TEXAS NATIVE BEES

The Jha Lab has been studying native pollinators since 2012. Researchers have identified hundreds out of the ~800 bee species and 6 families found in Texas. About 20,000 native bee species have been described around the world!

Carpenter bees (Apidae) are solitary but can live with sisters or daughters. Females bore holes in wood & partition nests with wood chips. Territorial males may fly





Long-horned bees (Apidae) are solitary but may nest in large groups in the ground. Guess why **Melissodes** is called a long-horned bee!



Laurel Treviño, Sarah Cusser S. Jha Lab – Integrative Biology http://w3.biosci.utexas.edu/jha

Bumble bees (Apidae) are ground-nesters; they can forage > 1 km away.



Mining Bees (Andrenidae) are solitary bees. Most build underground nests: a small entrance leads to a branched tunnel containing an egg.





Egg on pollen ball

Plasterer bees (Colletidae) chew leaves into spit balls to plaster their nests in

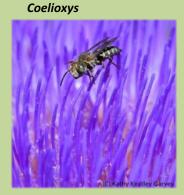
pithy stems.

Colletes

Wikipedia



Female parasitic bees invade nests of other bees to lay eggs on the food stored by the host. These kleptoparasite larvae consume all the food (pollen).



Lasioglossum

Sweat bees (Halictidae) are common. Most are ground-nesters like Agapostemon & Lasioglossum. Females can make individual cells in communally nests. Others are cavity nesters. They're called sweat bees because they lick salt from sweat.









Gardeners/farmers use mason bees like *Osmia* to pollinate crops. Some rear them commercially.





Mason bees

(Megachilidae) are solitary and docile; nesting in cavities, stems or snail shells! Females make mud walls between brood cells and mud packs to seal their nest.



Leafcutter bees (Megachilidae) pollinate well; one bee can pollinate as much alfalfa as 20 honey bees. They line cavity nests with pieces of leaves or petals.



Some (Melittidae) bees like *Hesperapis*, collect plant oils in dry climates.











