Species.doc>) with matching flowering periods are acceptable.

<sup>3</sup> 8' x 8' spacing (681 shrubs/acre).