

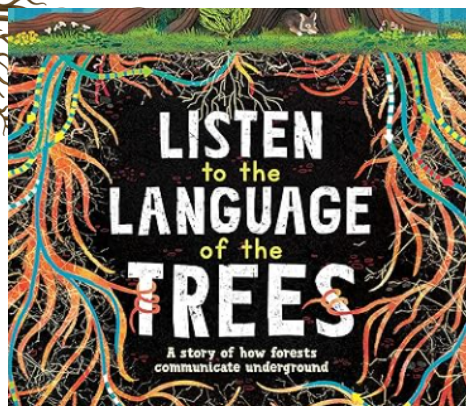
CONNECTIONS TO SCIENCE GUIDES

GEORGIA YOUTH SCIENCE & TECHNOLOGY CENTERS, INC.

LISTEN TO THE LANGUAGE OF THE TREES

BY: TERA KELLEY

CAN'T FIND THE BOOK?
READ-ALOUDS ARE AVAILABLE
ON YOUTUBE.



ASK

- What types of biotic (living) components are there in my local ecosystem?
- What types of abiotic (non-living) components are there in my local ecosystem?
- How do the biotic and abiotic components interact?
- Have you ever thought about being an ecologist?

EXPLORE

BIODIVERSITY ALL AROUND

Materials:

- Paper
- Pencil
- An outdoor space

Optional:

- Binoculars
- Seek App by iNaturalist

Directions:

- Begin by folding your piece of paper into eighths.
- In the first box, write Location, Date, and Time.
- Label the rest of the boxes (including some on the back): Plants, Amphibians, Fungi, Reptiles, Arachnids, Birds, Insects, Mollusks, Mammals, Abiotic Components (Non-Living), and Biodiversity.
- Find an outdoor space to observe. Record the location, date, and time in the first box.
- Try to observe and record all the different living and non-living things that you see.
- As you are observing, think about:
 - What kinds of interactions are taking place between all the living and non-living organisms in this location?
- To calculate the Biodiversity Index for the location, tally the total species and total items in each category. Then, divide the total number of different species by the total number of living things.

Fun Facts:

- Georgia is the 6th most biodiverse state in the country.
- 32 species of plants and animals are only found in Georgia.



EXPLAIN

RELATIONSHIPS IN ECOSYSTEMS

Symbiosis is a relationship between organisms in an ecosystem. There are three types of symbiotic relationships: mutualism, parasitism, and commensalism. In mutualism, both organisms benefit. In parasitism, one organism benefits while the other is harmed. In commensalism, one organism benefits, and the other is neither helped or harmed. There can also be predator-prey relationships and competition between organisms for resources.



EXTEND

ALTAMAHA RIVER



Georgia's Altamaha River winds 137 miles from Lumber City to Brunswick, Georgia. Hosting an impressive amount of biodiversity, it has been named one of the 75 Last Great Places on Earth by the Nature Conservancy.

STEM CAREER

ECOLOGIST

An ecologist is a scientist who studies the relationships among organisms and habitats. At work, ecologists can find solutions for non-native species, discover chemicals produced by plants and animals to treat human diseases, and help bring species back from the brink of extinction. If you are interested in ecosystems, being an ecologist might be for you!



BACKGROUND

The Georgia Youth Science and Technology Centers, Inc. provides quality programs for teachers of STEM subjects that improve the teaching and learning process at the kindergarten through eighth grade levels. We present programs that change students' perceptions and inspire an appreciation for science, technology, engineering, and mathematics subjects.

ABOUT US

GYSTC, Inc.

gystc@kennesaw.edu

470-578-7592

www.gystc.org

Follow Us on Socials:

Facebook: @gystc

Instagram: @gystc_inc

Twitter: @gystc

YouTube: @gystc



Scan QR code or Visit:
gystc.org/connection-to-science-guides-2024/
for more guides