

Bumble Bee (Bombus ternarius)¹

Bumble bees are large (10 to 23 mm in length), hairy, ground-nesting bees. Some species, such as Bombus impatiens, are used to pollinate greenhouse crops.



Honey Bee (Apis mellifera)2

This European species is used for pollination and for honey, propolis, and beeswax production. Bees are 10 to 15 mm in length and colonies survive winter on stored honey.



Leafcutter Bee (Megachile sp.)³

Leafcutter and mason bees are solitary, 3 to 20 mm in length, and usually nest in cavities. Leafcutter bees use bits of leaves and flowers to wrap brood cells for their young.



Blue Orchard Bee (Osmia lignaria)⁴

The blue orchard bee is a mason bee that uses mud to divide its brood cells. This bee belongs to the same family as leafcutter bees and is an important fruit pollinator.



Mining Bee²

Mining bees can be as small as 2 mm or as large as 25 mm in length. All species nest in the ground. Some species are important apple pollinators and can move more pollen than honey bees!

SAVE THE BEES: PLANT FLOWERS AND TREES!

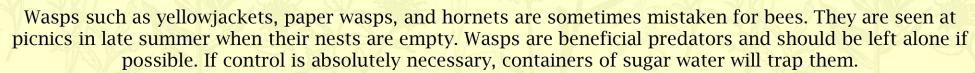
Pollinators require nectar and pollen plants.

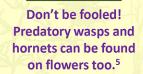


Sweat bees are small. often brightly-colored bees that nest in the ground or in wood.2

Trees, shrubs, and flowers that bloom from April to September create a consistent food supply for pollinators to complete their life cycles. Ground covers (ajuga, squill, crocus, clover, creeping Charlie) are also favorable.

In spring, overwintering female bees emerge from sandy soil to forage and do not return to the overwintering sites. Do not kill these bees; doing so prevents future generations. In fall, large females appear again. Bees are unlikely to sting; simply avoid making sudden movements that may startle them.





Pesticides can harm pollinators. For more information visit www.entomology.umn.edu/cues/pollinators



Rob Routledge, Sault College, Bugwood.org

Prairie Moon Nursery, www.prairiemoon.com North Creek Nurseries, www.northcreeknurseries.com

- David Cappaert, Michigan State University, Bugwood.org Whitney Cranshaw, Colorado State University, Bugwood.org
- Scott Bauer, USDA Agricultural Research Service, Bugwood.org
- ⁵ Dolichovespula maculata: Johnny N. Dell, Bugwood.org
- Alfred Osterloh [C-BY-NC-SA-3.0], Hortipedia Commons ¹⁰ Hardyplants at English Wikipedia, Wikimedia Commons ¹¹ Heike Löchel [CC-BY-SA-2.0-de], Wikimedia Commons Theodore Webster, USDA Ag Research Service, Bugwood.org ¹³ Barbara Tokarska-Guzik, University of Silesia, Bugwood.org

(Nepeta x faassenii)'

Paul Wray, Iowa State University, Bugwood.org

Research and outreach supported by 2010 LCCMR "Mitigating Pollinator Decline"

By Emily Tenczar & Vera Krischik





College of Food, Agricultural and Natural Resource Sciences University of Minnesota

