

BENTHIC COMMUNITIES

By J. HOPE BLACK

Abstract

The depth, substrate, flora and fauna of the 317 stations worked by the survey are listed and the benthic communities represented are discussed.

Introduction

The benthic fauna of Port Phillip Bay was collected over a period of six years, May 1957 to May 1963. During this period collections were made at 317 stations and all but six of these were within Port Phillip Heads. Six stations were worked within the 10 fm line along the open coast for comparison with the stations within the bay. Where substrate, flora and fauna changed rapidly, such as many areas close to shore, stations were close together. In more uniform areas such as the central silty clay and clay basin within the 10 fm line, stations were more widely spaced.

Such a large (735 sq mi, 1900 sq km) and complex geological area naturally has a variety of communities which can be considered on two levels, viz. (1) the major divisions which are more or less dependent on substrate and depth, and (2) the restricted communities within these major boundaries. Because of the considerable detail involved, it has not been possible to attempt a study of the latter, but the flora and fauna of all stations is listed and the major communities are discussed. Thus the present work is merely a basis on which it is hoped other workers will build by studying in greater detail the communities which are shown to exist.

The methods of collecting by skin divers and dredge were to some extent selective, and the author is sure that grab collecting and divers who have the opportunity to concentrate on small areas would increase the number of species at many of the stations. In spite of this, 22

new species and many new records were collected. Also it was found that some species collected by earlier workers such as the 1888-95 survey of the Royal Society of Victoria have become scarce, and are only taken now in the Heads region. Also because previously there had been no systematic collecting beyond the sublittoral, many species only rarely taken have been found to be dominant in deeper water communities, e.g. *Plesiastraea urvillei*, *Anadara trapezia*, and *Pecten alba*. It was the information gained from the survey that decided the Fisheries and Wildlife Department to open Port Phillip bay to the scallop fishing industry. All identified species from the survey are listed systematically and numbered. These numbers are used instead of names in the station lists. Where a number is followed by a question mark the identification is made by this author and not the author for the biological group concerned.

The method of tabulation of the stations is to list depth, substrate, flora and fauna followed by remarks if necessary. The boundaries of the major communities, and their affinities in other parts of the world, are discussed.

It is unfortunate that systematic zoologists could not be found to work certain groups in time for this publication, e.g. Porifera and Amphipoda.

Reefs in the bay are limited in extent and occur in less than six fathoms, but most support large and varied plant and animal communities. The most diverse and interesting of these is the artificial reef of the Popes Eye Annulus,

Area 59 (36), built last century in the form of a circle with an opening to the N. It is constructed of basalt, and has a jetty with light on the W. side. The floor is of sand, where the molluscs include the marginellas and *Xenogalea*. This station and its surrounds has such a unique fauna that it should be classified as a marine national reserve to preserve its inhabitants.

Plants

PHANEROGAMS

1. *Zostera muelleri*
2. *Z. tasmanica* (= *Heterozostera*)
3. *Halophila ovalis*
4. *Cymodocea antarctica* (= *Amphibolis*)

ALGAE CHLOROPHYTA

1. *Ulva lactuca*
2. *Chaetomorpha darwinii*
3. *C. indica*
4. *Cladophora bainesii*
5. *C. fascicularis*
- 6-6B. *Cladophora* sp. (1-3)
7. *Bryopsis plumosa*
8. *Caulerpa brownii*
9. *C. cactoides*
10. *C. flexilis*
11. *C. flexilis* var. *muelleri*
12. *C. geminata*
13. *C. longifolia*
14. *C. longifolia* f. *crispata*
15. *C. obscura*
16. *C. remotifolia*
17. *C. scalpelliformis*
18. *C. simpliciuscula*
19. *C. trifaria*
20. *Codium duthiae*
- 20A. *C. fragile novaezelandiae*
21. *C. galeatum*
22. *C. harveyi*
23. *C. perrinae*
24. *Acetabularia peniculus*

PHAEOPHYTA

25. *Ectocarpus confervoides*
26. *Feldmannia globifer*
27. *Sphacelaria furcigera*
28. *Halopteris funicularis*
31. *Cladostephus verticillatus*
32. *Cutleria multifida*

33. *Dictyota alternifida*
34. *D. apiculata*
35. *D. dichotoma*
36. *D. furcellata*
37. *Pachydictyon furcellatum*
38. *P. paniculatum*
39. *Dilophus fastigiatus*
40. *Dilophus* sp.
41. *Lobospira biscuspidata*
42. *Dictyopteris muelleri*
43. *Distromium?*
44. *Padina fraseri*
45. *Taonia australasica*
46. *Zonaria turneriana*
47. *Z. sinclairii*
48. *Bellotia eriophorum*
49. *Carpomitra costata*
50. *Colpomenia sinuosa*
51. *Ecklonia radiata*
52. *Macrocystis angustifolia*
53. *Durvillea potatorum*
54. *Xiphophora chondrophylla*
55. *Seirococcus axillaris*
56. *Acrocarpia paniculata*
57. *Caulocystis cephalornithos*
- 57A. *C. uvifera*
58. *Cystophora congesta*
59. *C. expansa*
60. *C. grevillei*
61. *C. monilifera*
62. *C. moniliformis*
63. *C. retorta*
64. *C. retroflexa*
65. *C. siliquosa*
66. *C. subfarcinata*
67. *C. torulosa*
68. *Myriodesma integrifolia*
69. *Sargassum decipiens*
70. *S. heteromorphum*
71. *S. paradoxum*
72. *S. sonderi*
73. *S. verruculosum*

RHODOPHYTA

74. *Liagora harveyiana*
75. *Delisea elegans*
76. *Gelidium australe*
77. *G. glandulaefolium*
78. *Pterocladia capillacea*
79. *P. lucida*

80. *Dasyphloea insignis*
 81. *Cheilosporum elegans*
 82. *Corallina cuvieri*
 83. *C. officinalis*
 84. *Jania fastigiata*
 85. *Metagoniolithon stelligerum*
 86. *Grateloupia filicina* var. *luxurians*
 87. *Polyopes constrictus*
 88. *Callophyllis ceratoclada*
 89. *C. harveyana*
 90. *Gracilaria confervoides*
 91. *G. furcellata*
 92. *G. secundata*
 93. *Melanthalia obtusata*
 94. *Plocamium angustum*
 95. *P. coccineum*
 96. *P. costatum*
 97. *P. mertensii*
 98. *P. preissianum*
 99. *Phacelocarpus labillardieri*
 100. *Nizyenia australis*
 101. *Solieria mollis*
 102. *S. robusta*
 103. *Areschougia laurencia*
 104. *Erythroclonium muelleri*
 105. *Rhabdonia coccinea*
 106. *R. nigrescens*
 107. *R. verticillata*
 108. *Rhodophyllis goodwiniae*
 109. *Hypnea episcopalis*
 110. *Hypnea* sp.
 111. *Ectoclinium dentatum*
 112. *Mychodea compressa*
 113. *M. foliosa*
 114. *M. hamata*
 115. *M. membranacea*
 116. *Dicranema grevillei*
 117. *Stenogramme leptophylla*
 118. *Gigartina brachiata*
 119. *G. muelleriana*
 120. *Rhodoglossum foliiferum*
 121. *R. proliferum*
 122. *Botryocladia obovata*
 123. *Erythrymenia minuta*
 124. *Gloiosaccion brownii*
 125. *Rhodymenia australis*
 126. *Champia affinis* var. *arcuata*
 127. *C. obsoleta*
 128. *C. tasmanica*
 129. *Antithamnion mucronatum*
 130. *Ballia callitricha*
 131. *B. scoparia*
 132. *Ceramium* sp. 1
 133. *Ceramium* sp. 2
 134. *Ceramium* sp. 3
 135. *Griffithsia teges*
 136. *Neomonospora griffithsoides*
 137. *Spongoclonium conspicuum*
 138. *Sypridia opposita*
 139. *Wrangelia protensa*
 140. *Dasya naccarioides*
 141. *D. villosa*
 142. *Heterosiphonia gunniana*
 143. *H. muelleri*
 144. *Acrosorium uncinatum*
 145. *Hymenena affinis*
 146. *Myriogramme gunniana*
 146A. *M.* sp.
 147. *Nitophyllum parvifolium*
 148. *N.* sp.
 149. *Phytomophora imbricata*
 150. *Malaconema roeana*
 151. *Sarcotrichia dolichocystidea*
 152. *Lophurella pericladus*
 153. *Polysiphonia blandi*
 154. *P. cancellata*
 155. *Brongniartella australis*
 156. *Lopothalia verticillata*
 157. *L.* sp.
 158. *Dictymenia harveyana*
 159. *Jeannerettia pedicellata*
 160. *Dasyclonium incisum*
 161. *Lenormandia prolifera*
 162. *L. smithiae*
 163. *Cladurus elatus*
 164. *Coeloclonium opuntioides*
 165. *Laurencia clavata*
 166. *L. elata*
 167. *L. filiformis*
 168. *L. heteroclada*
 169. *L. tasmanica*

Coelenterata

HYDROZOA

1. *Eudendrium capillare*
2. *Tubularia ralphii*
3. *T. larynx*
4. *Pennaria disticha*
5. *Myriothela australis*
6. *Obelia australis*

7. *O. geniculata* f. *subtropica*
8. *Orthopyxis crenata* *subtropica*
9. *O. caliculata*
10. *Silicularia bilabiata* *subtropica*
11. *Halecium delicatulum*
12. *Hebella calcarata*
13. *Hincksella corrugata*
14. *Thyroscyphus marginatus*
15. *Stereotheca elongata*
16. *Diphasia subcarinata*
17. *Anphisbetia minima*
18. *A. operculata*
19. *Sertularia unguiculata*
20. *Thuiaria lata*
21. *Dynamena quadridentata*
22. *Symplectoscyphus subdichotomus*
23. *S.* sp.
24. *Sertularella simplex*
25. *S. robusta*
26. *S. undulata*
27. *Plumularia setaceoides*
28. *P. watsii*
29. *P. procumbens*
30. *Aglaophenia divaricata*
31. *A. decumbens*
- 31A. *Halicornaria longirostris*
32. *Solanderia fusca*

CORALLIMORPHARIA

1. *Corynactis australis*

ACTINIARIA

2. *Actinia tenebrosa*
3. *Oulactis muscosa*
4. *Anthopleura aureoradiata*
5. *Epiactis australiensis*
6. *E. thomsoni*
7. *Phlyctenactis tuberculosa*
8. *P. australis*
9. *Bunodactis rubrofusca*
10. *Isanemonia australis*
11. *Isophellia stela*
12. *Anthothoe albocincta*
13. *Cricophorus nutrix*

ZOANTHIDEA

14. *Parazoanthus lividum*
15. *Epizoanthus sabulosum*

OCTOCORALLIA

1. *Telesto smithi*
2. *Parerythropodium hicksoni*

3. *P. membranaceum*
4. *Chondronephythya fusca*
5. *Mopsella aurantia*
6. *M. zimmeri*
7. *M. clavigera*
8. *M. klunzingeri*
9. *Mopsea encrinula*
10. *Virgularia* cf. *mirabilis*

SCLERACTINIA

1. *Plesiastrea urvillei*
2. *Homophyllia australis*
3. *Culicia hoffmeisteri*
4. *Monomyces radiatus*

Annelida

POLYCHAETA

1. *Harmothoe spinosa*
2. *Malmgrenia phillipensis*
3. *Paralepidonotus ampulliferus*
4. *Polyeunoa* sp.
5. *Sigalion ovigerum*
6. *Eteone platycephala*
7. *Eulalia (Pterocirrus) magalhaensis*
8. *Notophyllum splendens*
9. *Phyllodoce duplex*
10. *Nerimyra longicirrata*
11. *Eusyllis brevicirrata*
12. *Syllis kinbergiana*
13. *Trypanosyllis zebra*
14. *Ceratonereis costae*
15. *C. mirabilis*
16. *Nereis cockburnensis*
17. *N. (Neanthes) caudata*
18. *Perinereis amblyodonta*
19. *P. nutia brevicirris*
20. *Platynereis australis*
21. *Glycera americana*
22. *Goniauda emerita*
23. *Eunice antennata*
24. *E. australis*
25. *E. tentaculata*
26. *E. (Palolo) siciliensis*
27. *Lysidice ninetta*
28. *Diopatra aciculata*
29. *Onuphis (Nothria) holobranchiata*
30. *Oenone fulgida*
31. *Lumbrineris latreilli*
32. *Arabella iricolor iricolor*
33. *Dorvillea australiensis*

34. *Cirriformia filigera*
35. *C. tentaculata*
36. *Chaetopterus variopedatus*
37. *Halploscoloplos kerguelensis*
38. *Armandia lanceolata*
39. *Asychis glabra*
40. *Pectinaria antipoda*
41. *Terebellides stroemi*
42. *Polycirrus porcata*
43. *Thelepus setosus*
44. *Amphitrite rubra*
45. *Artacamella dibranchiata*
46. *Axionice harrissoni*
47. *Eupolymnia nebulosa*
48. *Lanice conchilega*
49. *Pista typha*
50. *Branchiomma cingulata*
51. *Sabellastarte indica*
52. *S. longa*
53. *Myxicola infundibulum*
54. *Spirorbis (Paralaeospira) antarcticus*
55. *S. (Paralaeospira) sp.*
56. *Pomatoceros terraenovae*
57. *Salmacina dysteri*
58. *Serpula sp.*
59. *Temporaria polytrema*
60. *Verniliopsis acanthophora*
61. *V. infundibulum*

SIPUNCULOIDEA

1. *Phascolosoma noduliferum*
2. *Golfingia sp.*
3. *Dendrostomum sp.*

ECHIUROIDEA

1. *Anelassorhynchus adelaidensis*
2. *Bonellia gigas*
3. *B. sp.*
4. *Arhynchite hiscocki*

Crustacea

CIRRIPEDIA

1. *Balanus variegatus cirratus*
2. *Elminius modestus*
3. *E. simplex*

ISOPODA

1. *Paridotea munda*
2. *P. ungulata*
3. *Crabyzos longicaudatus*
4. *Euidotea peronii*

5. *Cirolana woodjonesi*
6. *C. australiense*
7. *Neocirolana obesa*
8. *Serolis tuberculata*
9. *Zuzara venosa*
10. *Cymodoce bidentata*
11. *C. coronata*
12. *C. gaimardii*
13. *C. muldens australis*
14. *C. pubescens*
15. *C. tuberculosa*
16. *Cilicæa curtispina*
17. *C. latreillei*
18. *Paracilicæa hamata*
19. *P. septemdentata*
20. *Cymodopsis crassa*
21. *Dynamenella parva*
22. *D. rubida*
23. *Cerceis acuticaudata*
24. *C. tridentata*
25. *C. trispinosa*
26. *Haswellia anomala*

Crustacea

BRACHYURA

1. *Petalomera lateralis*
2. *P. wilsoni*
3. *Dromidiopsis excavata*
4. *Ebalia (Phlyxia) intermedia*
5. *Philyra larvis*
6. *P. undecimspinosa*
7. *Halicarcinus ovatus*
8. *H. rostratus*
9. *Paratymolus latipes*
10. *Naxia deflexifrons*
11. *N. aurita*
12. *N. tumida*
13. *Notomithrax minor*
14. *Leptomithrax gaimardii*
15. *Carcinus maenus*
16. *Nectocarcinus integrifrons*
17. *Ovalipes australiensis*
18. *Actaea peroni*
19. *Pilumnus acer*
20. *P. etheridgei*
21. *P. monilifer*
22. *P. tomentosus*
23. *Heteropilumnus fimbriatus*
24. *Pilumnopeus serratifrons*
25. *Litocheira bispinosa*

26. *Pinnotheres pisum*
27. *Leptograpsus variegatus*
28. *Cyclograpsus audomnii*
29. *Paragrapsus quadridentatus*
30. *P. gaimardii*
31. *Mycstryis platycheles*

Mollusca

AMPHINEURA

1. *Terenochiton liratus*
2. *Subterenochiton gabrieli*
3. *Poneroplax albida*
4. *P. costata*
5. *Kopionella matthewsi*
6. *Craspedoplax variabilis*
7. *Acanthochiton bednalli*
8. *A. graniostratus*
9. *Meturoplax retrojecta*
10. *Cryptoplax iredalei*
11. *C. striata*
12. *Ischnochiton elongatus*
13. *I. falcatus*
14. *I. lineolatus*
15. *I. variegatus*
16. *Ischnoradsia evanida*
- 16A. *Aulacochiton cimolia*
17. *Heterozona cariosa*
18. *H. fruticosa*
19. *Rhyssoplax exoptanda*
20. *R. tricostalis*

GASTROPODA

1. *Notohaliotis ruber*
2. *Marinauris emmae*
3. *Schismotis laevigata*
4. *Notomella candida*
5. *Montfortula rugosa*
6. *Amblychilepas javanicensis*
7. *A. omicron*
8. *A. nigrita*
9. *A. oblonga*
10. *Cosmetalepas concatenatus*
11. *Eligidion audax*
12. *Cellana tramoserica*
13. *Patelloida alticostata*
14. *Chiazacmea flammae*
15. *Actinoleuca calamus*
16. *Notoacmea granosa*
17. *N. mayi*
18. *N. scabrilirata*
19. *Herpetopoma aspersa*
20. *Grantia imbricata*
21. *Calliostoma (Fautor) allporti*
22. *Cantharidella tiberiana*
23. *Cantharides pulcherrimus*
24. *C. ramburi*
25. *Phasianotrochus apicinus*
26. *P. eximius*
27. *P. irisodontes*
28. *P. rutilus*
29. *Austrocochlea adelaidea*
30. *A. constricta*
31. *A. odontis*
32. *Clanculus aloysii*
33. *C. limbatus*
34. *C. plebejus*
35. *Ethminiola tasmanica*
36. *Stomatella impertusa*
37. *Subninella undulata*
38. *Micrastraea aurea*
39. *Phasianella australis*
40. *P. ventricosa*
41. *Melanerita melanotragus*
42. *Melarapha praetermissa*
43. *M. unifasciata*
44. *Bembicium auratum*
45. *B. melanostomum*
46. *B. nanum*
47. *Assininea brazieri*
48. *A. tasmanica*
49. *Serpulorbis siphon*
50. *Velacumantus australis*
51. *Zeacumantus diemenensis*
52. *Diala lauta*
53. *D. monile*
54. *D. pagodula*
55. *D. pulchra*
56. *Cacozeliana granaria*
57. *Eubittium lawleyanum*
58. *Hypotrochus monachus*
59. *Ataxacerithium serotinum*
60. *Notosinister maculosa*
61. *Cingulina spira*
62. *Hipponyx conicus*
63. *Antisabia foliacea*
64. *Capulus violacea*
65. *Sigapatella calpytraeformis*
66. *Zeacrypta immersa*
67. *Conuber conicum*
68. *Glossaulaux aulacoglossa*

69. *Sigaretotrema umbilicata*
70. *Ectosinum zonale*
71. *Lamellaria* sp.
72. *Notocypraea angustata*
73. *N. comptoni*
74. *Xenogalea pyrum*
75. *Cymatiella lesueurii*
76. *C. verrucosa*
77. *Cabastana spengleri*
78. *C. waterhousei*
79. *Pterynotus triformis*
80. *Bedevea paivae*
81. *Lepsiella vinosa*
82. *Dicathais textilosa*
83. *Dentimitrella austrina*
84. *D. franklinensis*
85. *D. lincolnensis*
86. *D. menkeana*
87. *D. nuberculata*
88. *D. pulla*
89. *D. semiconvexa*
90. *Macrozafra angasi*
91. *Austrosipho grandis*
92. *Cominalla eburnea*
93. *C. lineolata*
94. *Parcanassa buchardi*
95. *P. pauperata*
96. *Tavaniotha optata*
97. *Niotha pyrrhus*
98. *Pleuroploca australasia*
99. *Microcolus dunkeri*
100. *Alocospira marginata*
101. *Austromitra tasmanica*
102. *Mitra australis*
103. *Eumitra glabra*
104. *Amorena undulata*
105. *Cryptospira pygmaeoides*
106. *Austroginella johnstoni*
107. *Mitraguraleus mitralis*
108. *Floconus anemone*
109. *Salinator fragilis*
110. *Siphonaria diemenensis*

OPISTHOBRANCHIA

There were 88 species of Opisthobranchia recorded for Port Phillip by Burn 1966, but most of these are seasonal in occurrence and unimportant when considering permanent ecological communities; hence they have not been listed here.

1. *Bulla botanica*
2. *Haminoea brevis*
3. *H. tenera*
4. *Philina angasi*
5. *Doridium queritor*
6. *D. cyaneum*
7. *Aplysia parvula*
8. *A. sydneyensis*
9. *Pleurobranchaea maculosa*
10. *Ceratosoma brevicaudatum*
11. *Austrodoris peculiaris*
12. *Alloiodoris nivorus*
13. *Doriopsilla aurea*
14. *D. carneola*
15. *D. staminea*

BIVALVIA

1. *Leionucula obliqua*
2. *Anadara trapezia*
3. *Barbatia pistachia*
4. *B. squamosa*
5. *Modiolus cottoni*
6. *M. inconstans*
7. *Brachidontes rostratus*
8. *Lanistina ulmus*
9. *Mytilus planulatus*
10. *Electroma georgiana*
11. *Propeamussiini thetidis*
- 11A. *Pecten alba*
12. *Chlamys asperrimus*
13. *Ostrea angasi*
14. *Venericardia bimaculata*
15. *Fulvia tenuicostata*
16. *Phacosoma coerulea*
17. *P. circinaria*
18. *Notocallista kingii*
19. *Chioneryx cardioides*
20. *Tawera gallinula*
21. *Callanaitis disjecta*
22. *Eumarcia fumigata*
23. *Katelsia rhytiphora*
24. *K. scalarina*
25. *Pullastra fabagella*
26. *P. galactites*
27. *Donacilla nitida*
28. *Notospisula cretacea*
29. *N. trigonella*
30. *Electromactra antecessens*
31. *Soletellina biradiata*
32. *S. donacioides*

33. *Theora fragilis*
34. *Pseudarcopagia victoriae*
35. *Homalina deltoidalis*
36. *H. mariae*
37. *Hiatella australis*
38. *Gastrochaena tasmanica*
39. *Pholas australasiae*
40. *Myadora brevis*
41. *Cleidothearus albidus*
42. *Offadesma angasi*
43. *Laternula creccina*

CEPHALOPODA

1. *Amplisepia apama*
2. *Euprymna tamanica*
3. *Idiosepius notoides*
4. *Nototodarus sloanii gouldii*
5. *Septoteuthis australis*
6. *Loligo* sp.
7. *Octopus australis*
8. *O. flindersi*
9. *O. pallidus*
10. *O. supersilosus*
11. *Hapalochlaena maculosa*
12. *Argonauta nodosa*

BRACHIOPODA

1. *Megerlena lamarckiana*

BRYOZOA

1. *Elzerina blainvillii*
2. *Bowerbankia* sp.
3. *Amathia australis*
4. *A. biseriata*
5. *A. inarmata*
6. *A. tortuosa*
7. *A.* sp.
8. *Crisia acropora*
9. *C. edwardsiana*
10. *C. tenuis*
11. *C. geniculata*
12. *C.* sp.
13. *Berenicea sarniensis*
14. *Stomatopora geminata*
15. *Idmidronea australis*
16. *Hornera foliacea*
17. *H.* sp.
18. *Lichenopora* sp.
19. *Aetea anguina*
20. *A. sica*

21. *A.* sp.
22. *Scruparia ambigua*
23. *Membranipora membranacea*
24. *M. perfragilis*
25. *M. papulifera*
26. *Conopeum reticulum*
27. *Spiralaria denticulta*
28. *Bugularia dissimilis*
29. *Pyrulella pyrula*
30. *Hiantopora ferox*
31. *Arachnopusia monoceros*
32. *Caleschara denticulata*
33. *Steganoporella magnilabris*
34. *Thairopora cincta*
35. *T. mamillaris*
36. *T.* sp.
37. *Cellaria punctata*
38. *C. hirsuta*
39. *C. tenuirostris*
40. *Didymozoum simplex*
41. *Beania crotali*
42. *B. magellanica*
43. *B. spinigera*
44. *Dimetopia spicata*
45. *Cornucopina grandis*
46. *C. tuba*
47. *Bugula dentata*
48. *B. neritina*
49. *B.* sp.
50. *Scrupocellaria cyclostoma*
51. *S. diadema*
52. *S. ornithorhyncus*
53. *S. scrupea*
54. *S. scruposa*
55. *Amastigia rudis*
56. *Bugulopsis cuspidata*
57. *Caberea darwinii*
58. *C. glabra*
59. *C. grandis*
60. *C.* sp.
61. *Canda arachnoides*
62. *C. tenuis*
63. *Menipea crystallina*
64. *M.* sp.
65. *Celleporella hyalina*
66. *Euthyroides episcopalis*
67. *Schizoporella biturrita*
68. *S.* sp.
69. *Microporella ciliata*
70. *Fenestrulina malusii*

71. *F.* sp.
72. *Mucropetraliella ellerii*
73. *M.* *serrata*
74. *M.* *watersi*
75. *Mucropetraliella* sp.
76. *Parasmittina trispinosa*
77. *P.* *macphersonae*
78. *Smittina* sp.
79. *Margaretta hirsuta*
80. *Retepora avicularis*
81. *Retepora* sp.
82. *Rhynchozoon tubulosum*
83. *Schizoretepora tessellata*
84. *Triphyllozoon monilifera*
85. *Adeona grisea*
86. *A.* sp.
87. *Adeonella cellulosa*
88. *A.* *gracilis*
89. *Adeonellopsis mucronata*
90. *A.* sp.
91. *Celleporaria foliata*
92. *C.* *verrucosa*
93. *C.* *albirostris*
94. *C.* *mamillata*
95. *C.* *prolifera*
96. *C.* sp.
97. *Celleporina costazii*
98. *Vittaticella elegans*
99. *V.* *buskii*
100. *V.* *perforata*
101. *V.* sp.
102. *Costaticella hastata*
103. *Scuticella lorica*
104. *S.* *margaritacea*
105. *S.* *plagiostoma*
106. *S.* *ventricosa*
107. *Cornuticella cornuta*
108. *Pterocella alata*
109. *Claviporella aurita*
110. *C.* *geminata*
111. *Calpdium ponderosum*
112. *Calwellia bicornis*
113. *C.* *gracilis*

ECHINODERMATA

CRINOIDEA

1. *Comanthus trichoptera*
2. *Aporometra wilsoni*
3. *Euantedon paucicirra*
4. *Antenoid* sp.

5. *A.* *incommoda*
6. *A.* *loveni*

ASTEROIDEA

1. *Tosia australis*
2. *T.* *magnifica*
3. *Pentagonaster duebeni*
4. *Nectria macrobrachia*
5. *N.* *ocellata*
6. *N.* *multispina*
7. *Petricia vernicina*
8. *Austrofromia polypora*
9. *Patriella calcar*
10. *P.* *gunni*
- 10A. *P.* *brevispina*
11. *Paranepanthia grandis*
12. *Nepanthia hadracantha*
13. *Plectaster decanus*
14. *Coscinasterias calamaria*
15. *Allostichaster polyplax*
16. *Uniophora granifera*

OPHIUROIDEA

1. *Ophiomyxa australis*
2. *Ophiacantha alternata*
3. *Ophiactes resiliens*
4. *Amphipholus squamata*
5. *Amphiura constricta*
6. *A.* *poelica*
7. *A.* *elandiformis*
8. *A.* (*Ophiopeltis*) *parviscutata*
9. *Ophiocentrus pilosus*
10. *Ophiothrix caesipitosa*
11. *O.* sp.
12. *Ophiocoma canaliculata*
13. *Ophionereis schayeri*
14. *Ophiarachnella ramsayi*
15. *Ophiura kinbergi*

ECHINOIDEA

1. *Goniocidaris tubaria* f. *impressa*
2. *Heliocidaris erythrogramma*
3. *Amblypneustes ovum*
- 3A. *Pachycentrotus australiae*
4. *Echinocardium cordatum*

HOLOTHUROIDEA

1. *Stichopus mollis*
2. *Pentacta australis*
3. *Steroderma* sp.

4. *Staurothyone inconspicua*
5. *Thyone nigra*
6. *Cucumella mutans*
7. *Paracaudina australis*
8. *Leptosynapta dolabrifera*
9. *Trochdota allani*

ASCIDIACEA

ENTEROGONA

1. *Aplidium phortax*
2. *Synoicum papilliferum*
3. *S. arenaceum*
4. *Ritterella asymmetrica*
5. *Clavelina baudinensis*
6. *Podoclavella cylindrica*
7. *Polycitor gigantus*
8. *Sycozoa tenuicaulis*
9. *S. cerebriiformis*
10. *Distaplia viridis*
11. *D. stylifera*
12. *Cystodites dellechiaiei*
13. *Ciona intestinalis*
14. *Corella eumyota*
15. *Perophora hutchisoni*
16. *Ascidia sydneyensis*
17. *A. gemmata*
18. *Ascidiella aspersa*

PLEUROGONA

1. *Botryllus gracilis*
2. *B. stewartensis*
3. *Botrylloides magnicoecus*
4. *Symplegma viride*
5. *Amphicarpa diptycha*
6. *Polyandrocarpa lapidosa*
7. *Oculinaria australis*
9. *Polycarpa pedunculata*
10. *Styela etheridgii*
11. *S. plicata*
12. *Asterocarpa cerea*
13. *Pyura irregularis*
14. *P. pachydermatina*
15. *P. praeputialis*
16. *P. fissa*
17. *Microsmus spiniferus*
18. *M. australis*
19. *Herdmania momus*
20. *Molgula sabulosa*
21. *M. janis*

Benthic Stations

AREA 2 (201)

Depth. 3.5 fm
 Substrate. Dark grey to blackish clay
 Annelida. Polychaeta 21, 28
 Mollusca. Bivalvia 29
 Ascidiacea. Pleurogona 15

REMARKS: This station E. of the shipping channel is situated on the clay of the Yarra R. mouth and has the barrenness expected of a scoured channel.

AREA 3 (202)

Depth. 2.5 fm
 Substrate. Sand
 Algae. Rhodophyta 134
 Crustacea. Isopoda 12, Brachyura 6-7, 13.
 Mollusca. Gastropoda 80, 96. Bivalvia 9-10, 19-20, 22-23, 29.

AREA 3 (203)

Depth. 2.5 fm
 Substrate. Ironstone reef outcropping from sand. The reef was covered with coral almost to the exclusion of other growth.
 Coelenterata. Scleractinea 1
 Crustacea. Isopoda 12, Brachyura 4, 16
 Mollusca. Gastropoda 68, 98. Bivalvia 13, 20, 22-23
 Ascidiacea. Pleurogona 15.

AREA 5 (51)

Depth. 4 fm
 Substrate. Sand
 Algae. Phaeophyta 73
 Crustacea. Brachyura 7, 13, 16, 21-22, 25
 Mollusca. Bivalvia 13
 Bryozoa. 72, 76
 Echinodermata. Asteroidea 10A, Holothuroidea 1
 Ascidiacea. Pleurogona 15.

AREA 5 (52)

Depth. 3-3.5 fm
 Substrate. Sand
 Algae. Phaeophyta 51
 Mollusca. Gastropoda 32, 24, 80, Bivalvia 9, 11A, 13
 Bryozoa. 72, 76
 Echinodermata. Asteroidea 15, Holothuroidea, 2.

AREA 5 (53)

Depth. 2.5 fm

Substrate. Sand, with some broken shaley reef

Algae. Phaeophyta 51

Annelida Polychaeta. 1, 20, 44

Mollusca. Amphineura 12, 18, Gastropoda 15,
32, 34, Opisthobranchia 10, Bivalvia 9, 13,
31

Bryozoa. 72, 76

Echinodermata. Asteroidea 7.

AREA 5 (54)

Depth. 2-2.5 fm

Substrate. Sand and broken reef

Algae. Rhodophyta 83, 102

Coelenterata. Hydrozoa 10, 17

Crustacea. Isopoda 15, 17

Mollusca. Amphineura 12, 18, Gastropoda 28,
32, 34, Bivalvia 9, 13, 38

Bryozoa. 72, 76.

AREA 5 (55)

Depth. 2.5 fm

Substrate. Broken reef and sand

Mollusca. Bivalvia 9, 13

Bryozoa. 72, 76.

AREA 5 (56)

Depth. 3.5 fm

Substrate. Reef

Algae. Chlorophyta 14, 16, Rhodophyta 120-
121

Coelenterata. Scleractinia 1

Annelida. Polychaeta 26

Mollusca, Gastropoda 15, Bivalvia 9, 13, 23

Bryozoa. 72, 76.

AREA 5 (57)

Depth. 2 fm

Substrate. Sand

Algae. Chlorophyta 14, 16

Mollusca. Bivalvia 9, 13, 26

Bryozoa. 54, 68-69, 72, 74, 76, 79, 90-91

Ascidiacea. Enterogona 17, Pleurogona 10, 18.

AREA 5 (58)

Depth. 2 fm

Substrate. Shelly sand

Algae. Rhodophyta 102

Coelenterata. Actinaria 3

Crustacea. Brachyura 19, 26

Mollusca. Gastropoda 96, Bivalvia 9, 13, 26

Bryozoa. 72, 76.

REMARKS: Area 5 (51-58) is a uniform habitat with a sand bottom through which outcrops broken basalt reef. The sand has a limited fauna with *Mytilus planulatus* and *Ostrea angasi* dominant, and *Pecten alba* in the deeper water.

AREA 5 (165)

Depth. 6 fm

Substrate. Silty sand

Algae. Rhodophyta 122

Crustacea. Brachyura 7, 26

Mollusca. Bivalvia 9

Ascidiacea. Pleurogona 11, 18.

AREA 5 (166)

Depth. 6 fm

Substrate. Silty sand

Algae. Chlorophyta 6, 14, Phaeophyta 32

Crustacea. Brachyura 7, 13, 22, 26

Mollusca. Gastropoda 80, Bivalvia 9, 11A, 13

Echinodermata. Holothuroidea 1

Ascidiacea. Pleurogona 11, 13, 15, 18.

AREA 5 (167)

Depth. 7 fm

Substrate. Silty sand

Phanerogams. 1

Algae. Rhodophyta 121

Crustacea. Brachyura 7

Mollusca. Bivalvia 9, 13, 24

Ascidiacea. Pleurogona 15, 18.

AREA 5 (168)

Depth. 1.5 fm

Substrate. Sand and some shale

Phanerogams. 1

Algae. Chlorophyta 14

Crustacea. Isopoda 5, Brachyura 7, 13, 16, 26

Mollusca. Gastropoda 92, Bivalvia 9-10, 13, 23

Echinodermata. Asteroidea 1-2

Ascidiacea. Pleurogona 15, 18.

AREA 5 (169)

Algae. Chlorophyta 14

Annelida. Polychaeta. 1, 3, 6, 20, 34, 44, 47

Crustacea. Brachyura 7, 26 in Bivalvia 9

Mollusca. Bivalvia 9, 10, 13, Opisthobranchia 4

Echinodermata. Echinoidea 3.

REMARKS: The series of stations Area 5 (165-9) are typical of the *Caulerpa* beds of the NW. section of the bay. Stations 167-168 are on small isolated patches of *Zostera*.

AREA 6 (63)

Depth. 6-6.5 fm
 Substrate. Silty sand
 Algae. Rhodophyta 139
 Crustacea. Brachyura 6
 Mollusca. Gastropoda 98, Bivalvia 9, 11A, 13
 Echinodermata. Holothuroidea 1
 Ascidiacea. Pleurogona 17, on *Pecten alba*.

AREA 6 (64)

Depth. 6 fm
 Substrate. Silty sand
 Algae. Rhodophyta 136
 Crustacea. Brachyura 6, 26
 Mollusca. Bivalvia 9, 11A, 13, Opisthobranchiata 4
 Echinodermata. Holothuroidea 1
 Ascidiacea. Pleurogona 17.

AREA 6 (65)

Depth. 5 fm
 Substrate. Sand with reef outcropping
 Coelenterata. Actinaria 3
 Annelida. Polychaeta 34
 Crustacea. Isopoda 13, 17, Brachyura 6
 Mollusca. Amphineura 20, Gastropoda 15, 51, 66, Opisthobranchiata 4, Bivalvia 3, 9
 Bryozoa. 91-92, 94-95
 Echinodermata. Asteroidea 4, 7, Echinoidea 2, 4, Holothuroidea 2
 Ascidiacea. Pleurogona 9-10.

AREA 6 (66)

Depth. 5 fm
 Substrate. Silty sand.
 Algae. Chlorophyta 8
 Crustacea. Brachyura 4-5, 7, 13, 22
 Mollusca. Gastropoda 51, 66, Bivalvia 9
 Ascidiacea. Enterogona 17.

AREA 6 (67)

Depth. 5 fm
 Substrate. Silty sand
 Algae. Chlorophyta 8, Phacophyta 51, Rhodophyta 136
 Crustacea. Brachyura 4-5, 25
 Mollusca. Bivalvia 9, 13, Opisthobranchiata 4
 Ascidiacea. Enterogona 8.

AREA 6 (118)

Depth. 0.5-1 fm
 Substrate. Sandy silt with outcropping reef
 Phanerogams. 1

Algae. Chlorophyta 1, 18, 20A, Phacophyta 71, Rhodophyta 83, 86, 105, 118, 120, 135-136, 148, 152

Annelida. Polychaeta 44, 47
 Crustacea. Isopoda 1, Brachyura 5, 7, 13, 29
 Mollusca. Gastropoda 12, 37-38, 70, 92, 95, 97, Bivalvia 9, 13, 23, 26, 34
 Echinodermata. Asteroidea 9, Ophiuroidea 4
 Ascidiacea. Pleurogona 2, 18.

REMARKS: This station was the wreck of the Albert William Barge and because of the shallow water a number of species was found in the lower eulittoral and sub-littoral.

AREA 6 (136)

Depth. 2.2 fm
 Substrate. Silty sand
 Crustacea. Brachyura 7.

AREA 6 (137)

Depth. 2.5 fm
 Substrate. Coarse sand with outcropping reef
 Algae. Chlorophyta 8, Rhodophyta 125, 144, 167
 Annelida. Polychaeta 1
 Crustacea. Brachyura 13, 21, 25
 Mollusca. Amphineura 12, 20, Gastropoda 1, 32, 34, 38, 65, 66, 80, 89, 98, Bivalvia 3, 9, 10, 13
 Bryozoa. 70, 75
 Echinodermata. Asteroidea 1, 7, 14, 15, Ophiuroidea 2, 4, Echinoidea 2, Holothuroidea 2
 Ascidiacea. Enterogona 5, 17, Pleurogona 4, 17-18.

REMARKS: This is the area surrounding the wreckage of the *Kakariki*.

AREA 6 (199)

Depth. 8.5 fm
 Substrate. Silty clay.

REMARKS: Visibility was poor and the bottom appeared to be barren.

AREA 6 (200)

Depth. 8 fm
 Substrate. Silty clay
 Annelida. Polychaeta 35.

AREA 7 (123)

Depth. 3.5 fm
 Substrate. Sand
 Coelenterata. Actinaria 11

Annelida. Polychaeta 1, 14, 44, 50
 Crustacea. Brachyura 13, 16, 22-23, 25
 Mollusca. Bivalvia 9, 13
 Bryozoa. 53-54
 Echinodermata. Asteroidea 1, Ophiuroidea 5,
 Echinoidea 4, Holothuroidea 1, 6
 Ascidiacea. Enterogona 8, 17, Pleurogona 9, 18.

REMARKS: There were numbers of stones up to 10 × 5 cm which served as an attachment for mussels and ascidians.

AREA 7 (204)

Depth. 2.5 fm
 Substrate. Sand with reef outcropping
 Annelida. Polychaeta 1, 34
 Crustacea. Isopoda 12, Brachyura 13
 Mollusca. Bivalvia 9-10.

AREA 7 (205)

Depth 2.5 fm
 Substrate. Sand with reef outcropping
 Algac. Rhodophyta, 132
 Crustacea. Isopoda 12, Brachyura 6
 Ascidiacea. Pleurogona 18.

REMARK: Stations 204-5 are both situated on a reef off Point Ormond.

AREA 7 (206)

Depth. 4 fm
 Substrate. Sand with some pebbles
 Crustacea. Isopoda 12, Brachyura 7
 Mollusca. Gastropoda 15, 32, 34, 65, 80, 92,
 96. Bivalvia 9, 18-19, 22, 25, 29.

AREA 7 (207)

Depth 2.5 fm
 Substrate. Sand
 Annelida. Polychaeta 14, 35, 44
 Crustacea. Isopoda 12, Brachyura 13
 Mollusca. Bivalvia 11A
 Echinodermata. Ophiuroidea 7.

AREA 7 (208)

Depth. 5.5 fm
 Substrate. Sand
 Annelida. Polychaeta 47
 Crustacea. Isopoda 12, Brachyura 4, 7, 13, 26
 Mollusca. Gastropoda 96, Bivalvia 9-10, 19, 22,
 Opisthobranchia 4
 Echinodermata. Echinoidea 4, Holothuroidea 1.

AREA 9 (62)

Depth. 2. f fm
 Substrate. Medium to coarse sand and shell fragments
 Phanerogams. 3
 Algac. Chlorophyta 8, 12, 14, 16
 Mollusca. Gastropoda 97, Bivalvia 9, 15
 Ascidiacea. Enterogona 8, Pleurogona 9.

AREA 9 (84)

Depth. Sublittoral
 Substrate. Sand
 Phanerogam. 1
 Coelenterata. Actinaria 3-4
 Annelida. Polychaeta 19
 Crustacea. Brachyura 7, 15, 30
 Mollusca. Gastropoda 95, Bivalvia 9-10, 23,
 25, 28, 30, 35, 43
 Ascidiacea. Pleurogona 20.

REMARKS: The species (particularly the molluscs) recorded at this station, are typical of shallow very sheltered water fauna of the bay.

AREA 9 (178)

Depth. 1.5 fm
 Substrate. Fine sand with skeletal matter
 Algae. Chlorophyta 8, 12, 16, 18, Rhodophyta
 102, 120, 122, 154
 Annelida. Polychaeta 1, 11, 20, 32, 35, 47, 50
 Crustacea. Brachyura 4, 7, 13, 16, 25
 Mollusca. Gastropoda 32, 34, 56, 79, Bivalvia
 9-10, 25, Opisthobranchia 4
 Echinodermata. Asteroidea 15
 Ascidiacea. Pleurogona 15.

AREA 9 (179)

Depth. 3.5 fm
 Substrate. Coarse sand with shells and pebbles
 Coelenterata. Hydrozoa 28
 Mollusca. Gastropoda 32, 34, 56, 79, Bivalvia
 9-10, 23, 25.

REMARKS: In Table A (Mem. Nat. Mus. 27) this position is recorded as Area 19 but in Chart 2 it is shown in the extreme SE. corner of Area 9. This is of little importance as both positions fall in the extensive *Caulerpa* beds of the NW. coast of Port Phillip Bay (Chart 3, Mem. 27).

AREA 9 (180)

Depth. 3 fm
 Substrate. Sand
 Crustacea. Brachyura 4, 7, 13, 16, 25
 Mollusca. Gastropoda 32, 34, 56, 79, Bivalvia
 9-10, 25
 Ascidiacea. Pleurogona 13, 15.

AREA 10 (11)

Depth. 8.5 fm
 Substrate. Silty sand
 Coelenterata. Hydrozoa 3
 Mollusca. Gastropoda 15, 58, 80, 88, Bivalvia
 3, 9, 11A, 13, 15
 Echinodermata. Asteroidea 1, Holothuroidea 2
 Ascidiacea. Pleurogona 11, 15.

AREA 10 (12)

Depth. 7 fm
 Substrate. Silty sand
 Coelenterata. Corallimorparia 1
 Mollusca. Bivalvia 3, 11A, 13, 21
 Ascidiacea. Enterogona 8, 11, Pleurogona 10,
 15.

AREA 10 (13)

Depth. 6.5 fm
 Substrate. Silty sand
 Annelida. Polychaeta 44, 47
 Crustacea. Brachyura 3, 7, 22, 25
 Mollusca. Gastropoda 32, Bivalvia 9-10, 11A
 Ascidiacea. Pleurogona 10, 15.

AREA 10 (14)

Depth. 7.5 fm
 Substrate. Silty sand
 Phanerogams. 3
 Annelida. Polychaeta 44, 47
 Crustacea. Brachyura 3, 16, 21, 25
 Mollusca. Gastropoda 28, 32, 56, 58, 65,
 Bivalvia 9-10, 11A, 12
 Echinodermata. Echinoidea 4, Holothuroidea 1
 Ascidiacea. Pleurogona 10, 15.

AREA 10 (15)

Depth. 4 fm
 Substrate. Sand
 Phanerogam. 1
 Algae. Chlorophyta 8, 14, 16, Phaeophyta 57,
 Rhodophyta 122, 157
 Annelida. Polychaeta 47
 Crustacea. Brachyura 3, 25
 Mollusca. Gastropoda 28, 32, 34, 58, Bivalvia
 9, 13
 Ascidiacea. Pleurogona 15, 20.

AREA 10 (103)

Depth. 2.25 fm
 Substrate. Clayey sand
 Algae. Chlorophyta 6, Phaeophyta 52, Rhodo-
 phyta 105, 122, 152, 167
 Coelenterata. Hydrozoa 1, 8, 10, 21, 25
 Annelida. Polychaeta 1, 52
 Crustacea. Isopoda 2, 17, Brachyura 13, 29
 Mollusca. Bivalvia 9, 13
 Bryozoa. 2, 25, 48, 64-65, 90-91
 Echinodermata. Asteroidea 1, 9, 15-16, Echi-
 noidea 2, Holothuroidea 1.

AREA 10 (104)

Depth. 2.5 fm
 Substrate. Sand-clay-silt
 Algae. Rhodophyta 105, 122
 Annelida. 1
 Crustacea. Isopoda 2, 17
 Mollusca. Bivalvia 9, 13
 Bryozoa. 2, 25, 48, 64-65, 72, 91.

AREA 10 (105)

Depth. 2.5 fm
 Substrate. Sand-silt-clay
 Algae. Chlorophyta 8, Rhodophyta 122
 Annelida. Polychaeta 1
 Crustacea. Isopoda 2, 17
 Bryozoa. 2, 25, 48, 64-65, 90-91.

AREA 10 (106)

Depth.
 Substrate. Sand-silt-clay
 Algae. Rhodophyta 122
 Annelida. Polychaeta 1
 Crustacea. Isopoda 2, 17
 Mollusca. Gastropoda, 92, 95, Bivalvia 9, 22-
 23, 27, 29, 35.

REMARKS: Stations 103-6 are situated in the vicinity of Point Cook Pier and together illustrate the community of the area.

AREA 10 (193)

Depth. 6 fm
 Substrate. Junction of sand and silty sand
 Bryozoa. 6-7
 Echinodermata. Asteroidea 2, Holothuroidea 1.

REMARKS. This station is in the transition zone from the *Caulerpa* to the more barren silty sand with its restricted fauna.

AREA 10 (194)

Depth. 8 fm

Substrate. Silty sand

Echinodermata. Echinoidea 4, Holothuroidea 1.

REMARKS. This dredge haul, like 193, crossed the transition zone.

AREA 11 (125)

Depth. 8.5 fm

Substrate. Silty sand

Crustacea. Brachyura 13

Mollusca. Bivalvia 9, 11A, 13, 15, 21

Echinodermata. Holothuroidea 1-2, 6

Ascidiacea. 15

REMARKS: This station has a fauna typical of the communities living on the silty sand at depths from 7-10 fm. The dominant marker species are *Mytilus planulatus*, *Pecten alba*, *Ostrea angasi*, *Strichopus mollis* and *Pyura praeputialis*.

AREA 11 (190)

Depth. 5.5 fm

Substrate. Sand and shell fragments

Algae. Chlorophyta 12, 16, 18, Rhodophyta 122

Annelida. Polychaeta 1, 32, 34, 50

Crustacea. Isopoda 11, Brachyura 7-8, 13, 16, 21-22, 25

Mollusca. Gastropoda 15, 32, 34, 58, 65, Opisthobranchia 4, Bivalvia 8, 10, 13, 15, 19

Bryozoa. 69

Echinodermata. Echinoidea 4

Ascidiacea. Pleurogona 18.

REMARKS: This station is on the transition zone between the *Caulerpa* dominated sand fauna and the holothurian-*Pyura* fauna of the silty sand.

AREA 11 (191)

Depth. 5.5 fm

Substrate. Sand

Algae. Rhodophyta 101, 122

Crustacea. Brachyura 16, 25

Echinodermata. Asteroidea 15, Ophiuroidea 5, 13

Ascidiacea. Pleurogona 15.

AREA 11 (192)

Depth. 5 fm

Substrate. Silty sand

Algae. Chlorophyta 12, 16, 18

Crustacea. Isopoda 11

Ascidiacea. Pleurogona 15.

AREA 11 (195)

Depth. 10.5 fm

Substrate. Silty clay

Annelida. Polychaeta 1

Crustacea. Brachyura 4.

AREA 11 (212)

Depth. 8 fm

Substrate. Sandy silt

Annelida. Polychaeta 14, 21, 36, 44, 47, 50, 53

Bryozoa. 6, 53-54, 77

Ascidiacea. Pleurogona 10.

AREA 12 (110)

Depth. 8.5 fm

Substrate. Sand-silt-clay

Algae. Rhodophyta 156

Coelenterata. Hydrozoa 3, 6

Mollusca. Bivalvia 9

Echinodermata. Holothuroidea 1-2.

AREA 12 (111)

Depth. 9 fm

Substrate. Sand-silt-clay

Coelenterata. Hydrozoa 3, 6

Mollusca. Bivalvia 1, 9, 11A

Echinodermata. Echinoidea 4, Holothuroidea 1-2, 9

Ascidiacea. Enterogona 8, 18, Pleurogona 10.

REMARKS: Stations 110-11 have the same fauna which is a mixture derived from the bivalvia-*Stichopus* sand community and the deeper water annelid echinoderm fauna of the silty clays to the south.

AREA 12 (112)

Depth. 9 fm

Substrate. Silty clay

Coelenterata. Hydrozoa 3, 6, Actinaria 1

Annelida. Polychaeta 1

Mollusca. Bivalvia 1, 9, 11A

Echinodermata. Echinoidea 4, Holothuroidea 1-2, 9

Ascidiacea. Enterogona 18.

AREA 12 (113)

Depth. 10 fm

Substrate. Silty clay

Coelenterata. Hydrozoa 3, 6

Annelida. Polychaeta 1

Mollusca. Opisthobranchia 4, Bivalvia 1, 9
 Echinodermata. Holothuroidea 1-2, 9
 Ascidiacea. Enterogona 18.

AREA 12 (114)

Depth. 10 fm

Substrate. Silty clay

Annelida. Polychaeta 1

Mollusca. Bivalvia 2, 9, 21.

AREA 12 (196)

Depth. 11 fm

Substrate. Silty clay

Crustacea. Brachyura 8, 13

Mollusca. Opisthobranchia 11-12

Bryozoa. 6, 48-49, 53-54

Echinodermata. Ophiuroidea 5, Echinoidea 4,
 Holothuroidea 8-9.

AREA 12 (198)

Depth. 9 fm

Substrate. Clayey silt

Echinodermata. Ophiuroidea 5

Ascidiacea. Enterogona 18, Pleurogona 19.

REMARKS: This station is close to the dumping buoy and the silty clay of that station has spread from it.

AREA 12 (211)

Depth. 11 fm

Substrate. Silty clay

Annelida. Polychaeta 21

Echinodermata. Echinoidea 4, Holothuroidea 9.

AREA 13 (82)

Depth. 4 fm

Substrate. Sand

Coelenterata. Octocorallia 10

Crustacea. Isopoda 12, Brachyura 6, 13, 25-26

Mollusca. Bivalvia 9, 13

Echinodermata. Asteroidea 1.

AREA 13 (83)

Depth. 6.3 fm

Substrate. Sand

Coelenterata. Octocorallia 10

Crustacea. Brachyura 6-7, 13, 25

Mollusca. Gastropoda 32, 65, 68, Bivalvia
 11A, 21, 26

Echinodermata. Echinoidea 4.

AREA 13 (92)

Depth. 4 fm

Substrate. Sand

Algae. Phaeophyta 42, 51, Rhodophyta 135

Coelenterata. Octocorallia 10

Annelida. Polychaeta 1, 26, 35, 40

Crustacea. Brachyura 4, 7, 13

Mollusca. Amphineura 2, Gasteropoda 15, 32,

34, 65, 80, 88-89, 92, 98, Opisthobranchia

4, 9, Bivalvia 9-10, 11A, 13-15, 18, 21

Echinodermata. Asteroidea 1-2, Echinoidea 4,
 Holothuroidea 1, 6.

AREA 13 (93)

Depth. 2 fm

Substrate. Sand

Algae. Phaeophyta 46, Rhodophyta 101, 135,
 152

Coelenterata. Actinaria 6

Annelida. Polychaeta 44

Crustacea. Isopoda 12, 17

Mollusca. Amphineura 9, 12, 17, 20, Gastro-
 poda 1, 15, 32, 38, 49, 80, 88-89, Bivalvia
 9, 11A, 13

Echinodermata. Asteroidea 1, 14, Echinoidea 4.

AREA 13 (94)

Depth. 2 fm

Substrate. Sand

Annelida. Polychaeta 44

Crustacea. Brachyura 4-5, 13, 22, 25

Mollusca. Amphineura 9, 12, 17, 20, Gastro-
 poda 4, 35, 66, Bivalvia 9, 13, 19

Echinodermata. Asteroidea 1.

AREA 13 (209)

Depth. 6.6 fm

Substrate. Silty clay

Annelida. Polychaeta 36

Crustacea. Brachyura 13.

AREA 13 (210)

Depth. 9 fm

Substrate. Silty clay

Annelida. Polychaeta 21, 36, 44, 53

Mollusca. Bivalvia 1, 9, 13, 42

Bryozoa 6

Echinodermata. Ophiuroidea 7, Echinoidea 4,
 Holothuroidea 9.

AREA 14 (4)

Depth. 4 fm

Substrate. Reef

Algae. Phaeophyta 51, Rhodophyta 102, 109,
 141, 157, 167

Coelenterata. Scleractinia 1

Annelida. Echiuroidea 3
 Crustacea. Brachyura 7, 22, 25
 Mollusca. Bivalvia 9, 13
 Ascidiacea. Pleurogona 15.

AREA 14 (5)

Depth. 3.3 fm
 Substrate. Reef
 Algae. Chlorophyta 16, Rhodophyta 141
 Coelenterata. Scleraetinia 1
 Echinodermata. Asteroidea 10.

AREA 14 (8)

Depth. 3.5 fm
 Substrate. Sand with reef outcropping
 Annelida. Polychaeta 1, 34, 44
 Mollusca. Bivalvia 9, 13
 Ascidiacea. Pleurogona 15.

AREA 14 (95)

Depth. 1.6 fm
 Substrate. Sand
 Algae. Chlorophyta 2, 22, Phacophyta 64, Rhodophyta 167
 Annelida. 1, 7, 47, 60
 Crustacea. Brachyura 7, 16, 21, 23, 26
 Mollusca. Amphineura 9, 12, 17, 20, Gastropoda 15, 22, Bivalvia 9
 Echinodermata. Asteroidea 1, 14, Echinoidea 2.

AREA 14 (116)

Depth. 3 fm
 Substrate. Sand and reef
 Algae. Chlorophyta 8, 11.

AREA 14 (117)

Depth. 2fm
 Substrate. Sand and reef
 Algae. Chlorophyta 8, 14, Rhodophyta 105, 139
 Coelenterata. Hydrozoa 2
 Mollusca. Gastropoda 32, 34, 66, Bivalvia 9, 13, 41
 Echinodermata. Ophiuroidea 5
 Ascidiacea. Pleurogona 15, 18.

REMARKS: The reef had a large population of sponges but it has not been possible to have the sponge collection worked in time for publication in this volume.

AREA 14 (175)

Depth. 2.5 fm
 Substrate. Sand and reef
 Annelida. Polychaeta 2, 20, 31, 42-43
 Crustacea. Brachyura 8
 Mollusca. Amphineura 19, Gastropoda 1, 15, 34, 38, 80, Bivalvia 9, 9-11A, 13-14, 19, 21, 41
 Ascidiacea. Pleurogona 18.

AREA 16 (142)

Depth. 2.5 fm
 Substrate. Silty sand
 Phanerogams 1
 Algae. Chlorophyta 12, 14, Phacophyta 57, Rhodophyta 101, 105, 154
 Annelida. Polychaeta 44, 47
 Crustacea. Isopoda 17, Brachyura 7, 22, 25
 Mollusca. Gastropoda 34, Bivalvia 9-10, 11A, 13
 Echinodermata. Asteroidea 14.

AREA 16 (143)

Depth. 3.3 fm
 Substrate. Silty sand and shell
 Phanerogams. 1
 Algae. Chlorophyta 22, Phacophyta 57, Rhodophyta 101, 105, 154
 Crustacea. Isopoda 17, Brachyura 13
 Mollusca. Amphineura 17, Gastropoda 22, 32-34, 56, Bivalvia 9-10, 13, 25
 Echinodermata. Echinoidea 2.

AREA 16 (282)

Depth. 5 fm
 Substrate. Silty clay
 Annelida. Polychaeta 44
 Crustacea. Brachyura 25
 Mollusca. Gastropoda 98, Bivalvia 10, 15, 19, Opisthobranchia 4
 Echinodermata. Asteroidea 2, Holothuroidea 1
 Ascidiacea. Pleurogona 15.

AREA 16 (283)

Depth. 2.25 fm
 Substrate. Clayey sand
 Annelida. Polychaeta 11, 37, 39
 Crustacea. Brachyura 4, 25
 Mollusca. Gastropoda 80, Bivalvia 9, 23, 25, 29
 Echinodermata. Asteroidea 2, Holothuroidea 1.

AREA 17 (170)

Depth. 5.5 fm
 Substrate. Silty sand
 Algae. Chlorophyta 12, 14, Rhodophyta 105,
 120, 132, 139, 142, 144, 148, 157
 Annelida. Polychaeta 1, 26, 27, 44, 47
 Crustacea. Brachyura 13, 25, 29
 Mollusca. Amphineura 12, 17, Gastropoda 98,
 Bivalvia 9-11A, 13
 Ascidiacea. Pleurogona 11.

AREA 17 (171)

Depth. 4.5 fm
 Substrate. Sandy silt
 Algae. Chlorophyta 1, 12, 14, Rhodophyta 105,
 120, 132, 139, 142, 144, 148, 157
 Annelida. Polychaeta 26, 47
 Mollusca. Bivalvia 9, 11A
 Echinodermata. Holothuroidea 1.

AREA 17 (172)

Depth. 3 fm
 Substrate. Sandy silt and reef
 Algae. Chlorophyta 1, 14, Rhodophyta 132
 Annelida. Polychaeta 26
 Crustacea. Brachyura 22
 Mollusca. Gastropoda 1, Bivalvia 13
 Bryozoa 26.

AREA 17 (173)

Depth. 2 fm
 Substrate. Sand
 Algae. Chlorophyta 1, 14, 16, Rhodophyta 132
 Crustacea. Brachyura 7, 16
 Mollusca. Gastropoda 15, 34, 96, Bivalvia 9,
 13, 23.

AREA 18 (59)

Depth. 6 fm
 Substrate. Fine sand
 Algae. Chlorophyta 8, 14
 Mollusca. Gastropoda 15, 32, 34-35, Bivalvia
 10-11A, 13, 41
 Echinodermata. Ophiuroidea 5, Holothuroidea
 1
 Ascidiacea. Pleurogona 9-10, 13.

AREA 18 (60)

Depth. 5 fm.
 Substrate. Fine to medium sand
 Algae. Rhodophyta 122, 151
 Crustacea. Brachyura 16
 Mollusca. Bivalvia 3, 10-11A, 41

Echinodermata. Asteroidea 1? Echinoidea 23,
 Holothuroidea 1?
 Ascidiacea. Pleurogona 20.

AREA 18 (61)

Depth. 3.5 fm
 Substrate. Fine to medium sand
 Algae. Rhodophyta 122, 151
 Coelenterata. Actinaria 6
 Crustacea. Brachyura 7, 16
 Mollusca. Opisthobranchia 12, Bivalvia 9, 11A,
 15, 35
 Ascidiacea. Enterogona 1, Pleurogona 3.

AREA 18 (182)

Depth. 4 fm
 Substrate. Sand and shell fragments.

AREA 18 (183)

Depth. 3.3 fm
 Substrate. Sand with skeletal fragments
 Mollusca. Bivalvia 13.

AREA 18 (186)

Depth. 4 fm
 Substrate. Fine sand
 Phanerogams. 3
 Porifera. *Tethya corticalis*?
 Echinodermata. Echinoidea 4

REMARKS: This station is on the edge of the *Caulerpa* community as indicated by the *Halophila ovalis* and the specimens of silty sand fauna.

AREA 18 (187)

Depth. 6.3 fm
 Substrate. Sand
 Algae. Chlorophyta 12, 14?
 Mollusca. Bivalvia 10, 11A, 13
 Echinodermata. Holothuroidea 1
 Ascidiacea. 13?

REMARKS: The *Caulerpa* is scattered at this station which is on the transition from sand to silty sand.

AREA 18 (188)

Depth. 6.6 fm
 Substrate. Sand
 Mollusca. Bivalvia 11A.

AREA 18 (189)

Depth. 6.75 fm
 Substrate. Fine sand
 Mollusca. Bivalvia 11A, 13.

REMARKS: This station falls within the *Caulerpa* community and the dominant species were recorded though not collected.

AREA 18 (307)

Depth. 6 fm

Substrate. Silty sand with some pebbles

Phanerogams. 3

Algae. Chlorophyta 12, 14, Rhodophyta 122

Annelida. Polychaeta 47, 52

Crustacea. Brachyura 14, 25

Mollusca. Bivalvia 11A, 13, 15, 21, Opisthobranchia 4

Echinodermata. Echinoidea 4.

AREA 18 (308)

Depth. 6 fm

Substrate. Silty sand

Algae. Rhodophyta 122

Annelida. Polychaeta 52

Crustacea. Brachyura 4, 8, 13-14, 22

Mollusca. Bivalvia 9, 11A, 13, Opisthobranchia 4

Echinodermata. Asteroidea 2, Holothuroidea 1, 8.

AREA 19 (179)

Depth 3.3 fm

Substrate. Coarse shelly sand and small pebbles

Crustacea. Brachyura 4, 7

Mollusca. Bivalvia 9-10, 23, Opisthobranchia 4

Ascidiacea. Pleurogona 13, 15.

REMARKS: The specimens collected are very similar to Area 9 (178) and both of them are probably influenced by the Werribee River.

AREA 19 (181)

Depth. 3.5 fm

Substrate. Coarse shelly sand

Algae. Chlorophyta 12, 14

Crustacea. Brachyura 4, 7

Mollusca. Gastropoda 32, 34, 56, 79, 96,

Bivalvia 9-10, 25, Opisthobranchia 4

Ascidiacea. Pleurogona 13, 17.

REMARKS: This station is also in the *Caulerpa* community and is a continuation of the line from the Werribee River.

AREA 19 (304)

Depth. 7 fm

Substrate. Silty sand

Algae. Chlorophyta 14, 16

Coelenterata. Corallimorpharia 1

Crustacea. Brachyura 25

Mollusca. Gastropoda 80, 96, Bivalvia 11A, 19

Echinodermata. Ophiuroidea 5, Echinodermata, Echinoidca 4.

REMARKS: This is on the transition from the inshore *Caulerpa* to the central silty clay.

AREA 19 (305)

Depth. 9 fm

Substrate. Silty sand

Algae. Chlorophyta 8

Crustacea. Brachyura 8, 13

Mollusca. Gastropoda 80, 96, Bivalvia 9-10, 11A, 19

Echinodermata. Holothuroidea 2

Ascidiacea. Enterogona 17, Pleurogona 10.

AREA 19 (306)

Depth. 8.3 fm

Substrate.

Algae. Chlorophyta 8

Annelida. Polychaeta 1, 36, 39, 44, 47, 50

Mollusca. Gastropoda 80, 96, Bivalvia 9-10, 11A, 13

Echinodermata. Asteroidea 2, Holothuroidea 1, 8

Ascidiacea. Enterogona 8.

AREA 20 (124)

Depth. 12 fm

Substrate. Silty clay

Annelida. Polychaeta 50

Crustacea. Brachyura 8

Mollusca. Bivalvia 9-10, 11A, 15, 19, 33

Echinodermata. Asteroidea 1, Echinoidca 4.

AREA 20 (309)

Depth. 11 fm

Substrate. Silty clay

Annelida. Polychaeta 36

Crustacea. Brachyura 14

Mollusca. Bivalvia 21

Echinodermata. Ophiuroidea 7, Echinoidca 4, Holothuroidea 8

Ascidiacea. Enterogona 8.

AREA 21 (115)

Depth. 11 fm

Substrate. Silty clay

Coelenterata. Hydrozoa 6

Crustacea. Brachyura 13

Mollusca. Gastropoda 94, Bivalvia 9, 13, 21
 Bryozoa. 54
 Echinodermata. Ophiuroidea 7, Echinoidea 4,
 Holothuroidea 8-9
 Ascidiacea. Enterogona 17.

AREA 21 (176)

Depth. 12 fm
 Substrate. Silty clay
 Algae. Rhodophyta 132
 Annelida. Polychaeta 36
 Mollusca. Bivalvia 9, 11A, 13, 21
 Echinodermata. Asteroidea 2, Echinoidea 4
 Ascidiacea. Enterogona 17, Pleurogona 15 on
Pecten alba.

AREA 22 (119)

Depth. 11.5 fm
 Substrate. Silty sand
 Annelida. Polychaeta 36
 Crustacea. Brachyura 4, 7, 23, 25
 Mollusca. Bivalvia 9-10, 11A, 40
 Echinodermata. Asteroidea 2, Echinoidea 4,
 Holothuroidea 2, 8
 Ascidiacea. Enterogona 10, 17-18, Pleurogona
 12.

AREA 23 (1)

Depth. 4.75 fm
 Substrate. Sand
 Mollusca. Cephalopoda 7
 Ascidiacea. Pleurogona 15.

AREA 23 (2)

Depth. 4.75 fm
 Substrate. Silty sand
 Algae. Phaeophyta 47, 57
 Crustacea. Brachyura 13
 Mollusca. Opisthobranchia 4, Bivalvia 15
 Echinodermata. Echinoidea 4.

AREA 23 (3)

Depth. 4.25 fm
 Substrate. Sand
 Algae. Chlorophyta 8, Phaeophyta 51, Rhodophyta
 88, 102, 109, 141, 157, 167
 Coelenterata. Actinaria 6
 Mollusca. Bivalvia 3.

AREA 23 (7)

Depth. 4.75 fm
 Substrate. Sand

Algae. Phaeophyta 51
 Annelida. Polychaeta 1, Echiuroidea 3
 Mollusca. Bivalvia 9, 13, 15
 Echinodermata. Asteroidea 16
 Ascidiacea. Enterogona 8, 17.

AREA 23 (9)

Depth. 5.25 fm
 Substrate. Sand
 Algae. Rhodophyta 89, 102, 109, 157, 167
 Mollusca. Bivalvia 9, 13.

AREA 23 (68)

Depth. 8.5 fm
 Substrate. Clayey sand
 Crustacea. Brachyura 13
 Mollusca. Bivalvia 9, 11A
 Echinodermata. Ophiuroidea 4, 7, Holothuroidea
 2
 Ascidiacea. Enterogona 11, Pleurogona 12.

AREA 23 (69)

Depth. 8 fm
 Substrate. Silty clay
 Mollusca. Bivalvia 9, 11A
 Ascidiacea. Enterogona 17, Pleurogona 12.

AREA 23 (70)

Depth. 9 fm
 Substrate. Silty clay
 Crustacea. Brachyura 13
 Mollusca. Bivalvia 9, 11A
 Ascidiacea. Enterogona 17-18, Pleurogona 12,
 17-18.

AREA 23 (71)

Depth. 11 fm
 Substrate. Silty clay
 Crustacea. Brachyura 13
 Mollusca. Bivalvia 1
 Echinodermata. Ophiuroidea 5
 Ascidiacea. Enterogona 18.

AREA 24 (122)

Depth.
 Substrate. Sand
 Coelenterata. Actinaria 3
 Annelida. Polychaeta 1, 24, 37, 47, 53, Echiuroidea
 3
 Mollusca. Gastropoda 35, 80, Bivalvia 9, 13, 19
 Echinodermata. Holothuroidea 1
 Ascidiacea. Pleurogona 15, 18.

AREA 25 (128)

Depth. 5 fm
 Substrate. Silty clay
 Annelida. Polychaeta 34, 37, 39, 41, 44
 Mollusca. Opisthobranchia 4, Bivalvia 9-10, 11A, 15
 Echinodermata. Asteroidea 15, Holothuroidea 1
 Ascidiacea. Enterogonia 17, Pleurogona 15.

AREA 25 (129)

Depth. 1.5 fm
 Substrate. Clayey sand
 Coelenterata. Actinaria 12
 Annelida. Polychaeta 11, 35
 Crustacea. Brachyura 25, 30
 Mollusca. Bivalvia 11A, 39
 Echinodermata. Holothuroidea 1
 Ascidiacea. Pleurogona 9.

REMARKS: *Pholas australasiae* is known to occur in the off-shore platforms along the W. side of the bay, but it was only at this site that it was collected in quantity on the survey.

AREA 25 (299)

Depth. 5 fm
 Substrate. Clay
 Algae. 12
 Crustacea. Brachyura 23, 25
 Mollusca. Bivalvia 10, 15
 Bryozoa. 6
 Echinodermata. Ophiuroidea 8
 Ascidiacea. Enterogonia 17.

AREA 26 (126)

Depth. 3.5 fm
 Substrate. Silty clay
 Phanerogams 1
 Algae. Chlorophyta 12, Phaeophyta 45
 Annelida. Polychaeta 39, 44, 47
 Crustacea. Brachyura 25
 Mollusca. Gastropoda 56, Bivalvia 2, 10, 33
 Echinodermata. Asteroidea 9-10, 14, Ophiuroidea 8-9, Holothuroidea 1, 8
 Ascidiacea. Enterogonia 8, 17, Pleurogona 9, 15.

REMARKS: This area is comparatively barren with *Stichopus mollis* and *Ascidia gemmata* the dominant species.

AREA 26 (300)

Depth. 3 fm
 Substrate. Clayey sand

Phanerogams 1, 3
 Algae. Phaeophyta 41
 Annelida. Polychaeta 21, 58
 Crustacea. Brachyura 11, 25
 Mollusca. Bivalvia 10 on *Halophila* 13, Cephalopoda 11
 Echinodermata. Asteroidea 10, Holothuroidea 1, 5-6.

AREA 26 (301)

Depth. 2.5 fm
 Substrate. Clayey sand
 Algae. Chlorophyta 12, Phaeophyta 41, 45, Rhodophyta 151
 Crustacea. Brachyura 1, 13, 21-22, 25
 Mollusca. Bivalvia 10, 13, 24
 Echinodermata. Asteroidea 14, Echinoidea 2, Holothuroidea 5-6.

AREA 27 (41)

Depth. 1.5 fm
 Substrate. Silty sand with reef outcropping
 Algae. Chlorophyta 12, 16, 22, Phaeophyta 57A, Rhodophyta 102, 110, 122, 133, 167
 Porifera. Several species of sponges
 Coelenterata. Actinaria 6
 Crustacea. Brachyura 7, 13, 16, 19, 21, 25
 Mollusca. Amphineura 17, Gastropoda 1, 22, 26-27, 32, 34, 38, 52-53, 56, 88-89, 90, Bivalvia 2, 9-10, 13, 23, 25-26, 34
 Echinodermata. Asteroidea 1, 7, 9-10, 14-15, Ophiuroidea 1, Echinoidea 2-3, Holothuroidea 1-2, 5-6
 Ascidiacea. Enterogonia 17, Pleurogona 11.

AREA 27 (47)

Depth. 3 fm
 Substrate. Silty clay
 Algae. Chlorophyta 6A, 12
 Porifera. Two species of sponges
 Annelida. Polychaeta 1
 Mollusca. Bivalvia 9, 11A, 13
 Echinodermata. Asteroidea 10, 14.

AREA 27 (48)

Depth. 3 fm
 Substrate. Silty clay
 Porifera. Two species of sponges
 Annelida. Polychaeta 41
 Mollusca. Opisthobranchia 4, 11, Bivalvia 9, 11A
 Echinodermata. Ophiuroidea 9
 Ascidiacea. Pleurogona 10.

Depth. 6 fm AREA 27 (49)

Substrate. Silty clay

Porifera. One cream sponge

Crustacea. Cirripedia 1, Brachyura 14

Mollusca. Gastropoda 96, Bivalvia 9, 13, 15

Echinodermata. Holothuroidea 1.

AREA 27 (50)

Depth. 5 fm

Substrate. Silty clay

Porifera. Yellow and blue sponge

Crustacea. Cirripedia 1, Brachyura 14

Mollusca. Gastropoda 96, Bivalvia 9, 15

Ascidiacea. Pleurogona 10.

AREA 27 (138)

Depth. 2.5 fm

Substrate. Silty sand

Algae. Chlorophyta 12, 14, 22, Phaeophyta
57A, Rhodophyta 102, 105, 154

Annelida. Polychaeta 1, 34, 44

Crustacea. Isopoda 17, Brachyura 7, 19

Mollusca. Gastropoda 71, Opisthobranchia 10,
Bivalvia 9, 13.

REMARKS: The dominant animal was *Mytilus
planulatus*.

AREA 27 (139)

Depth. 1.5 fm

Substrate. Silty sand with reef outcropping 2 ft.
above the sand

Phanerogams 1, 3

Algae. Chlorophyta 12, Phaeophyta 57A,
Rhodophyta 102, 105, 154

Porifera. Abundant on reef

Annelida. Polychaeta 37, 47

Crustacea. Isopoda 17, Brachyura 7

Mollusca. Gastropoda 71, Bivalvia 9, 13, 19

Echinodermata. Asteroidea 16, Echinoidea 2,
Holothuroidea 1.

Area 27 (284)

Depth. 1.25 fm

Substrate. Silty sand with basalt pebbles

Algae. Chlorophyta 14, 16, Rhodophyta 120,
159

Annelida. Polychaeta 44, 59

Crustacea. Brachyura 4, 7

Mollusca. Gastropoda 15, 22, 32, 34, 52, 65,
Bivalvia 9, 23

Echinodermata. Asteroidea 10, 15, Ophiuroidea
2

Ascidiacea. Pleurogona 20.

AREA 27 (302)

Depth. 4 fm

Substrate. Silty clay

Annelida. Polychaeta 41

Mollusca. Bivalvia 9, 23

Echinodermata. Ophiuroidea 8, Holothuroidea
5, 8

Ascidiacea. Pleurogona 9.

AREA 28 (140)

Depth. 3 fm

Substrate. Silty sand

Phanerogams. 1

Algae 57A, Rhodophyta 102, 105, 154, 158

Porifera. Several species of sponges

Annelida. Polychaeta 44

Crustacea. Brachyura 7, 25

Mollusca. Gastropoda 79, 98, Bivalvia 9-10, 13

Echinodermata. Asteroidea 1

Ascidiacea. Pleurogona 9, 11, 15.

AREA 28 (141)

Depth. 3.5 fm

Substrate. Silty sand

Phanerogams. 3

Algae. Phaeophyta 57A, Rhodophyta 102, 105,
154

Crustacea. Brachyura 13, 21, 26 in *Mytilus*

Mollusca. Gastropoda 34, Bivalvia 9, 13, 41

Echinodermata. Ophiuroidea 1, Echinoidea 2,
Holothuroidea 1

Ascidiacea. Pleurogona 17.

AREA 28 (285)

Depth. 3 fm

Substrate. Silty sand.

Algae. Chlorophyta 17

Annelida. Polychaeta 4

Crustacea. Cirripedia 1, Isopoda 11, Brachyura
25

Mollusca. Amphineura 9, 17, Gastropoda 15,
32, 34, 79, Bivalvia 2, 10, 13, 25

Echinodermata. Holothuroidea 1, 6, 8

Ascidiacea. Enterogona 17, Pleurogona 13, 18.

AREA 28 (286)

Depth. 5 fm

Substrate. Silty clay

Annelida. Polychaeta 1, 11, 21, 31, 37, 39, 41,
44, 49

Crustacea. Brachyura 22

Mollusca. Bivalvia 15.

AREA 28 (316)

Depth. 6 fm
 Substrate. Silty sand
 Annelida. Polychaeta 14
 Mollusca. Gastropoda 38, 80.

AREA 28 (315)

Depth. 5 fm
 Substrate. Silty sand
 Phanerogams. 3
 Algae. Chlorophyta 12
 Crustacea. Brachyura 25
 Mollusca. Bivalvia 11A, 13
 Echinodermata. Asteroidea 2, Holothuroidea 1
 Ascidiacea. Enterogona 17.

AREA 29 (107)

Depth. 2.5 fm
 Substrate. Sand
 Algae. Chlorophyta 12, Rhodophyta 151, 152
 Coelenterata. Hydrozoa 18, Actinaria 12
 Annelida. Polychaeta 1, 14, 44
 Crustacea. Brachyura 13
 Mollusca. Gastropoda 97, Bivalvia 9, 13
 Echinodermata. Asteroidea 1
 Ascidiacea. Pleurogona.

REMARKS: This station is on and around Portarlington Pier.

AREA 29 (174)

Depth. 6.25 fm
 Substrate. Sandy silt
 Algae. Rhodophyta 133
 Mollusca. Gastropoda 98, Bivalvia 9, 11A, 21
 Bryozoa. 26, 92
 Echinodermata. Holothuroidea 1
 Ascidiacea. Enterogona 17, Pleurogona 13, 15.

REMARKS: The fauna was very sparse, and the only algae *Ceramium* sp. was attached to *Pecten alba*.

AREA 29 (287)

Depth. 5.5 fm
 Substrate. Sand-silt-clay
 Algae. Chlorophyta 17
 Crustacea. Brachyura 13
 Mollusca. Bivalvia 10, 11A, 15
 Echinodermata. Echinoidea 4, Holothuroidea 1
 Ascidiacea. Pleurogona 15, 18.

AREA 29 (317)

Depth. 4.50 fm
 Substrate. Silty sand

Algae. Chlorophyta 9
 Annelida. Polychaeta 21
 Mollusca. Gastropoda 98, Bivalvia 9-10, 11A
 Echinodermata. Holothuroidea 1.

AREA 30 (130)

Depth. 6 fm
 Substrate. Sand-clay-silt
 Algae. Phaeophyta 51
 Porifera. Two species
 Coelenterata. Hydrozoa 6-7, 27, Octocorallia 3
 Annelida. Polychaeta 26, 82, Echiuroidea 3
 Crustacea. Isopoda 17, 26
 Mollusca. Gastropoda 11, 15, 22, 32, 34, 38, 49, 79, 98, Bivalvia 9, 11A, 13, 15, 26, 38, 41
 Bryozoa 26, 82, 91
 Echinodermata. Asteroidea 1, 10A, 14, Echinoidea 2
 Ascidiacea. Pleurogona 18.

AREA 30 (135)

Depth. 2 fm
 Substrate. Sand with outcropping reef
 Algae. Chlorophyta 1, Phaeophyta 46? 57A?
 Porifera. Abundant sponges on reef
 Mollusca. Gastropoda 1, 3, 34, 38, 49, 79, Cephalopoda 11, Bivalvia 9, 15
 Echinodermata. Asteroidea 1, Echinoidea 2, Holothuroidea 1
 Ascidiacea. Pleurogona 18.

AREA 30 (278)

Depth. 8 fm
 Substrate. Silty sand
 Porifera. Red finger sponge
 Crustacea. Isopoda 23, 24, Brachyura 7, 13, 21, 25
 Mollusca. Gastropoda 91, Bivalvia 1, 10, 11A, 13
 Echinodermata. Asteroidea 2, Holothuroidea 1
 Ascidiacea. Enterogona 17? Pleurogona 13, 15.

AREA 30 (279)

Depth. 7 fm
 Substrate. Sand-clay-silt
 Porifera. Red finger sponge
 Crustacea. Brachyura 21
 Mollusca. Gastropoda 92, Bivalvia 1, 10, 11A, 13
 Echinodermata. Asteroidea 2, Holothuroidea 1
 Ascidiacea. Enterogona 17? Pleurogona 13, 15.

AREA 30 (280)

Depth 8 fm
 Substrate. Sandy gravel
 Algae. Phacophyta 46, Rhodophyta 103, 124, 135, 156, 158, 159
 Porifera. Large number including *Tethya* sp.
 Coelenterata. Actinaria 7
 Crustacea. Isopoda 17
 Mollusca. Amphineura 9, 12, Gastropoda 22, 25, 38, 52-53, 64, 88, 90, Bivalvia 13
 Echinodermata. Asteroidea 1-2, Echinoidea 2, Holothuroidea 1.

AREA 31 (10)

Depth. 5.25 fm
 Substrate. Silty sand with broken rock
 Algae. Phacophyta 68
 Porifera. Very common
 Coelenterata. Hydrozoa 6, 27, Actinaria 7, Octocorallia 2
 Annelida. Polychaeta 1-2, 20, 26, 41, 43-44, 50, 54
 Crustacea. Brachyura 3, 4, 7
 Mollusca. Amphineura 20, Gastropoda 1, 3, 11, 15, 32, 34, 49, Bivalvia 9-10, 11A, 13, 41, Cephalopoda 9
 Echinodermata. Crinoidea 6, Asteroidea 1, 10, 14, 15, Ophiuroidea 5, Echinoidea 2-3, Holothuroidea 1
 Ascidiacea. Pleurogona 11, 15-16, 19.

REMARKS: This station is situated at the Prince George Light. The specimen was collected from the rocks at the base and the surrounding silty sand. The piles of the light were completely encrusted with *Mytilus planulatus*, while the sea-floor under the piles was carpeted with smaller specimens.

AREA 31 (131)

Depth. 8 fm
 Substrate. Sand-clay-silt
 Annelida. Polychaeta 47, 53, 56
 Crustacea. Brachyura 21
 Mollusca. Gastropoda 22, Bivalvia 8, 19.

AREA 31 (132)

Depth. 8.5 fm
 Substrate. Silty clay
 Crustacea. Isopoda 17, 26, Brachyura 21
 Mollusca. Gastropoda 1, 98, Opisthobranchia 4, Bivalvia 9-10, 11A
 Ascidiacea. Pleurogona 11, 18.

AREA 31 (133)

Depth. 9.5 fm
 Substrate. Silty clay
 Annelida. Polychaeta 34? 36?, 39?
 Crustacea. Brachyura 21
 Mollusca. Bivalvia 9, 15
 Echinodermata. Holothuroidea 1, 5?
 Ascidiacea. Pleurogona 11.

AREA 31 (134)

Depth. 9.5 fm
 Substrate. Silty clay
 Crustacea. Brachyura 21
 Mollusca. Bivalvia 9, 15
 Echinodermata. Asteroidea 2? Holothuroidea 1, 5
 Ascidiacea. Pleurogona 11.

AREA 31 (273)

Depth. 8 fm
 Substrate. Silty clay
 Porifera. Red branching sponge
 Mollusca. Opisthobranchia 4, 9, Bivalvia 1, 10, 11A, 13, Cephalopoda 9
 Echinodermata. Asteroidea 2, Holothuroidea 1
 Ascidiacea. Pleurogona 13, 15.

AREA 31 (275)

Depth. 3 fm
 Substrate. Sand with broken shell and pebbles
 Annelida. Polychaeta 36?
 Crustacea. Brachyura 7
 Mollusca. Bivalvia 10, 21
 Ascidiacea. Pleurogona 15.

AREA 31 (276)

Depth. 8 fm
 Substrate. Silt-sand-clay
 Annelida. Polychaeta 34, 36, 39
 Mollusca. Gastropoda 65, Bivalvia 9-10, 11A, 13
 Echinodermata. Asteroidea 2.

AREA 31 (310)

Depth. 3.5-5.5 fm
 Substrate. Sand and reef
 Algae. Chlorophyta 16? Phaeophyta 68
 Coelenterata. Octocorallia 10
 Annelida. Polychaeta 1
 Crustacea. Brachyura 13
 Mollusca. Bivalvia 10, 13
 Ascidiacea. Enterogona 18?

AREA 32 (277)

Depth. 13 fm
 Substrate. Junction of silty clay and clay
 Annelida. Polychaeta 34, 36, 38
 Mollusca. Bivalvia 9, 13, 21
 Echinodermata. Ophiuroidea 4, 7, Echinoidea 4, Holothuroidea 8, 9
 Ascidiacea. Enterogona 18, Pleurogona 10.

REMARKS: This station has a typical central mud basin fauna.

AREA 33 (177)

Depth. 12 fm
 Substrate. Silty clay
 Coelenterata. Actinaria 11
 Annelida. Polychaeta 34, 44, 56?
 Crustacea. Brachyura 7-8
 Mollusca. Bivalvia 9, 11A, 13
 Echinodermata. Ophiuroidea 7, Echinoidea 4, Holothuroidea 9
 Ascidiacea. Enterogona 8, 17-18, Pleurogona 18.

AREA 34 (120)

Depth. 11 fm
 Substrate. Silty clay
 Porifera. Large yellow sponge
 Mollusca. Gastropoda 34, Bivalvia 9-10, 11A, 13
 Echinodermata. Asteroidea 2, Echinoidea 4, Holothuroidea 2
 Ascidiacea. Enterogonia 17, Pleurogona 15, 17.

AREA 35 (71)

Depth. 11 fm
 Substrate. Silty clay
 Annelida. Polychaeta 1
 Crustacea. Brachyura 7-8
 Mollusca. Bivalvia 9, 11A
 Bryozoa. 53-54, 69, 96
 Echinodermata. Echinoidea 4
 Ascidiacea. Enterogona 17?

AREA 35 (72)

Depth. 9 fm
 Substrate. Silty clay
 Annelida. Polychaeta 1?, 44
 Crustacea. Brachyura 7-8
 Mollusca. Gastropoda 96, Bivalvia 9, 11A, 13
 Echinodermata. Ophiuroidea 7
 Ascidiacea. Enterogona 18.

AREA 35 (73)

Depth. 9 fm
 Substrate. Clayey sand
 Crustacea. Brachyura 25-26
 Mollusca. Bivalvia 9
 Echinodermata. Holothuroidea 1
 Ascidiacea. Enterogona 8, Pleurogona 16.

AREA 35 (121)

Depth. 11 fm
 Substrate. Silty clay
 Annelida. Echiuroidea 3
 Crustacea. Brachyura 13, 22
 Mollusca. Bivalvia 13
 Echinodermata. Asteroidea 2
 Ascidiacea. Enterogona 18, Pleurogona 17-18.

AREA 36 (74)

Depth. 8 fm
 Substrate. Silty sand
 Mollusca. Bivalvia 9, 11A
 Ascidiacea. Pleurogona 15.

REMARKS: This was a very barren station with scattered clumps of *Mytilus planulatus* approximately 50 cm apart.

AREA 36 (75)

Depth. 8 fm
 Substrate. Sand
 Porifera. Some sponges
 Annelida. Polychaeta 40, 44
 Crustacea. Brachyura 7-8
 Mollusca. Bivalvia 9
 Echinodermata. Asteroidea 1, Holothuroidea 2, 6
 Ascidiacea. Enterogona 8, Pleurogona 13?, 15?

AREA 36 (76)

Depth. 5 fm
 Substrate. Sand
 Porifera. Some sponges
 Annelida. Polychaeta 40, Echiuroidea 3
 Crustacea. Cirripedia 3, Brachyura 8
 Mollusca. Amphineura 16A, Gastropoda 96, Bivalvia 9, 13, 16, 19
 Ascidiacea. Pleurogona 15.

AREA 36 (77)

Depth. 4 fm
 Substrate. Sand
 Porifera. A few sponges
 Annelida. Polychaeta 40, 44

Crustacea. Cirripedia 3, Brachyura 8, 13, 22
Mollusca. Amphineura 9, Gastropoda 15, 32,
35, Bivalvia 9, 13, 15, 19
Echinodermata. Holothuroidea 2, 6.

AREA 36 (78)

Depth. 4 fm

Substrate. Sand

Mollusca. Bivalvia 9

Echinodermata. Holothuroidea 8 (single speci-
men)

Ascidiacea. Pleurogona 15.

REMARKS: The single specimen of *Lepto-
synapta dolabrifera* was out of its usual
environment and had probably arrived by
mischance.

AREA 37 (4)

Depth. 2 fm

Substrate. Silty clay and some reef

Algae. Chlorophyta 12, Phaeophyta 57A, Rho-
dophyta 141, 154

Porifera. Several species of sponges

Annelida. Polychaeta 11, 35, 39

Crustacea. Isopoda 17, Brachyura 13, 21, 25,
30

Mollusca. Amphineura 15, Gastropoda 15, 32,
34, 97-98, Opisthobranchia 1, Bivalvia 2,
9-10, 15, 23, 26, 35, Cephalopoda 10

Echinodermata. Asteroidea 1, 7, 9, 10A, Echi-
noidea 2

Ascidiacea. Enterogona 13, 18, Pleurogona 11,
20.

REMARKS: This station on Thompson's Reef,
Stingaree Bay, Geelong, has the typical shel-
tered reef and silty clay fauna.

AREA 37 (296)

Depth. 2 fm

Substrate. Clay

Algae. Chlorophyta 12

Annelida. Polychaeta 35

Crustacea. Brachyura 25

Mollusca. Gastropoda 97, Opisthobranchia 1,
4, 6, 15, Bivalvia 35, Cephalopoda 2

Ascidiacea. Enterogona 18.

AREA 37 (297)

Depth. 1 fm

Substrate. Clay

Phanerogams. 1, 3

Algae. Chlorophyta 12

Annelida. Polychaeta 35

Mollusca. Opisthobranchia 1, 6, 15, Bivalvia
10, 15, 35, Cephalopoda 2

Bryozoa. 6

Echinodermata. Asteroidea 10, Holothuroidea 1

Ascidiacea. Enterogona 18.

AREA 37 (298)

Depth. 4.5 fm

Substrate. Clay

Mollusca. Bivalvia 13, Cephalopoda 2

Bryozoa 6.

AREA 38 (127)

Depth. 5 fm

Substrate. Silty clay

Algae. Chlorophyta 1?

Annelida. Polychaeta 44

Mollusca. Opisthobranchia 4, Bivalvia 9-10,
11A, 33

Echinodermata. Asteroidea 9, 14, Holothuroi-
dea 1

Ascidiacea. Enterogona 13, Pleurogona 9, 15.

AREA 38 (311)

Depth. 4 fm

Substrate. Clay

Algae. Chlorophyta 12

Annelida. Polychaeta 35, 41

Mollusca. Bivalvia 10 in *Caulerpa*

Echinodermata. Ophiuroidea 9

Ascidiacea. Enterogona 8.

AREA 39 (42)

Depth. 1.25 fm

Substrate. Sand

Phanerogams. 1

Algae. Phaeophyta 57A

Mollusca. Gastropoda 22, 38, 52, 56, 80, 101,
Bivalvia 2, 8, 10, 33

Echinodermata. Asteroidea 1, Echinoidea 3,
Holothuroidea 1

Ascidiacea. Pleurogona 9.

AREA 39 (43)

Depth. 2.50 fm

Substrate. Silty sand

Phanerogams. 1

Algae. Phaeophyta 57A

Annelida. Polychaeta 15

Crustacea. Brachyura 7-8, 21, 22, 25

Mollusca. Gastropoda 22, Bivalvia 10

Echinodermata. Asteroidea 10

Ascidiacea. Pleurogona 11, 15.

AREA 39 (44)

Depth. 3-50 fm
 Substrate. Silty sand
 Phanerogams. 1
 Algae. Chlorophyta 12, Phacophyta 57A
 Mollusca. Gastropoda 56, 102, Bivalvia 10.

AREA 39 (45)

Depth. 3-50 fm
 Substrate. Silty sand
 Phanerogams. 1, 3
 Algae. Phacophyta, 57A
 Porifera. Some yellow sponges
 Crustacea. Brachyura 16, 25
 Mollusca. Gastropoda 80, Bivalvia 9-10, 11A, 13
 Echinodermata. Ophiuroidea 9.

AREA 39 (46)

Depth. 3 fm
 Substrate. Silty clay
 Phanerogams. 1, 3
 Algae. Phaeophyta 57A
 Porifera. Four species of sponges
 Crustacea. Cirripeda 1, Isopoda 17, 23, Brachyura 25
 Mollusca. Bivalvia 9-10, 11A, 13
 Echinodermata. Echinoidea 4, Holothuroidea 1
 Ascidiacea. Pleurogona 18?

AREA 39 (312)

Depth. 4 fm
 Substrate. Silty clay-clay
 Annelida. Polychaeta 41
 Crustacea. Isopoda 7, 17
 Mollusca. Bivalvia 10
 Echinodermata. Asteroidea 14, Ophiuroidea 8-9, Holothuroidea 8-9
 Ascidiacea. Pleurogona 15.

AREA 39 (313)

Depth. 1-5 fm
 Substrate. Sand passing into silty sand as dredge moved N. of shore
 Phanerogams. 1
 Algae. Chlorophyta 12, Phaeophyta 45, 57A, Rhodophyta 154
 Crustacea. Isopoda 7, 17
 Mollusca. Gastropoda 22, 34, 38, 52-53, 86, 97, 99, Bivalvia 2
 Ascidiacea. Pleurogona 15.

AREA 39 (314)

Depth. 4-50 fm
 Substrate. Silty clay
 Algae. Chlorophyta 12?
 Annelida. Polychaeta 10, 39
 Crustacea. Isopoda 7, 17, Brachyura 25
 Mollusca. Opisthobranchia 4, Bivalvia 11A, 15
 Echinodermata. Echinoidea 4, Holothuroidea 1
 Ascidiacea. Enterogona 17, Pleurogona 15.

AREA 40 (101)

Depth. 1 fm
 Substrate. Sand
 Phanerogams. 1
 Algae. Chlorophyta 1, 16, Phaeophyta 57A
 Porifera. A wide variety
 Annelida. Polychaeta 20
 Crustacea. Brachyura 11, 16, 22, 25, 29
 Mollusca. Gastropoda 22, 32, 34, 38, 51-52, 53, 56, 88, 97-98, Opisthobranchia 10, 15, 33
 Echinodermata. Asteroidea 1, 10, 14-15, Ophiuroidea 5, Echinoidea 4, Holothuroidea 1
 Ascidiacea. Pleurogona 15, 18.

AREA 40 (102)

Depth. 5 fm
 Substrate. Silty sand
 Crustacea. Brachyura 16
 Mollusca. Bivalvia 15
 Echinodermata. Asteroidea 10, Holothuroidea 1
 Ascidiacea. Enterogona 8, Pleurogona 18.

REMARKS: Station 101 was situated in and around the Clifton Springs jetty where the *Zostera* was dense. A dredge run was made for this station on a course due N. on a continuous bed of *Zostera* until a depth of 3.5 fm was reached. After this depth the *Zostera* occurred in broken patches with sand between the clumps. These clumps continued to 4.75 fm where *Halophilus ovalis* replaced the *Zostera*. Station 102 is at the end of the dredge run.

AREA 42 (38)

Depth. Intertidal and sub-littoral to 1 fm
 Substrate. Sand
 Algae. Phacophyta 66, Rhodophyta 91, 102
 Coelenterata. Actinaria 3, 6, 9
 Annelida. Polychaeta 18, 20, 43
 Crustacea. Isopoda 16, Brachyura 4, 15, 24
 Mollusca. Amphineura. 5, 14-15, 17, Gastropoda 3, 5, 8, 12, 30-31, 39, 67, 76, 80, 95,

98, 108, 110, Opisthobranchia 4, 10, 14
 Bryozoa. 72
 Echinodermata. Asteroidea 1, 10, 15-16, Echinoidea 2, Holothuroidea 1, 6
 Ascidiacea. Enterogona 14, 18.

REMARKS: This station was worked from the shore by intertidal collecting and by divers working from the shore to 1 fm. The area traversed was from Indented Head southward for two miles.

AREA 42 (108)

Depth. 2 fm
 Substrate. Sand
 Algae. Phaeophyta 69-70, Rhodophyta 136, 150, 155-156, 158
 Coelenterata. Hydrozoa 8
 Annelida. Polychaeta 21
 Crustacea. Brachyura 11, 13-14, 16, 25-26
 Mollusca. Gastropoda 5, 17, 32, 34, 49, 56, 75-76, 80, 88, 97, Bivalvia 9-10, 13, 23
 Echinodermata. Asteroidea 14-15, Ophiuroidea 5
 Ascidiacea. Pleurogona 14-15, 18.

REMARKS: This station is at St Leonards Pier.

AREA 42 (109)

Depth. 2.5 fm
 Substrate. Sand and broken shell
 Algae. Rhodophyta 125, 150, 152, 156, 158-159, 164
 Annelida. Polychaeta 22, 25, 35, 39
 Crustacea. Brachyura 7-8, 13-14, 16, 25
 Mollusca. Gastropoda 78, Bivalvia 9-10, 13
 Echinodermata. Holothuroidea 1.

AREA 42 (264)

Depth. 4 fm
 Substrate. Sand
 Phanerogams. 1
 Algae. Chlorophyta.

REMARKS: This dredge haul was almost barren in contrast to the next station (265) which had a varied flora. These two stations are in Coles Channel.

AREA 42 (265)

Depth. 3.5 fm
 Substrate. Sand
 Phanerogams. 1, 3

Algae. Phaeophyta 55, 57A, 73, Rhodophyta 102-103, 124, 159, 164
 Annelida. Polychaeta 31, 44
 Mollusca. Bivalvia 13, 23
 Ascidiacea. Pleurogona 15, 18.

AREA 42 (281)

Depth. 2 fm
 Substrate. Sand and reef
 Phanerogams. 1
 Algae. Phaeophyta 57A, 64, Rhodophyta 91, 102, 107, 154
 Porifera. Some sponges
 Coelenterata. Scleractinia 1?
 Annelida. Polychaeta 44, 53
 Crustacea. Brachyura 7, 21 23
 Mollusca. Amphineura 17, 20, Gastropoda 3, 22, 25, 38, Bivalvia 10
 Echinodermata. Asteroidea 2, 10A, 16, Echinoidea 2
 Ascidiacea. Pleurogona 19.

AREA 42 (288)

Depth. 2 fm
 Substrate. Sand and rock pebbles
 Phanerogams. 1
 Crustacea. Brachyura 4, 25
 Mollusca. Gastropoda 92, Bivalvia 13, 23
 Ascidiacea. Pleurogona 15.

AREA 42 (289)

Depth. 2 fm
 Substrate. Sand
 Annelida. Polychaeta 21, 29, 34
 Crustacea. Brachyura 4
 Mollusca. Opisthobranchia 4, Gastropoda 70, Bivalvia 23
 Echinodermata. Ophiuroidea 9.

AREA 43 (251)

Depth. 10.5 fm
 Substrate. Sand-clay-silt
 Annelida. Polychaeta 53?
 Crustacea. Brachyura 6
 Echinodermata. Ophiuroidea 7, 15, Echinoidea 4
 Ascidiacea. Enterogona 17.

AREA 43 (263)

Depth. 9 fm
 Substrate. Silty clay
 Phanerogams. 1, 4
 Annelida. Polychaeta 36

Crustacea. Brachyura 8
 Mollusca. Bivalvia 1, 11A, 42-43
 Echinodermata. Ophiuroidea 7, Echinoidea 4.
 AREA 43 (274)

Depth. 6 fm
 Substrate. Silty sand
 Porifera. Orange branching sponge
 Annelida. Polychaeta 41, 53
 Mollusca. Bivalvia 11A, 13, 15, 43
 Echinodermata. Echinoidea 4, Holothuroidea 1
 Ascidiacea. Enterogona 8? 17, Pleurogona 19?

REMARKS: This station situated at the meeting point of several communities contains elements of fauna derived from the surrounding communities and does not belong to any one type.

AREA 43 (303)

Depth. 3.5 fm
 Substrate. Sand with shell and pebbles
 Phanerogams. 1
 Algae. Phaeophyta 32, 169
 Coelenterata. Hydrozoa 6, 24, 28, Actinaria 12
 Crustacea. Brachyura 4, 14
 Mollusca. Gastropoda 82, 88, 96, Bivalvia 9-10, 11A
 Bryozoa. 91
 Echinodermata. Asteroidea 14
 Ascidiacea. Enterogona 8.

AREA 44 (262)

Depth. 13 fm
 Substrate. Clay
 Annelida. Polychaeta 53
 Echinodermata. Ophiuroidea 7, Echinoidea 4, Holothuroidea 8-9.

AREA 45 (261)

Depth. 13 fm
 Substrate. Clay
 Annelida. Polychaeta 53
 Echinodermata. Ophiuroidea 7, Echinoidea 4, Holothuroidea 8-9.

AREA 46 (260)

Depth. 11 fm
 Substrate. Clay
 Annelida. Polychaeta 53
 Echinodermata. Ophiuroidea 7, Echinoidea 4, Holothuroidea 8-9.

REMARKS: Stations 260-2 are typical of the sparse annelid echinoderm fauna of the clay basin.

AREA 47 (28)

Depth. 8.25 fm
 Substrate. Silty sand
 Mollusca. Bivalvia 11A
 Echinodermata. Echinoidea 4
 Ascidiacea. Pleurogona 15.

AREA 47 (29)

Depth. 5 fm
 Substrate. Coarse sand
 Algae. Chlorophyta 4, Rhodophyta 139
 Coelenterata. Actinaria 7
 Crustacea. Cirripedia 1, Brachyura 22
 Mollusca. Bivalvia 9, 11A, 13, Cephalopoda 10
 Ascidiacea. Enterogona 8, Pleurogona 15, 18.

AREA 47 (30)

Depth. 3 fm
 Substrate. Sand
 Algae. Chlorophyta 4, 16, Phacophyta 68, Rhodophyta 135, 167
 Porifera. Yellow sponge
 Mollusca. Bivalvia 9, 13, 26
 Echinodermata. Ophiuroidea 5
 Ascidiacea. Pleurogona 13.

AREA 47 (31)

Depth. 3 fm
 Substrate. Sand
 Algae. Chlorophyta 4, 16
 Mollusca. Bivalvia 11A.

AREA 47 (258)

Depth. 8.5 fm
 Substrate. Clay
 Annelida. Polychaeta 53
 Echinodermata. Ophiuroidea 7, Echinoidea 4, Holothuroidea 8-9.

AREA 47 (259)

Depth. 10.5 fm
 Substrate. Clay
 Annelida. Polychaeta 36
 Mollusca. Bivalvia 9, 11A, 15
 Echinodermata. Ophiuroidea 7, Echinoidea 4, Holothuroidea 8-9.

REMARKS: This station is on the junction of several faunal communities and contains representatives of each of them.

AREA 48 (32)

Depth. 2.5 fm
Substrate. Sand
Algae. Chlorophyta 1, 20A
Mollusca. Amphineura 7, Gastropoda 53, 93,
Bivalvia 13, 22, 27.

AREA 48 (33)

Depth. 2 fm
Substrate. Sand
Mollusca. Bivalvia 27.

REMARKS: A very barren area between two similar faunas 32 and 34.

AREA 48 (34)

Depth. 1.5 fm
Substrate. Sand
Algae. Chlorophyta 1
Porifera. Some sponges
Mollusca. Amphineura 6, Gastropoda 12, 23,
Bivalvia 9
Echinodermata. Asteroidea 9, 14, Echinoida 4.

AREA 48 (257)

Depth. 4 fm
Substrate. Coarse sand
Algae. Chlorophyta 8
Annelida. Echiuroidea 3?
Mollusca. Bivalvia 10
Ascidiacea. Pleurogona 15.

REMARKS: This station is off Frankston Pier.

AREA 49 (236)

Depth. 0.5 fm
Substrate. Clayey sand
Phanerogam. 1
Annelida. Polychaeta 35, 38, 44, 47
Crustacea. Isopoda 2, Brachyura 5
Mollusca. Gastropoda 30, 47-48, 51-52, 55, 65.

AREA 49 (237)

Depth. 0.5 fm
Substrate. Clayey sand
Phanerogam. 1
Annelida. Polychaeta 1, 35-36, 44
Crustacea. Brachyura 25.

AREA 50 (228)

Depth. 3.5 fm
Substrate. Sand
Algae. Chlorophyta 2, 9?, 10, Phaeophyta 58,
Rhodophyta 153, 158
Crustacea. Brachyura 7, 14, 16, 25

Mollusca. Gastropoda 32, 34, 96, Bivalvia 15,
23

Echinodermata. Asteroidea 1?
Ascidiacea. Pleurogona 15, 18.

AREA 50 (229)

Depth. 2.5 fm
Substrate. Sand
Phanerogams. 1, 3-4
Algae. Phaeophyta 41, Rhodophyta 74, 80, 97
Mollusca. Bivalvia 10
Bryozoa. 34
Echinodermata. Asteroidea 10.

AREA 50 (230)

Depth. 3 fm
Substrate. Sand
Phanerogam. 1
Algae. Chlorophyta 8-9, 16, Phaeophyta 42,
57A, 65, 67, Rhodophyta 143
Mollusca. Amphineura 13, Opisthobranchia 7,
Gastropoda 25, 28, 32, 34, 39, 58, 65, 88,
96, Bivalvia 4, 9-10, 23
Echinodermata. Asteroidea 10A.

AREA 50 (231)

Depth. 2 fm
Substrate. Sand and pebbles
Algae. Chlorophyta 8-9, Phaeophyta 42, 57A,
65, 67, Rhodophyta 143
Mollusca. Gastropoda 28, 34, 39, 58, 65, 88,
Bivalvia 9-10.

AREA 50 (232)

Depth. 2 fm
Substrate. Sand.
REMARKS: This station on the edge of the
William Sand was barren.

AREA 50 (233)

Depth. 2 fm
Substrate. Sand
Phanerogams. 1
Porifera. On oysters
Annelida. Polychaeta 44?
Crustacea. Isopoda 11, 14, 23, Brachyura 7,
11, 13
Mollusca. Bivalvia 9, 13
Echinodermata. Crinoidea 3, Ophiuroidea 2, 10
Ascidiacea. Pleurogona 15, 18.

AREA 50 (238)

Depth. 1 fm
 Substrate. Clayey sand
 Phanerogam. 1
 Algae. Chlorophyta 16, 24, Rhodophyta 92
 Crustacea. Brachyura 7
 Mollusca. Gastropoda 22, 34, 38, 54, 80,
 Bivalvia 23.

AREA 50 (266)

Depth. 2.5 fm
 Substrate. Sand
 Phanerogams. 4
 Algae, Phaeophyta 57A, Rhodophyta 154, 164
 Mollusca. Bivalvia 15
 Ascidiacea. Pleurogona 20 on *Cymodocea*
 stems.

AREA 50 (267)

Depth. 2.5 fm
 Substrate. Sand and reef
 Phanerogams. 1, 3
 Echinodermata. Crinoidea 1.

AREA 51 (250)

Depth. 3.5 fm
 Substrate. Coarse sand
 Phanerogam. 1
 Algae. Rhodophyta 158, 164, 169
 Porifera. Some sponges
 Crustacea. Isopoda 14, Brachyura 7, 16, 22
 Mollusca. Gastropoda 25, 63, Bivalvia 9-10,
 14, 25
 Ascidiacea. Pleurogona 2, 15, 18.

AREA 51 (270)

Algae. Rhodophyta 90
 Annelida. Polychaeta 1, 11, 24, 35
 Crustacea. Isopoda 14
 Mollusca. Bivalvia 9
 Echinodermata. Holothuroidea 1, 9
 Ascidiacea. Pleurogona 20

REMARKS: This station in Symonds Channel had a very large population of *Mytilus planulatus*, most larger than 18 mm.

AREA 51 (271)

Depth. 6 fm
 Substrate. Sand
 Algae. Rhodophyta 90
 Coelenterata. Hydrozoa 22, 28

Crustacea. Brachyura 7, 14, 16
 Mollusca. Gastropoda 78.

REMARKS: The sand is ridged and moving. The ridges are approximately 2.5 cm high and with 10 cm between crests.

AREA 52 (252)

Depth. 13 fm
 Substrate. Clay
 Annelida. Polychaeta, 50, 53
 Echinodermata. Ophiuroidea 7, Echinoidea 4,
 Holothuroidea 8-9
 Ascidiacea. Enterogona 17, Pleurogona 14.

AREA 53 (253)

Depth. 12 fm
 Substrate. Clay
 Coelenterata. Hydrozoa 28
 Annelida. Polychaeta 36, 41, 50, 53
 Crustacea. Brachyura 8
 Mollusca. Bivalvia 13, 15
 Bryozoa. 22, 53
 Echinodermata. Ophiuroidea 7.

AREA 54 (254)

Depth. 10 fm
 Substrate. Sand-silt-clay
 Annelida. Polychaeta 44?
 Mollusca. Bivalvia 21
 Echinodermata. Ophiuroidea 7, 14, Echinoi-
 dea 4, Holothuroidea 8-9.

AREA 55 (22)

Depth. 4.5 fm
 Substrate. Sand
 Algae. Chlorophyta 22, Rhodophyta 141, 157
 Porifera. A number of sponges
 Crustacea. Cirripedia 1
 Mollusca. Gastropoda 49, 79, Bivalvia 9, 13
 Echinodermata. Ophiuroidea 12
 Ascidiacea. Enterogona 18, Pleurogona 15.

AREA 55 (35)

Depth. 3.5 fm
 Substrate. Sand
 Algae. Phaeophyta 42, 47, 51, 61, Rhodo-
 phytae 90, 155
 Coelenterata. Actinaria 5, Octocorallia 2
 Annelida. Echiuroidea 3
 Crustacea. Isopoda 1, Brachyura 7, 13, 20
 Mollusca. Gastropoda 68, 93, 98, Bivalvia 18,
 Cephalopoda 7
 Ascidiacea. Enterogona 1.

AREA 55 (39)

Depth. 2 fm
 Substrate. Sand
 Algae. Chlorophyta 1-2, Phaeophyta 32, 71, Rhodophyta 154
 Annelida. Polychaeta 12, 40, Echinozoa 1-2
 Crustacea. Brachyura 7, 13, 16, 29
 Mollusca. Amphineura 4, 8, 12, Gastropoda 1, 15, 56, Opisthobranchia 2, 10, Bivalvia 2, 9-10, 13, 23, 25, 34
 Bryozoa. 54, 95, 96
 Echinodermata. Asterozoa 1, 14-16, Echinozoa 2, Holothurozoa 6
 Ascidiacea. Enterogona 7.

AREA 55 (144)

Depth. 10 fm
 Substrate. Sand-clay-silt
 Coelenterata. Octocorallia 3
 Annelida. Polychaeta 44, Sipunculozoa 3
 Mollusca. Bivalvia 9, 11A
 Echinodermata. Holothurozoa 8
 Ascidiacea. Pleurogona 15.

AREA 58 (145)

Depth. 8.75 fm
 Substrate. Sand-clay-silt
 Annelida. Polychaeta 44?
 Mollusca. Bivalvia 13
 Echinodermata. Ophiurozoa 5, Holothurozoa 8-9
 Ascidiacea. Pleurogona 15.

AREA 55 (146)

Depth. 8 fm
 Substrate. Sandy silt
 Annelida. Polychaeta 36
 Mollusca. Bivalvia 1, 11A, 13
 Echinodermata. Echinozoa 4
 Ascidiacea. Pleurogona 15.

AREA 55 (147)

Depth. 5.5 fm
 Substrate. Sandy silt
 Crustacea. Isopoda 12, 18, 26, Brachyura 25
 Mollusca. Amphineura 2, 20, Gastropoda 11, 15, 19, 32, 65, 80, Bivalvia 13, 15, 37-38, Cephalopoda 11
 Brachiopoda. 1
 Echinodermata. Asterozoa 2, Ophiurozoa 8.

AREA 55 (148)

Depth. 3.5 fm
 Substrate. Sand
 Algae. Chlorophyta 23, Phaeophyta 47, 64, 132
 Coelenterata. Scleractinia 1
 Annelida. 1, 13, 18, 20, 25-27, 61
 Crustacea. Cirripedia 2
 Mollusca. Gastropoda 38, Bivalvia 3, 12, 41
 Echinodermata. Asterozoa 1, Echinozoa 4, Holothurozoa 1-2, 6
 Ascidiacea. Pleurogona 10.

AREA 55 (149)

Depth. 2.5 fm
 Substrate. Sand
 Algae. Phaeophyta 43, 47
 Crustacea. Brachyura 8, 13, 21
 Mollusca. Gastropoda 4, Bivalvia 3, 9
 Bryozoa. 33, 41, 53

AREA 55 (255)

Depth. 6 fm
 Substrate. Sand
 Annelida. Polychaeta 53
 Crustacea. Brachyura 7-8
 Mollusca. Bivalvia 11A
 Echinodermata. Holothurozoa 8?, 9?
 Ascidiacea. Enterogona 8?, 17, Pleurogona 4?, 15.

AREA 56 (256)

Depth. 4 fm
 Substrate. Sand
 Annelida. Polychaeta 35-36, 53
 Crustacea. Brachyura 4, 13
 Mollusca. Bivalvia 10, 11A, 13, 15
 Ascidiacea. Enterogona 8?, 17?, Pleurogona 15.

AREA 56 (295)

Depth. 3 fm
 Substrate. Sand and dune limestone reef
 Algae. Chlorophyta 2, 11, 13, Phaeophyta 28, 31, 56, Rhodophyta 82-83, 96, 99, 111, 131, 168
 Mollusca. Gastropoda 1, 23, 37, 49, 82, Bivalvia 9, 37, Opisthobranchia 15
 Bryozoa. 60, 63, 85, 87, 90, 96
 Echinodermata. Holothurozoa 2
 Ascidiacea. Enterogona 1, 12, Pleurogona 7, 14.

REMARKS: This station outside the Heads is off Barwon Heads.

AREA 57 (294)

Depth. 10 fm
 Substrate. Sand and reef
 Algae. Rhodophyta 100
 Annelida. Polychaeta 16
 Bryozoa. 13, 27, 45, 54, 68, 81, 83-84, 92, 96, 107
 Echinodermata. Ophiuroidea 10
 Ascidiacea. Pleurogona 19.

AREA 58 (80)

Depth. 2.5 fm
 Substrate. Sand and reef
 Coelenterata. Hydrozoa 4, 6, 14, Actinaria 10, 12
 Annelida. Polychaeta 51
 Crustacea. Isopoda 14, 20, 26, Brachyura 7, 21
 Mollusca. Gastropoda 29, 37
 Bryozoa. 23, 84.

AREA 58 (81)

Depth. 2 fm
 Substrate. Sand
 Phanerogam. 3?
 Crustacea. Brachyura 7
 Mollusca. Gastropoda 1, 13, 37
 Bryozoa. 101
 Echinodermata. Asteroidea 10A.

AREA 58 (88)

Depth. 7 fm
 Substrate. Sand
 Coelenterata. Hydrozoa 15-16, 19
 Crustacea. Brachyura 7, 10, 20
 Mollusca. Gastropoda 22-23, 25, 58, 65, 86, 88-89, 96, 101, Opisthobranchia 11, Bivalvia 8, 37
 Bryozoa. 1, 12, 19, 32, 50, 56, 61, 63, 65, 67, 70, 89, 96, 102, 110, 112.

AREA 58 (89)

Depth. Intertidal collecting
 Substrate. Sand
 Phanerogam. 1
 Crustacea. Brachyura 5, 15, 19, 30
 Mollusca. Gastropoda 51, 57, 92-93, 95, Bivalvia 6, 24, 35-36
 Bryozoa. 47, 80.

AREA 58 (90)

Depth. 6 fm
 Substrate. Sand
 Phanerogam. 1
 Coelenterata. Actinaria 8, Scleractinia 1.

AREA 58 (91)

Depth. 6 fm
 Substrate. Sand
 Phanerogam. 1
 Annelida. Polychaeta 23, 57.

AREA 58 (150-4)

Depth. 3-6.5 fm
 Substrate. Sand and reef
 Algae. Chlorophyta 2, 9-10, 12, 14, 18-19, Phaeophyta 41, 54-55, 58, 62, 69, Rhodophyta 76, 81, 84, 94, 104, 113-114, 119, 147, 160, 163
 Crustacea. Isopoda 16, 21, Brachyura 2, 7, 12, 14
 Mollusca. Gastropoda 1-2
 Bryozoa. 8, 14-15, 20, 22, 34, 45, 55, 62, 66, 68, 79-80, 90, 98-99, 103-104, 109
 Echinodermata. Crinoidea 4, Asteroidea 6, 10, Ophiuroidea 2, 4, 5, 10, Echinoidea 2, Holothuroidea 4
 Ascidiacea. Enterogona 9.

REMARKS: These four stations in Lonsdale Bight show that this area is very uniform with a large algal and bryozoal population. The majority of species collected occurred at the four stations but in addition each station had a few species peculiar to it, and these are listed below.

AREA 58 (150)

Depth. 3 fm
 Phanerogams. 1, 4
 Algae. Phaeophyta 65
 Crustacea. Isopoda 6, 11-12, 26
 Mollusca. Gastropoda 3.

AREA 58 (151)

Depth. 3.5 fm
 Phanerogams. 4
 Algae. Phaeophyta 67
 Crustacea. Isopoda 6, 11-12, 26
 Mollusca. Gastropoda 23, 40, 76, 89, 91, 98, 100
 Echinodermata. Crinoidea 2, 6
 Ascidiacea. Pleurogona 14, 19.

AREA 58 (152)

Depth. 3.5 fm
 Phanerogams. 4
 Crustacea. Isopoda 6, 11-12, 26
 Mollusca. Gastropoda 98.

AREA 58 (153)

Depth. 6.5 fm
Algae. Phaeophyta 65

AREA 58 (154)

Depth. 5 fm.

REMARKS: This flora and fauna was confined to the combined station list.

AREA 58 (223)

Depth. 2 fm
Substrate. Sand
Phanerogams. 4
Algae. Phaeophyta 51-52
Coelenterata. Hydrozoa 20, 28-29, 30
Bryozoa. 38.

AREA 58 (290)

Depth. 7 fm
Substrate. Sand
Phanerogam. 1
Coelenterata. Scleractinia 4
Crustacea. Brachyura 12
Mollusca. Gatsropoda 6
Bryozoa. 8-9, 22, 38, 45-46, 53, 56, 80, 84-85, 88, 95-97, 102
Echinodermata. Crinoidea 5, Ophiuroidea 3
Ascidiacea. Enterogona 4.

REMARKS: This station is on the dune limestone platform on the ocean side of Point Nepean.

AREA 58 (293)

Depth. 6 fm
Substrate. Sand with dune limestone reef
Algae. Chlorophyta 11, Phaeophyta 47, 56, Rhodophyta 78, 93, 130, 166
Coelentrata. Actinaria 15, Octocorallia 4-5
Crustacea. Brachyura 1
Mollusca. Amphineura 1, 10
Bryozoa. 35, 73, 108
Echinodermata. Echinoidea 3A
Ascidiacea. Pleurogona 19.

AREA 59 (23)

Depth. 2.5 fm
Substrate. Sand and dune limestone reef
Algae. Chlorophyta 1, 8, 15, Phateophyta 46, 57A, 62, 65-66, 73, Rhodophyta 82, 138, 140, 168-169
Porifera. Red sponge

Coelenterata. Actinaria 6
Annelida. Polychaeta 20, 26
Crustacea. Isopoda 11, 23, 26, Brachyura 3
Mollusca. Gastropoda 3, 7, 14, 25, 29, 31, 36-39, 49, 62 on 98, 76, 82, 93, 98, 104, 108, Bivalvia 5, 9, 37
Bryozoa. 24, 33, 42-43, 84
Ascidiacea. Enterogona 1-2, 16, Pleurogona 5.

AREA 59 (24)

Depth. 1.5 fm
Substrate. Sand and piles of pier
Porifera. Abundant sponges
Coelenterata. Hydrozoa 5, 17, Actinaria 12
Annelida. Polychaeta 31, 33, 44, 47, 51, 60, Sipunculoidea 1
Mollusca. Gastropoda 1, 3, 82, 108, Bivalvia 12
Bryozoa. 10, 26, 47, 51, 60, 84, 86, 91-92, 95
Echinodermata. Crinoidea 5, Asteroidea 1, 5-6, 10A, 15-16, Ophiuroidea 1, 5, 10, 12-14, Echinoidea 2
Ascidiacea. Enterogona 1, 2, 16, Pleurogona 5, 9, 14, 15, 19.

REMARKS: This station was at Portsea Pier, the piles, and the surrounding sand.

AREA 59 (25)

Depth. 2.5 fm
Substrate. Sand
Phanerogam. 1
Coelenterata. Actinaria 7, 12
Crustacea. Isopoda 26, Brachyura 7
Mollusca. Gastropoda 22, 32, 34, 38, 62, 89, 98, Bivalvia 11A
Echinodermata. Asteroidea 1, Holothuroidea 6.

AREA 59 (36)

Depth. 2-6 fm
Substrate. Sand and artificial reef
Algae. Chlorophyta 10, 15, 17, 19-21, Phaeophyta 28-29, 31, 41, 46-50, 56, 57A, 61, 73, Rhodophyta 78-79, 82, 87, 93-96, 101, 106, 127-128, 136, 138, 168
Coelenterata. Hydrozoa 1, 8, 10, 23-24, 26, 30-32, Actinaria 13, Octocorallia 1, 5-9, Scleractinia 34
Annelida. Polychaeta 17, 20, 23, 25-26, 31, 44, 48, 51
Crustacea. Isopoda 6, 16, 26, Brachyura 4, 7, 10, 17, 19-21

Mollusca. Amphineura 10, 20, Gastropoda 1, 3-5, 10, 13, 21-22, 34, 37, 59, 60, 67, 71-72, 74, 76, 82, 89, 96-97, 101, 105-107, 110, Opisthobranchia 13, Bivalvia 10, 15, 20, 37, 41

Bryozoa. 1, 4, 8, 11-12, 14, 16-17, 19, 21-23, 26, 28-29, 30, 33, 36-40, 44-45, 52-54, 56-59, 63, 67, 76, 80, 83-85, 91, 95-96, 98-100, 102, 104-106, 111-113

Echinodermata. Crinoidea 1, 4-5, Asteroidea 3, 14-15, Ophiuroidea 1-2, 4-5, 10, Echinoidea 1, 4

Ascidiacea. Enterogona 5-6, 9, Pleurogona 5, 14-15, 19.

REMARKS: This station is the artificial reef of the Popes Eye Annulus and its surround.

AREA 59 (79)

Depth. 2 fm

Substrate. Sand

Algae. Chlorophyta 8, 15, 20-21, Phaeophyta 42, 44, 46, 51, 57A, 59, 65, 69, 71, Rhodophyta 82, 85, 94, 96, 107-108, 112, 140, 149, 159, 169

Coelenterata. Hydrozoa 8, 17, 24, Actinaria 2

Annelida. Polychaeta 23

Crustacea. Isopoda 10, Brachyura 12

Mollusca. Gastropoda 1, 77, 82, Bivalvia 9

Bryozoa. 12, 98

Echinodermata. Asteroidea 1, Ophiuroidea 10

Ascidiacea. Enterogona 15.

REMARKS: This station is the Quarantine Jetty, Point Nepean.

AREA 59 (87)

Depth. 7.5 fm

Substrate. Sand

Algae. Phaeophyta 42, 68, Rhodophyta 99, 102, 117, 125, 128, 161

Coelenterata. Hydrozoa 9, 11, 17-18

Annelida. Polychaeta 51

Crustacea. Isopoda 12, Brachyura 12

Bryozoa. 7, 56, 81, 101, 108

Echinodermata. Ophiuroidea 10.

AREA 59 (213)

Depth. 8 fm

Substrate. Dune limestone with only 2.5 cm of sand and a large area of bare rock

Algae. Phaeophyta 57A

Porifera. Abundant sponges

Annelida. Polychaeta 47

Mollusca. Gastropoda 32, 38, 71, 82, Opisthobranchia *Rostangia arbuta* in sponge, Bivalvia 9, 11A-12

Echinodermata. Holothuroidea 9

Ascidiacea. Pleurogona 15?

REMARKS: The large number of sponges were the habitat for numerous amphipods and isopods.

AREA 59 (214)

Depth. 6 fm

Substrate. Sand

Phanerogams. 1, 4

Algae. Chlorophyta 8? Rhodophyta 75, 108, 116, 159

Annelida. 1

Crustacea. Isopoda 15, 17, Brachyura 11, 25

Mollusca. Bivalvia 10, Cephalopoda 2

Echinodermata. Ophiuroidea 5, 10, Holothuroidea 2.

AREA 59 (224)

Depth. 9 fm

Substrate. Sand

Algae. Phaeophyta 73, Rhodophyta 94, 158, 159, 161

Crustacea. Brachyura 7, 11, 16

Mollusca. Bivalvia 10.

REMARKS: A comparatively barren station.

AREA 59 (225)

Depth. 8.75 fm

Substrate. Sand with pebbles

Algae. Chlorophyta 8, 19, Phaeophyta 57A

Bryozoa. 3, 64, 99.

AREA 59 (226)

Depth. 8 fm

Substrate. Sand

Phanerogam. 1

Algae. Chlorophyta 19, Phaeophyta 42, 48, 57A, 60, 73, Rhodophyta 80, 88, 94, 102, 137, 142, 158

Mollusca. Bivalvia 10.

AREA 59 (227)

Depth. 8 fm

Substrate. Coarse sand

Crustacea. Brachyura 14.

REMARKS: The ripple-marked and scoured sand was barren except for the crab.

AREA 59 (234)

Depth. 8 fm
 Substrate. Sand
 Phanerogam. 1
 Algae. Chlorophyta 8, 16, Phaeophyta 28, 31,
 Rhodophyta 85, 126, 145-146
 Echinodermata. Ophiuroidea 10.

AREA 60 (85)

Depth. 6 fm
 Substrate. Sand
 Algae. Chlorophyta 1, 19, Phaeophyta 61, Rhodophyta 91, 94, 129, 146, 155, 158, 162
 Crustacea. Brachyura 17
 Mollusca. Bivalvia 11A.

AREA 60 (86)

Depth. 11 fm
 Substrate. Completely barren scouring sand.

AREA 60 (215)

Depth. 6 fm
 Substrate. Almost barren sand with rock fragments
 Bryozoa. 5

AREA 60 (235)

Depth. 8 fm
 Substrate. Sand
 Phanerogam. 1
 Algae. Rhodophyta 91, 120
 Crustacea. Brachyura 7, 11
 Mollusca. Bivalvia 9 (dead)
 Ascidiacea. Pleurogona 6, 21.

AREA 60 (268)

Depth. 1.5 fm
 Substrate. Sand with shell
 Phanerogam. 1
 Algae. Phaeophyta 25-27
 Coelenterata. Hydrozoa 3
 Mollusca. Bivalvia 10
 Bryozoa. 17.

REMARKS: On sandbank W. of Mud Island.

AREA 60 (269)

Depth. 1.5 fm
 Substrate. Fine shell sand
 Algae. Rhodophyta 140.

AREA 61 (37)

Depth. 4 fm
 Substrate. Sand and artificial rock platform
 Algae. Chlorophyta 22, Phaeophyta 51, 64,
 Rhodophyta 82, 169

Porifera. Various sponges
 Coelenterata. Hydrozoa 4, 6, Actinaria 12,
 Octocorallia 5-6
 Annelida. Polychaeta 7, 34
 Crustacea. Isopoda 6, 21, 23-24, 26, Brachyura
 19, 21
 Mollusca. Gastropoda 1, 12, 62 on 1, 65, 67-
 68, 95, 97-98, 110, Opisthobranchia 4, 10,
 Bivalvia 3, 9-10, 13, 23
 Echinodermata. Crinoidea 1, 6, Asteroidea 1,
 14, Ophiuroidea 4-5, Echinoidea 3, Holo-
 thuroidea 2-4
 Ascidiacea. Enterogona 7, 10, 19.

AREA 61 (239)

Depth. 4 fm
 Substrate. Sand
 Phanerogam. 1
 Annelida. Polychaeta 1, 44
 Crustacea. Brachyura 7, 13, 21
 Mollusca. Amphineura 11, Gastropoda 1, Bi-
 valvia 9
 Bryozoa. 47, 65, 94
 Echinodermata. Ophiuroidea 10
 Ascidiacea. Pleurogona 19.

REMARKS: This station like (37) is located on S. Channel Fort.

AREA 61 (240)

Depth. 2 fm
 Substrate. A bare sand floor
 Mollusca. Gastropoda 96, Bivalvia 1, 19.

AREA 61 (241)

Depth. 7.5 fm
 Substrate. Silty sand
 Annelida. Polychaeta 36, 53?
 Crustacea. Isopoda 17, Brachyura 8
 Mollusca. Bivalvia 43
 Bryozoa. 7
 Echinodermata. Crinoidea 3, Ophiuroidea 7,
 Holothuroidea 9.

AREA 61 (242)

Depth. 11 fm
 Substrate. Silty sand
 Algae. Chlorophyta 12
 Annelida. Polychaeta 21, 37, 45
 Crustacea. Isopoda 17, Brachyura 7, 13
 Mollusca. Bivalvia 9, 11A, 13
 Bryozoa. 5, 19
 Ascidiacea. Enterogona 17?, Pleurogona 15.

AREA 62 (96)

Depth. 6 fm
 Substrate. Sand
 Crustacea. Isopoda 12, Brachyura 7-8, 21-22
 Mollusca. Gastropoda 15, 36, 80, 96, 106,
 Bivalvia 9, 11A, 13
 Bryozoa. 93
 Echinodermata. Ophiuroidea 5-6, 15.

AREA 62 (98)

Depth. 6 fm
 Substrate. Sand
 Mollusca. Bivalvia 11A.

AREA 62 (99)

Depth. 6 fm
 Substrate. Coarse sand and shell
 Porifera. Branching sponge
 Coelenterata. Hydrozoa 22
 Mollusca. Gastropoda 15, Bivalvia 11A
 Echinodermata. Asteroidea 1
 Ascidiacea. Pleurogona 18.

AREA 62 (243)

Depth. 11 fm
 Substrate. Silty sand
 Algae. Phaeophyta 51?
 Annelida. Polychaeta 53?
 Crustacea. Brachyura 7, 13
 Mollusca. Bivalvia 9, 11A, 13, 21
 Ascidiacea. Enterogona 17, Pleurogona 15,

AREA 62 (244)

Depth. 9.5 fm
 Substrate. Silty sand grading to clay
 Annelida. Polychaeta 36, 53
 Crustacea. Brachyura 8, 13
 Mollusca. Gastropoda 80
 Echinodermata. Ophiuroidea 7, Echinoidea 4,
 Holothuroidea 8-9.

AREA 63 (16)

Depth. 4 fm
 Substrate. Sand
 Algae. Rhodophyta 139
 Coelenterata. Hydrozoa 6
 Annelida. Polychaeta 1
 Crustacea. Isopoda 1
 Mollusca. Gastropoda 80, 96, Bivalvia 9
 Ascidiacea. Pleurogona 15.

AREA 63 (17)

Depth. 3.5 fm
 Substrate. Sand
 Chlorophyta. 1
 Algae. Phaeophyta 31, Rhodophyta 139, 155,
 159
 Crustacea. Cirripedia 1
 Mollusca. Gastropoda 80, 96, Bivalvia 9
 Ascidiacea. Pleurogona 15, 17.

AREA 63 (18)

Depth. 3 fm
 Substrate. Sand
 Algae. Chlorophyta 8, Phaeophyta 31, Rhodophyta 139, 155, 159
 Annelida. Polychaeta 56?
 Crustacea. Isopoda 11-12
 Mollusca. Gastropoda 80, 96, Bivalvia 9
 Echinodermata. Holothuroidea 1.

AREA 63 (19)

Depth. 2.5 fm
 Substrate. Sand
 Algae. Phaeophyta 31, Rhodophyta 139, 155,
 159
 Annelida. Polychaeta 1, 15
 Mollusca. Gastropoda 80, 96, Bivalvia 9, 13
 Ascidiacea. Pleurogona 18?

AREA 63 (20)

Depth. 2.5 fm
 Substrate. Sand
 Algae. Phaeophyta 63, Rhodophyta 139
 Annelida. Polychaeta 1, 20
 Crustacea. Brachyura 13, 22
 Mollusca. Gastropoda 80, 96.

AREA 63 (21)

Depth. 2.5 fm
 Substrate. Sand
 Algae. Phaeophyta 31, 73, Rhodophyta 139,
 155, 159
 Annelida. Polychaeta 1, 44
 Crustacea. Brachyura 8, 16
 Mollusca. Bivalvia 9, 13
 Ascidiacea. Pleurogona 17?

REMARKS: Stations 17-21 on the N. shore of Safety Bay are a series of close inshore stations, together giving a picture of the community inhabiting the locality.

AREA 63 (159)

Depth. 10 fm
 Substrate. Clay
 Annelida. Polychaeta 53?
 Crustacea. Brachyura 13, 26 in *Mytilus planu-*
latus
 Mollusca. Bivalvia 9, 11A, 13
 Echinodermata. Asteroidea 2, Echinoidea 4,
 Holothuroidea 2
 Ascidiacea. Pleurogona 10, 17 attached to
Pecten alba

REMARKS: This station is on the edge of the clay and has a mingling of the silty sand and clay faunas.

AREA 63 (160)

Depth. 5 fm
 Substrate. Sand-clay-silt
 Crustacea. Brachyura 13?, 26 on *Mytilus planu-*
latus
 Mollusca. Bivalvia 9, 13
 Echinodermata. Asteroidea 14
 Ascidiacea. Pleurogona 15, 17.

AREA 63 (161)

Depth. 4 fm
 Substrate. Coarse sand
 Annelida. Polychaeta 1
 Crustacea. Brachyura 26
 Mollusca. Bivalvia 9, 13
 Echinodermata. Asteroidea 14
 Ascidiacea. Pleurogona 15, 17.

AREA 63 (162)

Depth. 2 fm
 Substrate. Sand
 Annelida. Polychaeta 1
 Crustacea. Brachyura 8, 26
 Mollusca. Bivalvia 9, 13
 Ascidiacea. Pleurogona 15, 17.

AREA 63 (245)

Depth. 9 fm
 Substrate. Silty sand
 Annelida. Polychaeta 21
 Crustacea. Brachyura 13, 25
 Mollusca. Bivalvia 11A, 13
 Ascidiacea. Enterogona 17, Pleurogona 13, 15.

REMARKS: A scallop ground.

AREA 63 (246)

Depth. 8.5 fm
 Substrate. Sand

Substrate. Silty sand grading to clay
 Annelida. Polychaeta 36, 53?
 Mollusca. Bivalvia 11A, 13, 15
 Echinodermata. Ophiuroidea 7, Echinoidea 4,
 Holothuroidea 8-9
 Ascidiacea. Pleurogona 15.

AREA 63 (247)

Depth. 7 fm
 Substrate. Fine sand
 Mollusca. Bivalvia 11A, 13
 Ascidiacea. Pleurogona 15.

AREA 63 (248)

Depth. 4.5 fm
 Substrate. Coarse sand
 Annelida. Echiuroidea 3?
 Mollusca. Bivalvia 11A
 Ascidiacea. Pleurogona 15.

AREA 63 (249)

Depth. 4.5 fm
 Substrate. Sand
 Algae. Rhodophyta 122, 156
 Porifera. Several sponges
 Annelida. Echiuroidea 3?
 Mollusca. Bivalvia 11A
 Ascidiacea. Pleurogona 17.

AREA 64 (163)

Depth. 2 fm
 Substrate. Reef and sand
 Algae. Phaeophyta
 Annelida. Polychaeta 44, 53
 Crustacea. Brachyura 7
 Mollusca. Amphineura 12, Gastropoda 1, 19,
 34, 77, 80, 93, Bivalvia 1, 3, 9, 13, 24, 31-32
 Echinodermata. Asteroidea 16
 Ascidiacea. Enterogona 17, Pleurogona 15, 17.

REMARKS: This station and the following 164 are on the granite reefs at the base of Martha Cliff.

AREA 64 (164)

Depth. 1.5 fm
 Substrate. Reef and sand
 Algae. Phaeophyta 51?, 61
 Porifera. Sponges abundant
 Coelenterata. Scleractinia 1?
 Annelida. Polychaeta 25
 Crustacea. Brachyura 22

Mollusca. Gastropoda 2, 8-9, 37, 65, 77-78, 98, Opisthobranchia 4, Bivalvia 3, 9, 12-13, 20, 31, 41, Cephalopoda 9, 11
Echinodermata. Asteroidea 1, 14, Ophiuroidea 5, Echinoidea 2, Holothuroidea 1, 6.

AREA 66 (291)

Depth. 10 fm
Substrate. Sand
Phanerogams. 1, 4
Algae. Chlorophyta 10, Phaeophyta 57, Rhodophyta 76, 79, 81-82, 94, 98, 100, 108, 123, 128, 130, 146A, 165
Crustacea. Isopoda 4, 6, 18
Bryozoa. 8-9, 31, 45, 53, 56, 70-71, 96
Ascidiacea. Enterogona 9, Pleurogona 19.

AREA 66 (292)

Depth. 10 fm
Substrate. Sand and dune limestone reef
Algae. Phaeophyta 51
Coelenterata. Hydrozoa 28, 31
Annelida. Polychaeta 8, 23, 50, 55
Crustacea. Isopoda 6, 18, Brachyura 19-20
Mollusca. Amphineura 10, 20, Gastropoda 6, 24, 73, 103
Bryozoa. 9, 53, 56, 70-71, 75, 96
Echinodermata. Asteroidea 3-4, 8, 12-13, Ophiuroidea 10
Ascidiacea. Enterogona 9, Pleurogona 19.

REMARKS: The reefs on this open coast have abundant sponges which harbour several species, including the small brittle star.

AREA 67 (216)

Depth. 4 fm
Substrate. Sand
Phanerogam. 1?
Algae. Chlorophyta 16?
Porifera. A few sponges
Annelida. Polychaeta 1, 35
Crustacea. Brachyura 7, 11, 25
Mollusca. Bivalvia 9-10, 13, 23
Echinodermata. Ophiuroidea 5
Ascidiacea. Enterogona 7, 17, Pleurogona 6, 15, 19.

AREA 67 (217)

Depth. 3.5 fm
Substrate. Fine sand with shell
Phanerogam. 1?

Annelida. Polychaeta 15, 25, 47, 51, 53
Crustacea. Brachyura 7
Mollusca. Bivalvia 11A
Ascidiacea. Pleurogona 17.

AREA 68 (155)

Depth. 5.5 fm
Substrate. Sand
Phanerogam. 1
Porifera. Two red branching sponges
Annelida. Polychaeta 20
Crustacea. Isopoda 12, Brachyura 4, 7-8, 21, 25
Mollusca. Gastropoda 25, 32, 34, 56, 88, Bivalvia 13, 26
Echinodermata. Asteroidea 1, Holothuroidea 1.

AREA 68 (156)

Depth. 7.5 fm
Substrate. Sand
Porifera. Several sponges
Annelida. Polychaeta 44?
Mollusca. Bivalvia 10, 11A, Cephalopoda 3
Echinodermata. Asteroidea 1
Ascidiacea. Pleurogona 13?

AREA 68 (157)

Depth. 6 fm
Substrate. Sand
Porifera. Some sponges
Crustacea. Brachyura 4
Mollusca. Gastropoda 98, 104, Bivalvia 9-10, Asteroidea 1
Echinodermata. Holothuroidea 1.

AREA 68 (158)

Depth. 8 fm
Substrate. Fine sand
Annelida. Polychaeta 53
Crustacea. Isopoda 11-12, 17, Brachyura 13
Mollusca. Gastropoda 96, Bivalvia 13, 15.

AREA 68 (218)

Depth. 5 fm
Substrate. Sand with shell
Algae. Rhodophyta 122
Porifera. Some sponges
Coelenterata. Hydrozoa 6, 28
Echinodermata. Asteroidea 1.

AREA 68 (219)

Depth. 6.75 fm
Substrate. Fine sand
Porifera. Some sponges

Coelenterata. Hydrozoa 6, 28
 Mollusca. Gastropoda 98, Bivalvia 11A
 Echinodermata. Echinoidea 4?, Holothuroidea
 1?

AREA 68 (220)

Depth. 7.5 fm
 Substrate. Fine sand with many dead shells
 Crustacea. Brachyura 3, 13-14
 Echinodermata. Ophiuroidea 9, Echinoidea 4,
 Holothuroidea 1.

AREA 69 (97)

Depth. 6.5 fm
 Substrate. Sand
 Annelida. Polychaeta 1, 14
 Mollusca. Gastropoda 15, Bivalvia 11A, 13, 21.

AREA 69 (100)

Depth. 3 fm
 Substrate. Sand
 Porifera. Brown sponges abundant
 Crustacea. Brachyura 14, 22
 Mollusca. Bivalvia 11A
 Aseidiacea. Pleurogona 15?, 17.

AREA 69 (221)

Depth. 4 fm
 Substrate. Sand
 Coelenterata. Hydrozoa 31, 31A, Octocorallia
 1
 Annelida. Polychaeta 30
 Crustacea. Isopoda 17, Brachyura 7, 14, 21,
 25
 Mollusca. Gastropoda 63 on *Fulvia*, Bivalvia
 11A, 15
 Bryozoa. 65, 87
 Echinodermata. Asteroidea 2, Echinoidea 2
 Aseidiacea. Enterogona 3.

AREA 69 (222)

Depth. 5 fm
 Substrate. Sand
 Porifera. Some sponges
 Coelenterata. Hydrozoa 3, 31, 31A
 Annelida. Polychaeta 5, 9, 24, 26
 Crustacea. Isopoda 17, Brachyura 21-22
 Mollusca. Bivalvia 10, 11A, 15
 Echinodermata. Asteroidea 2
 Aseidiacea. Pleurogona 15.

Discussion

Biological Communities

Port Phillip is a broad shallow bay with a narrow opening to the ocean on the S. extremity. This opening, between the low dune limestone cliffs of Point Lonsdale and Point Nepean, is only 2 miles (3.2 km) wide with a dredged depth on the limestone bar of 50 ft (15 m). Each side of the bar the depth increases rapidly, and a scour hole has a depth of approximately 280 feet (Keble 1946). Spot diving and dredging in the entrance channel indicates that the bottom is barren sand, probably due to the scour by the strong currents and daily rip tides. This in contrast with the rich flora and fauna of the underwater limestone platforms that run out from the bases of the two points for about 0.5 mile (0.8 km) both within and outside the heads at depths of 2-3 fm.

Port Phillip is a drowned river system (Keble 1946, Bowler 1966) and the contours of the former valley are reproduced in the bathymetric contours, but the overall impression is of an irregular saucer with gently sloping sides and a flat central area of 13 fm. The slopes are more gentle towards the N. so that the deepest area is slightly S. of the central E-W. line, and there is a long shallow W. extension to form Corio Bay.

The biological communities fall into two parts governed by substrate. The major portion of the bay has sediments ranging from gravels to elays and comprising approximately 90 per cent of the area. The other 10 per cent consists of reefs, usually in shallow water, of a variety of rock types. These reefs are the seaward extensions of the rock forming the adjacent shoreline.

The fauna associated with these two substrate types can be divided into two sections (Petersen 1913): 1. The infauna comprising all animals living on and in the sedimentary sea floor, and 2. The epifauna animals living upon a firm surface of rock, shell or vegetation. A third group (not considered to any extent) is the pelagic animals which are of course intimately related and often dependent upon the benthic community.

The limited facilities both of manpower and equipment made it impossible to make quantitative collections, and the abundance of species has been based on the reports of the divers and the processing of the collected material. The author is fully aware of the limitations of this method, but hopes that observations and deductions are accurate enough to give a picture of the ecological communities present and their approximate limits, so as to form a foundation for further detailed work.

As the sediments comprise the greater proportion of the bay, it is proposed to deal with them first. The communities are governed by depth, substrate and degree of shelter, or perhaps more correctly the degree of flushing afforded by the daily tidal movement. Thus they appear to zone the sides of the saucer in a series of parallel bands almost comparable with the intertidal zones of a rock platform.

The central basin situated within the 10 fm line has a substrate of fine sediments which are silty clays in the N. half and in Corio Bay, while the S. sector has a clay substrate. The community is an echinoderm-annelid one, the dominant echinoderms being *Echinocardium cordatum*, *Amphiura elandiformis*, *Trochodota allani* and *Leptosynapta dolabrifera*. In the N. silty clays the dominant annelid is *Chaetopterus variopedatus*, but in the S. clays *Myxicola infundibulum*, *Ostraea angasi* and *Pecten alba* also occur spasmodically, the latter a migrant from the silty sand and sand. The silty sand substrate forms a narrow band surrounding these clay sediments except in the SW. where there is a sharp division between the clay and sand at the 10 fm line.

The silty sand band is wide in the NW. sector and it also extends into Corio Bay. The dominant animals are *Amphrites rubra*, *Pecten alba*, *Stichopus mollis* and *Pyura praeputialis*, with the following species often present—*Ostraea angasi*, *Tosia magnifica* and *Pentacta australis*. In the NW. there are extensive *Mytilus planulatus* beds, and associated with them an orange branching sponge and the bryozoan *Amalithia tortuosa*.

From the shore to approximately 6 fm the substrate is sand of varying grain size, except for Swan Bay, and the W. and N. shores of

Corio Bay where the clays and silty clays extend to the shoreline. The fauna of this substrate is not uniform, but different communities occur with the changing grain size and position in relation to the Heads, which area is comparatively barren. The sand of Areas 24 and 36 has a sparse fauna consisting mostly of the bivalves *Mytilus planulatus*, *Ostrea angasi*, *Chioneryx candioides* and *Phacosoma coerulea*, the ascidian *Pyura praeputialis*, the crab *Notomithrax minor*, as well a large *Bonellia* sp. which it was impossible to collect complete. It was found in large numbers at some stations, and although the divers made repeated efforts to collect whole specimens, they never succeeded in obtaining more than the long cream and chocolate proboscis.

On the NW. shore, including Areas 5, 9-10 and portions of 6, 7, 11, 16-19 inclusive, and on portions of 28-29, 40 on the S. shore of Corio Bay, as well as Areas 48, 55 between Frankston and Mornington, there are extensive beds of the green alga *Caulerpa brownii* and *C. remotifolia*. The dominant species of the epifauna associated with the *Caulerpa* is the bivalve *Electroma georgiana*, but it is also found in association with *Zostera* and other algae which afford it a suitable attachment. The fauna of the *Caulerpa* beds is large and varied as can be seen from the station lists.

Zostera beds occur on sand in Capell Sound and on the E. shores of the Bellarine Peninsula as well as on the silty and clayey sands of Swan Bay and Corio Bay. These beds are often fringed on their seaward side by *Cymodocea antarctica* and *Halophila ovalis*, which line the deeper channels. The *Zostera* provides shelter and a stable substrate for a large number of animals that are not adapted to the greater movement of the pure sand. Associated with the *Zostera* are a number of animals including *Amphitrites rubra*, *Carcinus maenus* and *Katelysia rhytiphora*.

The very well sheltered Swan Bay has a fauna typical of such conditions, of which the Tellinid bivalve *Homalina* is indicative. In the bay the mollusc is the closely allied species *Macoma deltoidalis*, and the associated fauna includes the annelids *Hormothoe spinosa*,

Curiformia tentaculata, *Chaetopterus vario-pedalis* and *Amphitrites rubra*, as well as the crabs *Philyra laevis* and *Litochiera bispinosa*.

The substrates which occur in Corio Bay indicate faunas similar to those within 7-13 fm in the main bay. However, the shallower water (5 fm maximum) produces a larger and more varied population. In the deep water with a clay substrate *Echinocardium cordatum* and *Leptosynapta dolabrifera* occur, but the ophiuroid is *Amphiura constricta*. On the N. shore, which has substrates of clayey sand (Area 26) and silty sand (Area 27), the bivalve *Anadara trapezia* occurs from the sub-littoral to 5 fm. Associated with it is a comparatively rich fauna—Areas 26 (126), 27 (41).

Reefs are formed by outcrops of the main rock types occurring round the bay, and are as follows:

1. The dune limestone of the Heads region. These platforms are very rich in both species and numbers of specimens of flora and fauna. Being S. of the Nepean Bay bar, they have the benefit of the daily flushing by the tide. Bracebridge Wilson collected this region and made extensive collections of all the major groups of algae and animals. This was repeated by the present survey as shown by stations Area 58 (150-4) and many of those of Area 59.

The Popes Eye Annulus Area 59 (36) is included here although it is a man-made structure of basalt blocks.

2. The Oligocene basalt (Gill 1961) of the NW. shore from Corio Bay to Williamstown dips under the bay floor and outcrops as comparatively soft reefs. These carry a typical rich reef population and an infauna of burrowing annelids and molluscs such as *Pholas australasiae*. At Area 25 (129) the basalt is overlain by a thin layer of clayey sand through which the *Pholas* projects its siphons to the surface.

Other stations on this type of reef are Area 6 (137), 13 (93-94), 27 (41, 139) and 28 (141).

3. Tertiary ironstone of the Miocene clays and sandstones of the N. and E. shores. On these ironstone reefs the star coral *Plesiastrea urvillei* occurs in some cases almost to the exclusion of other species. It is recorded as a dominant species at Area 3 (203), 5 (56), 14 (4-5), 55 (148), and 58 (90).

4. The granites of Martha Point extend seawards and form off-shore reefs—Areas 63 (163) and 64 (164).

The flora and fauna, though very large and varied, are typical of similar temperate regions, and can be paralleled by populations in both the N. and S. hemisphere. In spite of over a century of intensive habitation of its shores by man, the greater part of the bay had been little altered at the time of this survey. Hobson Bay has definitely suffered as shown by the molluscs and bryozoans recorded previously and on the present survey (Macpherson 1966, Vigeland 1971).

The greatest single change that the bay has suffered in recent years has been the intensive scallop fishing of the early 1960s. The extent of the alteration has not yet been fully assessed, but some spot dredging by the author has shown that the *Caulerpa* community has been spread to the W. of its previous limits. This is probably due to the dredges moving the skeletal material of the W. sands on to the silty sand and so providing a firm substrate.

References

- GILL, E. D., 1961. Eustasy and the Yarra Delta. *Proc. R. Soc. Vict.* 74: 125-133.
- KEBLE, R. A., 1944. The sunklands of Port Phillip and Bass Strait. *Mem. natn. Mus. Vict.* 14: 69-122.
- KNOX, G. A., 1969. *The natural history of Canterbury*. Melbourne. 620 pp.
- MORTON, J., and MILLER, M., 1968. *The New Zealand seashore*. Auckland. 638 pp.
- PETERSEN, C. G. J., 1913. Valuation of the sea 2. *Rep. Danish biol. Stat.* 21: 1-44.
- THORSON, G., 1957. Bottom communities. *Treatise on marine ecology and paleoecology* (Geo. Soc. Amer. Mem. 67) 1 Ecology, pp. 461-534.
- All other references are to this *Memoir* or the previous one (No. 27) on this Survey.