



## Table Rocks Curriculum

### Home is a Habitat

**Objective:** The learner will identify the components of a *habitat*, recognize how humans, plants, and other animals depend upon a *habitat*, and explore the relationships within a *habitat* by creating a Table Rocks poster or calendar page.

#### **Benchmarks Targeted: 1, 2, and 3 (Grades 3-8)**

#### **Oregon Standards:**

**Subject Area:** Life Science

**Common Curriculum Goals:** Diversity/Interdependence: Understand the relationships among living things and between living things and their environments.

**Benchmark 1:** Describe a habitat and the animals that live there. Identify how some animals gather and store food, defend themselves and find shelter.

**Benchmark 2:** Describe the relationship between characteristics of specific habitats and the organisms that live there. Describe how adaptations help a species survive.

**Benchmark 3:** Identify and describe the factors that influence or change the balance of populations in their environment.

**Common Curriculum Goals:** Organisms: Understand the characteristics, structure, and functions of an organism.

**Benchmark 1:** Describe the basic needs of living things.

**Benchmark 2:** Group or classify organisms based on a variety of characteristics.

**Subject Area:** The Arts

**Common Curriculum Goals:** Create, present and perform: Apply ideas, techniques and processes in the arts.

**Benchmark 1:** Use experiences, imagination, essential elements and organizational principles to achieve a desired effect when creating, presenting and/or performing works of art.

**Benchmark 2:** Use experiences, imagination, observations, essential elements and organizational principles to achieve a desired effect when creating, presenting and/or performing works of art.

**Benchmark 3:** Select and combine essential elements and organizational principles to achieve a desired effect when creating, presenting and/or performing works of art.

**Subject Area:** English/Language Arts

**Common Curriculum Goal:** Writing: Investigate topics of interest and importance across the subject areas, selecting appropriate media sources, using effective research processes, and demonstrating ethical use of resources and materials.

**Length of Lesson:** Several 30 minute intervals

#### **Materials:**

- ✓ Drawing paper
- ✓ Black pens for drawing (works best for low-cost reproduction )
- ✓ BLM Table Rocks website:  
<<http://www.blm.gov/or/resources/recreation/ablerock/index.php>>.

**Key Vocabulary:** *chaparral, generalist, habitat, mixed woodland, mounded prairie/vernal pool, oak savannah, predator, resources, specialist*

**Background:**

See Chapter Introduction.

**Procedure:** (adapted from a calendar produced by Lea Earnheart from Marin County School District, Marin County Open Space, Audubon Canyon Ranch, and Stacy Henderson, Graphic Design, 1997).

**Preparation:**

Gather students in a comfortable area and lead a discussion on “What is a *habitat*?” Include a description of the different *habitats* of the Table Rocks (*oak savannah, chaparral, mixed woodland, mounded prairie/vernal pool*). Tell students that after the discussion, they are going to pick an element from within the Table Rocks *habitats* and work with a partner to create a poster or calendar page about a specific animal, insect, plant, or group of people that live or lived around the Table Rocks.

**Activity:**

Give the students time to research an organism that can be found on the Table Rocks from the *habitat* descriptions given in the background section (e.g., coyote, buckbrush, Turkey Vulture, serviceberry). The Table Rocks website is a great research tool. Using colored pens with a variety of widths have students create a poster incorporating facts from their research and important relationships that occur in its *habitat*. Students can make notes around the illustration describing special features, adaptations, and any interrelationships associated with the organism they selected. (see example pages at the end of this lesson). Have students discover how their selected organism meets the *habitat* requirements (food, shelter, water, space) on the Table Rocks, and which of these are shared with other insects, plants, animals or humans within the same *habitat*.

Some species are *generalists*: species able to survive in a wide variety of environmental conditions and able to make use of a variety of different resources. Other species are *specialists*: species that can only thrive in a narrow range of environmental conditions or have a limited diet. Have students determine which category their organism belongs to.

**Grades 5-8:** Have students consider aspects of survival such as mate attraction, pollination methods, and seed dispersal.

If desired, provide students with a standard formatting design for a creating a calendar. Some ideas for what the calendar could include: a cover page; a title page; a *habitat* description page; a page for each month of the year; a closing page with names and portrait sketches of the contributors. Keep in mind that printing companies can turn the pages into a bound calendar eliminating the need for students to make date boxes.

**Sample questions to include in your research and drawings for the calendar:**

- What plant community (communities) does this organism belong to or live in?
- What types of *predators* exist for this species?
- What does the organism use for its shelter/home? (Where does it sleep?)
- What types of birds nest in, take nectar from, or eat berries (as applicable) from this plant?

- Did the Native American people use this plant or animal for food, tools, basketry, or medicine?
- Does the organism have more than one name used?
- How does this species obtain *resources*? (Food, water, nutrients etc.)
- What does it look like?
- Can you find any fun facts about the organism?

\*Questions can be expanded to greater levels of detail as student age and knowledge increases.

**Example:** Serviceberry (*Amelanchier alnifolia*)

- **Plant information-** A broad, multi-branched shrub or small tree that grows in the *chaparral* environment on the Table Rocks. It has small white flowers in early spring, followed by purple berries in June or July.
- **Wildlife information-** Berries are eaten by many animals: woodpeckers, crows, chickadees, thrushes, towhees, bluebirds, waxwings, orioles, tanagers, grosbeaks, goldfinches, juncos, grouse, pheasant, chipmunks, skunks, foxes, ground squirrels, raccoons, and bear. Deer and elk browse the leaves and twigs. Nectar is used by spring azure butterflies and foliage is eaten by swallowtail and other butterfly larvae.
- **Human uses-** The berries are a food source. They were ground up and used in pemmican (similar to trail mix) by Native American people and western settlers. The straight branches can be used to make arrows and other tools.

### Extensions:

- Make copies of your calendar for all the classes at the school to use.
- Include school events in the calendar during production.
- Invest time in making a creation that will interest people. Use it as a fundraiser!
- Encourage students to include a poem about their Table Rock hike experience in the corners of each page or on the back of their poster. Just after hiking the Table Rocks have students write what they experienced and add it to their poster or calendar page.
- **Grades 6-8:** Add cultural and management elements to the research such as Native Americans, pioneers, miners, ethnobotany, BLM, The Nature Conservancy.

### Discussion Questions:

#### Explore the different connections in nature.

*Ask students to discuss the relationships among different species they discovered in the research. Do animals, plants, and people all depend on each other? Could we live without each other? Is a variety of species a necessary component in a healthy **habitat**?*

#### Explain how the arrangement of food, water, shelter, and space is important to animals.

*Animals need sufficient quantities of these **resources** for survival, reproduction, and sustained survival of the species. Answers are based on the animal in question; different animals require*

*different amounts of space, types of food, etc. Give some examples and have students determine impacts on each animal based on their requirements.*

**What are you most likely to see on our Table Rocks hike (if pre-hike)? What was the most common item from posters that we saw on our hike (if post-hike)?**

*Items most likely remembered are the familiar plants of Table Rocks. Flowers are blooming March-June, and oak, buckbrush, and manzanita are dense in certain areas along the hike. These plants create most of the **habitat**. Animals that are usually seen or remembered include Turkey Vulture, Western fence lizard, Pacific treefrog, Anna's hummingbird, and Western Scrub-jay.*

## **References:**

Table Rocks Environmental Education. 2007. USDI BLM. 7 December 2007  
<<http://www.blm.gov/or/resources/recreation/tablerock/index.php>>.

Example of Front Cover Page



# Poison Oak

*Rhus diversiloba*

**description:**  
in sun - a shrub  
in shade - a vine

The honeybee loves the tiny whitish-green flowers of the Poison Oak. Our bees really rely on them.

**Family: sumac**

Many people are allergic to the urushiol oil in poison oak. Animals don't seem bothered by it, but they can get a rash by eating them!

Leaves of three. Let it be, let it be, you and me.

In the fall a wren's diet consists of mostly fruit. Poison oak berries take up 1/4 of a wren's diet.

Mark people used poison oak juice to tattoo their faces in traditional designs, and also to dye basket materials black.

I told you not to touch me so if you dare to touch my red and green oily leaves I would not if I were you.

don't you dare touch me or you will go Yucky scratchy get this thing off of me and if you do I will laugh because

To deer, poison oak is a tasty treat to browse.

don't breathe poison oak smoke or touch its shiny leaves but it can heal and feed the birds and be pretty in the fall sun

Look hard for me in winter, I don't have any leaves

native Americans used Poison oak oil to help cure rattlesnake bites

If you burn poison oak and breathe it, you'll get very sick

Example of Information Page

Example of Back Cover



Thanks to all the people who helped us make this calendar, and, special thanks to:

Bob Stewart, Naturalist Marin County Open Space	Jean & Debbie at Finline	Lea Earnheart for teaching us Home is a Habitat	Stacey Henderson Graphic Design	Ray Peterson Audubon Canyon Ranch
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