

TECHNICAL NOTES

STATE OFFICE

STILLWATER, OKLAHOMA 74074

ECOLOGICAL SCIENCES TECHNICAL REFERENCES

FOR IN-SERVICE USE ONLY

BIOLOGY OK-33

July 22, 2008

RE: List of Pollinator Plants for the Conservation Security Program (CSP) Wildlife Enhancement Activity – Pollinator Areas.

Use this Technical Note for guidance when selecting and establishing flowering plants under the CSP Wildlife Enhancement Activity for Pollinator Areas. There may be additional important pollinator plants that are not included on the list in this Technical Note. Submit any requests to consider alternative plant species, changes in flowering season, or seeding rates to the State Resource Conservationist for review and technical determination.

This Technical Note is to be used with the Wildlife Enhancement Activity Sheet for Pollinator Areas which provides specific instructions on the required number of species and flowering periods. Refer to Range Planting (550) and/or Restoration and Management of Rare or Declining Habitat (643) for additional information on forb and legume plantings. Refer to Tree/Shrub Establishment (612) for additional information on planting woody species.

/s/Gary O'Neill, Acting

RONALD L. HILLIARD

State Conservationist

Conservation Security Program (CSP) Wildlife Enhancement Activity Oklahoma NRCS Pollinator Areas Plant List

As stated in the CSP Wildlife Enhancement Activity Sheet instructions for Pollinator Areas, a minimum of 10 flowering plant species are required for planting in order to meet the requirements for Pollinator Areas. Furthermore, plantings will include a minimum of 3 early season flowering plants, 3 mid season flowering plants, and 3 late season flowering plants as contained on the attached NRCS state list of pollinator species.

The table on pages 3 and 4 of this document list flowering plants that are used by pollinators and identifies the plants by flowering season. Note that several plants are listed in multiple seasons because of overlap in flowering periods and/or because the plants have relatively long flowering periods. The list is not all inclusive and if there are additional plants that the field office staff would like to recommend for planting, please contact the State Resource Conservationist for listing consideration.

The guidance indicates that plantings will be composed of native species. With the exception of alfalfa and sweetclover, all of the plants on the list meet this requirement. These two non-native species have been added because of their high value as pollinator plants and commercial availability. When used, alfalfa and sweetclover can each comprise up to 5 percent of the planting mixture.

A general guide for planting forbs and legumes for pollinators is to assume a full seeding rate of 2 pounds PLS per acre for each species of forb and legume. Refer to the examples below for calculating seeding mixtures based on this rate:

Example 1: Planting 10 native species in a mixture in equal proportions of 10 percent will require 0.2 pounds of PLS seed per acre for each of the 10 species and result in a total planting of 2 pounds of PLS seed per acre.

Example 2: Planting 11 species in the mixture where 9 native species are planted in equal proportions of 10 percent and 2 introduced species (alfalfa and sweetclover) are planted at 5 percent each would require 0.2 pounds of PLS seed per acre for each of the 9 native species (1.8 pounds subtotal) and 0.1 pound PLS per acre for each of the two introduced species (0.2 pounds subtotal). The total planting would be 1.8 pounds of native plant seed plus 0.2 pounds of non-native plant seed for a total of 2 pounds PLS per acre.

Any other planting combination that includes at least 10 total plant species and does not include more than 5 percent alfalfa or 5 percent sweetclover and results in a total planting of no less than 2.0 pounds PLS will be acceptable.

Refer to the Range Planting (550) and Restoration and Management of Declining Habitats (643) standards for additional information on planting forbs and legumes. Flowering trees and shrubs may also be planted as part of the required number of pollinator species. Refer to the Tree/Shrub Establishment (612) standard for specific guidance on adaptability, site preparation, spacing etc. Refer to the CSP Wildlife Enhancement Activity Sheet for Pollinator Areas for information on program requirements.

Pollinator Plant List

Early Season Flowering	Mid Season Flowering	Late Flowering Season
Forbs and Legumes	Forbs and Legumes	Forbs and Legumes
Alfalfa	Alfalfa	Alfalfa
Blue Wild Indigo	Ashy Sunflower	Asters
Buttercup	Awnless Bush Sunflower	Ashy Sunflower
Engelmann Daisy	Baldwin Ironweed	Awnless Bush Sunflower
Evening Primrose	Basket Flower	Baldwin Ironweed
Half Shrub Sundrop	Black-eyed Susan	Blazing Star
Indian Paintbrush	Black Sampson	Boneset
Penstemon	Blazing Star	Butterfly Milkweed
Plains Coreopsis	Blue Wild Indigo	Cardinal Flower
Tephrosia	Boneset	Compass Plant
Thistle (Cirsium)	Butterfly Milkweed	Daisy Fleabane
Verbena (Vervain)	Cardinal Flower	Dotted Gayfeather
Yarrow	Compass Plant	Evening Primrose
Yellow Wild Indigo	Daisy Fleabane	Goldenrods
	Dotted Gayfeather	Illinois Bundleflower
Trees, Shrubs, and Vines	Engelmann Daisy	Leavenworth Eryngo
Blackberry	Evening Primrose	Maximilian Sunflower
Black Locust	Half Shrub Sundrop	Milkweeds
Coral Honeysuckle	Hemp Dogbane	Partridge Pea
Golden Currant	Illinois Bundleflower	Prairie Acacia
Hawthorn	Indian Blanket	Purple Prairie Clover
Plum	Indian Paintbrush	Rosinweed
Persimmon	Leadplant	Sweetclover
Redbud	Leavenworth Eryngo	Western Indigo
Rough-leaf Dogwood	Lemon Monarda (Beebalm)	
Indigo Bush (Amorpha)	Milkweeds	Trees, Shrubs, and Vines
	Oxe-eye Daisy	Trumpet Creeper *
	Pale Echinacea	
	Partridge Pea	
	Penstemon	
	Pitcher's Sage	
	Plains Coreopsis	
	Prairie Acacia	
	Prairie Coneflower (Mex. Hat)	
	Purple Prairie Clover	
	Sweetclover	
	Tephrosia	
	Thistle (Cirsium)	
	Verbena (Vervain)	
	Western Indigo	
	Yarrow	
	Yellow Wild Indigo	
	(continued next page)	

	(continued from page 1)	
Early Flowering Season	Mid Season Flowering	Late Flowering Season
	Trees, Shrubs, and Vines	
	Black Locust	
	Coral Honeysuckle	
	Hawthorn	
	Indigo Bush (Amorpha)	
	Persimmon	
	Rough-leaf Dogwood	
	Trumpet Creeper *	
	Golden Currant	

* Note: Trumpet creeper spreads aggressively and may need to be controlled or planted in areas away from other desirable plants.