

# RPC (Random Point Contact) Protocol

## General Notes

Random Point Contact surveys are conducted at eleven different sites on the north shore of Santa Cruz Island (35°5'N: 119°45'W) annually between the months of August and January. Each site has 40 m transects at 10, 20, and 30 ft, characterized by different habitat zones, for a total of three transects per site. Note that sites and sampling were variable prior to 1991.

## RPC Sampling

The purpose of the Random Point Contact sampling is to determine the percentage cover of benthic substrates along the Santa Cruz Island transects. Before surveying, an observer runs a 40 m transect tape parallel to shore at one of the three depth intervals (~5, 10, and 15m). There are 80 random point positions established on the datasheet. He/she swims the length of the transect and randomly selects four replicates on a 1 m imaginary line perpendicular to the meter tape at the established point. He/she then records the substrate type at those points (n=320 points per transect).

## Materials Needed:

Transect Tape

Dive Slate

Appropriate Data sheets

## RPC Species List

Below is the current list of the substrate and associated code recorded in the RPC sampling. Additional substrates may be added as they are encountered.

CODE	SUBSTRATE TYPE
A	Anemonies
Ac	Articulated Corralines
B	Bare Rock
Bry	Bryozoan
Bs	Brittle Star
Clad	<i>Cladophora</i>
Cod	<i>Codium spp.</i>
Colp	<i>Colpomenia</i>
Cory	<i>Corynactis</i>
Cy	<i>Cystoseira spp.</i>
D	<i>Desmarestia spp.</i>
Dic	<i>Dictyota/Dictyopteris</i>
E	<i>Eisenia</i>
Ec	Encrusting Corralines
Egr	<i>Egregia</i>
F	<i>Fauchea/Fryella</i>
Gel	<i>Gelidium spp.</i>
Gig	<i>Gigartina spp.</i>

Gn	<i>Gelidium nudifrons</i>
Gr	<i>Gelidium robustum</i>
Gor	<i>Gorgonian</i>
Gt	Green Turf
H	<i>Halidrys</i>
Irid	<i>Iridaea</i>
L	<i>Laurencia spp.</i>
Lf	<i>Laminaria farlowii</i>
M	<i>Macrocystis</i>
P	<i>Pachythyone rubra</i>
Ploc	<i>Plocamium</i>
Pt	<i>Pterogophora</i>
Pri	<i>Prionitis</i>
R	<i>Rhodymenialis</i>
RI	<i>Rhodymenia</i> like
Rt	Filamentous Red Algal Turf
S	Sand
Sg	<i>Sargassum spp.</i>
Sr	Shell Rubble
Ss	<i>Sciadaphycus stellatus</i>
T	"Turf" (defined as diatom algal mats, cobble, and miscellaneous sessile invertebrates)
U	Urchin
W	Tube Worm
XX	Unknown