

The Way



STANDARD COURSE OF STUDY CORRELATIONS:

Science, Grade 5, Goal 1: The learner will conduct investigations to build an understanding of the interdependence of plants and animals.

- 1.01** Describe and compare several common ecosystems (communities of organisms and their interaction with the environment).
- 1.02** Explain why an ecosystem can support a variety of organisms.
- 1.03** Determine the interaction of organisms within an ecosystem.
- 1.06** Explain and evaluate some ways that humans affect ecosystems.
 - Habitat reduction due to development.
 - Pollutants.
 - Increased nutrients.

MATERIALS

- ❁ Roanoke River handout (1 per student)

INTRODUCTION TO LESSON: Students will learn about North Carolina’s Roanoke River, then study a handout, proverb and book excerpt to draw conclusions about how humans’ consumption of resources affects the environment.

BACKGROUND FOR TEACHER: The lower Roanoke River floodplain contains the largest intact bottomland hardwood forest ecosystem remaining in the mid-Atlantic region. The floodplain supports the full range of bottomland forest types. The mid-section of the river contains alluvial forests and large swamps, while the lower section of the river flows through vast tracts of baldcypress and water tupelo swamp forests. The handout lists plant and animal species native to the Roanoke.

engage > Using pair sharing, encourage students to discuss what they already know about rivers:

- Why is a river important to humans?
- Why is a river important to plants and animals?
- If we were to call a river a super highway, what is “transported” on this road? What characteristics of a river might make it a super highway?

explore > Show Chapters 5 and 6 of the video and discuss afterward.

explain > Have students read the handout and revisit the “Engage” questions through written work or in pair/group discussion.

elaborate > Read and discuss the following proverb.

“Treat the earth well,
It was not given to you by your parents,
It was loaned to you by your children.”
— Cherokee proverb

- What is a proverb?
- What is the tone or emotion of this proverb?
- Is our “Amazon,” the Roanoke River, on loan to us from future generations? Why?

As an alternative or additional exercise, have students read this excerpt from *The Education of Little Tree** by Forrest Carter, then lead a discussion of its themes.

From *The Education of Little Tree*:

“It is The Way,” he said softly. “Take only what ye need. When ye take the deer, do not take the best. Take the smaller and the slower and then the deer will grow stronger and always give you meat. Pa-koh, the panther, knows and so must ye.”

And he laughed, “Only Ti-bi, the bee, stores more than he can use... and so he is robbed by the bear, and the ‘coon...and the Cherokee. It is so with people who store and fat themselves with more than their share. They will have it taken from them. And there will be wars over it...and they will make long talks, trying to hold more than their share. They will say a flag stands for their right to do this...and men will die because of the words and the flag...but they will not change the rules of The Way.”

Discussion:

- What is “The Way?” (*Taking only what you need.*)
- Are we living “The Way?” (*Have students offer personal anecdotes about sharing with siblings and their thoughts on being a consumer of toys, clothes, electricity, water, etc.*)
- In what ways is it possible to follow “The Way” in our modern world? (*Possible contexts: consumption of natural resources like oil or metals; rain forests; extinct species; climate change; pollution; development in coastal regions.*)

* This text is recommended with acknowledgment that there is controversy surrounding the author Forrest Carter, also known as Asa Earl Carter, including his social views and his false claim that this text is his memoir. However, if delivered as fiction, this text has value as we consider what ways culture can threaten the environment. At this time, North Carolina’s Cherokee Central School System of the Eastern Band of Cherokee Indians requires that all of its middle school students read this book.

evaluate > Review exit writing or homework.

Teacher’s Notes:



Baldcypress photograph by N.C. Wildlife Resources Commission.



BEYOND THE CLASSROOM

Visit a nearby river or park to see if you can identify ways that humans, animals and plants are using the resource.

Additional Resources:

Southern Forests Project: North Carolina • <http://www.nature.org/wherework/northamerica/states/northcarolina/features/art17536.html>

Roanoke River Lighthouse • http://www.roanokeriver.com/news_features/lighthouse.htm

A Travelers Guide to the Roanoke River Region • http://www.roanokeriverpartners.org/PDFs/Roanoke%20River%20brochure_05.pdf



Coastal Plain Roanoke River

The Roanoke River stretches for 137 miles across North Carolina's Coastal Plain and is up to 5 miles wide in some places. Its floodplain contains the largest intact and least-disturbed bottomland hardwood forest ecosystem remaining in the mid-Atlantic region. The middle section of the Roanoke River is characterized by alluvial forests and large backswamps, while the lower section contains vast tracts of baldcypress and water tupelo swamp forests. The Roanoke River provides a haven for a host of plants and animals, including more than 200 bird species.



Roanoke River Facts

- **Size:** 61,000 acres (The Nature Conservancy acres: 57,000 acres)
- **Location:** The coastal plain of northeastern North Carolina, in Bertie, Halifax, Martin, Northampton and Washington counties
- **Plant Species:** wild hyacinth, trout lily, atamasco lily, fire pink, spring beauty, Virginia bluebells, pawpaw, spicebush, yellow buckeye, eastern wahoo
- **Animal Species:** The river supports 214 bird species, such as wood ducks, bald eagles, barred owls, great blue herons and cerulean warblers. Bottomland hardwood forests shelter wide-ranging mammals such as black bear and bobcat, while the river supports an important fish community including striped bass, river herring and hickory shad.

Conservation Highlights:

The Nature Conservancy has worked with many public and private partners who have participated in the complex task of protecting significant natural areas along a 137-mile river corridor.



In 1989, the Conservancy purchased 10,626 acres in Bertie and Martin counties from Georgia-Pacific Corporation to create the Roanoke River National Wildlife Refuge and add land to the state-owned Roanoke River Wetlands. In 1994, Georgia-Pacific Corporation and the Conservancy entered into an agreement to jointly manage and protect approximately 21,000 acres on the Roanoke. And in 2006, The Nature Conservancy purchased 22,000 acres along the Roanoke from International Paper, as part of the largest-ever land conservation project in the southern United States.

Text and map from the N.C. Chapter of the Nature Conservancy; photograph courtesy of N.C. Wildlife Resources Commission.