Threats to Pollinators

- Habitat loss
- Pesticides
- Diseases
- Climate change

How You Can Help

Provide food & water: Bees depend on nectar and pollen. Native bees prefer native plant pollen. Provide abundant and diverse native plants from spring through fall.

Conserve nest habitat: bare ground & cavities

Prevent: soil erosion & compaction

Reduce: pesticide use

Pollinator Habitat Management

Thanks to Texas Parks and Wildlife Department initiatives, landowners may now receive tax incentives by managing pollinator habitat. TPWD outlines Pollinator Habitat Conservation practices* to help landowners qualify for agriculture–wildlife tax valuation through their county appraisal district. A landowner must implement at least three habitat management practices such as pollinator surveys. The Jha Lab can help interpret data from pollinator surveys to inform landowners of best management practices (Landowners|Naturalists webpage).

http://w3.biosci.utexas.edu/jha/wp-content/uploads/Landowners|Naturalists.pdf

* http://tpwd.texas.gov/huntwild/wild/wildlife_diversity/nongame/native-pollinators/media/TPWD-Native-Pollinator-Management.pdf

Native Pollinators Thrive in Native Landscapes

Pollinator Habitat Conservation

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Plants & Native Bees

~87% of flowering plants rely on animal pollinators to set fruit. There are 4,000 bee species in North America; 800+ of them in Texas alone. Native bees originated in and are adapted to local climate, soils, and native plants. Non-native species like the Western honeybee were introduced from Europe and became naturalized here.

Bee-pollinated Crop Species

Almonds, apples & blueberries depend on bee pollination. Watermelons, melons and squash are often pollinated by native squash bees. Peppers, tomatoes and potatoes are often buzz pollinated by native bumble bees. Leafcutter bees pollinate alfalfa more efficiently than European/Western honeybees do.

Pollination services give us 1 in 3 food morsels!

~35% of U.S. crop species rely on insect pollination. Bees boost US crop production by ~$15 billion/year with ~$3 billion attributed to native bees. Studies in Texas show that insect mediated cross-pollination boosts cotton yield by 17%!

Native Bee Habitat

~75% of native bees are ground-nesters: digger bees, bumble bees, and sweat bees. If soil is deeply tilled, eroded or compacted their nests are destroyed. Leave bare ground for native bee nests!

Tom Murray

~25% of native bees are cavity-nesters: carpenter bees, mason bees and leaf cutters make nests in soft wood, plant stems, rock crevices or snail shells. Nest sites are scarcer as native woodlands decrease. Leave snags, logs and thatch for nests!

Alain C.

Scott Famous

~90% of native bees are solitary. A female bee lays eggs on pollen balls she makes in her nest; larvae consume this bee bread to develop into pupa and then adults.

Hundreds of butterfly and bee species inhabit Central Texas