

## Soft substrate macrobenthos of Fiji's Great Astrolabe Reef lagoon. List of taxons, densities and their biomass

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### Abstract

During the joint Fijian-French ASTRO cruise conducted in April 1994 in the Great Astrolabe lagoon, the soft bottom macrobenthos was quantitatively investigated at 25 sampling stations, using a 0.1 m<sup>2</sup> Smith-McIntyre grab. At each station, sediment was sampled with a total 1 m<sup>2</sup> area (10 replicate grabs) and washed through a set of 20, 5 and 2 mm sieves to retain flora and fauna. A total of 207 taxa was identified. This paper presents methods and raw data obtained from the study expressed for each taxon as numbers of individuals, dry weight and ash free dry weight per m<sup>2</sup>.

### Résumé

Au cours de la mission franco-fidjienne réalisée en avril 1994 dans le lagon du Grand récif de l'Astrolabe, le macrobenthos des fonds meubles a été échantillonné quantitativement sur 25 stations, à l'aide d'une benne Smith-McIntyre. Sur chaque station, le sédiment a été prélevé sur une superficie totale de 1 m<sup>2</sup> (10 coups de benne) et passé sur des tamis de 20, 5 et 2 mm pour isoler la flore et la faune. Un total de 207 taxons a été identifié. Le présent document regroupe un exposé des méthodes mises en oeuvre et une liste des résultats bruts issus de l'étude. Pour chaque taxon, ces derniers portent sur le nombre d'individus, le poids sec et le poids de matière sèche sans cendre.

### 1. Introduction

Quantitative studies on the benthic fauna of the sediments behind coral reefs are surprisingly sparse, and no such studies have previously been made in Fijian waters. The Great Astrolabe Reef and Lagoon have been the subject of a baseline study (Morrison and Naqasima, 1992) but this did not include the fauna and flora of the lagoonal sediments, concentrating limited analysis and collecting resources on the reef (Naqasima and Brandy, 1992).

Quantitative studies on the marine benthos of soft substrate have been made in the South West Pacific,

centred on the work of the ORSTOM team based in Nouméa, New Caledonia. These include work on the South West lagoon of New Caledonia (Chardy *et al.*, 1988; Chardy and Clavier, 1988), Chesterfield Lagoon (WNW of New Caledonia, Clavier and Garrigue, 1990) and Uvea Lagoon (Loyalty Islands, NE of New Caledonia; Clavier *et al.*, 1992).

Sampling soft sediments has been reviewed by Hartley and Dicks (1987) and the methods used in this study are described below. The protocol followed is the one that has been developed by the ORSTOM team operating from Nouméa, New Caledonia, and was followed in this study to facilitate comparisons between this and the earlier work done in New Caledonia.

### 2. Materials and methods

The study focused on subtidal sediments. Macrobenthic communities were sampled at 25 sites located between 17 and 43 m depth over the lagoon (Table 1 and Figure 1). Sampling was carried out with the RV 'ALIS' in April 1994.

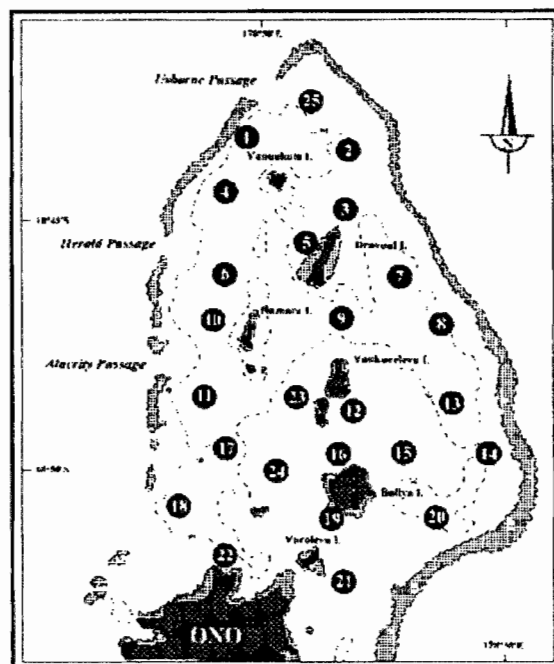


Figure 1: Location of sampling stations

Macrofauna and macroflora were sampled using a 0.1 m<sup>2</sup> Smith McIntyre grab weighed down with an additional 60 kg lead ballast (Figure 2). The sampling unit was a 1m<sup>2</sup> area, i.e. ten 0.1 m<sup>2</sup> grabs. The total collected volume of sediment was about 60 l. The boat was moored with a bow anchor and was free to swing under the influence of wind. The probability of a bite coincidence between samples was consequently very low. The samples from the same station were mixed and passed through 20, 5 and 2 mm stacked sieves. On board, organisms were separated from the substrate, sorted by major taxonomic groups and preserved in 10 % formalin neutralised with borax.

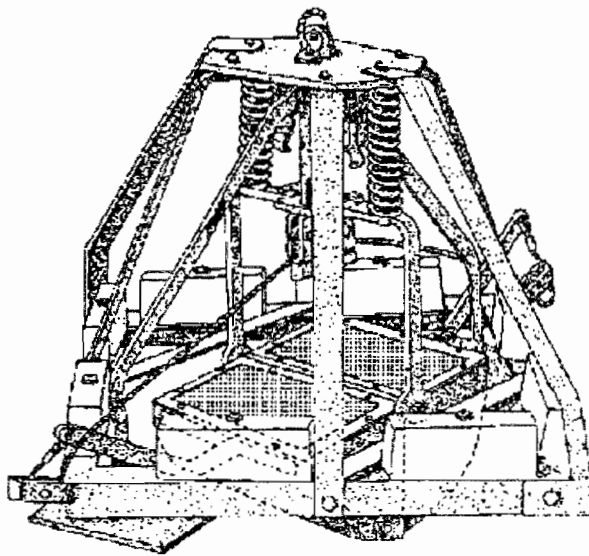


Figure 2: The Smith-Mc-Intyre grab

In the laboratory, taxonomic determinations were carried out as precisely as possible using the available literature. The results per station have been expressed as the number of individuals per m<sup>2</sup> for each identified taxon for macrofauna. Dry weights were measured after oven-drying (60°C) until constant weight and the ash weight by further heating at 550°C for 3 hours. The ash free dry weight is the difference between these two values. The biomasses have been expressed in grams of dry weight and ash free dry weight per m<sup>2</sup> for macrofauna and macroflora. Taxonomic biomasses have been summed to obtain the total macrobenthic biomass per station.

Table 1 : Depth (m) and position of the sampling stations

N	Depth	Latitude	Longitude
	31	18°43.50' S	178°29.67' E
	28	18°43.49' S	178°31.75' E
	22	18°44.68' S	178°31.70' E
	39	18°44.57' S	178°29.46' E
	17	18°45.19' S	178°31.25' E
	38	18°46.11' S	178°29.53' E
	43	18°46.09' S	178°32.73' E
	37	18°46.97' S	178°33.84' E
	35	18°46.90' S	178°31.75' E
1	37	18°46.99' S	178°29.18' E
1	39	18°48.81' S	178°29.19' E
1	29	18°48.80' S	178°32.10' E
1	34	18°48.28' S	178°33.84' E
14	27	18°49.48' S	178°34.72' E
15	29	18°49.46' S	178°33.14' E
16	32	18°49.48' S	178°31.83' E
17	34	18°49.57' S	178°29.50' E
18	34	18°50.77' S	178°26.64' E
19	31	18°50.94' S	178°31.86' E
20	34	18°50.71' S	178°33.85' E
21	30	18°52.14' S	178°31.97' E
22	36	18°51.64' S	178°29.50' E
23	31	18°48.43' S	178°30.84' E
24	32	18°49.83' S	178°30.50' E
25	31	18°42.66' S	178°30.97' E

### 3. Taxonomic list

#### 3.1 Phytobenthos

##### CHLOROPHYTA

- 1 *Avrainvillea amadelpha* (Montagne) Gepp & Gepp
- 2 *Avrainvillea* sp.
- 3 *Caulerpa bikinensis* Taylor
- 4 *Caulerpa brachypus* Harvey
- 5 *Caulerpa racemosa* var. *clavifera* (Turner) Weber van Bosse
- 6 *Caulerpa sertularioides* (Gmelin) Howe
- 7 *Caulerpa taxifolia* (Vahl) C. Agardh
- 8 *Caulerpa urvilliana* Montagne
- 9 *Halimeda cylindracea* Decaisne
- 10 *Halimeda discoidea* Decaisne
- 11 *Halimeda incrassata* (Ellis) Lamouroux
- 12 *Halimeda macroloba* Decaisne
- 13 *Halimeda opuntia* (L.) Lamouroux
- 14 *Tydemania expeditionis* Weber van Bosse
- 15 *Udotea flabellum* (Ellis & Solander) Howe
- 16 *Udotea glaucescens* Harvey
- 17 *Halicystis* sp.

- 18 *Valonia aegagropila* C. Agardh  
19 *Valonia fastigiata* Harvey

**PHAEOPHYTA**

- 20 *Dictyota* sp.

**CYANOPHYTA**

- 21 Cyanophyceae indet.

**3.2 Zoobenthos****SPONGES**

- 22 Sponge indet. 1  
23 Sponge indet. 2  
24 Sponge indet. 3  
25 Sponge indet. 4  
26 Sponge indet. 5  
27 Sponge indet. 6

**CNIDARIANS**

- 28 *Edwardsia* sp.  
29 *Trachyphyllia geoffroyi* (Audouin, 1926)

**PLATYHELMINTHS**

- 30 Platyhelminth indet.

**NEMERTEANS**

- 31 Nemertean indet.

**NEMATODES**

- 32 Nematode indet.

**ANNELIDS**

- 33 *Amphicteis* sp.  
34 *Arabella iricolor* (Montagu, 1804)  
35 *Armandia* sp. cf. *leptocirrus* (Grube, 1878)  
36 Chaetopteridae indet.  
37 *Chloeia* sp.  
38 *Cirriformia* sp.  
39 *Dasybranchus* sp.  
40 *Drilonereis* sp.  
41 *Euclymene* sp.  
42 *Eunice complanata* (Grube, 1877)  
43 *Eunice* sp.  
44 *Eupolymnia* sp.  
45 *Glycera* sp.  
46 *Goniada* sp. 1  
47 *Goniada* sp. 2  
48 *Laonome* sp.  
49 *Leiochrides australis* Augener, 1814  
50 *Linopherus* sp.  
51 *Loimia ingens* (Grube, 1878)  
52 *Lumbrineris* sp. 1  
53 *Lumbrineris* sp. 2  
54 *Lysilla pacifica* Hessle, 1917  
55 *Lysippe* sp.  
56 *Malacoceros* sp.  
57 *Marphysa* sp.  
58 *Mastobranchus trinchesei* Eisig, 1887  
59 Nereidinae indet.  
60 *Notomastus* sp.  
61 *Pareulepis* sp.  
62 *Pectinaria* sp.  
63 *Phyllochaetopterus* sp.  
64 *Phyllodoce* sp.

- 65 *Pista* sp. cf. *australis* Hutchings & Glasby, 1988  
66 *Poecilochaetus* sp.  
67 *Polydora* sp.  
68 *Polydortes* sp.  
69 *Prionospio (Aquilaspio) aucklandica* Augener, 1923  
70 *Prionospio (Aquilaspio)* sp..  
71 *Prionospio (Prionospio) lineata* Imajima, 1990  
72 *Prionospio* sp.  
73 *Psammolyce antipoda* (Schmarda, 1861)  
74 *Rhinothelepus* sp.  
75 *Samytha* sp.  
76 *Samythella* sp.  
77 *Sigalion mathildae* Audouin & Milne-Edwards, 1832  
78 *Spio* sp.  
79 *Sthenelais laevis* Kinberg, 1858  
80 *Sthenelais zeylandica* Wiley, 1905  
81 *Sthenolepis yhleni* (Malmgren, 1867)  
82 *Streblosoma* sp.  
83 *Syllis (syllis)* sp.  
84 *Terebellides stroemi* Sars, 1835

**SIPUNCULIDS**

- 85 *Aspidosiphon* sp. 1  
86 *Aspidosiphon* sp. 2  
87 *Aspidosiphon* sp. 3  
88 Sipunculid indet. 1  
89 Sipunculid indet. 2

**LOPHOPHORIAN**

- 90 Phoronidian indet.  
91 Brachiopod indet.  
92 *Lingula* sp.

**MOLLUSCS****Gastropods**

- 93 *Acteon virgatus* Reeve, 1842  
94 *Atys cylindricus* (Helbling, 1879)  
95 *Cantharidus* sp.  
96 Cerithidae indet. 1  
97 Cerithidae indet. 2  
98 *Dentalium* sp.  
99 *Lophiotoma* sp.  
100 *Malea pomum* (L., 1758)  
101 *Nassarius glans* Röding, 1798  
102 *Nassarius* sp.  
103 *Natica onca* Röding, 1798  
104 *Natica* sp.  
105 *Oliva carneola* (Gmelin, 1791)  
106 *Oliva miniacea* (Röding, 1798)  
107 *Pupa solidula* (L., 1758)  
108 *Rhinoclavis aspera* (L., 1758)  
109 *Strombus fragilis* (Röding, 1758)  
110 *Subcancilla interlirata* (Reeve, 1844)  
111 *Terebellum terebellum* L., 1758  
112 *Terebra* sp.  
113 *Terebra subulata* (L., 1767)  
114 *Terebra undulata* Gray, 1834  
115 Turridae indet. 1  
116 Turridae indet. 2  
117 *Vexillum sanguisugum* (L., 1758)  
118 *Vexillum* sp. 1

- 119 *Vexillum* sp. 2  
 120 *Vexillum* sp. 3  
 121 *Vexillum* sp. 4  
 122 *Viriola interfilata* (Gould, 1861)  
**Bivalves**  
 123 *Anodontia* sp.  
 124 *Arca navicularis* Bruguière, 1789  
 125 *Arcopagia* (*Pinguitellina*) *robusta* (Hanley, 1844)  
 126 *Barbatia* sp.  
 127 *Codakia* sp.  
 128 *Ctenodardia victor* (Angas, 1872)  
 129 *Fimbria fimbriata* (L., 1758)  
 130 *Gari maculosa* (Lamarck, 1818)  
 131 *Laevicardium* sp.  
 132 *Lima* sp.  
 133 *Lioconcha castrensis* (L., 1758)  
 134 *Lioconcha ornata* (Dillwynn, 1817)  
 135 Lucinicae indet. 1  
 136 Lucinidae indet. 2  
 137 *Modiolus philippinarum* Hanley, 1843  
 138 *Pinna* sp.  
 139 Pinnidae indet.  
 140 *Tellina rastella* Hanley, 1844  
 141 *Tellina* sp.  
 142 Tellinidae indet.  
 143 *Timoclea* (*Glycydonta*) *marica* (L., 1758)  
 144 *Vasticardium pulicarium* (Reeve, 1845)
- CRUSTACEANS**  
 145 Stomatopod indet. 1  
 146 Stomatopod indet. 2  
 147 *Ampelisca* sp.  
 148 Melitidae indet.  
 149 *Arcania* sp.  
 150 *Calappa* sp.  
 151 *Dacryopilumnus* sp.  
 152 *Hepthopelta* sp.  
 153 *Hexapus* (*Lambdophattus*) *anfractus* Rathbun, 1909  
 154 *Hexapus* (*Lambdophattus*) sp.  
 155 *Hexapus* sp.  
 156 *Leucosia* sp.  
 157 *Macrophthalmus convexus* Stimpson, 1858  
 158 *Micippa philira* (Herbst, 1803)  
 159 *Nursia* sp.  
 160 *Palicus* sp.  
 161 *Parthenope* (*Aulacolambrus*) *hepatus* (Adams & White, 1848)  
 162 *Phymodius* sp.  
 163 *Pilodius* sp.  
 164 *Pilumnus* sp.
- 165 *Podophthalmus nacreus* Alcock, 1899  
 166 *Portunus longispinosus* (Dana, 1852)  
 167 *Portunus* sp.  
 168 *Psaumis cavipes* (Dana, 1852)  
 169 *Tetrias fischeri* (A. Milne Edwards, 1867)  
 170 *Thalamita* sp. 1  
 171 *Thalamita* sp. 2  
 172 *Thalmitoides tridens* (A. Milne Edwards, 1869)  
 173 *Typhlocarcinodes* sp.  
 174 Galatheididae indet.  
 175 Paguridae indet.  
 176 *Alpheidae* indet. 1  
 177 *Alpheidae* indet. 2  
 178 Natantia indet.  
 179 Palaemonidae indet.  
 180 Pasiphaeidae indet.  
 181 Penaeidae indet.  
 182 Processidae indet.  
 183 Sergestidae indet.  
 184 *Parribacus* sp.  
 185 Callianassidae indet.  
 186 *Upogebia* sp.
- ECHINODERMS**  
 187 Asterid indet.  
 188 *Astropecten polyacanthus* Müller et Troschel, 1842  
 189 Brissidae indet.  
 190 *Brissopsis luzonica* (Gray, 1851)  
 191 *Laganum depressum* Agassiz, 1841  
 192 *Maretia planulata* (Lamarck, 1816)  
 193 *Metalia sternalis* (Lamarck, 1816)  
 194 Holothurid indet.  
 195 Amphiuridae indet.  
 196 Ophionereidae indet.  
 197 *Ophiopteron elegans* Ludwig, 1888  
 198 Ophiuridae indet.
- CHORDATES**  
 199 Enteropneusta indet.  
 200 Ascidian indet.  
 201 Acranian indet.
- VERTEBRATES**  
 202 *Callionymus* sp.  
 203 Gobiidae indet.  
 204 Labridae indet.  
 205 *Muraenichthys* sp.  
 206 Scorpaenidae indet.  
 207 Syngnathidae indet.

## 4. Results by station

Number of individuals (Nb), dry weight (DW) and ash free dry weight (AFDW) in grams, are expressed per m<sup>2</sup>.

### STATION 1

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Annelids</b>			
<i>Eupolymnia</i> sp.	1	0.0009	0.0006
<i>Loimia ingens</i>	1	0.0075	0.0044
<i>Marphysa</i> sp.	1	0.0069	0.0052
Nereidinae indet.	1	0.0011	0.0007
<i>Notomastus</i> sp.	1	0.0008	0.0005
<i>Pectinaria</i> sp.	2	0.0027	0.0004
<i>Phyllochaetopterus</i> sp.	1	0.0008	0.0006
<i>Pista</i> sp. cf. <i>australis</i>	1	0.0075	0.0038
<i>Terebellides stroemi</i>	1	0.0172	0.0108
<b>Sipunculids</b>			
<i>Aspidosiphon</i> sp. 3	2	0.0091	0.0069
Sipunculid indet. 1	1	0.0159	0.0044
Sipunculid indet. 2	1	0.0983	0.0236
<b>Molluscs</b>			
<i>Dentalium</i> sp.	2	0.0624	0.0138
<i>Oliva carneola</i>	1	1.3447	0.0987
<i>Oliva miniacea</i>	1	5.9760	0.5760
<i>Vexillum</i> sp. 1	1	0.2405	0.0215
<i>Anodontia</i> sp.	1	0.2614	0.0304
<i>Laevicardium</i> sp.	10	1.1941	0.1345
<i>Modiolus philippinarum</i>	1	0.2070	0.0437
<i>Tellina</i> sp.	6	0.5382	0.0651
<b>Crustaceans</b>			
Paguridae indet.	1	0.0087	0.0061
<b>Echinoderms</b>			
Amphiuridae indet.	1	0.0189	0.0108
Ophiuridae indet.	2	0.0191	0.0090
<b>Vertebrates</b>			
Gobiidae indet.	1	0.0119	0.0085
<hr/>			
<b>Number of taxons :</b>	<b>25</b>		
<b>Number of individuals :</b>	<b>42</b>		
<hr/>			

## STATION 2

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Annelids</b>			
<i>Chloeia</i> sp.	1	0.0049	0.0039
<i>Dasybranchus</i> sp.	2	0.0146	0.0107
<i>Glycera</i> sp.	1	0.0006	0.0003
<i>Lysippe</i> sp.	1	0.0005	0.0003
<i>Pista</i> sp. cf. <i>australis</i>	1	0.0068	0.0032
<i>Polyodontes</i> sp.	1	0.0098	0.0074
<i>Prionospio (Prionospio) lineata</i>	1	0.0083	0.0057
<i>Sigalion mathildae</i>	3	0.0056	0.0035
<i>Terebellides stroemi</i>	13	0.4230	0.2665
<b>Sipunculids</b>			
Sipunculid indet. 2	1	0.0391	0.0218
<b>Molluscs</b>			
<i>Nassarius</i> sp.	1	0.0965	0.0224
<i>Oliva miniacea</i>	1	2.2658	0.2096
<i>Pupa solidula</i>	1	0.8794	0.1527
<i>Terebra</i> sp.	1	0.2973	0.0270
<i>Terebra undulata</i>	1	0.1327	0.0211
<i>Lioconcha ornata</i>	1	0.0892	0.0721
<i>Modiolus philippinarum</i>	5	0.8568	0.1389
<i>Tellina</i> sp.	1	0.0170	0.0073
<b>Crustaceans</b>			
<i>Calappa</i> sp.	1	0.0420	0.0260
<i>Hexapus (Lambdophattus) anfractus</i>	2	0.0681	0.0414
<i>Hexapus (Lambdophattus) sp.</i>	4	0.0680	0.0372
<i>Hexapus</i> sp.	2	0.0343	0.0202
Paguridae indet.	1	0.0148	0.0054
<i>Thalamita</i> sp. 1	1	0.0352	0.0146
<b>Echinoderms</b>			
<i>Laganum depressum</i>	1	0.1285	0.0219
Ophiuridae indet.	2	0.0116	0.0058
<b>Number of taxons :</b>		<b>28</b>	
<b>Number of individuals :</b>		<b>51</b>	

**STATION 3**

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Algae</b>			
<i>Halimeda cylindracea</i>		27.8357	3.0890
<b>Cnidarians</b>			
<i>Edwardsia</i> sp.	1	0.0472	0.0185
<b>Annelids</b>			
<i>Lysippe</i> sp.	1	0.0008	0.0006
Nereidinae indet.	1	0.0009	0.0007
<b>Sipunculids</b>			
<i>Aspidosiphon</i> sp. 3	1	0.0090	0.0048
<b>Lophophorians</b>			
Brachiopod indet.	1	0.5000	0.0200
<b>Molluscs</b>			
<i>Natica onca</i>	1	0.0627	0.0296
<i>Oliva miniacea</i>	1	2.7920	0.5454
<i>Pupa solidula</i>	1	0.0615	0.0118
<i>Arca navicularis</i>	1	0.1207	0.0067
<i>Laevicardium</i> sp.	1	0.0658	0.0058
<i>Lioconcha ornata</i>	4	3.1597	0.9740
<i>Tellina</i> sp.	10	1.3451	0.1362
<b>Crustaceans</b>			
<i>Portunus longispinosus</i>	1	0.1381	0.0642
<b>Number of taxons :</b>	<b>16</b>		
<b>Number of individuals :</b>	<b>26</b>		

**STATION 4**

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Nemertean</b>			
Nemertean indet.	1	0.0068	0.0059
<b>Annelids</b>			
<i>Dasybranchus</i> sp.	2	0.0056	0.0041
<i>Eunice complanata</i>	1	0.0015	0.0011
<i>Eunice</i> sp.	1	0.0018	0.0010
<i>Glycera</i> sp.	1	0.0006	0.0003
<i>Goniada</i> sp.1	1	0.0008	0.0005
<i>Lysippe</i> sp.	4	0.0019	0.0014
<i>Phyllochaetopterus</i> sp.	1	0.0064	0.0051
<i>Poecilochaetus</i> sp.	2	0.0018	0.0012
<i>Prionospio (Prionospio) lineata</i>	2	0.0021	0.0012
<i>Rhinothelopus</i> sp.	3	0.0736	0.0442
<i>Sigalion mathildae</i>	1	0.0034	0.0029
<i>Sthenolepis yhlani</i>	1	0.0042	0.0036
<i>Terebellides stroemi</i>	41	0.7604	0.4791
<b>Molluscs</b>			
<i>Nassarius</i> sp.	1	0.1524	0.0652
<i>Subcancilla interlirata</i>	2	0.3436	0.0292
<i>Terebellum terebellum</i>	1	0.0300	0.0062
<i>Arca navicularis</i>	1	0.2405	0.0222
<i>Barbatia</i> sp.	1	0.2678	0.0356
<i>Laevicardium</i> sp.	5	0.3224	0.0408
<i>Lioconcha ornata</i>	3	0.4147	0.0289
<i>Modiolus philippinarum</i>	45	0.6456	0.2184
<i>Tellina</i> sp.	1	0.0199	0.0053
Tellinidae indet.	7	0.2860	0.1324
<b>Crustaceans</b>			
<i>Alpheidae</i> indet. 2	2	0.0242	0.0184
<i>Ampelisca</i> sp.	1	0.0002	0.0001
Callianassidae indet.	4	0.0503	0.0343
<i>Hexapus</i> sp.	3	1.1161	1.0790
<b>Echinoderms</b>			
Amphiuridae indet.	2	0.0454	0.0149
Ophiuridae indet.	11	0.0895	0.0130
<b>Number of taxons :</b>	<b>35</b>		
<b>Number of individuals :</b>	<b>152</b>		



**STATION 5**

<b>Taxon</b>	<b>Nb</b>	<b>DW</b>	<b>AFDW</b>
<b>Nemerteans</b>			
Nemertean indet.	3	0.0168	0.0148
<b>Annelids</b>			
<i>Eupolyornia</i> sp.	1	0.0008	0.0006
<i>Linopherus</i> sp.	1	0.0005	0.0004
<i>Lysippe</i> sp.	5	0.0112	0.0090
<i>Malacoceros</i> sp.	1	0.0014	0.0009
Nereidinae indet.	1	0.0011	0.0007
<i>Samythella</i> sp.	1	0.0008	0.0006
<b>Sipunculids</b>			
<i>Aspidosiphon</i> sp. 3	1	0.0159	0.0110
<b>Molluscs</b>			
<i>Terebra subulata</i>	1	11.3325	0.4073
<i>Fimbria fimbriata</i>	2	0.1842	0.0228
<i>Laevicardium</i> sp.	2	0.4121	0.0389
<i>Lioconcha castrensis</i>	2	0.3867	0.0645
<i>Lioconcha ornata</i>	2	7.4660	0.5032
<i>Modiolus philippinarum</i>	1	0.2535	0.1227
<i>Tellina</i> sp.	2	0.3018	0.1434
<i>Timoclea (Glycydonta) marica</i>	1	0.0396	0.0243
<b>Crustaceans</b>			
<i>Dacryopilumnus</i> sp.	1	0.0084	0.0052
Pasiphaeidae indet.	1	0.0018	0.0017
<i>Portunus</i> sp.	1	0.0882	0.0546
Stomatopod indet. 2	1	0.0401	0.0267
<b>Echinoderms</b>			
<i>Astropecten polyacanthus</i>	1	0.2312	0.0340
<i>Laganum depressum</i>	1	0.0404	0.0183
Ophiuridae indet.	1	0.0327	0.0159
<b>Chordata</b>			
Acranian indet.	8	0.0260	0.0219
<b>Vertebrates</b>			
Gobiidae indet.	1	0.0657	0.0559
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<b>Number of taxons :</b>	<b>27</b>		
<b>Number of individuals :</b>	<b>43</b>		
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## STATION 6

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Algae</b>			
Cyanophyceae indet.		0.0450	0.0060
<i>Udotea glaucescens</i>		0.0190	0.0020
<b>Nemerteans</b>			
Nemertean indet.	1	0.0095	0.0065
<b>Annelids</b>			
<i>Eunice complanata</i>	1	0.0018	0.0013
<i>Glycera</i> sp.	1	0.0014	0.0008
<i>Goniada</i> sp.1	2	0.0134	0.0107
<i>Lysippe</i> sp.	3	0.0012	0.0009
<i>Mastobranchus trinchessii</i>	1	0.0005	0.0002
<i>Polyodontes</i> sp.	1	0.0086	0.0071
<i>Prionospio (Prionospio) lineata</i>	2	0.0128	0.0088
<i>Sthenolepis yhleni</i>	1	0.0056	0.0041
<i>Terebellides stroemi</i>	12	0.2413	0.1520
<b>Molluscs</b>			
Cerithiidae indet. 1	1	0.0624	0.0289
<i>Lophiotoma</i> sp.	1	0.3770	0.0336
<i>Nassarius glans</i>	2	0.2132	0.0396
<i>Nassarius</i> sp.	1	0.1520	0.0205
<i>Terebellum terebellum</i>	1	0.1010	0.0233
<i>Terebra</i> sp.	1	0.2903	0.0242
<i>Ctenodardia victor</i>	1	0.1037	0.0630
<i>Laevicardium</i> sp.	5	0.2834	0.0634
<i>Lioconcha ornata</i>	1	0.0491	0.0026
<i>Modiolus philippinarum</i>	45	1.0480	0.1037
Pinnidae indet.	1	0.0372	0.0056
Tellinidae indet.	2	0.0632	0.0205
<b>Crustaceans</b>			
Alpheidae indet. 2	2	0.0149	0.0104
<i>Calappa</i> sp.	1	0.0084	0.0052
Callianassidae indet.	1	0.0343	0.0206
<i>Hexapus (Lambdophattus)</i> sp.	1	0.0907	0.0560
<i>Hexapus</i> sp.	1	0.0185	0.0110
<i>Leucosia</i> sp.	1	0.0096	0.0019
<i>Macrophthalmus convexus</i>	1	0.0081	0.0048
Paguridae indet.	2	0.0120	0.0085
<i>Parthenope (Aulacolambrus) hepatus</i>	1	0.0657	0.0354
<i>Thalmitoides tridens</i>	1	0.0882	0.0546
<b>Echinoderms</b>			
<i>Maretia planulata</i>	1	0.0994	0.0148
Ophiuridae indet.	3	0.0299	0.0143
<b>Vertebrates</b>			
Gobiidae indet.	1	0.0130	0.0096
<hr/>			
<b>Number of taxons :</b>	<b>38</b>		
<b>Number of individuals :</b>	<b>104</b>		
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**STATION 7**

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Nemerteans</b>			
Nemertean indet.	2	0.2144	0.1631
<b>Annelids</b>			
<i>Euclymene</i> sp.	1	0.0006	0.0002
<i>Lumbrineris</i> sp.1	2	0.0007	0.0004
<i>Phyllochaetopterus</i> sp.	1	0.0005	0.0003
<i>Prionospio (Aquilaspio) aucklandica</i>	2	0.0218	0.0150
<b>Molluscs</b>			
Cerithidae indet. 1	3	0.2546	0.0215
<i>Tellina</i> sp.	1	0.0736	0.0112
<b>Crustaceans</b>			
Alpheidae indet. 2	1	0.0074	0.0049
<i>Hexapus (Lambdophattus) anfractus</i>	3	0.4085	0.2338
<i>Macrophthalmus convexus</i>	2	0.3654	0.1871
<i>Podophthalmus nacreus</i>	1	0.0399	0.0247
Stomatopod indet. 2	1	0.1603	0.1083
<b>Echinoderms</b>			
<i>Astropecten polyacanthus</i>	1	0.1489	0.0242
<b>Chordata</b>			
Enteropneusta indet.	1	0.2325	0.1284
<b>Vertebrates</b>			
<i>Callionymus</i> sp.	1	0.0080	0.0060
<i>Muraenichthys</i> sp.	1	0.7100	0.5325
<hr/>			
<b>Number of taxons :</b>	<b>17</b>		
<b>Number of individuals :</b>	<b>24</b>		

**STATION 8**

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Cnidarians</b>			
<i>Edwardsia</i> sp.	1	0.0277	0.0135
<b>Annelids</b>			
<i>Lysilla pacifica</i>	1	0.0063	0.0040
<i>Phyllochaetopterus</i> sp.	1	0.0092	0.0074
<i>Polydortes</i> sp.	1	0.0123	0.0107
<i>Prionospio (Aquilaspio) aucklandica</i>	3	0.0113	0.0078
<i>Samytha</i> sp.	5	0.0163	0.0098
<i>Sigalion mathildae</i>	2	0.0044	0.0028
<i>Terebellides stroemi</i>	3	0.0579	0.0365
<b>Sipunculids</b>			
Sipunculid indet. 1	1	0.0482	0.0220
<b>Molluscs</b>			
Cerithidae indet. 1	1	1.0852	1.0059
<i>Nassarius</i> sp.	1	0.3213	0.0493
<i>Terebellum terebellum</i>	1	0.4152	0.1887
<i>Lioconcha castrensis</i>	2	0.8847	0.1292
<i>Tellina</i> sp.	1	0.0425	0.0098
<b>Crustaceans</b>			
Alpheidae indet. 2	1	0.0061	0.0042
<i>Hexapus (Lambdophattus)</i> sp.	1	0.0347	0.0190
<i>Hexapus</i> sp.	3	0.0805	0.1215
<i>Macrophthalmus convexus</i>	1	0.3671	0.1612
<i>Portunus longistylosus</i>	1	0.3549	0.2197
Stomatopod indet. 2	1	0.0239	-0.8245
<b>Echinoderms</b>			
<i>Marelia planulata</i>	1	0.1187	0.0075
Ophiuridae indet.	1	0.0113	0.0057
<b>Chordata</b>			
Enteropneusta indet.	1	0.3129	0.1378
<b>Vertebrates</b>			
Gobiidae indet.	2	0.0291	0.0209
<b>Number of taxons :</b>	<b>28</b>		
<b>Number of individuals :</b>	<b>37</b>		

**STATION 9**

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Nematodes</b>			
Nematode indet.	2	0.0199	0.0179
<b>Annelids</b>			
<i>Dasybranchus</i> sp.	1	0.0935	0.0683
<i>Glycera</i> sp.	1	0.0012	0.0008
<i>Lysippe</i> sp.	1	0.0006	0.0003
<i>Prionospio (Aquilaspio)</i> sp.	1	0.0047	0.0029
<i>Terebellides stroemi</i>	6	0.1059	0.0667
<b>Sipunculids</b>			
Sipunculid indet. 1	1	0.0220	0.0100
<b>Crustaceans</b>			
<i>Hexapus</i> sp.	1	0.0191	0.0117
Stomatopod indet. 2	1	0.1706	0.1219
<b>Echinoderms</b>			
Asterid indet.	1	0.0204	0.0030
<i>Laganum depressum</i>	1	0.3629	0.0409
<i>Maretia planulata</i>	4	0.3617	0.0222
<i>Metalia sternalis</i>	1	14.7044	2.1924
Ophiuridae indet.	3	0.0168	0.0038
<b>Number of taxons :</b>	<b>15</b>		
<b>Number of individuals :</b>	<b>25</b>		

**STATION 10**

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Cnidarians</b>			
<i>Edwardsia</i> sp.	1	0.0118	0.0065
<b>Nemertean</b>			
Nemertean indet.	2	0.2523	0.1373
<b>Annelids</b>			
<i>Arabella iricolor</i>	1	0.0082	0.0068
<i>Dasybranchus</i> sp.	1	0.0013	0.0007
<i>Euclymene</i> sp.	1	0.0008	0.0004
<i>Goniada</i> sp.1	1	0.0009	0.0007
<i>Lysilla pacifica</i>	2	0.0146	0.0084
<i>Lysippe</i> sp.	1	0.0005	0.0003
<i>Poecilochaetus</i> sp.	1	0.0008	0.0006
<i>Prionospio (Prionospio) lineata</i>	1	0.0007	0.0005
<i>Rhinothelepus</i> sp.	2	0.0839	0.0210
<i>Sigalion mathildae</i>	2	0.0320	0.0272
<i>Terebellides stroemi</i>	18	0.4068	0.2563
<b>Sipunculids</b>			
<i>Aspidosiphon</i> sp. 2	3	0.0169	0.0113
Sipunculid indet. 1	6	0.0894	0.0226
<b>Molluscs</b>			
<i>Nassarius glans</i>	1	0.1401	0.0215
<i>Subcancilla interlirata</i>	2	0.0569	0.0045
<i>Vexillum</i> sp. 2	1	0.1625	0.0150
<i>Vexillum</i> sp. 3	1	0.0640	0.0058
<i>Vexillum</i> sp. 4	1	0.0585	0.0054
<i>Ctenocardia victor</i>	1	0.1638	0.0141
<i>Laevicardium</i> sp.	1	0.0481	0.0059
<i>Lioconcha castrensis</i>	1	0.7527	0.3002
<i>Lioconcha ornata</i>	3	0.1908	0.0133
<i>Pinna</i> sp.	2	0.1248	0.0494
<i>Tellina</i> sp.	1	0.0241	0.0050
<b>Crustaceans</b>			
Callianassidae indet.	1	0.0116	0.0083
Pasiphaeidae indet.	2	0.0030	0.0025
<i>Portunus longispinosus</i>	1	0.0079	0.0044
Stomatopod indet. 2	1	0.1221	0.0923
<b>Echinoderms</b>			
<i>Laganum depressum</i>	3	0.3581	0.0501
<i>Maretia planulata</i>	2	0.0822	0.0076
<i>Metalia sternalis</i>	1	4.1810	0.8050
Amphiuridae indet.	2	0.0365	0.0106
Ophiuridae indet.	14	0.1213	0.0595
<b>Number of taxons : 41</b>			
<b>Number of individuals : 85</b>			

**STATION 11**

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Nemerteans</b>			
Nemertean indet.	1	0.0280	0.0234
<b>Nematodes</b>			
Nematode indet.	4	0.0331	0.0298
<b>Annelids</b>			
<i>Dasybranchus</i> sp.	4	0.0637	0.0465
<i>Euclymene</i> sp.	1	0.0691	0.0484
<i>Linopherus</i> sp.	2	0.0017	0.0013
<i>Loimia ingens</i>	2	0.0980	0.0591
<i>Polyodontes</i> sp.	1	0.0097	0.0083
<i>Prionospio (Prionospio) lineata</i>	1	0.0119	0.0082
<i>Rhinothelepus</i> sp.	1	0.0458	0.0275
<i>Terebellides stroemi</i>	26	0.6077	0.3829
<b>Sipunculids</b>			
Sipunculid indet. 1	2	0.0674	0.0287
<b>Molluscs</b>			
<i>Atys cylindricus</i>	1	0.1820	0.0162
Pinnidae indet.	1	0.0367	0.0150
<i>Tellina rastella</i>	1	0.1815	0.1263
<i>Tellina</i> sp.	1	0.0356	0.0162
<b>Crustaceans</b>			
Alpheidae indet. 1	1	0.0686	0.0457
Alpheidae indet. 2	1	0.0058	0.0035
<i>Leucosia</i> sp.	1	0.0503	0.0252
Stomatopod indet. 2	1	0.0184	0.0143
<b>Echinoderms</b>			
<i>Brissopsis luzonica</i>	1	4.5859	0.9461
<i>Laganum depressum</i>	1	0.1952	0.0693
<i>Maretia planulata</i>	3	0.2126	0.0148
<i>Metalia sternalis</i>	1	17.6416	7.2719
Amphiuridae indet.	2	0.1345	0.0286
Ophiuridae indet.	10	0.1003	0.0500
<b>Vertebrates</b>			
Gobiidae indet.	1	0.0212	0.0164
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<b>Number of taxons :</b>	<b>31</b>		
<b>Number of individuals :</b>	<b>72</b>		
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<b>STATION 12</b>			
<b>Taxon</b>	<b>Nb</b>	<b>DW</b>	<b>AFDW</b>
<b>Algae</b>			
<i>Caulerpa racemosa</i> var. <i>clavifera</i>		0.3120	0.1490
<i>Halicystis</i> sp.		0.0230	0.0080
<i>Halimeda incrassata</i>		0.8650	0.0640
<i>Halimeda opuntia</i>		3.9880	0.2060
<i>Udotea glaucescens</i>		0.2090	0.0450
<i>Valonia aegagropila</i>		0.0960	0.0220
<b>Sponges</b>			
Sponge indet. 2	1	3.3362	0.1744
Sponge indet. 4	5	7.4655	1.5818
<b>Annelids</b>			
Chaetopteridae indet.	1	0.0009	0.0007
<i>Eunice</i> sp.	1	0.0008	0.0006
<i>Laonome</i> sp.	1	0.0141	0.0109
<i>Terebellides stroemi</i>	1	0.0253	0.0159
<b>Sipunculids</b>			
Sipunculid indet. 1	1	0.0952	0.0495
<b>Molluscs</b>			
<i>Acteon virgatus</i>	1	0.2600	0.0232
<i>Natica</i> sp.	3	0.3180	0.1224
<i>Rhinoclavis aspera</i>	1	3.0029	0.1289
<i>Terebellum terebellum</i>	1	0.7486	0.1011
<i>Arcopagia (Pinguitellina) robusta</i>	1	0.0300	0.0102
<i>Ctenocardia victor</i>	2	3.2533	1.1311
<i>Gari maculosa</i>	2	0.4317	0.0635
<i>Gari squamosa</i>	1	0.0091	0.0062
<i>Laevicardium</i> sp.	15	3.7839	1.3467
<i>Lima</i> sp.	4	0.1158	0.0515
<i>Lioconcha ornata</i>	3	5.5766	2.4012
Lucinicae indet. 1	1	0.0419	0.0312
<i>Modiolus philippinarum</i>	153	5.4497	0.6229
<i>Tellina</i> sp.	10	0.8186	0.3350
<b>Crustaceans</b>			
Alpheidae indet. 2	3	0.0223	0.0163
Callianassidae indet.	2	0.2501	0.1864
<i>Hexapus (Lambdophattus)</i> sp.	1	0.0101	0.0058
<i>Macrophthalmus convexus</i>	5	0.0632	0.0431
<i>Nursia</i> sp.	1	0.0168	0.0104
Palaemonidae indet.	1	0.0110	0.0093
<i>Palicus</i> sp.	1	0.0672	0.0416
<i>Thalamita</i> sp. 1	3	0.0408	0.0238
<b>Echinoderms</b>			
<i>Astropecten polyacanthus</i>	1	2.2960	0.3807
<i>Maretia planulata</i>	1	0.2687	0.0554
Amphiuridae indet.	1	0.0063	0.0024
<b>Chordata</b>			
Ascidian indet.	1	0.8046	0.1043
<b>Vertebrates</b>			
Gobiidae indet.	1	0.0289	0.0202
<b>Number of taxons :</b>	<b>44</b>		
<b>Number of individuals :</b>	<b>231</b>		



**STATION 13**

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Algae</b>			
<i>Caulerpa taxifolia</i>		0.0190	0.0090
<b>Sponges</b>			
Sponge indet. 1	1	1.2109	0.4328
Sponge indet. 2	1	0.2167	0.0107
<b>Cnidarians</b>			
<i>Edwardsia</i> sp.	2	0.0645	0.0177
<b>Annelids</b>			
<i>Arandia</i> sp. cf. <i>leptocirrus</i>	1	0.0002	0.0001
<i>Dasybranchus</i> sp.	2	0.3756	0.2742
<i>Lumbrineris</i> sp.2	1	0.0006	0.0004
<i>Lysilla pacifica</i>	2	0.0241	0.0171
<i>Polydora</i> sp.	1	0.0006	0.0003
<i>Polyodontes</i> sp.	1	0.0108	0.0089
<i>Prionospio (Prionospio) lineata</i>	1	0.0016	0.0009
<b>Sipunculids</b>			
Sipunculid indet. 2	1	0.1136	0.0615
<b>Molluscs</b>			
<i>Viriola interfilata</i>	1	0.0650	0.0060
<b>Crustaceans</b>			
Alpheidae indet. 2	2	0.0227	0.0161
<i>Arcania</i> sp.	1	0.0105	0.0065
Callianassidae indet.	1	0.0133	0.0080
<i>Hexapus</i> sp.	1	0.0240	0.0103
<i>Pilodius</i> sp.	1	0.0252	0.0156
Stomatopod indet. 1	1	0.3816	0.2544
<b>Echinoderms</b>			
<i>Ophiopteron elegans</i>	1	0.0060	0.0021
Ophiuridae indet.	1	0.0402	0.0198
<b>Number of taxons :</b>	<b>22</b>		
<b>Number of individuals :</b>	<b>24</b>		

## STATION 14

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Algae</b>			
<i>Caulerpa uvilliana</i>		0.1930	0.1190
<i>Halimeda cylindracea</i>		9.4810	1.4330
<b>Annelids</b>			
<i>Loimia ingens</i>	1	0.0622	0.0367
<i>Notomastus</i> sp.	2	0.0075	0.0063
<i>Sigalion mathildae</i>	2	0.0156	0.0133
<i>Terebellides stroemi</i>	5	0.1301	0.0820
<b>Molluscs</b>			
<i>Malea pomum</i>	1	0.3359	0.2515
<i>Nassarius glans</i>	1	0.8699	0.3249
<i>Nassarius</i> sp.	1	0.1170	0.0348
<i>Natica onca</i>	1	0.0732	0.0346
<i>Terebellum terebellum</i>	1	0.3705	0.0331
<i>Terebra</i> sp.	1	0.0585	0.0054
<i>Vexillum sanguisugum</i>	1	2.7604	0.1977
<i>Arcopagia (Pinguicellina) robusta</i>	3	0.0116	0.0054
<i>Ctenocardia victor</i>	2	0.2242	0.0957
<i>Laevicardium</i> sp.	5	0.5597	0.0969
<i>Lioconcha ornata</i>	4	0.8623	0.3098
<i>Tellina</i> sp.	8	0.4723	0.1825
<b>Crustaceans</b>			
<i>Hexapus (Lambdophattus) anfractus</i>	2	0.0298	0.0121
<i>Hexapus (Lambdophattus) sp.</i>	1	0.0401	0.0215
<b>Echinoderms</b>			
<i>Maretia planulata</i>	1	0.0655	0.0067
<b>Chordata</b>			
Enteropneusta indet.	1	0.0240	0.0110
<b>Number of taxons :</b>	<b>24</b>		
<b>Number of individuals :</b>	<b>44</b>		

## STATION 15

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Algae</b>			
<i>Avrainvillea</i> sp.		0.0100	0.0020
<i>Caulerpa brachypus</i>		0.1230	0.0660
<i>Caulerpa racemosa</i> var. <i>clavifera</i>		0.1720	0.0730
<i>Halimeda opuntia</i>		0.3700	0.0190
<i>Udotea glaucescens</i>		0.1480	0.0450
<b>Annelids</b>			
<i>Glycera</i> sp.	1	0.0006	0.0003
<i>Laonome</i> sp.	1	0.0133	0.0106
<i>Loimia ingens</i>	2	0.0576	0.0340
<i>Polyodontes</i> sp.	1	0.0085	0.0071
<i>Prionospio (Prionospio) lineata</i>	1	0.0018	0.0010
<i>Streblosoma</i> sp.	1	0.0032	0.0013
<b>Sipunculids</b>			
Sipunculid indet. 1	1	0.0277	0.0080
<b>Molluscs</b>			
<i>Acteon virgatus</i>	1	0.2525	0.0292
<i>Natica onca</i>	1	0.8402	0.0633
<i>Pupa solidula</i>	1	0.1752	0.0102
<i>Terebellum terebellum</i>	3	1.4233	0.1933
<i>Laevicardium</i> sp.	7	1.8816	0.7778
<i>Lioconcha ornata</i>	4	2.0265	0.4047
<i>Modiolus philippinarum</i>	1	0.3088	0.1585
<i>Tellina</i> sp.	4	0.4641	0.0494
<b>Crustaceans</b>			
Callianassidae indet.	1	0.0161	0.0111
<i>Portunus longispinosus</i>	1	0.0160	0.0091
Stomatopod indet. 2	1	0.0237	0.0149
<i>Thalamita</i> sp. 1	1	0.1405	0.0834
<b>Echinoderms</b>			
Holothurid indet.	1	0.1901	0.0982
<b>Chordata</b>			
Ascidian indet.	1	0.4956	0.0502
<b>Number of taxons :</b>	<b>26</b>		
<b>Number of individuals :</b>	<b>36</b>		

**STATION 16**

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Algae</b>			
<i>Avrainvillea amadelpha</i>		4.3470	0.9280
<i>Halimeda incrassata</i>		0.4440	0.0550
<i>Halimeda opuntia</i>		1.6680	0.1280
<i>Udotea glaucescens</i>		0.0400	0.0090
<b>Sponges</b>			
Sponge indet. 2	1	0.2768	0.0237
<b>Nemerteans</b>			
Nemertean indet.	1	0.0530	0.0451
<b>Annelids</b>			
<i>Dasybranchus</i> sp.	1	0.0299	0.0218
<i>Glycera</i> sp.	1	0.0009	0.0005
<i>Polydora</i> sp.	1	0.0005	0.0003
<i>Sihnelais zeylandica</i>	1	0.0167	0.0156
<i>Terebellides stroemi</i>	5	0.1068	0.0673
<b>Lophophorians</b>			
<i>Lingula</i> sp.	1	0.1300	0.0780
<b>Molluscs</b>			
Cerithidae indet. 1	1	0.1051	0.0102
<i>Barbatia</i> sp.	2	1.3043	0.3270
<b>Crustaceans</b>			
<i>Hexapus</i> sp.	1	0.0082	0.0039
Palaemonidae indet.	3	0.1002	0.0843
Sergestidae indet.	1	0.0020	0.0019
Stomatopod indet. 2	2	0.0654	0.0414
<i>Tetrias fischeri</i>	1	0.0882	0.0546
<i>Thalamita</i> sp. 1	2	0.0690	0.0397
<i>Typhlocarcinus</i> sp.	2	0.0929	0.0575
<b>Echinoderms</b>			
Brissidae indet.	1	0.0140	0.0029
Ophionereidae indet.	1	0.0005	0.0001
<b>Number of taxa :</b>		<b>26</b>	
<b>Number of individuals :</b>		<b>29</b>	

## STATION 17

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Algae</b>			
<i>Caulerpa taxifolia</i>		0.0050	0.0020
<i>Dictyota</i> sp.		0.0470	0.0180
<i>Halimeda macrophysa</i>		0.0410	0.0060
<i>Halimeda opuntia</i>		0.2770	0.0150
<i>Valonia fastigiata</i>		0.0400	0.0160
<b>Sponges</b>			
Sponge indet. 5	1	0.6586	0.3012
<b>Annelids</b>			
<i>Cirriformia</i> sp.	1	0.0003	0.0002
<i>Euclymene</i> sp.	2	0.0021	0.0010
<i>Eunice complanata</i>	1	0.0018	0.0013
<i>Glycera</i> sp.	1	0.0011	0.0008
<i>Leiochrides australis</i>	2	0.0015	0.0009
<i>Lumbrineris</i> sp.2	1	0.0006	0.0004
<i>Phyllodoce</i> sp.	1	0.0052	0.0011
<i>Prionospio</i> sp.	1	0.0006	0.0004
<i>Sthenelais laevis</i>	1	0.0018	0.0010
<b>Molluscs</b>			
<i>Cantharidus</i> sp.	1	0.1300	0.0116
Cerithidae indet. 2	1	0.1950	0.0180
<i>Tellina</i> sp.	1	0.0082	0.0037
<b>Crustaceans</b>			
Alpheidae indet. 2	2	0.0019	0.0015
<i>Macrophthalmus convexus</i>	3	0.0188	0.0103
Paguridae indet.	3	0.0710	0.0377
<i>Thalamita</i> sp. 1	1	0.1024	0.0623
<i>Thalamita</i> sp.2	1	0.0065	0.0007
<i>Upogebia</i> sp.	2	0.0104	0.0071
<b>Echinoderms</b>			
Holothurid indet.	1	0.1098	0.0656
Ophiuridae indet.	2	0.0073	0.0021
<b>Vertebrates</b>			
Gobiidae indet.	3	0.1590	0.1212
<b>Number of taxons :</b>		<b>29</b>	
<b>Number of individuals :</b>		<b>33</b>	

## STATION 18

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Annelids</b>			
<i>Dasybranchus</i> sp.	1	0.0015	0.0009
<i>Euclymene</i> sp.	5	0.0054	0.0037
<i>Lumbrineris</i> sp.2	1	0.0006	0.0004
<i>Polydora</i> sp.	1	0.0006	0.0003
<i>Sigalion mathildae</i>	2	0.0043	0.0029
<i>Spio</i> sp.	1	0.0012	0.0008
<i>Terebellides stroemi</i>	5	0.0909	0.0573
<b>Sipunculids</b>			
<i>Aspidosiphon</i> sp. 3	1	0.0238	0.0157
Sipunculid indet. 1	1	0.0118	0.0050
<b>Molluscs</b>			
<i>Oliva carneola</i>	1	0.2158	0.0208
<i>Terebra</i> sp.	1	0.0846	0.0092
<i>Terebra undulata</i>	3	0.3808	0.0461
Turridae indet. 1	1	0.1170	0.0108
<i>Ctenocardia victor</i>	1	0.2036	0.0314
<i>Laevicardium</i> sp.	6	0.4515	0.0567
<i>Lioconcha castrensis</i>	2	0.6349	0.1696
<i>Lioconcha ornata</i>	1	0.0287	0.0050
<i>Modiolus philippinarum</i>	9	0.1216	0.0227
<i>Tellina</i> sp.	1	0.0102	0.0046
<i>Vasticardium pulicarium</i>	1	0.0621	0.0457
<b>Crustaceans</b>			
Paguridae indet.	2	0.0329	0.0139
<i>Parthenope (Aulacolambrus) hoplonatus</i>	2	0.0283	0.0159
<i>Portunus longispinosus</i>	1	0.0270	0.0117
<i>Typhlocarcinodes</i> sp.	1	0.0650	0.0580
<b>Echinoderms</b>			
<i>Maretia planulata</i>	3	0.2215	0.0133
<i>Metalia sternalis</i>	1	6.9581	0.6832
Amphiuridae indet.	2	0.0375	0.0196
Ophiuridae indet.	2	0.0114	0.0058
<b>Chordata</b>			
Enteropneusta indet.	2	0.0735	0.0353
<b>Number of taxons :</b>	<b>33</b>		
<b>Number of individuals :</b>	<b>61</b>		

**STATION 19**

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Algae</b>			
<i>Avrainvillea amadelpha</i>		0.6610	0.1740
<i>Caulerpa racemosa</i> var. <i>clavifera</i>		0.9900	0.5030
<i>Halimeda incrassata</i>		0.4140	0.0450
<i>Udotea glaucescens</i>		0.2490	0.0450
<b>Nemerteans</b>			
Nemertean indet.	2	0.0552	0.0388
<b>Annelids</b>			
<i>Amphicteis</i> sp.	1	0.0009	0.0006
<i>Drilonereis</i> sp.	1	0.0543	0.0378
<i>Euclymene</i> sp.	1	0.0010	0.0005
<i>Loimia ingens</i>	1	0.1101	0.0650
<i>Lumbrineris</i> sp. 1	1	0.0007	0.0005
<i>Lysilla pacifica</i>	2	0.0203	0.0081
<i>Lysippe</i> sp.	4	0.0018	0.0012
<i>Pareulepis</i> sp.	2	0.0091	0.0080
<i>Polydora</i> sp.	14	0.0146	0.0101
<i>Sigalion mathildae</i>	2	0.0095	0.0076
<i>Terebellides stroemi</i>	13	0.3560	0.2243
<b>Sipunculids</b>			
Sipunculid indet. 1	9	0.3593	0.0489
<b>Molluscs</b>			
<i>Terebellum terebellum</i>	2	0.4880	0.2477
<b>Crustaceans</b>			
Alpheidae indet. 2	2	0.0173	0.0137
Galatheidae indet.	2	0.0373	0.1089
<i>Hexapus (Lambdophattus) anfractus</i>	2	0.0694	0.0429
<i>Hexapus (Lambdophattus) sp.</i>	2	0.0778	0.0464
<i>Macrophthalmus convexus</i>	4	0.1920	0.0826
<i>Parthenope (Aulacolambrus) hepatus</i>	1	0.4076	0.1313
Penaeidae indet.	1	0.0141	0.0022
Stomatopod indet. 2	2	0.0848	0.0632
<i>Thalamita</i> sp. 1	1	0.0115	0.0070
<b>Echinoderms</b>			
<i>Metalia sternalis</i>	2	18.2651	1.4802
<b>Chordata</b>			
Ascidian indet.	1	0.0123	0.0020
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<b>Number of taxons :</b>	<b>36</b>		
<b>Number of individuals :</b>	<b>75</b>		

## STATION 20

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Annelids</b>			
<i>Dasybranchus</i> sp.	1	0.0245	0.0179
<i>Glycera</i> sp.	3	0.0079	0.0063
<i>Goniada</i> sp.1	2	0.0017	0.0012
<i>Lumbrineris</i> sp.1	1	0.0005	0.0003
<i>Lysilla pacifica</i>	1	0.0057	0.0032
<i>Lysippe</i> sp.	1	0.0006	0.0003
<i>Poecilochaetus</i> sp.	2	0.0021	0.0014
<i>Sigalion mathildae</i>	1	0.0019	0.0011
<i>Terebellides stroemi</i>	11	0.1184	0.0746
<b>Sipunculids</b>			
Sipunculid indet. 1	1	0.1255	0.0130
<b>Molluscs</b>			
<i>Tellina</i> sp.	1	0.0959	0.0279
<b>Crustaceans</b>			
Alpheidae indet. 2	2	0.0390	0.0246
<i>Hepthopelta</i> sp.	1	0.0756	0.0468
<i>Hexapus (Lambdophattus)</i> sp.	4	0.3085	0.1419
<b>Echinoderms</b>			
Ophiuridae indet.	1	0.0107	0.0053
<b>Chordata</b>			
Enteropneusta indet.	3	0.1693	0.1027
<b>Vertebrates</b>			
Gobiidae indet.	1	0.0300	0.0225
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<b>Number of taxons :</b>	<b>21</b>		
<b>Number of individuals :</b>	<b>37</b>		



**STATION 21**

<b>Taxon</b>	<b>Nb</b>	<b>DW</b>	<b>AFDW</b>
<b>Algae</b>			
<i>Halimeda cylindracea</i>		1.2560	0.1600
<b>Sponges</b>			
Sponge indet. 5	1	1.9348	0.2854
Sponge indet. 6	1	2.6146	0.2821
<b>Annelids</b>			
<i>Dasybranchus</i> sp.	1	0.0087	0.0064
<i>Loimia ingens</i>	1	0.0166	0.0051
<i>Samythella</i> sp.	1	0.0007	0.0006
<i>Streblosoma</i> sp.	1	0.0087	0.0053
<i>Terebellides stroemi</i>	1	0.0245	0.0154
<b>Sipunculids</b>			
Sipunculid indet. 2	1	0.0720	0.0384
<b>Molluscs</b>			
<i>Subcancilla interlirata</i>	1	0.3639	0.0778
<i>Ctenocardia victor</i>	1	2.0577	0.5103
<i>Lioconcha ornata</i>	1	3.1727	1.0538
Tellinidae indet.	1	0.5892	0.0374
<b>Crustaceans</b>			
Alpheidae indet. 2	3	0.0302	0.0226
<i>Macrophthalmus convexus</i>	1	0.0053	0.0024
<i>Pilumnus</i> sp.	1	0.0147	0.0091
<i>Thalamita</i> sp. 1	1	0.0146	0.0091
<b>Echinoderms</b>			
Holothurid indet.	1	0.4250	0.2210
<b>Vertebrates</b>			
Gobiidae indet.	1	0.1123	0.0857

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**Number of taxons :** 19  
**Number of individuals :** 20

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<b>STATION 22</b>				
<i>Taxon</i>		<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Cnidarians</b>				
	<i>Edwardsia</i> sp.	1	0.0240	0.0082
<b>Nemerteans</b>				
	Nemertean indet.	1	0.0238	0.0205
<b>Annelids</b>				
	<i>Lysilla pacifica</i>	3	0.0221	0.0157
	<i>Pareulepis</i> sp.	1	0.0024	0.0016
	<i>Phyllochaetopterus</i> sp.	2	0.0011	0.0007
	<i>Prionospio (Prionospio) lineata</i>	1	0.0009	0.0005
	<i>Rhinothelopus</i> sp.	1	0.0097	0.0061
	<i>Terebellides stroemi</i>	2	0.0141	0.0089
<b>Sipunculids</b>				
	Sipunculid indet. 1	2	0.0571	0.0190
<b>Molluscs</b>				
	Cerithidae indet. 1	2	0.3587	0.0355
	<i>Terebellum terebellum</i>	1	0.1314	0.0315
	<i>Laevicardium</i> sp.	2	0.1590	0.0437
<b>Crustaceans</b>				
	Alpheidae indet. 1	1	0.0096	0.0071
	Alpheidae indet. 2	1	0.0131	0.0086
	Callianassidae indet.	1	0.0115	0.0071
	<i>Macrophthalmus convexus</i>	1	0.4836	0.2872
	Natantia indet.	17	0.0790	0.0722
	Stomatopod indet. 2	2	0.0753	0.0569
<b>Echinoderms</b>				
	Amphiuridae indet.	1	0.0151	0.0030
	Ophionereidae indet.	1	0.0049	0.0015
<b>Chordata</b>				
	Enteropneusta indet.	1	0.0957	0.0430
<b>Vertebrates</b>				
	Gobiidae indet.	1	0.0385	0.0272
<b>Number of taxons :</b>		<b>25</b>		
<b>Number of individuals :</b>		<b>46</b>		

## STATION 23

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Algae</b>			
<i>Caulerpa bikiniensis</i>		0.4950	0.2850
<i>Caulerpa sertularioides</i>		0.0630	0.0410
<i>Caulerpa taxifolia</i>		0.1310	0.0840
<i>Halimeda discoidea</i>		13.1140	3.0080
<i>Halimeda incrassata</i>		68.7700	7.5500
<i>Halimeda macroloba</i>		0.2540	0.0720
<i>Halimeda opuntia</i>		71.7900	3.6820
<i>Udotea glaucescens</i>		0.8820	0.2210
<b>Sponges</b>			
Sponge indet. 2	3	4.9770	0.4182
Sponge indet. 3	2	0.1883	0.0770
Sponge indet. 4	1	1.4781	0.3127
Sponge indet. 5	1	0.5990	0.1339
<b>Cnidarians</b>			
<i>Trachyphyllia geoffroyi</i>	1	117.0475	5.2972
<b>Platyhelminths</b>			
Platyhelminth indet.	1	0.0648	0.0545
<b>Nemertean</b>			
Nemertean indet.	2	0.1317	0.1066
<b>Annelids</b>			
<i>Arabella iricolor</i>	4	0.0228	0.0185
<i>Arandia</i> sp. cf. <i>leptocirrus</i>	25	0.0755	0.0589
<i>Dasybranchus</i> sp.	1	1.2093	0.8828
<i>Euclymene</i> sp.	1	0.0012	0.0005
<i>Eunice</i> sp.	2	0.0013	0.0009
<i>Eupolymnia</i> sp.	1	0.0011	0.0008
<i>Leiochrides australis</i>	6	0.0178	0.0130
<i>Linopherus</i> sp.	7	0.0461	0.0420
<i>Lumbrineris</i> sp.2	5	0.0009	0.0007
<i>Lysilla pacifica</i>	3	0.0239	0.0104
<i>Prionospio (Prionospio) lineata</i>	6	0.0238	0.0164
<i>Psammolyce antipoda</i>	1	0.0525	0.0176
<i>Syllis (syllis) sp.</i>	3	0.0015	0.0012
<b>Sipunculids</b>			
Sipunculid indet. 1	1	0.0091	0.0017
<b>Molluscs</b>			
<i>Strombus fragilis</i>	3	3.5612	0.2275
<i>Codakia</i> sp.	5	7.1363	1.2397
<i>Ctenodardia victor</i>	1	0.3424	0.0494
<i>Lioconcha ornata</i>	1	3.8089	1.2570
<i>Modiolus philippinarum</i>	1	0.3770	0.0863
<b>Crustaceans</b>			
Alpheidae indet. 1	2	0.1937	0.1322
Alpheidae indet. 2	16	0.2312	0.1647
Callianassidae indet.	3	0.0664	0.0441
<i>Hexapus</i> sp.	1	0.0112	0.0053
Melitidae indet.	4	0.0085	0.0065
<i>Micippa philira</i>	1	0.8253	0.5109
<i>Parribacus</i> sp.	1	0.0594	0.0396
Pasiphaeidae indet.	2	0.0402	0.0321
Penaeidae indet.	2	0.0336	0.0248
<i>Phymodius</i> sp.	8	0.7288	0.3242
Processidae indet.	2	0.1195	0.1027
Stomatopod indet. 1	1	0.8412	0.5668
Stomatopod indet. 2	10	0.9962	0.7036
<i>Thalamita</i> sp. 1	1	0.2016	0.1182
<i>Typhlocarcinus</i> sp.	3	0.1646	0.0912
<b>Echinoderms</b>			
Ophionereidae indet.	1	0.0969	0.0521
<b>Vertebrates</b>			

Gobiidae indet.	3	0.1196	0.0889
Labridae indet.	1	0.0820	0.0615
<i>Muraenichthys</i> sp.	1	0.1637	0.1370
Scorpaenidae indet.	1	0.1227	0.0888
Syngnathidae indet.	1	0.0120	0.0090

Number of taxons :	64
Number of individuals :	153

**STATION 24**

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Algae</b>			
<i>Caulerpa bikiniensis</i>		5.2310	3.6580
<i>Caulerpa brachypus</i>		0.0440	0.0340
<i>Caulerpa taxifolia</i>		0.4540	0.3280
<i>Halimeda discoidea</i>		16.0380	4.4820
<i>Halimeda incrassata</i>		94.8050	10.9880
<i>Halimeda opuntia</i>		64.6390	3.7470
<i>Udotea flabellum</i>		0.3290	0.0500
<i>Udotea glaucescens</i>		0.1380	0.0260
<b>Sponge</b>			
Sponge indet. 4	1	2.4284	0.4830
<b>Nemerteans</b>			
Nemertean indet.	1	0.0281	0.0241
<b>Annelids</b>			
<i>Arabella iricolor</i>	2	0.0119	0.0100
<i>Arandia</i> sp. cf. <i>leptocirrus</i>	35	0.0981	0.0764
<i>Dasybranchus</i> sp.	1	0.0021	0.0013
<i>Euclymene</i> sp.	1	0.0014	0.0008
<i>Eunice</i> sp.	2	0.0015	0.0011
<i>Goniada</i> sp.2	1	0.0095	0.0084
<i>Leiochrides australis</i>	2	0.0085	0.0062
<i>Linopherus</i> sp.	6	0.0154	0.0137
<i>Lysilla pacifica</i>	1	0.0064	0.0042
<i>Mastobranchus trinchessii</i>	3	0.0340	0.0238
<i>Notomastus</i> sp.	1	0.0009	0.0006
<i>Syllis (syllis)</i> sp.	5	0.0023	0.0002
<b>Sipunculids</b>			
Sipunculid indet. 1	1	0.0464	0.0135
<b>Molluscs</b>			
<i>Nassarius glans</i>	1	0.2478	0.2110
<i>Strombus fragilis</i>	1	0.3603	0.0486
Turridae indet. 2	1	0.0910	0.0081
<i>Codakia</i> sp.	10	16.9091	5.1683
<i>Lioconcha ornata</i>	1	0.0467	0.0040
Lucinidae indet. 2	2	0.1065	0.0484
<i>Modiolus philippinarum</i>	4	1.1802	0.4306
<b>Crustaceans</b>			
Alpheidae indet. 1	2	0.1461	0.1106
Alpheidae indet. 2	9	0.0653	0.0491
<i>Arcania</i> sp.	2	0.0790	0.0383
<i>Leucosia</i> sp.	1	0.0924	0.0572
Melitidae indet.	1	0.0003	0.0001
Paguridae indet.	1	0.0147	0.0065
<i>Phymodius</i> sp.	2	0.9164	0.5254
<i>Portunus longispinosus</i>	1	0.4294	0.2227
Processidae indet.	2	0.1060	0.0734
<i>Psaumis cavipes</i>	1	0.0126	0.0078
Stomatopod indet. 2	7	0.2917	0.2038
<i>Thalamita</i> sp. 1	2	0.1443	0.0885
<i>Thalamita</i> sp.2	2	0.0160	0.0108

	<i>Thalmitoides tridens</i>	2	0.0324	0.0196
	<i>Typhlocarcinus</i> sp.	2	0.4998	0.2594
	<i>Upogebia</i> sp.	2	0.0052	0.0036
<b>Echinoderms</b>				
	Ophionereidae indet.	1	0.0061	0.0027
<b>Chordata</b>				
	Ascidian indet.	1	0.5295	0.0944
<b>Vertebrates</b>				
	Gobiidae indet.	3	0.0792	0.0606
	Scorpaenidae indet.	1	0.2060	0.1545
<b>Number of taxons :</b>		<b>62</b>		
<b>Number of individuals :</b>		<b>128</b>		

**STATION 25**

<i>Taxon</i>	<i>Nb</i>	<i>DW</i>	<i>AFDW</i>
<b>Plants</b>			
	<i>Tydemania expeditionis</i>	0.5250	0.0800
<b>Sponges</b>			
	Sponge indet. 3	1	0.0500
<b>Annelids</b>			
	<i>Dasybranchus</i> sp.	1	0.0018
	<i>Lysippe</i> sp.	1	0.0005
	Nereidinae indet.	1	0.0008
	<i>Sthenelais laevis</i>	1	0.0012
	<i>Syllis (syllis)</i> sp.	1	0.0008
<b>Sipunculids</b>			
	<i>Aspidosiphon</i> sp. 1	1	0.1620
	<i>Aspidosiphon</i> sp. 3	1	0.0101
<b>Molluscs</b>			
	<i>Dentalium</i> sp.	1	0.0250
	<i>Terebellum terebellum</i>	1	0.1233
	<i>Tellina</i> sp.	4	0.4252
	<i>Vasticardium pulicarium</i>	1	0.4679
<b>Crustaceans</b>			
	Alpheidae indet. 2	1	0.0091
	<i>Thalamita</i> sp. 1	1	0.0051
	<i>Typhlocarcinodes</i> sp.	1	0.0070
<b>Echinoderms</b>			
	Ophiuridae indet.	1	0.0180
<b>Number of taxons :</b>		<b>18</b>	
<b>Number of individuals :</b>		<b>19</b>	

## 5. Summary of biomasses per station

Station	dry weight			Ash free dry weight		
	Plants	Animals	Total	Plants	Animals	Total
1	0.000	10.052	10.052	0.000	1.080	1.080
2	0.000	5.550	5.550	0.000	1.147	1.147
3	27.836	8.304	36.139	3.089	1.818	4.907
4	0.000	4.920	4.920	0.000	2.295	2.295
5	0.000	20.959	20.943	0.000	1.599	1.584
6	0.064	3.569	3.633	0.008	0.869	0.877
7	0.000	2.647	2.647	0.000	1.462	1.462
8	0.000	4.282	4.282	0.000	1.370	1.370
9	0.000	15.904	15.904	0.000	2.563	2.563
10	0.000	7.631	7.631	0.000	1.981	1.981
11	0.000	24.506	24.506	0.000	9.324	9.324
12	5.493	38.664	44.157	0.494	9.109	9.603
13	0.019	2.608	2.627	0.009	1.163	1.172
14	9.674	7.090	16.764	1.552	1.762	3.314
15	0.823	8.367	9.190	0.205	2.016	2.221
16	6.499	2.464	8.963	1.120	0.876	1.996
17	0.410	1.494	1.904	0.057	0.650	0.707
18	0.000	9.906	9.906	0.000	1.366	1.366
19	2.314	20.670	22.984	0.767	2.679	3.446
20	0.000	1.018	1.018	0.000	0.491	0.491
21	1.256	12.722	13.978	0.160	2.828	2.988
22	0.000	1.631	1.631	0.000	0.706	0.706
23	155.499	146.317	301.816	14.943	13.630	28.573
24	181.678	25.309	206.987	23.313	8.575	31.888
25	0.525	1.308	1.833	0.080	0.377	0.457
Mean	15.684	15.516	31.199	1.832	2.869	4.701
SE	9.500	5.888	14.172	1.100	0.697	1.643

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