

Pollinator Plants for North-Central and West Texas and Southwestern Oklahoma

Plant Materials Technical Note



Background

Pollinators, such as insects, birds, bats, and other animals, are essential to our environment. The ecological service they provide accounts for the reproduction of nearly 70 percent of the world's flowering plants, including more than two-thirds of the world's crop species. Pollination by bees and other species contributes an estimated \$3 billion dollars of fruits and vegetables production, and \$1.6 billion to \$8.3 billion for agricultural crops. Crops grown throughout Texas that benefit from pollinators include: tomatoes, berries, alfalfa, sunflowers, fruit orchards, and vegetables. Outside of agriculture, pollinators play a vital role in most terrestrial ecosystems. Fruits and seeds derived from insect pollination make up a major part of the diet for many species of wildlife.

There is evidence that many pollinator species are on the decline due to disease, habitat loss, fragmentation, and deterioration. NRCS can help develop and enhance pollinator habitat through technical and financial assistance. Habitat development and enhancement can be planned and implemented adjacent to cropland fields and within pastureland, and rangeland. Habitat requirements of pollinators should include food, shelter and water, space, a place to reproduce, and materials for nesting in order to survive and flourish. Native plant materials can provide these needs.

Purpose

The purpose of this technical note is to provide a list of plants that can be used in North-Central and West Texas to encourage and provide pollinator habitat. The list includes information on planting dates, soil conditions, MLRA information, flower color, bloom times, and pollinators that use particular plant species.

Pollinator Habitat Planning Considerations

Pollinator diversity and abundance is influenced by two main factors: pesticide use and suitable habitat. Pollinator species are extremely sensitive to pesticides; therefore, areas with extensive pesticide use should be avoided. Nesting and egg-laying sites, flowers for foraging, overwintering cover and refuge areas basic habitat needs for native pollinators. Pollinator habitat enhancement begins with knowledge of the habitat area followed with protecting and enhancing flowering plants and nest sites to ensure maximum plant diversity that flower from spring through fall.

Pollinator Seedmix by Land Use

| Land Use | % Forb in Seedmix | Conservation Practice | Special Consideration |
|-----------------|--------------------------|--|---|
| Cropland | 50%-85% | Field Border (386) Conservation Cover (327) | Forb percentage determined by climatic factors at planting site |
| Rangeland | 30% | Range Seeding (550) | Plant a mixture of at least 4 forbs and 5 native grasses. Grazing management will be planned to ensure flowering forbs recover from grazing pressure. |
| Wildlife | 50%-85% | Riparian Forest Buffer (391) Conservation Cover (327) | Plant a diversity of woody plant species to spread blooming periods from spring through fall. |

References

The Xerces Society <http://www.xerces.org/pollinator-conservation/> (March 2011)

Lady Bird Johnson Wildflower Center, www.wildflower.org/plants/ (March 2011)

The Dallas County Lepidopterists Society, <http://www.dallasbutterflies.com> (April 2011)

Pollinator Plants for Texas Conservation Practices. USDA-NRCS Technical Note TX-PM-10-02.

http://www.tx.nrcs.usda.gov/technical/pmc/docs/pollinator_pm_tech_note_508.pdf (March 2011)

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