Land Cover

GLOBE Observer

The World Beneath Your Tree and Beyond

Learners will focus on **perspectives** from differing views including what is at the base of a tree, under the ground beneath the ground cover near the tree, and then step back and sketch a larger picture of the land cover beyond the tree. Learners will make observations to help them understand the biological community of interacting organisms that depend on the physical environment of land cover.

Purpose

To provide campers an opportunity to explore and learn about the **ecosystem** found around the base of a tree and beyond.

Time

Approximately 20 minutes

Materials

- Observation Journals
- □ Colored pencils, markers, stickers, etc.
- Magnifying glasses
- Parachute or blanket for the group to lie down on, if needed

Safety

Instructors should find safe locations for students to lie down on the ground near the base of or in close proximity to a tree to complete this activity. Be sure the area is free of ant beds, sharp rocks, or other dangerous objects.

What to Do

Preparation

Locate a prominent tree around your camp setting where learners can lie down near the base of the tree facing the ground to make observations, observe the area around the base of the tree and step back to observe and sketch the land cover surrounding the tree.



Investigation

- 1. Have learners sketch the base of the tree in their observation notebook.
- 2. Encourage learners to touch the ground cover and look closely at the plant life and any organisms they see. Have them think about and sketch what they think lives beneath the surface. Have them get in the mindset of an ant or earthworm or any other tiny **decomposers** and think about how land cover affects their life.
- 3. Have learners step back and look out from the base of the tree to the ecosystem around the tree and then look up and notice what might be growing up the tree or living in or flying above the tree.
- 4. Discuss what would happen if the ground cover around the tree was not present.

Question for Review

How do trees, land cover, plants, and organisms depend on one another to maintain a healthy ecosystem?

Key Words

Ecosystem: a geographic area where plants, animals and other organisms, as well as weather and land cover work together to form a community of life

Perspective: a way of thinking about and understanding something; a point of view

Decomposers: an organism, such as soil bacteria, fungus or an invertebrate that breaks down organic material

Acknowledgements

This resource was created by NASA Langley Research Center under the NASA Earth Science Education Collaborative (NASA award NNX16AE28A) for GLOBE Goes to Camp.