

Cowiche Canyon Conservancy's "TrailTalks" Program: An Interactive Exploration of the "Web of Life"

"The Mighty Oak and the Web of Life"		
	<p>Learning Objectives</p> <p>The student will be able to describe ecosystem interactions, why they are important, and demonstrate some of the myriad connections that occur in nature.</p>	<p>Activities (20-40 Minutes total)</p> <p>A banner display is used to demonstrate the many life forms dependant on the oak tree, and on each other, followed by a "web of life" game using pictures of the different oak-dependant species. Each student gets to be one of the life forms, and a ball of yarn is tossed between the "species" to demonstrate the "web". After the web is formed, individuals are removed, showing what happens to an ecosystem as a result of losing system components.</p>
"The Promise of Pollination"		
	<p>Learning Objectives</p> <p>The student will be able to demonstrate the basic mechanics of pollination; and describe the role of butterflies and other pollinators in plant reproduction.</p>	<p>Activities (15-20 Minutes total)</p> <p>A banner display is used to show a beautiful graphic of a dissected flower, with the anatomical structures identified, followed by a lively activity using hand-held wooden models of flowers and pollinators—teams of "flowers" "attract" teams of "pollinators" to pick up and transfer "pollen grains" to reveal the secret life of plants.</p>
"The Butterfly Life Cycle"		
	<p>Learning Objective</p> <p>The student will be able to identify the many stages of butterfly development with a focus on multiple caterpillar "instars" and the importance of their host plants.</p>	<p>Activities (15-20 Minutes total)</p> <p>A banner display depicting a simple life cycle model from egg to adult is used to briefly describe the butterfly life cycle. The following hands-on activity allows students to correctly arrange different life stages in their order of development.</p>

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Learning Station: “When Plants Talk, Insects Listen!”		
	<p>Learning Objective</p> <p>The student will explore how plants can actually communicate in a special “plant language” used to call for help when under attack by insects.</p>	<p>Activities(15-20 Minutes total)</p> <p>This learning station uses a banner display to graphically illustrate the mysterious chain of events that unfolds when plants are attacked by insects. The plant’s “call for help,” and the response by beneficial insects is acted out with the use of fun multi-sensory props.</p>
Learning Station: “Go with the Flow- Stepping on 10 million Years of Rock History”		
	<p>Learning Objectives</p> <p>Acquaint students with local geological processes visible at Snow Mountain Ranch</p>	<p>Activities (Time will vary based on field trip design)</p> <p>This learning experience will use a banner display and simple activities to illustrate the geological processes that formed the unique landforms here and around the region. The concept of cliffs as special habitats for many different kinds of life forms will be explored interactively.</p>
Learning Station: “Shrub-Steppe Habitat—Love it or Lose It”		
	<p>Learning Objectives</p> <p>The student will learn about the basic characteristics of and an appreciation for the shrub-steppe ecosystem, learn to recognize healthy versus degraded habitat, and what we can do to restore unhealthy shrub-steppe.</p>	<p>Activities (Time will vary based on field trip design)</p> <p>This learning experience will be given as a group discussion with a banner display depicting the facets of this vanishing habitat. Activities may include “scratch and sniff” to distinguish between aromatic shrubs, examination of different grass species, netting butterflies, and demonstration of very simple field methods to determine the ecological health of the site.</p>

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Nature Walk- "Busy as a Beaver!"		
	<p>Learning Objectives</p> <p>The student will learn about the significance of the "Web of Life" star, the Oregon White Oak, and how beaver dams contribute to stream function and health.</p>	<p>Activities (Time will vary based on field trip design)</p> <p>This learning experience will be given as a group discussion along a trail, winding through an Oregon White Oak woodland and beautiful meadow of native grasses, wild iris, and shrub thickets where deer sleep and birds make their nests. This walk takes students out to a beaver dam with examples of beaver activity easily seen and touched.</p>
Nature Walk- Butterfly Garden and Swallowtail Trail		
	<p>Learning Objectives</p> <p>The student will walk along an active restoration area and a small butterfly botanical garden, learning about natural ecosystems and how we protect them.</p>	<p>Activities (Time will vary based on field trip design)</p> <p>This learning experience will be given as a group discussion along a trail, walking along the edge of CCC" active restoration program. The destination for this walk is our "Children's Butterfly Garden and Swallowtail Trail", where we will talk about the role of native plants in supporting butterflies, which in turn help pollinate plants that support us.</p>
Nature Walk- Butterfly Red-Winged Blackbird Pond		
	<p>Learning Objectives</p> <p>The student will walk along an active restoration area and experience an actively changing wetland, learning about streams, wetlands, and the birds, plants, amphibians and mammals that use them.</p>	<p>Activities (Time will vary based on field trip design)</p> <p>This learning experience will be given as a group discussion along a trail, ending at a wetland feature along Cowiche Creek. Various plants and wildlife species associated with streams and wetlands will be highlighted, and the importance of wetlands will be discussed.</p>

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Teacher's Guide to Cowiche Canyon Conservancy's TrailTalks Program

Registering for your Trail Talks field trip:

- 1) Call Cowiche Canyon Conservancy to speak to staff about when you want to have your field trip, how many classes wish to participate, how much time you want to be on site, and get more information about the program. CCC would like 30 days notice for large groups, but can accommodate small groups or single classrooms with less lead time.
- 2) Review this brochure to become familiar with all nine of the possible sessions. A TrailTalks field trip consists of the "Web of Life Learning Station," and two other Learning Stations of your choice (morning session), and a combination of an additional learning station with a Nature Walk, or two Nature Walks after lunch.
- 3) Select the combination of Learning Stations and Nature Walks that best suit your need, and email info@cowichecanyon.org with all the above information: date, time in the field, number of classrooms, and selection.

Organizing for the day:

- 1) CCC appreciates a strong adult-to-child ratio made up of school/parent volunteer chaperones. We ask adults to ensure students have a wonderful time, but don't negatively affect the experience of others.
- 2) Make sure students come prepared: sturdy closed-toe shoes and socks, long pants, jackets, hats, sunscreen and water are needed for spending time outdoors.
- 3) We need to have students stow away their cell phones and other devices, unless needed to take pictures. Encourage journals, note-taking drawing, or other activity to reinforce learning. CCC provides a "Passport"—a notecard on heavy stock paper that has beautiful, local artist-rendered graphics representing each of the stations in the program, together with short statements and questions about the curriculum to reflect upon later. The passports are stamped for each station attended, students and teachers with a reminder of the day, and may inspire students to come back with their parents.
- 4) Think about snacks and lunch—we set aside time around noon for a lunch break.

After the trip:

- 1) Let us know how the day went-what worked and what could be improved.
- 2) Submit TrailTalks payment to:
Cowiche Canyon Conservancy
P.O. Box 877
Yakima, WA 98907

Fee Schedule:

- Base cost for a TrailTalks field day for a single classroom: \$125.00
Each additional classroom: \$ 50.00