

Richards, D.V. 2000. The status of rocky intertidal communities in Channel Islands National Park. Pp 356-358 in *Proceedings of the Fifth California Islands Symposium* (D.R. Browne, K.L. Mitchell, & H.W. Chaney, eds.), U.S. Minerals Management Service.

Abstract: Channel Islands National Park began monitoring the rocky intertidal community in 1982. Black abalone, owl limpets, mussels, acorn barnacles, rockweed, and turfweed are monitored biannually on all five park islands in fixed plots. The monitoring was designed to collect baseline information to determine normal variation and discover abnormal conditions as well as examine trends and watch for species introductions. Generally, three patterns in species abundance were seen among the sessile organisms: a steady population over time, a slow decline, or a dip in the population numbers around 1990 with a return to previous levels in recent years. Some declines can be explained by increased sea star predation. Sea star numbers were high (1 per m<sup>2</sup> or greater) at four sites and were responsible for declines in the mussel population at two sites. Storm waves had significant localized impacts on mussels and rockweed. Other agents of change are not so evident. Since 1986, black abalone populations declined over 99% parkwide due to withering syndrome (WS), a bacterial disease. Only a few remnant populations of black abalone remain, mostly on San Miguel Island. The loss of this spatial dominant from the community has been significant at all sites.