



For more resources,  
visit [plantheroes.org](http://plantheroes.org)

Follow us on social media!



@PlantHeroes



A program of the  
American  
Public Gardens  
Association

In partnership  
with the



# POLLINATION JOURNAL

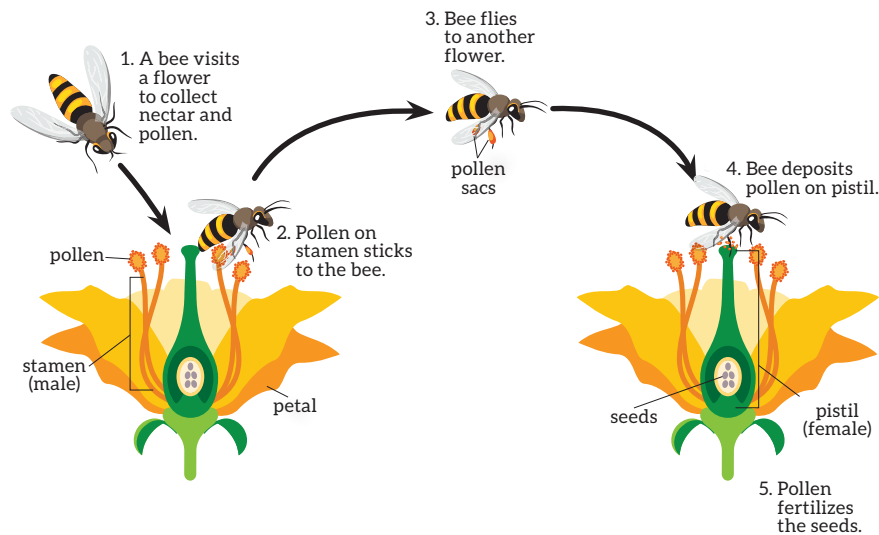
# Have you ever wondered where plants come from?

Plants produce their young through the **pollination** of flowers and cones.

Pollination is the transfer of **pollen** from the **stamen** (male part) of a flower to the **pistil** (female part) that contains the unfertilized seeds inside.

Because plants can't move around, they can't get close enough to each other to transfer pollen on their own. That's why they rely on helpers such as bees to transfer pollen for them!

## POLLINATION



Once the pollen fertilizes the seeds, the seeds mature. These seeds then can germinate into seedlings.

**Draw the pollination clues you see.**

## Pollination Reflection

The most exciting thing I learned about pollination is

---

---

---

I'm curious about

---

---

---

I want to learn more about

---

---

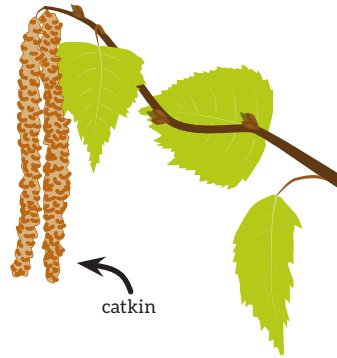
---

## Wind Pollination

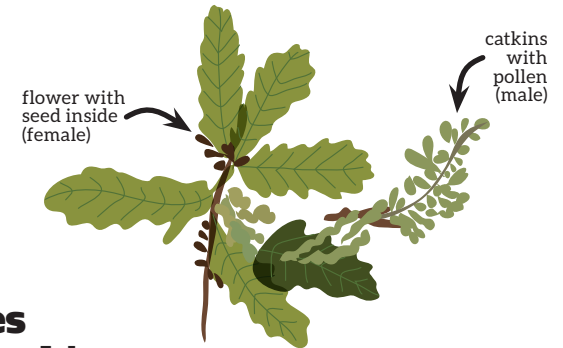
Trees that produce cones instead of flowers are called “conifers.” They make male **pollen cones** and female **seed cones**. Without colorful flowers to attract pollinators, they depend on the wind to pollinate the cones.

Some flowering trees also use wind pollination. The male and female flowers on these trees do not have colorful petals and nectar. Scientists call these caterpillar-shaped clusters of flowers “**catkins**.”

Let's look at some examples:



valley oak  
(*Quercus lobata*)

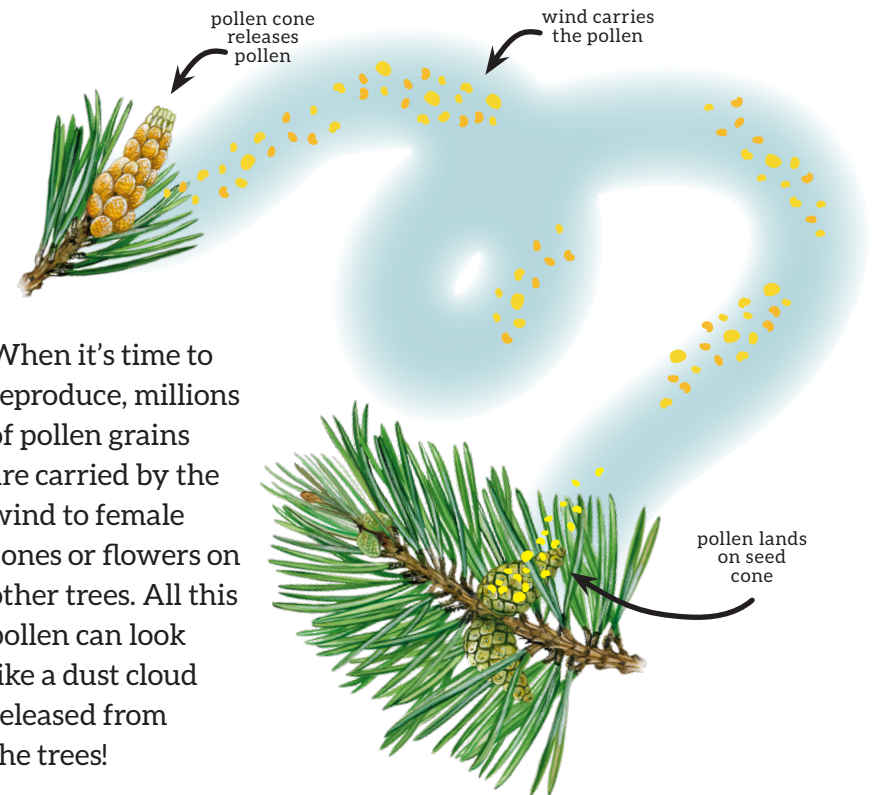
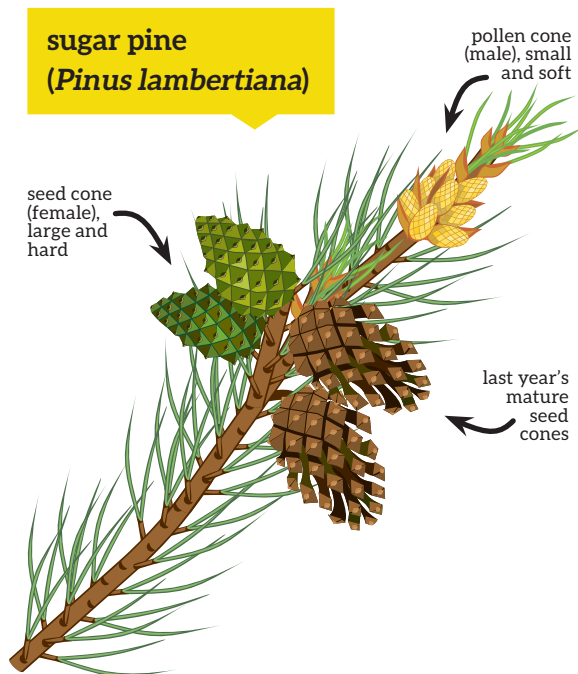


### Flowering trees that produce catkins:

aspens and cottonwoods (*Populus* spp.),  
birches (*Betula* spp.), elms (*Ulmus* spp.), and oaks (*Quercus* spp.)

### Conifers that produce cones:

firs (*Abies* spp.),  
junipers (*Juniperus* spp.),  
pines (*Pinus* spp.),  
spruces (*Picea* spp.)

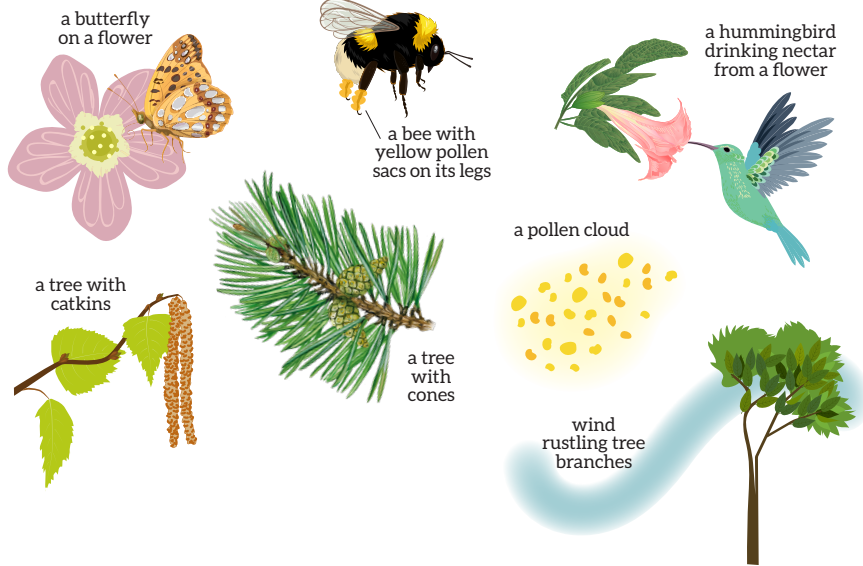


When it's time to reproduce, millions of pollen grains are carried by the wind to female cones or flowers on other trees. All this pollen can look like a dust cloud released from the trees!



# Signs of pollination are all around us!

Use your detective skills to find some of the following clues:



## Observation Notes

Date and Time: \_\_\_\_\_

Weather: \_\_\_\_\_

Circle the pollinators you see:

bees    beetles    butterflies    birds    flies    other

Interesting observations:

---

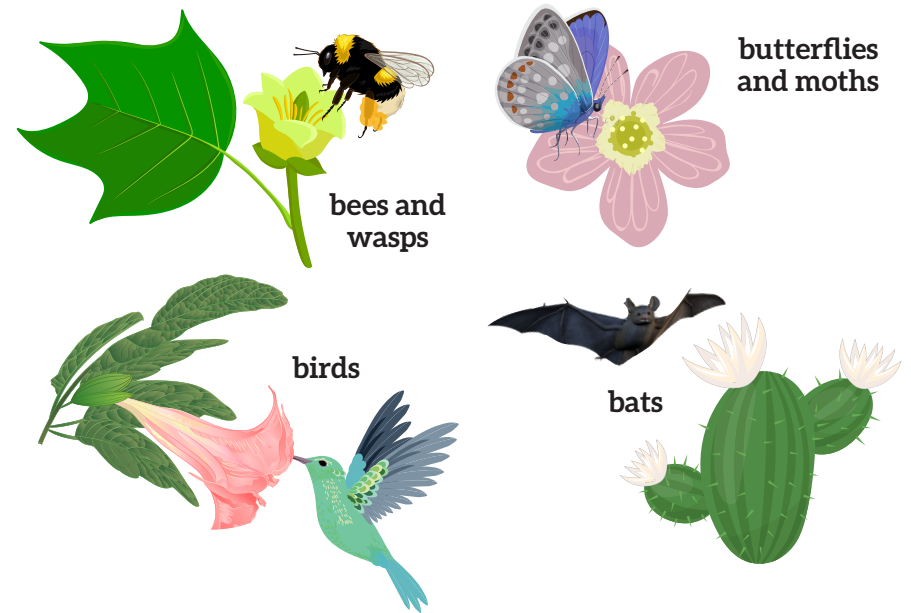


---



---

# Let's meet some of the helpers!



These helpers are called “**pollinators**.” They are attracted to colorful flowers filled with **nectar**, a sugary food source. When pollinators land on a flower, pollen sticks to them. When they move from flower to flower, they transfer pollen. That’s how pollination works.

Did you know that some flies, ants, beetles, and even mosquitoes are also pollinators?

Which pollinators have you seen?

---

What is your favorite pollinator and why?

---



---