

Plants 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

This enhancement is applicable on cropland, pasture land, rangeland and forest land.

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 for *Establishing Pollinator Habitat*

Pollinator habitat areas will be at least ½ acre in size for each 40 acres of cropland, pastureland, rangeland or forest land and include a minimum of nine (9) flowering plant species including forbs, legumes, vines, shrubs, and/or trees.

- ◆ 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.
- ◆ 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.
- ◆ 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.
- ◆ 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:



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- Create insecticide free buffers in the first 25 feet of crop area,
- Use application methods that minimizing drift to the adjacent habitat,
- Apply active ingredients in the evening when most insect pollinators are not active.
- ◆ 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.
- ◆ Any use of the pollinator habitat area must not compromise its intended purpose.

Documentation Requirements for *Pollinator Habitat Establishment*

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

References:

Agroforestry Note – 32: “Agroforestry: Sustaining Native Bee Habitat For Crop Pollination,” Vaughan, Mace and Black, Scott Hoffman, 2006. USDA National Agroforestry Center.

Agroforestry Note – 33: “Improving Forage For Native Bee Crop Pollinators,” Vaughan, Mace and Black, Scott Hoffman, 2006. USDA National Agroforestry Center.

Agroforestry Note – 34: “Enhancing Nest Sites For Native Bee Crop Pollinators,” Vaughan, Mace and Black, Scott Hoffman, 2006. USDA National Agroforestry Center.

Agroforestry Note – 35: “Pesticide Considerations For Native Bees In Agroforestry,” Vaughan, Mace and Black, Scott Hoffman, 2006. USDA National Agroforestry Center.

Black, S.H., N. Hodges, M. Vaughan and M. Shepherd. 2008. **Pollinators in Natural Areas: A Primer on Habitat Management.**

Buchmann, S. and G.P. Nabhan. 1997. **The Forgotten Pollinators.** Island Press, Washington, D.C.

Calder, W. A. 1997. Hummingbirds in Rocky Mountain meadows. In K. Able, ed. **A Gathering of Angels: The Ecology and Conservation of Migratory Birds.** Cornell University Press, Ithaca. p. 149-168.

Nabhan, G. P. et al. 1998. The potential consequences of pollinator declines on the conservation of biodiversity and stability of food crop yields. *Conservation Biology* 12(1):8-17.

Nabhan, G.P. and J. Donovan. 200. Nectar trails for pollinators: Designing corridors for conservation. Arizona-Sonora Desert Museum Technical Monograph 4, Tucson, Arizona.

Pollinator Biology and Habitat. Natural Resources Conservation Service, Illinois Biology Technical Note No. 23. 2008.

Shepherd, M., S. Buchmann, M. Vaughan, and S. Black. 2003. **Pollinator Conservation Handbook.** Portland, OR: The Xerces Society for Invertebrate Conservation. 145 pp.

Vaughan, M., M. Shepherd, C. Kremen, and S. Black. 2007. *Farming for Bees: Guidelines for Providing Native Bee Habitat on Farms.* 2nd Ed. Portland, OR: Xerces Society for Invertebrate



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Conservation. 44 pp.

http://www.xerces.org/Pollinator_Insect_Conservation/Farming_for_Bees_2nd_edition.pdf

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**Conservation Stewardship Program
Utah Supplemental Information**

Suitable plants for pollinator habitat:

Pollinator Plant List - Utah FOTG Notice 238; Seed Sources - Aberdeen PMC
Tech Note 33