

REDWOODS ECOLOGY PROGRAM INFORMATION

This week we will explore the beauty of the Coastal Redwoods Forest as we visit different ecosystems within the park: old growth stands, grass meadows, freshwater streams and tide pools in the rocky intertidal areas. When visiting each site, we will do comparative studies to look at the amazing diversity in these habitats and how they affect each other. We will look to understand how the land was formed, identify what is living there, and discover how the flora and fauna have adapted to survive. Campers will leave this program with a better understanding of ecological processes and of environmental issues affecting the Coastal Redwood Forests. Come prepared for an active week as we hop, elevations and habitats, in our explorations!

OMSI is fortunate to be able to make use of Wolf Creek Education Center in Redwood National and State Park. Located 50 miles south of the Oregon border and three miles from the Pacific Ocean, Wolf Creek Lodge has a modern kitchen, dining and meeting area and natural history learning center. Cabins sleep 16 and are close to the shower house and restrooms. The bunks are wooden, and a foam or inflatable pad will make them more comfortable. The site also has an amphitheater and four miles of loop trails that access forest, meadow and stream ecosystems. An old growth redwood grove, active trout and salmon spawning stream and direct access to Prairie Creek Redwood State Park makes this an exciting site for forest and coastal ecosystem explorations

COURSE SYLLABUS

This course includes a minimum of 35 hours of lecture/seminar discussions, and a minimum of 35 hours of field investigation/laboratory time. Students successfully completing the course will receive a certificate of credit that may be given to their school or service organization for possible credit.

Objectives:

- Learn science by doing science
- Learn community living skills, including cooperation, respect and trust.
- Increase ability to observe the natural world
- Using the coastal ecosystem as a guide, understand the general concepts of marine and aquatic biology and, coastal geologic processes.

Activities: Hands on learning in the field

- Explore Redwoods National Park forests
- Investigate fauna and flora of the Redwood forest and coastal area
- Investigate the geology of the Pacific Coast

Concepts: Principles to be introduced

- Wildlife – Adaptations, survival challenges, predator/prey relationships.
- Plants – Adaptations, survival challenges, nutrient cycles
- Marine Biology--Tides, currents, zonation, species identification
- Temperate Rainforest Ecology – Weather patterns, bio mass, adaptations

SAMPLE DAILY SCHEDULE*

7:00 a.m.	General camp wake-up
8:00 a.m.	Breakfast
9:00 a.m.	Activity Block 1
11:30 a.m.	Lunch
12:30 p.m.	Rest & relaxation
1:30 p.m.	Activity Block 2
3:30 p.m.	Activity Block 3
5:00 p.m.	Recreation and free time
6:00 p.m.	Dinner
7:15 p.m.	Evening activities
8:30 p.m.	Return to cabins, prepare for bed

* Programs that are partly or entirely field-based will follow a unique schedule each day, depending on the activities planned. Drive times between field sites and campgrounds will include stops for short hikes and games, meals, and bathroom breaks.

TECHNOLOGY AND COMMUNICATION

Cell phones are not allowed on any OMSI Science Camp program. Cell phones are too easily lost or damaged. Students have an excellent support system at camp including their fellow students, the counselors, the instructional staff, and the lead staff. We will ensure that any necessary communication between parents/guardians and students can take place through the main phone at each site. Instructional staff carries cell phones during transportation and on off-site programs for emergency purposes only. An important part of the camp experience is for each student to gain independence, develop greater resilience, and enjoy the unique opportunities offered by OMSI Science Camps without technological distractions. We are grateful for the trust parents and guardians put in our staff to care for each student, and we appreciate the time taken in discussing this important issue with your student before his or her program begins.

Digital cameras are allowed, but remember that, at camp, things can easily be lost or damaged. We recommend single use cameras or film cameras. Please keep in mind cell phones with cameras will not be allowed.

For the safety of your child and OMSI Science Camps staff, we strongly discourage our staff from having contact with your child after camp since we cannot supervise it. Making new friends is one of many positive outcomes of OMSI Science Camps programs, and students who want to stay in touch with each other may exchange phone numbers, addresses, or e-mails. Please understand that any communication between your child and another student or a staff member after the camp session is over is the responsibility of the student's parent or guardian to oversee.

If your child would like to contact a staff member, then email a letter to: pmsc@omsi.edu.

REDWOODS ECOLOGY EQUIPMENT LIST

Sleeping Gear:

- sleeping bag
- insulated sleeping pad
- pajamas
- pillow with pillowcase (optional)

Field Equipment:

- 2 water bottles (1 quart/liter each)
- flashlight or headlamp
- daypack
- sack lunch for the first day**

Clothing:

- sturdy, well-fitting and broken in shoes. (hiking boots preferred)
- 3 pairs long pants
- 1 or 2 pairs of shorts
- 3 shirts, 1 long-sleeved, 2 short-sleeved (for layering)
- sweater or sweatshirt (it will get cold at night)
- adequate underwear & socks
- rain gear (jacket w/hood & pants, or poncho)**

Personal Gear:

- toiletries: soap and container, toothbrush/toothpaste, comb/brush
- wash cloth and a bathing towel
- sunscreen
- lip balm with sun screen
- personal hygiene items

Optional:

- camera
- binoculars
- compass
- lightweight books (field guide, natural history, legends, etc.)

ALL CLOTHES AND EQUIPMENT SHOULD BE MARKED WITH THE PARTICIPANT'S FULL NAME. OMSI IS NOT RESPONSIBLE FOR LOST ITEMS.

PLEASE DO NOT BRING SNACKS OR CANDY
(rodents enjoy searching cabins for food).

NO ELECTRICAL EQUIPMENT SHOULD BE BROUGHT (CELL PHONES, MP3 PLAYERS, RADIOS, BLOW DRYERS, COMPUTER GAMES, ETC.)