



OBSERVING POLLINATORS

**Identify and count pollinators as
they visit flowering plants.**

Welcome!

We are thrilled that you have chosen to participate in citizen science!

This Observing Pollinators kit is a great fit for both new and seasoned citizen scientists. Arizona State University and SciStarter, an online citizen science hub, have created the “Check It Out: Citizen Science at Your Library” program, thanks to generous support from the Institute for Museum and Library Services, the Moore Foundation and the National Library of Medicine. This program provides libraries with resources to build citizen science kits with specialized tools to help YOU participate in real scientific research!

To get started, visit SciStarter.org/library-kits where you’ll be guided through the steps to use your kit and register with SciStarter so you can submit your data.

We could not do this without you—thank you!

PLEASE NOTE: When returning the kit to the library, be sure to return it to the service/front desk and NOT the drop box.

QUESTIONS?

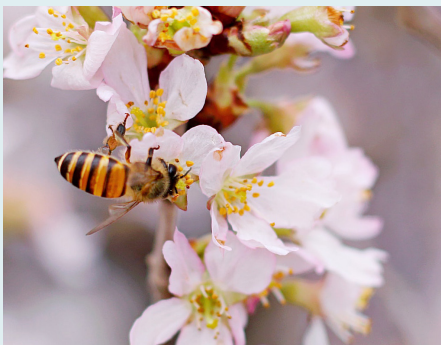
Email librarynetwork@scistarter.org

OBSERVING POLLINATORS

Identify and count pollinators as they visit flowering plants.

Pollinators are animals that assist plants in their reproductive cycles and are critical to the world's food supply. Pollinators include ants, bats, bees, birds, butterflies and more. In recent years, their populations have suffered severe declines, especially among honey bee colonies. The Great Sunflower Project engages volunteers to help scientists understand and respond to changes in pollinator populations and the types of flowering plants that pollinators prefer from wherever they are.

Simply observe any flowering plant for less than 15 minutes, count and identify the pollinators that visit the plant, then log data online as instructed to participate in the project.



Pexels / Hiếu Hoàng

KIT COMPONENTS

Kit components will vary based on your library's selections. This kit likely contains the following materials: **binoculars** to observe pollinators, a **data sheet**, a **clipboard** and **dry-erase marker** to record observations from the field, a **stopwatch** to time observations, a **bee observer card**, a **guide** to identify local flowering plants, a **field journal** to share tips and questions for the next kit user, a printable **Pollinator Coloring Page** to introduce aspiring citizen scientists to pollinators and **Lemon Queen sunflower seeds** to plant to attract future pollinators to observe for continued engagement after the kit is returned to the library!

PLAN

The **Smithsonian Gardens' website** provides easy to use pollinator resources to help you plan: when to observe, where to observe, what to observe (types of plants and pollinators). Search for a flowering plant to observe, ideally one that attracts pollinators.

Use the binoculars in the kit to observe the plant and pollinators at a distance. To adjust the binoculars:

- Fold the binoculars until they are comfortable for both eyes.
- Close your right eye and rotate the center adjusting knob until you can see clearly through your left eye.
- Close your left eye and open your right eye, turn the right eyepiece ring (diopter) until you can see clearly. The image should now be clear in both eyes.

PREPARE

Review the instructions on **SciStarter.org/library-kits**.

Select the "Observing Pollinators" kit page, view the video and review the step-by-step instructions. Bookmark the webpage to find it more easily in the future.

(Continued on reverse)

There are two ways to upload your observations for the project, via smartphone (enter data right from the field) or data sheets (record data on paper sheets included in the kit, then enter the data via a tablet or computer later).

In both cases, we encourage you to first create a free SciStarter account and then use your SciStarter account to login to the Great Sunflower Project to upload your observations.

Create your free SciStarter account to earn credit for your participation in your **SciStarter dashboard**.

After you've reviewed the instructions on the webpage, **click "Participate"** to be directed to the Great Sunflower Project's website.

In the top right corner, click "Login," then scroll down and click "Login through SciStarter." Authorize SciStarter to share your SciStarter email address with the Great Sunflower Project to make it easier to log in next time.

Now you're ready to make and share your observations!

PARTICIPATE

Now that you've selected a location to observe pollinators, you're ready to take the kit outside and find a comfortable place to sit. Look over the bee and flowering plants guides as well as the field guide community journal (perhaps someone added an interesting tip or question in regard to pollinators near them!).

Focus on one site or plant each time you engage in this project to help you better understand your local pollinator community.

On the data entry form, record the date, time and location of the flowering plant you selected. Enter the type of plant you're observing and the approximate number of flowers on that plant. If your kit includes a laminated form, use the dry erase marker to record your data.

Set the stopwatch for five minutes and write down the

types of pollinators that visit and the number of visits they make during the five minutes. If the same pollinator flies away and comes back, count it twice. Remember, you are counting the visits.

If possible, record the type of pollinator. The pollinator observer cards can help you identify specific pollinators.

When you are ready to add the data to the website, return to the SciStarter page: **[SciStarter.org/library-kits/observing-pollinators](https://www.scistarter.org/library-kits/observing-pollinators)**. Click "Participate" to be redirected to the Great Sunflower Project's website. Log in using your SciStarter account (scroll down a bit on the Login page to see that option). Then click "Add A Count" and just add your data from the printed sheet to the online data form. You can make as many observations as you would like over time.

If possible, record the type of pollinator. You can be as specific as you want, but please be specific only if you are certain! The pollinator observer cards and *The Bees in Your Backyard* book can help you identify specific pollinators.

OPTIONAL: PLANT SUNFLOWER SEEDS!

Sunflowers are great for pollinators. Planting sunflowers or other flowering plants in helps keep pollinators healthy and are perfect for future pollinator observations.

ADD TO THE COMMUNITY FIELD JOURNAL

Share your experience with other citizen scientists! Record your thoughts, sketches or notes in the Community Field Journal. Share tips, draw a picture of your observations or just say hello to your fellow citizen scientists.

Thank you for participating in citizen science!

Check that all items are in the kit before you return it to the library.

LOOKING FOR MORE?

Find more projects on your SciStarter Dashboard: **[SciStarter.org/Dashboard](https://www.scistarter.org/Dashboard)**

KIT MATERIALS

