# **Common Wild Bee Genera of Illinois, USA**

Angella Moorehouse<sup>1</sup>, Illinois Nature Preserves Commission<sup>2</sup>

Photos: Angella Moorehouse (Angella.moorehouse@illinois.gov) Produced: Angella Moorehouse and Alicia Diaz, Field Museum. Photo Identification assistance provided by Dr. John Ascher (bugguide.net). Note: Size Range: (S) Small, sweat bee 2-10mm; (M) Medium, honey bee 11-15mm; (L) Large, bumble bee 15-28mm

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4

8

12

20



ANDRENIDAE Mining Bee



Pseudopanurgus sp. (S) 2 ANDRENIDAE Small Mining Bee

Melissodes sp. (M-L)

APIDÂE

Chap-legged Bee

6

10

14

18

7



3 Anthophora abrupta (M) APIDAE **Digger Bee** 



Ceratina sp. (S) APIDAE Small Carpenter Bee



Eucera hamata (M) 5 APIDAE Long-horned Bee



Triepeolus sp. (M) APIDAE Sunflower Bee



13 Agapostemon sp. (S-M) HALICTIDAE Large Green Sweat Bee



Coelioxys sp. (S-M) MEGACHILIDAE Leafcutter Cuckoo Bee



Xylocopa virginica (L)

APIDAE

Eastern Carpenter Bee

Augochlorini (S) HALICTIDAE



Hoplitis sp. (S-M) MEGACHILIDAE Small Leafcutter Bee



COLLETIDAE Polyester Bee

Nomada sp. (S-M)

APIDAE

Nomad Cuckoo Bee



Svastra obliqua (M-L) APIDAE Sunflower Bee



Hylaeus sp. (S) COLLETIDAE Mask or Yellowed-faced Bee



Lasioglossum sp. (S) HALICTIDAE Sweat Bee or Ground Bee



Osmia sp. (S-M) MEGACHILIDAE Mason Bee

15 Green Sweat Bees

19

Halictus ligatus (S HALICTIDAE



Megachile sp. (M) MEGACHILIDAE Leafcutter Bee





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Aside from the domesticated honey bee and bumble bees (not included) and the eastern carpenter bee, most bees are not easily identified to species level in the field. Photographs submitted to bugguide.net or inaturalist.org can provide some assistance. Bee identification takes practice. This guide is meant to help encourage citizen scientists/volunteers to get out and get some practice documenting bees in Illinois. Below you will find genus characteristics found in the bees from the previous page.

### 1. Andrena, ANDRENIDAE (Mining Bee):

5-18mm; mostly early season, some mid- and late season, females with facial fovea (pale patches of hair interior from each eye); generally, less hairy than Colletes esp.on abdomen.

2. **Pseudopanurgus**, ANDRENIDAE (Small Mining Bee): 5-11mm; similar in appearance to sweat bees, often with blueish or greenish eyes; males have yellow facial markings.

# 3. Anthophora, APIDAE (Digger Bee):

10-19mm; short dense hairy, often resembling bumble bee with downward curved abdomen; often fly with tongue out, pointing downward.

4. **Ceratina,** APIDAE (Small Carpenter Bee): 4-9mm; dark metallic blue/black, males have distinctive yellow facial markings; tip of abdomen bluntly rounded.

#### 5. Eucera, APIDAE (Long-horned Bee):

11-19mm; males with long antennae, females can have orangish hairs on thorax.

#### 6. Melissodes, APIDAE (Chap-legged Bee):

7-18mm; males with long antennae, often seen in bachelor clubs resting in vegetation during early evening; hairy chap-like legs; may have black, cream or orange body hairs.

#### 7. Nomada, APIDAE (Nomad Cuckoo Bee):

5-17mm; generally, have rusty red coloration, often with some yellow markings on abdomen and thorax; nest parasites of Andrena.

#### 8. Svastra, APIDAE (Sunflower Bee):

9-19mm; very densely haired hind legs often full of pollen; affinity for sunflowers, rosinweed, and gray-headed coneflower.

# 9. Triepeolus, APIDAE (Cuckoo Bee):

12-18mm; often with a smiley face 😇 on thorax, bold creamy or white markings on abdomen; nest parasites of Melissodes

#### 10. Xylocopa, APIDAE (Eastern Carpenter Bee):

1 species in Midwest; 13-25mm; similar to bumble bee in size and appearance but with shiny black abdomen; males have yellow facial markings; often cut holes at base of tubular flowers and rob nectar.

# 11. Colletes, COLLETIDAE (Polyester Bee):

6-15mm; densely haired head and thorax with hair bands on abdomen; heart-shaped face.

12. **Hylaeus**, COLLETIDAE (Masked or Yellow-faced Bee): 5-9mm; small black bees with distinct yellow facial marks; some with yellow marks on thorax.

13. **Agapostemon,** HALICTIDAE (Large Green Sweat Bee): 8-13mm; small to medium green sweat bee; males have black abdomen with distinct white bands; females are fatter and usually larger than small green sweat bees (Augochlorini).

14. **Augochlorini,** HALICTIDAE (Green Sweat Bee: Augochlora, Augochloropsis, Augochlorella):

5-12mm; difficult to distinguish genera of these small all green bees; usually smaller and thinner than Agapostemon.

15. **Halictus**, HALICTIDAE (Furrow Bee): 7-13mm; larger sweat bee; head often wide, wedge-shaped.

16. **Lasioglossum,** HALICTIDAE (Sweat Bee or Ground Bee): 3-10mm; tiny often metallic bronze or black, a few are orangish; smaller, thinner heads than Halictus.

17. **Coelioxys,** MEGACHILIDAE (Leafcutter Cuckoo Bee): 7-17mm; blackish/gray bees; females with sharply pointed abdomens; males have pointed abdomens with several spikes at tip; nest parasites of Megachile.

 Hoplitis, MEGACHILIDAE (Small Leafcutter Bee):
5-13mm; black bees; slender elongated abdomen with white stripes that do not meet in the middle; some with blueish eyes.

# 19. Megachile, MEGACHILIDAE (Leafcutter Bee):

7-20mm; cut circular holes in leaves and flower petals to line nests; distinct hairs on underside of abdomen often colored by pollen; may hold abdomen upright when feeding; many have bluntly triangular abdomen.

# 20. Osmia, MEGACHILIDAE (Mason Bee):

6-13mm; metallic blue, green, or bronze with wide head and body; some hair on the underside of abdomen though usually not as much as Megachile.

#### **References:**

Heather, Holm, 2017. Bees: an identification and native plant forage guide. Pollination Press LLC, Minnetonka, MN. 224 pp. www.pollinatorsnativeplants.com

Wilson, J.S., and O.M. Carril. 2016. The bees in your backyard, a guide to North American's bees. Princeton Univ. Press. Princeton and Oxford. www.beesinyourbackyard.com