

How to Create Habitat for Stem-Nesting Bees

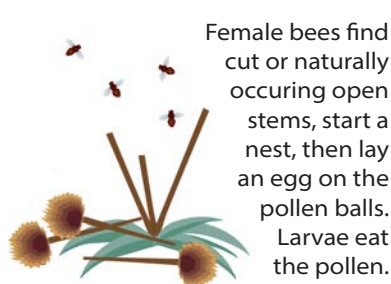


WINTER

Leave dead flower stalks intact over the winter

SPRING

Cut back dead flower stalks leaving stem stubble of varying height, 8 to 24 inches, to provide nest cavities.



Female bees find cut or naturally occurring open stems, start a nest, then lay an egg on the pollen balls. Larvae eat the pollen.



SUMMER

New growth of the perennial hides the stem stubble.



Bee larvae develop in cut dead stems during the growing season.



FALL



WINTER



Bees hibernate in stems during the winter



SPRING

Cut back dead flower stalks. Old stem stubble will naturally decompose.



Adult bees emerge and start nests in newly cut dead stems or in naturally occurring open stems.



Save the Stems

Many hollow or pithy plant stems and branches provide excellent places for cavity-nesting insects to call home. Small carpenter bees (*Ceratina* spp.) frequently carve out their nests in last year's dead raspberry (*Rubus* spp.) canes or wildflower stems, often only a few inches away from the blossoms that provide pollen to feed their young. Still tinier yellow-faced bees (*Hylaeus* spp.) use the hollow center of smaller stems, like bee balm (*Monarda* spp.) or roses (*Rosa* spp.), and larger leaf-cutter bees (*Megachile* spp.) prefer the larger stems of plants like native thistles (*Cirsium* spp.), cup plant (*Silphium perfoliatum*), or desert willow (*Chilopsis linearis*). The biggest stem-nesting bees in North America, large carpenter bees (*Xylocopa* spp.), sometimes use the pithy stems of large plants like yucca (*Yucca* spp.) and agave (*Agave* spp.) in regions where wood is uncommon or unavailable. Other common occupants of dead stems and twigs include cavity-nesting wasps, stem-boring moths, and even some spiders. In addition, some beneficial insects insert their eggs into the stems of wildflowers and grasses for safe keeping over the winter.

Learn more about how you can help provide nesting habitat for native bees at:

xerces.org/pollinator-conservation/nesting-resources.

Print additional copies of this brochure at:

xerces.org/publications/brochures/save-the-stems



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Acknowledgments

How to Create Habitat for Stem-Nesting Bees graphic provided by Colleen Satyshur, Elaine Evans, Heather Holm, and Sarah Foltz Jordan. Text above adapted from *Nesting & Overwintering Habitat for Pollinators & Other Beneficial Insects* by Sarah Foltz Jordan, Jennifer Hopwood, and Sara Morris of The Xerces Society for Invertebrate Conservation (available at: xerces.org/publications/fact-sheets/nesting-overwintering-habitat).

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