



## Native Tree Leaves Activity Set

### Activity #5: It's all connected

It may seem like trees are independent organisms, but like everything else in nature, trees form partnerships with the beings that grow around them. Plants and animals are connected through their evolutionary history. Over the many, many years that plants and animals have lived together, they have grown to depend on each other.

Goals:

- Understand how plants and animals are connected
- Value trees as important parts of nature

Materials

- Pencils
- Paper

**Exercise 1: Connection Web.** Invite the students to consider a greenspace that's local to them, maybe a neighboring park close to the school, a trail everyone is familiar with, or even the school yard. Have the students create a relationship web, noting the different organisms present in the ecosystem they've chosen and how the different species interact with one another.

The following prompts may help students add to their lists.

- **Food:** Plants are typically the foundation of any ecosystem. Plants are unique in their ability to create food for themselves from sunlight. Unlike most other organisms, most plants don't consume other beings, instead they are consumed by many animals. Tree leaves may be consumed by insects, like caterpillars. Porcupines, deer, and rabbits might peel a tree's bark in the winter for food.
- **Seed dispersal:** Some trees encase their seeds in fruit. Trees don't make fruit for the sake of feeding animals; they're enticing animals to move the seeds inside of the fruit. When the animal finishes digesting the fruit, they tend to poop out the seeds, inadvertently dispersing the tree's seeds.
- **Pollination:** Pollinators like bees, beetles, wasps, and hummingbirds visit flowers in search of nectar and pollen to consume. In their search for food, pollinators often pick up pollen from the male anther and carry it to the female stigma, which allows the flower to develop into a seed. Similar to wildflowers, trees also produce flowers that require animal pollinators for seed development.
- **Habitat:** Many animals take up residence in trees. Birds and squirrels hide their nests between the cover of leaves. Grazers like rabbits and deer can help clear the ground of grass so that trees can grow.

**Exercise 2: Outdoor exploration.** Go outside and pick a tree to study. For the next 5 minutes students will examine the tree for signs of partnerships with other beings. Ask the students to write down their observations so that they can share them with the class.

**Exercise 3: Trees and People.** Wild animals aren't the only creatures that benefit from trees. Have the students consider their personal connection with trees. How do they benefit from having trees around, what do they offer the tree in return?