

Site: PenaguidTransect: 144Date: 7.13.16Observer: Norissa

Depth (m) at 1m:	Depth (m) at 40m:	Visibility (m):
14.4	22.8	3m
Inshore	Offshore	Substrate
1	1	
2	2	
3	3	
4	4	
5	5	
6	6	
7	7	
8	8	
9	9	
10	10	
11	11	
12	12	
13	13	
14	14	
15	15	
16	16	
17	17	
18	18	
19	19	
20	20	
21	21	
22	22	
23	23	
24	24	BL
25	25	BL
26	26	BL
27	27	BL
28	28	BL
29	29	BL
30	30	BL
31	31	BL
32	32	BL
33	33	BL
34	34	BL
35	35	BL
36	36	BL
37	37	BL
38	38	BL
39	39	BL
40	40	BL

Substrate

P Pebbles (<5cm)
 B Bedrock
 SS Shallow Sand (<1cm)
 BM Boulder (25-50cm)
 BL Boulder (>100cm)
 S Sand (>1cm)

Green Algae

COF Codium fragile (fingers)
 FG Filamentous Green (fine hairs)
 UV Blady Uvoid (lvs & enteromorpha)
 TUV Tubular Uvoid (lvs & enteromorpha)

Erect Red Algae

BOHA Bonnemasonia hamifera (hooks)
 CRSP Ceramium spp. (pinners, corticated)
 CHCR Chondrus crispus
 CYPD Cystodinium purpureum (bristly)
 DUCO Dumontia contorta (flat cylinders)
 EUCR Euthora cristata (flat branching blades, lacy)
 HJ Heterosiphonia japonica (bright, luffy, solid midrib)

MAST Mastocarpus stellatus (channeled blades papillate)
 PAPA Palmaria palmata (hand-like blades)
 PHRU Phycodrys rubens (oak leaves)

POLS Polysiphonia sp. (variable fluffly)
 PORO Polydora rotundus (regular thick branches)
 PORS Porphyra spp. (thin sheet)

PTSE Platysa serrata (branches w/ branchlets)
 RAT Red Algal Turf (thin UND mat many spp.)

SPRE Spermothamnion repens (bushy tufts, epiphytic)
 CO Corallina officinalis (erect coralline)

URB Unidentified Red Blade
 UFR Unidentified Filamentous Red

AHPL Alveolita plicata
 COTR Coccolithus truncatus (Blade with small lobes)

Encrusting Red Algae (smooth to bumpy)
 HIRU Hildenbrandia rubra (not calcified crust)

CLCI Clathromorphum circumscriptum (smooth and thick)
 LISP Lithothylum sp. (smooth, chalky)

LESP Leptophyllum spp. (smooth, very thin, no band, pores)
 PHSP Phymatolithion spp. (rough surface, white swirls, conceptacles)

LIGL Lithothamnion glaciale (bumpy)
 EC Unidentified Encrusting coralline

UENC Unidentified Encrusting Non-Coralline

Brown Algae
 AGCL Agardum clathratum (shotgun)

ALES Alaria esculenta (midrib)
 ARVI Arthrocladia villosa (branching, tubular, hairs)

ASDI Ascophyllum nodosum
 BLD Und Laminariales Blade

CHFI Chorda filum (long smooth rope)
 COPE Colopomena peregrina (sea potato)

DEAC Desmarestia aculeata (coarse, alternating branches)
 DEV Desmarestia virdis (fine, opposite branches)

DIAT Diatom Tube Mat
 HATO Halosiphon tomentosus (long and furry)

LADI Laminaria digitata (hand-like)
 LEMA Leathesia marina (stiffer, brain-like)

SADE Saccharina dermatodes (oar-like, souzzy)
 SL Saccharina latissima (facagna blade)

SALO Saccharina longicurs (very long & hollow stipe)
 FUSP Fucus sp.

Byzoans
 BUSP Bugula sp.

BUTU Bugula turrita (xmas tree)
 BUNE Bugula neritina (purple)

CREB Crista eburnea (fuzzy, fine)
 CAEL Cabera elisi (chondrus byzoan?)

DEMU Dendrobania murrayana (leafy)
 ELPI Elcia plosa

LIVE Lichenopora verrucaria (thick in middle, white)
 MEMA Membranipora membranacea (lacy epizoitic)

SCAU Schizomavella auriculata (bumpy, orange & white, round zooids)
 TRIN Tricellaria inpinata (crunchy arborescent)

UAB Unidentified Arborescent Byzoans

Sponges
 ES Encrusting Sponge

CLSP Cliona sp. (large osculum)
 HADU Halisarca diadema (slimy sheet)

HAOC Haliciona oculata (few fingers)
 HAPA Halichondria panicea (crumbs)

HYSP Hymedesmia sp. (blue)
 ISPA Isodictya palmata (palmate)

LEUC Leucosolenia sp. (many small vases)
 MIPR Microciona prolifera (red, fingerhead)

SCSP Scypha sp. (little vases)

Tunicates
 APPA Apidium pallidum

ASAS Ascidella aspersa
 BOEC Botellina echinata

BOSC Botryllus schlosseri (stars)
 BOVI Botryllodes violaceus

CINI Ciona intestinalis
 CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)
 DIAL Didemnum abdonum

DIP Diplosoma listerianum
 DIVE Didemnum vetillum

HAPY Halysynthia pyramis
 STCL Styela clava

UT Und. Colonial tunicate
 MOMA Moguia manhattensis

MOCI Moguia citina
 BOOV Botellina ovifera

BOVI Botryllodes violaceus

CINI Ciona intestinalis

CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)

DIAL Didemnum abdonum

DIP Diplosoma listerianum

DIVE Didemnum vetillum

HAPY Halysynthia pyramis

STCL Styela clava

UT Und. Colonial tunicate

MOMA Moguia manhattensis

MOCI Moguia citina

BOOV Botellina ovifera

BOVI Botryllodes violaceus

CINI Ciona intestinalis

CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)

DIAL Didemnum abdonum

DIP Diplosoma listerianum

DIVE Didemnum vetillum

HAPY Halysynthia pyramis

STCL Styela clava

UT Und. Colonial tunicate

MOMA Moguia manhattensis

MOCI Moguia citina

BOOV Botellina ovifera

BOVI Botryllodes violaceus

CINI Ciona intestinalis

CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)

DIAL Didemnum abdonum

DIP Diplosoma listerianum

DIVE Didemnum vetillum

HAPY Halysynthia pyramis

STCL Styela clava

UT Und. Colonial tunicate

MOMA Moguia manhattensis

MOCI Moguia citina

BOOV Botellina ovifera

BOVI Botryllodes violaceus

CINI Ciona intestinalis

CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)

DIAL Didemnum abdonum

DIP Diplosoma listerianum

DIVE Didemnum vetillum

HAPY Halysynthia pyramis

STCL Styela clava

UT Und. Colonial tunicate

MOMA Moguia manhattensis

MOCI Moguia citina

BOOV Botellina ovifera

BOVI Botryllodes violaceus

CINI Ciona intestinalis

CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)

DIAL Didemnum abdonum

DIP Diplosoma listerianum

DIVE Didemnum vetillum

HAPY Halysynthia pyramis

STCL Styela clava

UT Und. Colonial tunicate

MOMA Moguia manhattensis

MOCI Moguia citina

BOOV Botellina ovifera

BOVI Botryllodes violaceus

CINI Ciona intestinalis

CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)

DIAL Didemnum abdonum

DIP Diplosoma listerianum

DIVE Didemnum vetillum

HAPY Halysynthia pyramis

STCL Styela clava

UT Und. Colonial tunicate

MOMA Moguia manhattensis

MOCI Moguia citina

BOOV Botellina ovifera

BOVI Botryllodes violaceus

CINI Ciona intestinalis

CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)

DIAL Didemnum abdonum

DIP Diplosoma listerianum

DIVE Didemnum vetillum

HAPY Halysynthia pyramis

STCL Styela clava

UT Und. Colonial tunicate

MOMA Moguia manhattensis

MOCI Moguia citina

BOOV Botellina ovifera

BOVI Botryllodes violaceus

CINI Ciona intestinalis

CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)

DIAL Didemnum abdonum

DIP Diplosoma listerianum

DIVE Didemnum vetillum

HAPY Halysynthia pyramis

STCL Styela clava

UT Und. Colonial tunicate

MOMA Moguia manhattensis

MOCI Moguia citina

BOOV Botellina ovifera

BOVI Botryllodes violaceus

CINI Ciona intestinalis

CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)

DIAL Didemnum abdonum

DIP Diplosoma listerianum

DIVE Didemnum vetillum

HAPY Halysynthia pyramis

STCL Styela clava

UT Und. Colonial tunicate

MOMA Moguia manhattensis

MOCI Moguia citina

BOOV Botellina ovifera

BOVI Botryllodes violaceus

CINI Ciona intestinalis

CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)

DIAL Didemnum abdonum

DIP Diplosoma listerianum

DIVE Didemnum vetillum

HAPY Halysynthia pyramis

STCL Styela clava

UT Und. Colonial tunicate

MOMA Moguia manhattensis

MOCI Moguia citina

BOOV Botellina ovifera

BOVI Botryllodes violaceus

CINI Ciona intestinalis

CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)

DIAL Didemnum abdonum

DIP Diplosoma listerianum

DIVE Didemnum vetillum

HAPY Halysynthia pyramis

STCL Styela clava

UT Und. Colonial tunicate

MOMA Moguia manhattensis

MOCI Moguia citina

BOOV Botellina ovifera

BOVI Botryllodes violaceus

CINI Ciona intestinalis

CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)

DIAL Didemnum abdonum

DIP Diplosoma listerianum

DIVE Didemnum vetillum

HAPY Halysynthia pyramis

STCL Styela clava

UT Und. Colonial tunicate

MOMA Moguia manhattensis

MOCI Moguia citina

BOOV Botellina ovifera

BOVI Botryllodes violaceus

CINI Ciona intestinalis

CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)

DIAL Didemnum abdonum

DIP Diplosoma listerianum

DIVE Didemnum vetillum

HAPY Halysynthia pyramis

STCL Styela clava

UT Und. Colonial tunicate

MOMA Moguia manhattensis

MOCI Moguia citina

BOOV Botellina ovifera

BOVI Botryllodes violaceus

CINI Ciona intestinalis

CISA Ciona savignyi

DECA Dendrodoa carnea (small pink)

DIAL Didemnum abdonum