

Comparative Ecosystem Study

Comparing your home ecosystem with the ecosystem at Foothill Horizons is an activity that could be used in a variety of ways:

- 1) Before or after your trip to Foothill Horizons, have students focus on/document the flora, fauna and geology in your own area. Ask them to note the differences when they are at outdoor school.
(See *page from the Foothill Horizons journal* for a guide.)

- 2) Have each student research one plant or animal that is unique to the Sierra Foothills before arriving at Foothill Horizons (see attached list). Why doesn't that organism live in your area? Is there something else that fulfills a similar role?
Standards: *Grade 6 Science 5c*
Grade 6 Science 5d

- 3) Create your own guidebook(s) as a class. Have students research your local flora/fauna/geology. Then, take photographs, draw pictures, and/or compile notes on the ecosystem surrounding your school. Do the same during your visit to Foothill Horizons.
Standards: *Grade 6 ELA 2.2*
Grade 6 ELA 2.3

Plants and Animals to Research from Foothill Horizons

Background:

Foothill Horizons Outdoor School is located in the foothills of the Sierra Nevada in an ecosystem known as an Oak Woodland. The geology, elevation, plants and animals that define this arid ecosystem are very different from those found in California's Central Valley. At 2500 feet above sea level, Foothill Horizons is home to six species of oak, large pines and stands of manzanita. Birds, mammals, amphibians and reptiles, many of them unique to the Sierra Foothills, call our campus home. A seasonal creek provides a riparian zone that further increases biodiversity.

Animals

Birds

White-Breasted Nuthatch, Acorn Woodpecker, California Towhee, Dark-Eyed Junco, Anna's Hummingbird, American Robin, House Finch, Stellar's Jay, Downy Woodpecker, Red-Tailed Hawk, Brown Creeper, Mourning Dove, Screech Owl, Brown-Headed Cowbird, Black Phoebe, Northern Flicker, House Sparrow, Turkey Vulture, Spotted (Rufous-Sided) Towhee, Swainson's Hawk

Mammals

Western Gray Squirrel, California Bat, Little Brown Bat, California Ground Squirrel, Northern Flying Squirrel, Striped Skunk, Bobcat, Mountain Lion, Deer Mouse, Pocket Gopher, Gray Fox, raccoon, California Mole, coyote, Mule Deer

Reptiles and Amphibians

Garter Snake, Gopher Snake, Western Fence Lizard, Alligator Lizard, Striped Racer, California King Snake, Western Skink, Pacific Chorus Frog, American Bullfrog, Western Toad

Plants

Ponderosa Pine, Gray (Foothill) Pine, Manzanita, Black Oak, Toyon, California Buckeye, Poison Oak, Big-leaf Maple, soaproot, willow, White Alder, milkweed, Incense Cedar, elderberry, mistletoe, California Wild Grape, Canyon Live Oak, Miner's Lettuce, mugwort