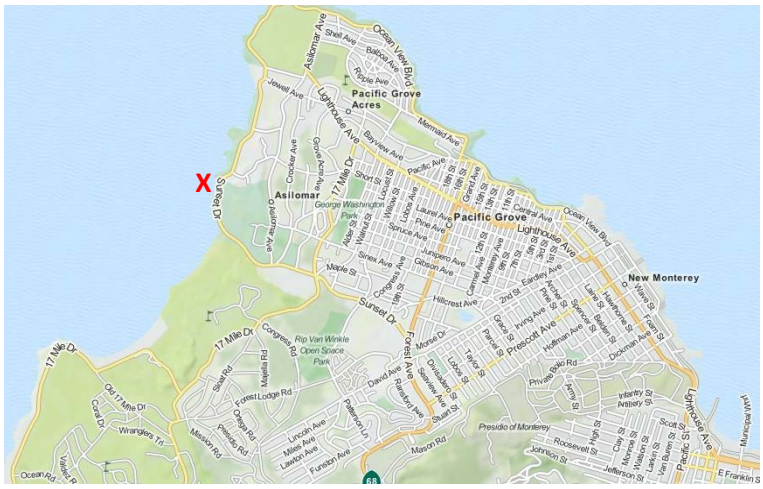
LiMPETS Monitoring Site: Asilomar

Directions:

This site is in Pacific Grove within the boundaries of Asilomar State Beach. Take the Highway 68 west/Pacific Grove/Pebble Beach exit from Highway 1. Proceed approximately 3 miles passing Safeway and Traders Joes and turn left on Sunset Dr. towards the ocean. Continue down Sunset Drive where you will pass Asilomar Ave. on your right, from that point proceed approximately .5 miles to Trail Marker #10. Trail markers are located on the posts of the posted signage at each entry way to the Coast Trail on the west side of the road. Parking is on the ocean-side of the street.



Sampling Methods

Three procedures are used at Asilomar: 1) Vertical transect, 2) Size measurements in a permanent area, and 3) Total organism counts in a permanent area.

Vertical Transect

The vertical transect is marked with 4 stainless steel eyebolts cemented into the rock. The 0 meter mark of the vertical transect line is at the highest point on the out cropping. The others are at 4.5m, 12m, and 17.5m (in the middle of the surf grass).

1. Center the quadrats over the transect tape every 2 meters from 0m to 18m

2. Record the species abundance within each quadrat as instructed on the data sheet. For algae, only the square(s) that contain a holdfast should be recorded. Count only live organisms, this may require some close investigation.

Size Measurements in a Permanent Area for Owl Limpets

The owl limpet plot at the Asilomar site is the uplifted area between meters 8 and 10 on the vertical transect. Smaller owl limpets (*Lottia gigantea*) are sometimes difficult to distinguish from other species of limpets, therefore we only count and measure owl limpets equal to and above 2.5 cm in shell length. The length of each limpet is measured with a flexible ruler or calipers and recorded. Look for cleared areas in the mussels beds, these might be owl limpet "farms".

Total Organism Counts in a Permanent Area

Species counted are ochre sea stars and black abalones. Teams of 2 or 3 students should tackle total organism counts for one species at a time. Systematically search the whole area by moving back and forth across it, searching successive swaths about the width of your outstretched arms.

Black abalones will be counted over the outcropping from the crevice before the 0m marker on the vertical transect down to the crack at the 16m. Abalone will rarely be found out in the open, so pay special attention to any cracks and crevices.