



A Natural Resource Ramble

Richland Soil and Water Conservation District

by Chanda L. Cooper

December, 2018

Summary:

Students go on a “natural resource ramble” to identify and document the renewable and non-renewable natural resources they encounter.

Objectives:

Students will demonstrate an understanding of renewable and non-renewable natural resources.

Students will use technology and language arts skills to create and present a record of their ramble.

Background

Natural resources—things we use that come from nature such as plants, animals, and minerals—are all around us. We use these resources to meet our basic needs for water, food, shelter, and air as well as to create the products that make our lives more convenient, healthy, and productive.

Natural resources are typically organized in two categories: renewable and non-renewable.

Renewable resources are those that never run out or can be replenished quickly—usually within a human lifetime. **Non-renewable** resources are those that are in limited supply and cannot be regenerated within a human lifetime.

Examples of renewable resources include trees, which can be harvested for paper pulp within 20 years of planting in SC’s climate; and water, which never “runs out” because the water cycle continuously makes water available for re-use.

Examples of non-renewable resources include minerals such as rocks, metals, gems, and sand. Fossil fuels (oil, coal, and natural gas) are also non-renewable. While these materials are generated by

natural processes and can therefore eventually be “regenerated,” these processes take thousands or millions of years.

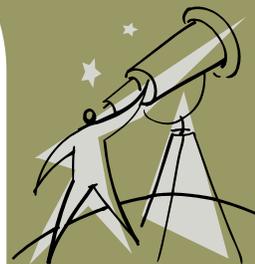
Assignment

Take a walk around your school or through your neighborhood. How many natural resources can you find? Use a camera to document five examples of natural resources and five ways those resources are being used. Caption each photo with details about the resource. (You may do this in a document, slideshow, or spreadsheet or you may upload the photos and captions to a social media site.) Make sure you answer these questions in your captions:

- What resource is depicted?
- How do humans use this resource?
- Is this resource renewable or non-renewable? Why?



SC Science Standards Correlations



GRADE ONE EARTH SCIENCE: EARTH’S NATURAL RESOURCES

- Standard 1.E.4
- Conceptual Understanding 1.E.4B
- Performance Indicator: 1.E.4B.1, 1.E.4B.2

GRADE THREE EARTH SCIENCE: EARTH’S MATERIALS AND PROCESSES

- Standard 3.E.4
- Conceptual Understanding 3.E.4A
- Performance Indicator: 3.E.4A.3

GRADE EIGHT EARTH SCIENCE: EARTH SYSTEMS AND RESOURCES

- Standard 8.E.5
- Conceptual Understanding 8.E.5C
- Performance Indicator: 8.E.5C.1

Extensions

- Document five ways you see humans conserving (protecting, saving, or using wisely) natural resources. Caption these photos with an explanation of the conservation practice and how it helps preserve or protect the resource.
- Write a creative account of your Natural Resource Ramble. This could be in the form of a short story, poem, song, or performance art. Be sure to include information about how resources are used and whether they are renewable or non-renewable in your final product.



Example

A Natural Resource Ramble

Killian Crossing

December 4, 2018

Visit us online at
rcgov.us/rswcd/



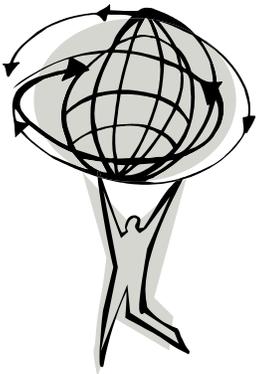
The average person uses 80-100 gallons of water a day to flush the toilet, take a shower or bath, wash clothes and dishes, and more. Water is a renewable resource because used water can be made available for re-use through water treatment and/or the water cycle.



Granite is an igneous rock comprised of the minerals feldspar, quartz, and mica. It is one of the most common rock types on Earth and has a variety of commercial uses, from rip-rap for drainage and slope protection to building stone. Granite is also used for ornamental statues and monuments. Granite is mined throughout SC, and SC's state stone is Winnsboro blue granite. Because granite takes millions of years to form, it is considered a non-renewable natural resource.



Trees such as these longleaf pines are used to produce utility poles, sawtimber, and high-quality pine straw for landscaping. They also provide important wildlife habitat for a number of species. Because straw can be produced in 8 years and utility poles and sawtimber can be produced in 40-60 years (within a human lifetime), longleaf pine trees are a renewable natural resource.



Example

A Natural Resource Ramble

Killian Crossing

December 4, 2018

Visit us online at rcgov.us/rswcd/



This camphorweed provides important habitat—including forage, nectar, and pollen—for a variety of insects. These insects, in turn, provide important services for humans including crop pollination and pest control. Because this plant can grow and reproduce each year, it is considered a renewable natural resource.



Background: a pile of bark mulch (made from trees, which are a renewable resource) will be used to enhance the landscaping and feed the soil around this development.

Foreground: a pile of sand has been depleted as the sand is used for various construction and landscaping projects. Because it takes thousands to millions of years for sand to form via the rock cycle and weathering, sand is a non-renewable natural resource.



This manhole cover provides a conservation message—"Dump no waste; drains to waterways"—designed to educate passers-by and protect water quality in our local ecosystems. Education and public awareness campaigns are an important conservation tool!

