

The Pollinator Dance

Take a moment to think about what a **pollinator** is. What kinds of animals are you thinking about? What exactly do they do? How do they pollinate and why?



Pollinators are an extremely important part of any **ecosystem**. They help flowers and food grow by bringing **pollen** from one plant to another, and without them we wouldn't have most of the food we eat today. When you think about pollinators, you probably immediately think about bees... but did you know that bats, butterflies, moths, beetles, wasps, flies, and all manner of other creatures are also pollinators? Bees are, of course, the most important and **specialized** pollinators, but they receive a lot of help. Butterflies need nectar in order to have the energy they need to fly; wasps prey upon pest insects and pollinate flowers as they hunt; syrphid flies mimic bees and wasps and protect plants with their offspring; bats also love nectar and will visit flowers to pollinate them!

Honeybees are interesting because, more than any other animal, they live to pollinate flowers. One of the ways they do this is by sending scouts to find flower patches, which they report back to the colony with a special dance that tells them how to get there. Have you wondered how they do this? Let's find out by playing a game!

Time Needed: 10+ Minutes. You may play as many rounds as you'd like!

Vocabulary

- **Pollinator:** a type of animal that goes from flower to flower carrying pollen, which helps the plants to reproduce and grow fruit or seeds.

- **Pollen:** a small, usually yellow powdery substance produced by male flowers, that is required for female flowers to grow fruit and seeds.
- **Ecosystem:** in nature, it is a net of interconnected plants and animals that work together to survive and thrive. Pollinators are a type of animal that supports the entire ecosystem by making sure the plants are healthy.
- **Specialization:** an expert in a special skill, just like bees are experts in gathering pollen!

What You'll Need:

- 2+ Players
- Paper
- Items to find
- Optional: Music to play during rounds

How to Play:

1. Players will first gather to form a 'colony.' Your colony needs to decide on a set of dance moves that will tell them how to get from one place to another. Before playing the game, figure out what moves will determine what directions!
Examples of moves to think about:
 - a. Something to tell people how many steps they need to take
 - b. Moves to tell people what direction to turn.
 - c. Moves to tell people to look around an area.
 - d. Moves to tell people to go over or around something.
 - e. And whatever else you can think of!
2. Once you have figured out your dance moves, take a bit of time to practice them. Ideally, you will want to be able to do your dance without needing reminders of what dance moves mean what, but if you need help there's also no problem with asking.
 - a. If you have music to play, use it to entertain the colony and set a time limit for the rounds.
3. Start small: A player will take one of their gathered items (without revealing what it is) and go hide it nearby. When they are finished hiding, they will use dance moves to try to tell the others where to find it.
4. The first 'bee' to return with the correct object will be that round's winner and will be able to hide an item next!
5. Once the group is comfortable with the exercise, feel free to make the game a little more difficult by hiding items in different rooms. Make changes to you dance moves if you need to make it easier!

You may find that it's a lot more difficult than it seems. Bees have excellent memories. Is your memory as good as a bee's?

Other Pollinators:

- **Syrphid Flies:** Also known as hoverflies. Often considered to be the second-most important pollinators, syrphids are a family of wasp and bee mimics in the fly family and they do a good job pretending to be bees! While the adults prefer to drink nectar to survive, their maggots are predatory and will protect their home plants from vicious pests like aphids. Gardeners love syrphid flies!
- **Bats:** Certain species of bats, such as Arizona's lesser long-nosed bat, drink nectar in order to survive their long migrations. These bats will stick their long tongues into the flower to sip the liquid, getting pollen all over their fur, which they take to the next flower.
- **Butterflies:** These insects are beautiful and powerful pollinators. Using their long mouthparts, called a proboscis, they sip the nectar and rub the pollen all over themselves in the process, which they take to the next flower.
- **Wasps:** While not traditional pollinators, they do the job just the same. Wasps in general are carnivorous so they don't usually drink nectar, but they like to eat the insects that call flowers home. A wasp catching a bug might have pollen rubbed off onto its body, which it'll carry to the next flower over.
- **What other pollinators can you find?** The internet is a vast resource of information so see if you can do some additional research. Bees are fantastic creatures, but they don't do it alone!

