|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | The Great Georgia Pollinator Census August 23rd & 24th, 2019 |  | |  |  | |
| Insect Counting & Identification Guide |

**Thank you for being part of Georgia pollinator history by helping us document our pollinator populations. The Great Georgia Pollinator Census takes place on August 23rd and 24th, 2019. Here are your counting instructions.**

**Counting instructions:**

* Choose a favorite pollinator plant for counting. This can be any blooming plant that shows insect activity.
* Count and categorize the insects that land on your plant. Count for 15 minutes. The insect categories are:
  + Bumble Bees
  + Honey Bees
  + Small Bees
  + Carpenter Bees
  + Wasps
  + Flies
  + Butterflies/Moths
  + Other insects
* There is an insect counting sheet at the end of this booklet to make counting easier for you.
* Upload your counts on the website (<https://GGaPC.org>). (We do not have the ability to accept mailed paper forms)
* Post photos of your counters having fun, photos of your gardens, or anything you think would be of interest to the group on the Georgia Pollinator Census Facebook page.
* Becky Griffin is the project coordinator and is available through email at [beckygri@uga.edu](mailto:beckygri@uga.edu) if you have any questions.
* Counting hint: Your cell phone camera makes a great magnifier.
* The next pages are examples of the insects that you may see. Use these as your guides.

# Have questions about counting? Contact Becky Griffin at beckygri@uga.edu.



**Carpenter Bees**

**(16 – 22 mm)**

* Black body with yellow and black bands
* Dense hair on head and thorax
* NO HAIR on abdomen
* Broad head, thick body
* Males have yellow to white coloring on face, females all black on face

## **Carpenter Bee**



**Carpenter Bee – Hairless Abdomen**



**Bumble Bees**

**(10 – 19 mm)**

* Black body covered with dense yellow and black hair
* Fat bee with small head
* Large thorax and abdomen
* Hairy abdomen

**Bumble Bee**

**Bumble Bee – Hairy Abdomen**

**This photo illustrates the differences between the carpenter bee and a bumble bee. The carpenter bee is a “mack truck” while the bumble bee is more of a “pickup truck.”**



**Carpenter Bee with a Bumble Bee**

*Photo credit: Bodie Pennisi, UGA Extension*



**Honey Bees**

**(12 – 15 mm)**

* Brown or black stripes on body
* Golden-brown hair covers abdomen

**Honey Bee**

## 

**This photo shows a honey bee and a bumble bee together. The two are easily distinguishable.**

**Bumble Bee and Honey Bee**



**Small Bees**

**(Any bee smaller than a honey bee)**

Can include:

* Leafcutter Bees
* Sweat Bees
* And others
* Note: Keep a lookout for the metallic shine of the sweat bees from the family Halictidae. Even though these bees can be small, the metallic color is easy to spot when the sun is shining on them.

**Sweat bee**

*Photo credit: Joseph Berger, bugwood.org*

Notice the dark striped abdomen of the leafcutter bee. Remember if you can get a glimpse of the underside of the abdomen, the bee will carry the pollen there on the hairy scopa.



*Photo credit: Bees of Georgia*



**Leafcutter bee**

*Photo credit: David Cappaert, bugwood.org*



**Small bee**



**Small bee**

**Small bee**



**Wasps**

**(13 - 25 mm)**

Can include:

* Potter Wasps
* Paper Wasps
* And others

These are generally hairless.

Note: Yellow jackets are not often seen on flowers.

**Potter Wasp**



**Paper Wasp**



**Yellow Jacket**

*Photo Credit – Jon Yuschock, Bugwood.org*



**Flies**

**(6 – 13 mm)**

* Have two wings instead of the four wings on bees and wasps
* Eyes are large and take up most of the face
* Small antenna

Note: Some flies are bee mimics. They have bee-like coloring and will visit flowers. The large eyes and small antenna will confirm you see a fly.

**Fly**



**Tachinid Fly**

****

**Syrphid Fly (Bee mimic)**

*Photo credit: Washington State Univ* StateUniversity

## 

**Butterflies and Moths**

**Can include:**

* Skippers
* Gulf Fritillaries
* Monarchs
* Swallowtails
* Tuliptree Moth
* And others

## **Skipper Butterfly**

## 

**Gulf Fritillary Butterfly**



**Monarch Butterfly**



**Eastern Tiger Swallowtail Butterfly**

Photo by [Alan Emery](https://unsplash.com/photos/wTMyELLeV38?utm_source=unsplash&utm_medium=referral&utm_content=creditCopyText) on [Unsplash](https://unsplash.com/?utm_source=unsplash&utm_medium=referral&utm_content=creditCopyText)



**Other Insects**

**Can include:**

* Beetles
* Dragonflies
* Lacewings
* And others

**Lady Beetle**

*Photo credit: M. E. Bartolo, Bugwood.org*



**Dragonfly**

*Photo credit: Millard Griffin*



**Lacewing**

*Photo credit: Eddie McGriff, UGA, Bugwood.org*

**Great Georgia Pollinator Census Observation Sheet**

Name of participant: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address of Garden (for mapping): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ County\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Would you consider your garden small (< ¼ of an acre) medium (>1/4 of an acre but < 1 acre) or large (>1 acre)

Date: Aug 23 Aug 24

Time of count start: \_\_\_\_\_\_\_\_\_

Temperature: \_\_\_\_ °F

Weather conditions: Sunny Partly Cloudy Cloudy Rainy

Is there a honey beekeeper within 5 miles of your garden? Yes No Don’t Know

Name of pollinator plant used for counting. Please give common name and Latin name if you have it: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Counting Data:

|  |  |
| --- | --- |
| **Type of Insect** | **Numbers** |
| Carpenter Bees |  |
| Bumble Bees |  |
| Honey Bees |  |
| Small Bees |  |
| Wasps |  |
| Flies |  |
| Butterflies/Moths |  |
| Other Insects |  |

**Visit** [**https://GGaPC.org**](https://GGaPC.org) **to upload your counts to the website. Thank you for being part of Georgia pollinator history!**



