



DALLAS ARBORETUM  
Education

*Garden STEM at Home*  
*The Fallen Log*



WE GROW MINDS, TOO.



## OBJECTIVE:

STUDENTS WILL EXPLORE A ROTTING LOG AND IDENTIFY SOME OF THE ORGANISMS THAT LIVE IN, ON AND UNDER FALLEN LOGS AND EXPLAIN HOW THEY DEPEND ON THE DEAD WOOD FOR SURVIVAL. STUDENTS WILL DESCRIBE THE PROCESS OF DECOMPOSITION.

## SOURCE

Project Learning Tree PreK-8 Activity Guide

## BACKGROUND

Over their lifetime, trees use nutrients from their environment to grow and produce bark, wood, branches, leaves and fruit. When they die, those nutrients are recycled back into the environment through decomposition. In many cases, decomposers begin this work long before the tree itself has died.

Dead or dying wood is home to a plethora of living organisms. From the moss, lichens and fungi that sprout on bark to termites, saw bugs and other scavengers that eat the wood, a rotten log is full of life. Predatory insects, such as centipedes, beetles and spiders may also call a rotten log home, which, in turn, provide a meal for other living organisms like birds, reptiles and small mammals. Other insects, like wasps, slugs and other beetle species, may use the warmth from a rotting log to spend the winter.

## INSTRUCTIONS

1. Choose a study site that can safely be visited. If you don't have access to a rotting log, any urban landscape - a cinder block, old tire or other object lying on bare earth can merit investigation.
2. Prior to visiting the spot, ask kids to consider some of the following: (1) how the tree might have died (2) what kind of animals live in, on or under it (3) how do these animals meet their basic needs and (4) do any plants call it home.
3. Using a nature journal or smart phone, explore the log, focusing on limited disturbance of the animals that inhabit it. Draw, photograph and provide as much detail as possible.
4. Using field guides or an app such as iNaturalist, identify as many of the species as possible.
5. Share out your results in a method of the students' choosing, including a Google slideshow, art piece or book. Ask students to focus on decomposition and its role in the forest ecosystem.

## ADDITIONAL RESOURCES

Explore the The Fallen Log Additional Resources Guide from PLT:  
<https://www.plt.org/blog/activity/prek-8-activity-23-fallen-log/>

Explore the The Fallen Log Family Activity Guide from PLT:  
<https://www.plt.org/family-activity/the-fallen-log/>

Texas A&M Field Guide to Common Texas Insects:  
<https://texasinsects.tamu.edu/>

What's Under the Log by Anne Hunter; ISBN: 0395754968.

A Log's Life by Wendy Pfeffer; ISBN: 0689806361.