**General site descriptions of the study areas**

**Bordjies Reef**

The study area was sparse in foliose biomass with turf species more abundant, and encrusting coralline dominating the benthic environment. The understory species was a mixture of red and brown algae species with red algae species absent from the study area. The density of sea urchins was high and seemed to dominate the benthic environment. Gastropods and limpets were also prevalent in the area. The kelp biomass was dominated by *E. maxima* with only the occasional *L. pallida* in mixed stands. *E. maxima* occurred in solitary stands as well as clusters with the latter more prevalent. The *E. maxima* population is a mixture of sub-canopy and canopy individuals, with fewer juveniles. The orography of the area was mostly uniform with the occasional ‘rocky outcrop’ which was often covered in kelp. These rock outcrops were inhabited by sea urchins, rock lobsters, gastropods and the occasional pyjama shark.

**Oudekraal**

The biomass of algae at this site was dense and was a mixture of red, green and brown species, with red seaweeds the most prevalent. Encrusting coralline dominated the benthic environment, from which the aforementioned species grow. Sea urchins were not found in the open and were most abundant in crevices and overhangs. Invertebrate abundances were high and gastropods and limpets are the most prevalent. E. maxima dominated the kelp biomass at the site. Mixed stands of *E. maxima* and *L. pallida* occurred outside the site in deeper water however *E. maxima* dominated the kelp biomass at the site. The population structure of the kelp was largely a mixture of sub-canopy and canopy individuals with few juveniles in comparison. Rock lobsters were not as abundant as expected considering the site is a rock lobster reserve. Abalone was also found at the study site. The orography of the area was not uniform and the depth ranged over the study area due to the presence of granite boulders however the plots chosen for this site were uniform in depth distribution.

**Betty’s Bay**

The biomass of algae and general fauna was notably low at this study site. The lack of biomass at the study site was attributed to a dense matt of sedimentary material that encrusted the benthic environment as it seemed to be ‘choking’ any possible growth. Sponges were prevalent in the area and were large in size. Rock lobsters were the most abundant invertebrate and were notably smaller at this site compared to other sites. Abalone were rare and were almost absent from the area in entirely. Gastropods were abundant and were much larger compared to individuals from other sites in this study. E. maxima was the only kelp species inhabiting the study site and occurred in mixed and solitary stands with the later more prevalent. No juvenile *E. maxima* were found. It should be noted that the community structure changes in deeper water outside the study site, where the dense sedimentary mat dissipates and algae species return with red algae dominating the algal biomass.