Researcher name: Jennifer Burnaford

General site location: Pile Point

General site ownership and permissions: Private property owned by the Ragen Family

Description of study: Long-term monitoring – distribution and abundance of canopy-forming macrophytes and their effect on community structure. I have been working at this site since 1998, using several different methods to quantify patterns of community structure across the entire intertidal zone. These methods include: permanent plots (1m x 1m, N = 25 plots) in the low intertidal zone in which I monitor the abundance of the kelp *Saccharina sessilis* and macrofauna (seastars and chitons); permanent plots (0.5m x 0.25m, N = 50 plots) in which I monitor the abundance of all macroscopic species for assessment of community structure; permanent transects (extending from above the intertidal zone down to 2 ft below MLLW, N = 10 belt transects 1m wide) in which I monitor the abundance of all canopy-forming macrophytes; site-wide surveys of selected macrofaunal species, and installation of a variety of data loggers for high-frequency recording of abiotic variables such as light, temperature, wave action, and salinity.

See attached photos for site boundaries.

Notes: \*No collections\* Because of the scope and nature of this study (large-scale, long-term assessment of patterns of community structure and function) any collections of biological material at the site will disrupt the ongoing work. \*No installations, no trampling\* The combination of several different large-scale, long-term permanent design elements result in very broad coverage of the rock surface across the whole intertidal zone at the site. In addition, because canopy forming algae are highly susceptible to damage and removal by trampling, trampling / foot traffic is disruptive to ongoing work.

Start date of concern: May 1998

End date of concern: N/A. This study is ongoing and long-term.

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