

Common pollinators in Minnesota landscapes

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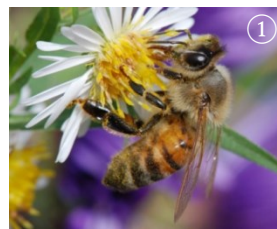
Bees

Bee characteristics

- Usually hairy, especially on legs or abdomen
- Usually robust with a thin waist
- Four wings
- Moderate long, elbowed antennae
- Pollen on legs or abdomen
- 1/8 inch – 1 inch long

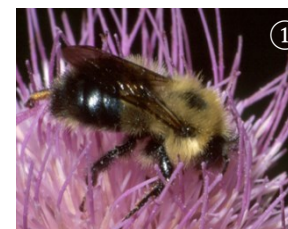
Honey bee characteristics

- Moderate sized (1/2")
- Golden brown abdomen with black stripes
- But color is variable!
- Pollen packed into balls on back legs



Bumble bee characteristics

- Moderate to large (up to 1")
- Yellow (sometimes red) and black hair
- Pollen packed into balls on back legs



Bee characteristics

- Size and color variable
- Pollen collected on brushes on back legs or under abdomen

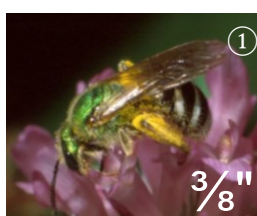
Yellow faced bee



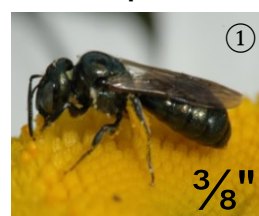
Small resin bee



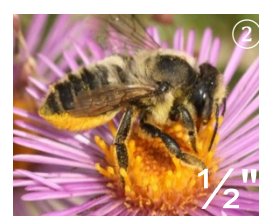
Green sweat bee



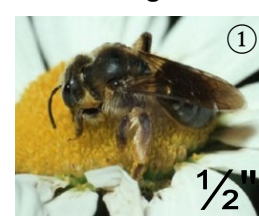
Small carpenter bee



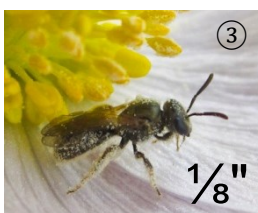
Leafcutter bee



Mining bee



Small sweat bee



Carder bee



Large sweat bee



Longhorned bee



Mason bee



Cuckoo bee

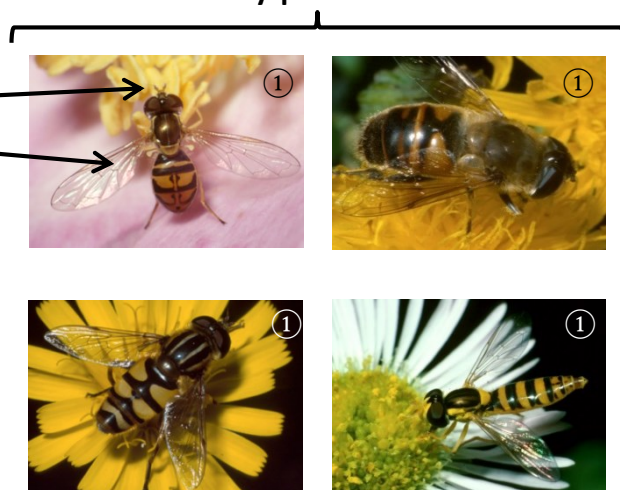


True Flies

True fly characteristics

- Short antennae
- Two wings
- No visible waist
- Typically less hairy
- Syrphid flies are bee and wasp mimics
- Most between 1/8" – 1"

Syrphid flies



Bee flies



Blow fly



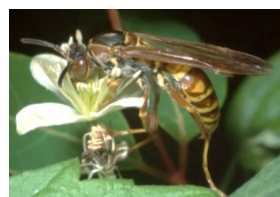
Tachinid fly



Wasps

Wasp characteristics

- Four wings
- Generally visible waist
- More slender than bees
- Antennae medium length
- Mostly hairless
- Some with obvious color patterns
- Many between 1/4" – 1"



Paper wasps



Great black wasp

Beetles

Beetle characteristics

- Wing covers present

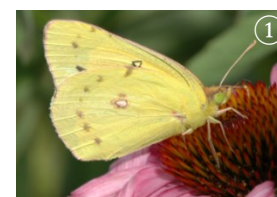


Soldier beetle

Butterflies/Moths

Butterfly/Moth characteristics

- Four wings covered with scales



Clouded sulphur

Photo Credits

- ① Jeff Hahn
- ② Karl Foord
- ③ Heather Holm
- ④ Joel Gardner

Resources

Upper Midwest Citizen Science Monitoring Guide Native Bees: <http://xerces.org/xerces-bee-monitoring-tools/>
 Bee Lab: <http://beelab.umn.edu/> BugGuide: <http://bugguide.net/> Discover Life: <http://discoverlife.org/>