



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.

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.

Wasps, such as yellowjackets, paper wasps, and hornets, are sometimes mistaken for bees. Yellowjackets are seen at picnics in late summer when their nests are empty. Wasps are beneficial predators and should be left alone if possible. Insecticides can harm pollinators.

For more information visit www.entomology.umn.edu/cues



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



Don't be fooled! Predatory wasps and hornets can be found on flowers too.⁵

EARLY SEASON	EARLY-MID SEASON	MID SEASON	MID-LATE SEASON	LATE SEASON
 Serviceberry (<i>Amelanchier</i> species) ⁶	 Wild rose (<i>Rosa</i> species) ⁶	 Purple prairie clover (<i>Petalostemum candida</i>) ⁶	 Anise hyssop (<i>Agastache foeniculum</i>) ⁶	 New England aster (<i>Symphyotrichum novae-angliae</i>) ⁷
 Pussy willow (<i>Salix discolor</i>) ⁶	 Basswood, linden (<i>Tilia americana</i>) ⁸	 Swamp milkweed (<i>Asclepias incarnata</i>) ⁷	 Wild bergamot (<i>Monarda fistulosa</i>) ⁷	 Goldenrod (<i>Solidago</i> species) ⁶
 Carolina lupine (<i>Thermopsis villosa</i>) ⁶	 Garden sage (<i>Salvia nemorosa</i> 'May Night') ⁷	 Billard's spiraea (<i>Spiraea x billardii</i> 'Triumphans') ⁹	 Sunflower (<i>Helianthus</i> species) ⁶	 Korean angelica (<i>Angelica gigas</i>) ¹⁰
 Siberian squill (<i>Scilla siberica</i>) ¹¹	 Catmint (<i>Nepeta x faassenii</i>) ⁷	 Catnip (<i>Nepeta cataria</i>) ¹²	 Globethistle (<i>Echinops</i> species) ¹³	 Stoncrop (<i>Sedum</i> species) ⁷

NATIVE PLANTS

GARDEN PLANTS

¹ Robert Routledge, Sault College, Bugwood.org

² David Cappaert, Michigan State University, Bugwood.org

³ Whitney Cranshaw, Colorado State University, Bugwood.org

⁴ Scott Bauer, USDA Agricultural Research Service, Bugwood.org

⁵ *Dolichovespula maculata*: Johnny N. Dell, Bugwood.org

⁶ Prairie Moon Nursery, www.prairiemoon.com

⁷ North Creek Nurseries, www.northcreeknurseries.com

⁸ Paul Wray, Iowa State University, Bugwood.org

⁹ 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

¹² Theodore Webster, USDA Ag Research Service, Bugwood.org

¹³ Barbara Tokarska-Guzik, University of Silesia, Bugwood.org

Vera Krischik, Emily Tenczar

Research and outreach supported by 2010 LCCMR[®] Mitigating Pollinator Decline[™]