



INSECT HABITATS

If you were an insect, what would you need to live? Just like you, living things like insects need food, water, and somewhere to rest. A place that has all of those things is called a habitat. Head outside, think like an insect, and use your careful observational skills to explore habitats. Can you find a habitat with only a few insects, and one with so many? Join us to find out why!

Time: 40-minute activity



Materials:

- YOU and your senses
- Two different habitats to visit
- Paper and something to write with, or a camera, to record what you find

Directions:



1. With permission from an adult, head outside and visit a place where you may find some insects. You could choose a grassy lawn, a lawn with dandelions, a garden, a scrubby edge along an alley, or a natural place with many different types of plants. It's your choice.



2. Spend some time thinking like an insect, as you make observations about your habitat. What is it about this habitat that you think would help an insect survive? Does your habitat have food? How many different types of food for insects can you find? Can you find green leaves, flowers, seeds, rotting things, or other insects or animals like you (!) to eat?



3. Scan with your eyes and feel with your skin. Can you find a source of water nearby? Insects are small, so even a drop of morning dew on a leaf could be enough for a good drink. Would an insect be able to get a sip of water to drink here in your habitat? Do you think it rains or snows here? Are there places where the soil is moist?



4. Be an insect detective, and search for places insects could rest and hide. If you were as small as an insect, would you find spots to safely sit still in your habitat? Are there places to get out of the rain, or find shade from the sun? Are there places you could hide if you were being chased or if you just needed a rest? Could you be sneaky here, waiting for your lunch to walk by, if you were as small as an insect?



5. Now that you have been a careful observer of your habitat, and found ways it may help an insect survive, scout around to find as many insects as you can. Get down low on hands and knees and then look up high. Look on leaves and turn them over to see what may be hiding underneath. Watch and wait for insects to visit flowers. Search for insects crawling along the Earth. Turn over a rock to find insects hiding there, being sure to put it back the way you found it. How many insects did you find? How many different types of insects?



6. With permission from an adult, visit another habitat, so different from the first you can easily see it with your eyes. And become an insect again, looking for food, water, and shelter. How is this habitat different from the first? And when you look for insects, do you find the same insects, or something very different?

Wonder Why with Nature WY...

Why do you think different habitats have different numbers and types of insects? Scientists would call the number of creatures found a measure of **abundance**. It is a simple count of all insects found. When you count up the number of insects found, along with a count of how many different types of insects found, you have described the **diversity** of insects in a habitat. Why do you think one place would have a higher diversity of insects than another? Think about the needs one type of insect has for life, like a butterfly that must have nectar from flowers for food. Compare that to a beetle that hunts for food along the ground.

Visit a new habitat, and consider how that habitat may support the lives of insects. Before you search for insects, challenge yourself to make a prediction. Do you think you will find many insects? What types of insects do you think you will find? Those that sip nectar? Those that live under rocks? Those that eat blades of grass?

Create an insect life map. Choose your favorite insect of the day, and describe that insect in words or with a drawing on a piece of paper. Around that favorite insect, write the words or make drawings of things you found in your habitat that you think that insect needs for life. Do the same for your second favorite insect. How are their needs the same? How are they different?

Think about you. You are a living creature. How would you describe your habitat? Draw a human life map for yourself, with a picture of you or your name on a piece of paper, and words or drawings of all of the things you need for life surrounding you. Think hard! Only add those things that you really need to survive, not the things you want and are lovely, like roller skates!

To a scientist, a generalist is a creature that can live in different habitats, because it can find food and everything else it needs for life in many different places. Specialists are the opposite. They can only live in habitats that have the special things they need for life. The flowers of a penstemon plant are long and skinny, so that only bees with really long tongues can sip the nectar from those flowers. Those bees, like *Osmia brevis*, are specialists, unlike a generalist bee like bumble bees. And yet without flowers, you won't find bees! When you think about the habitats you explored, do you think you found places where specialists could live?

Wonder what you found as you investigated your habitats? Try using [Seek by iNaturalist](#) to help you identify insects and plants. Or head to the library for a field guide on plants or insects and start learning about the living creatures in each habitat you explore.

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