

Logs

Paper logs might help you get started, but consider using your smart phone to access the website to automate several logging steps.

Collection Log

Date: _____

Location: _____

of Flowers Observed: _____

Plant Species: _____

Start Time: _____

of Bumble Bees: _____

of Carpenter Bees: _____

of Western Honey Bees: _____

of Other Bees (Take Notes): _____

of Unknown Bees: _____

of Birds: _____

of Butterflies: _____

of Other (Take Notes): _____

End Time: _____

Notes: _____



Join the Hunt for Bees



Free Lemon Queen
sunflower seeds and
planting instructions:
honeytrust.org

Join over 100,000 citizen scientists across North America and collect samples to help San Francisco State University entomologists understand the impact of struggling bee populations.

greatsunflower.org

Citizen Scientists

A citizen scientist is any person who helps conduct real scientific research—no advanced degree necessary. By participating in citizen science projects, you contribute to the understanding of our world and make it a better place.

About the Project

Scientific studies suggest that both honey bee and native bee populations are in trouble. What we don't know is how this is affecting pollination of our gardens, crops, and wildlands. In 2008, the Great Sunflower Project began to gather information about our urban, suburban, and rural bee populations to learn what is happening to the pollinators.

Before You Begin

Lemon Queen sunflowers are a natural hybrid and provide an excellent source of nectar and pollen for bees. In this project they are used as a scientific control.

- Grow Lemon Queen sunflowers. Free seeds and planting instructions are available at: honeytrust.org

Observation Methods

Record information on pollinator activity by using one of four observation methods:

- *Stationary*: A count of pollinator visits to a single plant for a length of time. This is the most beneficial method and the one detailed by this pamphlet.
- *Traveling*: A count of pollinator visits along a walk or trail.
- *Casual*: A count of pollinators where counting was not the main activity.
- *Area*: A count of pollinators in a botanic garden or park where the size of the area is known.

Stationary Observations

Start making observations today by finding a flower in bloom. Lemon Queen sunflowers are preferred, but any identified flower will work. Observations of multiple flowers are possible as long as they are all from a single plant species.

- Log the date, location, number of flowers observed, plant species, and observation start time.
- Observe the flower for at least five minutes, preferably 15 minutes or more.
- Count every single visit by a pollinator to that flower.
- Log your counts and observation end time.

Tips

- For plants with many flowers in a spike or bunch, like foxglove, count the number of flowers you'll be observing beforehand.
- If a bee returns multiple times, count each visit separately—count the number of visits to the flower, not the number of visitors.
- Log your counts even if zero pollinators visited during your observations.

Add Your Count

After you've completed your first observation, go to greatsunflower.org and create your profile. Log in and add your pollinator count. Congratulations, you're now a citizen scientist!

Spread the Word

At the end of the growing season, harvest your Lemon Queen sunflower seeds to plant next season. Share excess seeds with friends, family, and your local seed libraries to encourage participation in this important project. The more samples collected across the continent, the better the data. Print copies of this pamphlet to include with your shared seeds and learn how else you can help the bees at: honeytrust.org