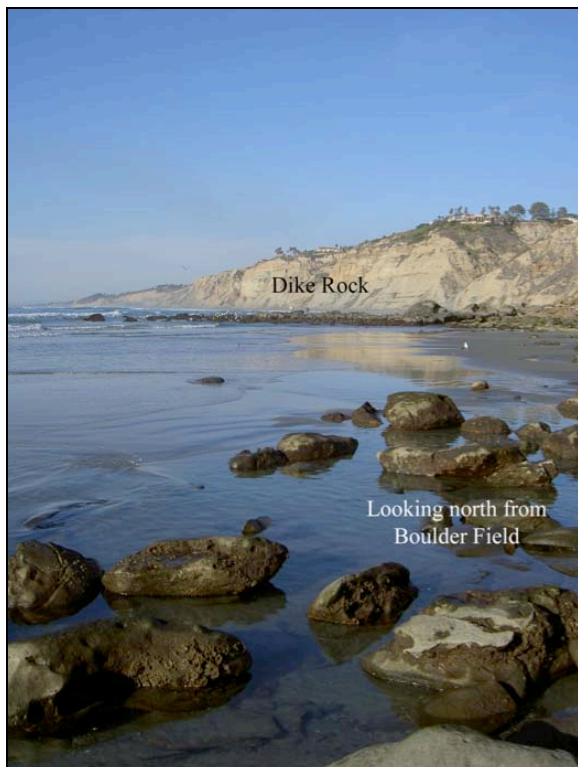
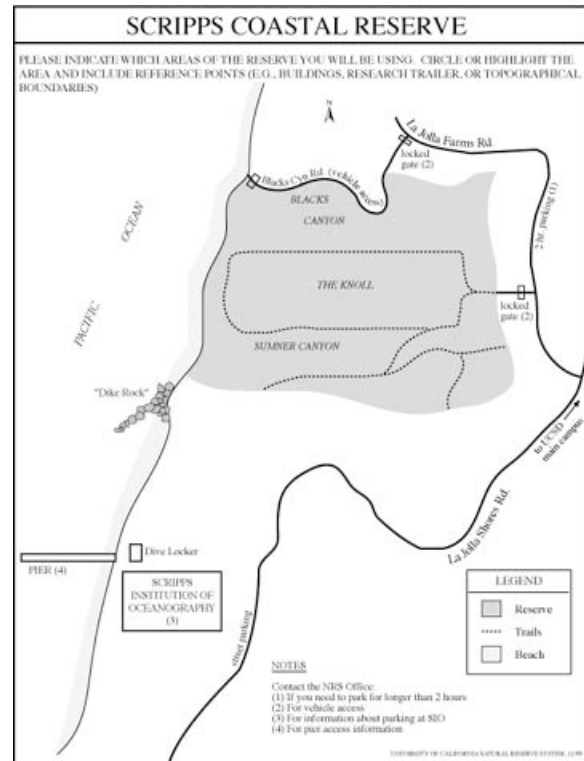


Directions:

Dike Rock is located within the Scripps Coastal Reserve just north of the Scripps Pier. From Interstate 5 exit La Jolla Village Dr. Turn left onto La Jolla Shores Dr. Continue down the hill and park anywhere along the street near the beach, or in the La Jolla Shores beach parking lot. If you park near Scripps Institute of Oceanography there are two staircases just south of the pier leading down to the beach.

Dike Rock is a small rocky intertidal area bordered on either side by sandy beach. Rugged coastal bluffs rise approximately 100 meters above the reserve. This site is characterized by many large boulders in the high intertidal, broad mud- and sandstone benches covered with coralline algal turf and a few small boulders in the mid-intertidal, and a mixture of larger boulders and algae-covered flats in the lower intertidal area.



Monitoring Protocols

Two monitoring procedures are used at Dike Rock for monitoring:

- 1) Total organism counts
- 2) Size measurements

1. Total Organism Count

Ochre sea stars are large invertebrates that can have a major impact on the rocky intertidal community, but are not adequately counted in random quadrats.

Ochre stars will be counted within the boulder field from the point between the rocky outcropping and dike rock island up to the area just below Southwest Marine Fisheries. The

Total Organism Count *(continued)*

delineated area is approximately 25m long and about 10m wide, depending on the tide, so the total area counted is about 250m². All trips should be made on a 0 tide or below.

- Mark the boundaries of the permanent area with cones or a transect tape.

- Systematically search the whole area in teams of 2 or 3. Look carefully in cracks and crevices, and under ledges.
- Record ochre sea stars as “orange” or “purple/brown”. Record all the ochre sea stars you can find as you go.

2. Size Measurements

Owl limpets will be counted and measured within two areas.

The first site is directly beneath the 4 palm trees on the cliff. Site 1 is 4m long by 2.3m wide, a total area of about 9m².

The second site is located north of the dike rock island and south of Southwest Marine Fisheries, and is comprised of two large boulders in a “V” shape measuring 6.4m in length and 2.7m wide, an area of 17m².

- Mark the boundaries of the permanent areas with transect tapes or cones.
- In teams of 2 or 3, systematically search the whole area. Look carefully in cracks and crevices and under ledges.
- Designate one person as the recorder. This person is responsible for completing the data sheet. The others should be searching for limpets and should tell the recorder what they see as they see it.
- Use the rulers or calipers to measure the length of individual limpets.

Note: Of course, some individuals will be missed, so total counts are just estimates of the true abundance. If 5-10 teams count the selected species in the same defined area, the average number counted provides a reasonable estimate that can be compared over time.



Site 1



Site 2