

Bat Pollination **Field Guide**



Bats help other living things, including humans, in many different ways! One of the amazing ecosystem services that bats provide is pollination. This field guide will help you learn how to identify a bat-pollinated plant when you see one, teach you about some bat-pollinated plants you use every day, and give you a space to record your own observations and field sketches!

Age Group: 7-12 (this activity requires scissors so younger bat activists or "bativists" may need assistance)

Supplies Needed:

- Activity 1 print-outs (bat shape and pollination information sheets)
- 1 sheet of construction paper (any color!)
- 3 sheets of white printer paper
- markers or colored pencils
- scissors
- stapler
- glue stick

Before you start: Gather the supplies above and print "bat shape" and "pollination information" sheets (pages 3-7) single-sided. "Bat shape" is optional for older kids who want to free draw their cover design!

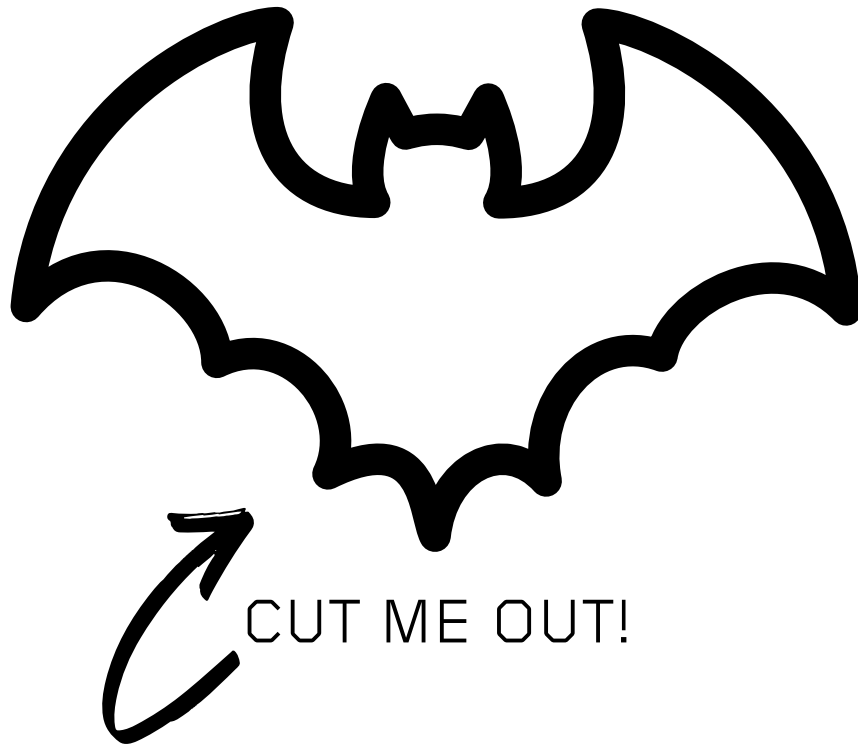
Steps for making your Bat Pollination Field Guide:

1. First, take a piece of construction paper and fold short end to short end. Set aside.
2. Next, take 3 pieces of white printer paper, stack on top of each other, and fold short end to short end.
3. Open papers and lay printer paper on top of construction paper, lining up the creases.
4. Fold the papers closed and staple along the crease you made, close to the edge (you may need an adult to help!) Now you have a booklet! Set aside.
5. Next find the print-out labeled "Bat Shape." Cut out bat shape along the solid black line with scissors (you may need an adult to help!)
6. Now make sure your booklet is laying with the staples on the left, and the opening of the book on the right. Attach your bat shape to the middle of your book cover using a glue stick and decorate it however you like!
7. Number all your pages in the bottom corner, front and back! 1-12
8. Next take "Pollination Information" print-outs and cut out along the dotted lines.
9. Each cut-out will have a number in the lower-left corner that tells you what page to glue it on! Glue each cut-out on the correct page. There is a special label for the front of your book!
10. Now you can decorate the pages of your field guide however you like! The blank pages at the end are for you to make your own drawings and notes like a real scientist!

Finished!

Now you are ready to try to identify bat pollinated plants, make your own observations or field sketches, and most importantly...have fun!

Bat Shape



Pollination Information

Bat Pollination Field Guide

This Belongs to:

What is Pollination?

Plants need pollen from other plants to make seeds. These seeds will grow into new plants someday!

But plants can't walk and move? How do they get pollen from other plants?

To get pollen from each other, many plants rely on insects or animals, such as bats or bees. This is called pollination.

These insects and animals are called "pollinators."

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Pollination Information

Bat Pollination Facts

- "Nectar-feeding" bats visit flowers to drink their nectar and distribute pollen in the process.

- Over 300 types of fruit rely on bats for pollination, including mangoes, guavas, and bananas!

- Bats pollinate primarily at night, so bat-pollinated flowers look different than other flowers!

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Signs of a bat- pollinated flower

- Large in size (1 to 3.5 inches).
- Open at night.
- White or pale in color.
- Strong or fruity smell.



This is a lesser long-nosed bat pollinating an agave plant. Agave is used in many sweeteners and some drinks.

Photographer: J. Scott
Altenbach

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Pollination Information

The bat pollination process:

1. A bat flies to a plant to drink nectar from the flowers.
2. Pollen sticks to the hairs on its body.
3. The bat flies to another plant for more food.
4. The bat transfers the pollen from its body to the new plant.

4

This is a Curacaoan
lesser long-nosed bat
drinking nectar from an
agave plant and helping
pollinate it.
Photographer: Bruce D.
Taubert



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Here are some plants you might know that are pollinated by bats!

- banana tree
- mango tree
- guava tree
- saguaro cactus

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Pollination Information

This is a lesser long-tongued fruit bat feeding on nectar from the flower of a banana plant in Malaysia. While it drinks nectar from the plant it is also helping to pollinate that plant AND the future plants it visits.

Photographer: Ch'ien Lee/Minden Pictures,



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Here you try!

- On this page try to draw a bat pollinating a flower!

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My Field Sketches

Now you are ready to spot bat pollinated plants! The next few pages are for you to make your own drawings and notes like a real scientist! Feel free to draw pictures of bat pollinated plants listed in this guide or plants you think may be pollinated by bats!

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