

Species Checklist

Purpose

To make a yearly estimate of the relative abundance of all species observed at each site

Materials

1 underwater slate

Personnel

2 SCUBA divers with experience adequate to identify most kelp forest species at the Channel Islands.

Methods

The relative abundance of all species observed at each site is estimated every year. During the quantitative sampling at each site, notes are made on the presence and/or abundance of all species encountered. Near the end of each site visit, one or more observer searches the entire monitoring site for all species and makes specific notes on their relative abundance. This abundance estimate for the observed species is recorded as X, 0, 1, 2, 3, 4, where:

X = present: no relative abundance rating given

4 = abundant: organism present in higher than normal densities

3 = common: organism found over most of site or in high density patches

2 = present: organism found in moderate numbers

1 = rare: few organisms found

0 = noticeably absent: an effort was made to look for an organism that was not found

The value recorded for each species is a consensus, determined by the chief scientist in conference with all observers using the check list of known species (**Appendix F**). The value reflects the potential abundance of that species. For example, sightings of four black sea bass, *Stereolepis gigas*, at a site would be recorded as abundant (4), whereas 100 purple sea urchins, would probably rate only present (2) or common (3) depending on the site.

This protocol should only be carried out if time and more importantly experienced observers are available.

Time Required

Minimum of 30 minutes

Organisms Sampled

Kelp forest community