

Pollinator Identification Guide

Bees



*John Severen

Honey bee

Scientific name: *Apis mellifera*
Type: Social/Domesticated
Native: No
Size: 10-15mm (medium to large)
Characteristics: Pollen baskets on hind legs
Life history: The iconic example of the bee social caste system. Spends the season provisioning nectar and pollen to create honey.



*Ryan Hodnett

Bumble bee

Scientific name: *Bombus* spp.
Type: Social/Some species domesticated
Native: Yes
Size: 10-25mm (large)
Characteristics: Fuzzy with branched hairs
Life history: First up in the morning and last to go to bed. Bumble bees nest underground and collect nectar and pollen all season long. New queens active in spring.



*Diana Foreman

Carpenter Bee

Scientific name: *Xylocopa virginica*
Type: Solitary
Native: Yes
Size: 15-25mm (large)
Characteristics: Hairy thorax with shiny hairless abdomen
Life history: Chews burrows into wood and provisions with pollen to rear young. Can be a nuisance near wooden structures.



Sweat bee

Scientific name: Family Halictidae
Type: Solitary
Native: Yes
Size: 4-8mm (small)
Characteristics: Metallic sheen
Life history: Nests in earthen burrows or cavities in soft decaying wood.



*Beatriz Moisset

Digger/Mining Bee

Scientific name: Family Andrenidae
Type: Solitary
Native: Yes
Size: 8-14mm (medium)
Characteristics: Hairy
Life history: Early season bees that provision underground burrows with pollen to rear young



Mason/Leafcutter Bee

Scientific name: Family Megachilidae
 Type: Solitary/Some species domesticated
 Native: Yes
 Size: 8-14mm (small-medium)
 Characteristics: Underside of abdomen covered in bristles
 Life history: Provision cavities with pollen and create chambers using resin and leaves



Masked Bee

Scientific name: Family Colletidae
 Type: Solitary
 Native: Yes
 Size: 6-9 (small)
 Characteristics: Markings on face
 Life history: Provision pollen in pre-existing cavities

Butterflies



Monarch butterfly

Scientific name: *Danaus plexippus*
 Type: Brushfoot
 Native: Yes
 Size: 3-4" wingspan
 Characteristics: Orange and black with white spots
 Life history: Monarchs need milkweed to complete their lifecycle. Each year monarchs perform a spectacular migration upwards of 2000 miles.



Buckeye butterfly

Scientific name: *Junonia coenia*
 Type: Brushfoot
 Native: Yes
 Size: 1.5-2.5" wingspan
 Characteristics: Brown with big eye spots
 Life history: Common meadow butterfly. Caterpillars need narrowleaf and greater plantain to complete their lifecycle.



Meadow fritillary

Scientific name: *Boloria bellona*
 Type: Brushfoot
 Native: Yes
 Size: 2-2.5" wingspan
 Characteristics: Orange and black
 Life history: Common meadow butterfly. Caterpillars need violets to complete their lifecycle.



*Andy Reago

American snout

Scientific name: *Libytheana carinenta*
Type: Brushfoot
Native: Yes
Size: 2-2.5" wingspan
Characteristics: Orange and black with white spots
Life history: Common meadow butterfly. Caterpillars need hackberry to complete their lifecycle.



*James St. John



*Jacy Lucier

American snout

Scientific name: *Nymphalis antiopa*
Type: Brushfoot
Native: Yes
Size: 2.5-3.5" wingspan
Characteristics: Black, blue, with white fringe
Life history: Common woodland butterfly. Caterpillars need willow/elm/hackberry/birch to complete their lifecycle.



*Melissa McMasters



*Robert Barber

Zebra swallowtail

Scientific name: *Protographium marcellus*
Type: Swallowtail
Native: Yes
Size: 2.5-4" wingspan
Characteristics: White with black stripes and long tails
Life history: Caterpillars need paw paw to complete their lifecycle.



*Daniel Schwen



*TheAlphaWolf

Eastern tiger swallowtail

Scientific name: *Papilio glaucus*
Type: Swallowtail
Native: Yes
Size: 3-5" wingspan
Characteristics: Yellow with black stripe (also a black morphotype)
Life history: Common woodland/meadow butterfly. Caterpillars need tulip tree to complete their lifecycle.



*Dr. Thomas Barns



*Rockerboo

Spicebush swallowtail

Scientific name: *Papilio troilus*
Type: Swallowtail
Native: Yes
Size: 3-4.5" wingspan
Characteristics: Black and blue
Life history: Common meadow/woodland butterfly. Caterpillars need spicebush to complete their lifecycle.



*Charles J Sharp



*Butterflyidentification.com

Spring azure

Scientific name: *Celastrina ladon*
Type: Azure/copper
Native: Yes
Size: .5-1" wingspan
Characteristics: Blue iridescent
Life history: Common meadow/lawn butterfly.
Caterpillars need dogwood or black cherry to complete their lifecycle.



*USFWS



American copper

Scientific name: *Lycaena phlaeas*
Type: Azure/copper
Native: Yes
Size: .5-1" wingspan
Characteristics: Orange and grey
Life history: Common meadow/lawn butterfly.
Caterpillars need sorrel to complete their lifecycle.



*John Tann



*Agpest.com

Cabbage white

Scientific name: *Pieris rapae*
Type: Sulfur
Native: No
Size: .75-1.5" wingspan
Characteristics: White/yellow with black spots
Life history: Common garden/lawn butterfly.
Caterpillars need mustards to complete their lifecycle.



*John Flannery



*Bugguide.net

Clouded sulfur

Scientific name: *Colias philodice*
Type: Skipper
Native: Yes
Size: .75-1.5" wingspan
Characteristics: Yellow with black spots and peach marks
Life history: Common garden/lawn butterfly.
Caterpillars need clovers to complete their lifecycle.



*Derek Ramsey



*Judy Gallagher

Clouded sulfur

Scientific name: *Epargyreus clarus*
Type: Skipper
Native: Yes
Size: 1.5-2" wingspan
Characteristics: Brown and white with distinctive silver spot in the underside of wing
Life history: Common meadow butterfly.
Caterpillars need black locust to complete their lifecycle.

Day flying moths



Hummingbird moth

Scientific name: *Hemaris thysbe*
Type: Clearwing
Native: Yes
Size: 1-2" wingspan
Characteristics: Mimics hummingbirds
Life history: Found foraging on flowers with deep nectar wells.



Snowberry clearwing

Scientific name: *Hemaris diffinis*
Type: Clearwing
Native: Yes
Size: 1-2" wingspan
Characteristics: Mimics bumblebees
Life history: Found foraging on flowers with deep nectar wells.



Alianthus webworm moth

Scientific name: *Atteva aurea*
Type: Ermine
Native: Yes
Size: 1" wingspan
Characteristics: Mimics beetles
Life history: Common brightly colored moths found foraging on milkweed, goldenrod, and other flowers.



Yellow-collared scape moth

Scientific name: *Cisseps fulvicollis*
Type: Erebidae
Native: Yes
Size: 1-1.5" wingspan
Characteristics: Bright orange/yellow thorax with blue iridescent abdomen
Life history: Common moth found foraging on milkweed, goldenrod, and other flowers.

Flies



Hover fly

Scientific name: Family Syrphidae
Type: Syrphid fly
Native: Yes
Size: 7-10mm
Characteristics: Yellow and black mimicking bees
Life history: Known for their hovering behavior. Will land on your skin during the summer to collect salt.



Blow fly

Scientific name: Family Calliphoridae
Type: Blow fly
Native: Yes
Size: 7-10mm
Characteristics: Metallic green or black
Life history: Common pollinator. Seeks out decomposing animals to lay their eggs and has a relationship with flowers that produce a foul odor (arums).

Beetles



Dark flower scarab

Scientific name: *Euphoria sepulcralis*
Type: Euphoria beetle
Native: Yes
Size: 10-12mm
Characteristics: Metallic brown with white markings
Life history: Usually found tucked deep into flowers covered in pollen



Tumbling flower beetle

Scientific name: *Mordellistena trifasciata*
Type: Flower beetle
Native: Yes
Size: 8-10mm
Characteristics: Small beetles with variable markings
Life history: Usually found tucked deep into flowers covered in pollen. Will 'tumble' from flowers if discovered.



Jacy Lucier

Black locust borer

Scientific name: Family Syrphidae
Type: Longhorned beetle
Native: Yes
Size: 12-17mm
Characteristics: Yellow and black mimicking bees
Life history: These beetles are a mainstay on late season flowers such as goldenrod. Their larvae develop in the wood of black locust



*NC BioTeacher

Soldier beetle

Scientific name: Chauliognathus pennsylvanicus
Type: Cantharid beetle
Native: Yes
Size: 10-12mm
Characteristics: Yellow and black
Life history: These beetles are a mainstay on late season flowers such as goldenrod. Their larvae are predatory.

Pollinator look-alikes

Robber fly



*Ilona loser

Mantis fly



*XPDA