

COELENTERATA: HYDROIDA

Phylum **COELENTERATA**

Class **HYDROZOA**

Order HYDROIDA

For convenience hydroids and medusae are listed separately. The new arrangement for hydroids presented here brings the classification of British hydroids into line with that of medusae in Russell, 1953. It will be noted that the Trichydridae is transferred from the Leptomedusae to the Anthomedusae.

Sub-Order ANTHOMEDUSAE (ATHECATA in part)

Family **Hydriidae**

PROTHOHYDRA LEUCKARTI Greef [*Fowler*, 1900, p. 49]

Bere Ferrers, shallow pools of brackish water, River Tavy, 15.6.12 (R.J.B.): Chelson Meadow, brackish streams in mud, spring and summer, common (M.V.L.)

Family **Corymorphidae**

CORYMORPHA NUTANS M. Sars [*Allman*, 1871, p. 388] (Medusa, *Steenstrupia nutans*)

The hydroid generation only taken very occasionally, although its medusa is common (E.J.A.): off Fort Tregantle, 5 specimens in about 3 fm., May 1887 (W.H.): 3 specimens, May 1895 (E.J.A.): sought unsuccessfully, 1889-90 (G.C.B.): 2 specimens on patch of sand in East Channel, May 1895 (E.J.A.): Queen's Ground, single specimen, June 1904 (s.p.): Cawsand Bay, single specimen, June 1904 (S.P.): Whitsand Bay 4½-6 fm., inner fishing ground (east end), grab, about 4 specimens, gonophores very few if any, 7.6.22, brought in by E.F. (A.J.S.)

Attached medusae in May.

EUPHYSA AURATA Forbes [*Rees*, 1938, p. 25 as Corymorpha] (Medusa, *E. aurata*)

Single polyp on hapteron of *Laminaria cloustoni* from the east end of the Breakwater, 9.7.36; few young polyps obtained with a mud-tangle in Jennycliff Bay, 27.9.37 (W.J.R.)

BOREOHYDRA SIMPLEX Westblad, 1953a, p. 351

Hamoaze at a depth of about 16 metres, 26.7.1949 (Westblad, *loc. cit.*)

Family **Tubulariidae**

TUBULARIA INDIVISA L. [*Allman*, 1871, p. 400]

Rocks under Hoe (E.J.A.): Drake's Island, in low tide rock pools (G.C.B.): Millbay Channel and Pit, moderately common (W.G., E.J.A., R.A.T., S.P.): Asia Shoal (E.J.A., R.A.T.): Mount Edgcumbe (E.J.A.): Duke Rock (R.A.T.): Eddystone Rock (E.J.A.)

Breeding: Feb.-April (W.G., R.A.T.): May (R.A.T.)

TUBULARIA CROCEA (L. Agassiz) [*Allman*, 1871, p. 416]

On the stern of a sailing ship from S. America anchored in Plymouth, Sept. 1895; on bottom of M.B.A. sailing boat, Oct. 1907; on a mooring buoy off Promenade Pier, with gonophores, Oct. 1907 (E.T.B.)

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TUBULARIA LARYNX Ellis and Solander [*Allman*, 1871, p. 406]

Growing profusely on the Duke Rock Buoy, and on other buoys in the East Channel, 1889 (G.C.B.): Millbay Channel (W.G., R.A.T.): not taken in 1895 (E.J.A.)

Breeding: April-May (W.G., R.A.T.): Dec. (S.P.)

ECTOPLEURA DUMORTIERI (Van Beneden). [*Allman*, 1871, p. 424] (Medusa, *E. dumortieri*)

4½ m. S. of Rame Head, dredge, 27.9.04; one specimen attached to an old Halecium stem; medusae liberated in a bell jar (E.T.B.)

HYBOCODON PROLIFER L. Agassiz [*Allman*, 1871, p. 422] (Medusa, *H. prolifer*)

Colonies with medusa buds, embedded in the sponge *Desmacidon fruticosum* dredged off E. of Mewstone Buoy, March 1914 (E.T.B.): 4 or 5 polyps without gonophores on *Desmacidon fruticosum*, Rame bearing E. about 8 m., Otter trawl, 10/11.6.14: one polyp on *Desmacidon fruticosum*, Looe-Eddystone, Agassiz trawl, 21.8.14, not breeding (A.J.S.): occasionally in *Desmacidon* dredged off Stoke Point (W.J.R.)

Breeding: March (E.T.B.): April (W.J.R.)

## Family Corynidae

CORYNE PUSILLA Gaertner [*Hincks*, 1868, p. 41, as *C. vaginata*; *Allman*, 1871, p. 268; as *C. vaginata*]

Under Hoe, fairly abundant (E.J.A.): common in tide pools; Rum Bay; Cawsand Bay (R.A.T., W.J.R.): Drake's Island (G.C.B., T.V.H.): inside Bovisand Pier (W.G.): Bovisand Bay (G.C.B.): Wembury Bay (G.C.B., E.J.A.): tide Pool (W.J.R.)

SALCOMBE. Colonies on algae in a tide Pool (W.J.R.)

Breeding: April (R.A.T., W.J.R.): May-Aug. (G.C.B.): probably this species extruding eggs (which segmented) forming blastostyles below laboratory, 15.5.24 (J.H.O.)

SARSIA LOVENI (M. Sars) [*Hincks*, 1868, p. 53, as *Syncoryne gravata*]

Rocks under Hoe, occasionally; Mount Edgcumbe (W.G., R.A.T.): Drake's Island; Devil's Point; Garden Battery (E.J.A.)

With attached medusae: March (W.G., R.A.T.): April (E.J.A.)

SARSIA EXIMIA (Allman, 1871, p. 282, as *Syncoryne*) (Medusa, *S. eximia*)

Single colony on piece of rope, 1 m. S of Mewstone, May 1889 (G.C.B.): Penlee Point, Sept. 1897; a great mass on a fisherman's cork and rope, found floating off the Mewstone; colonies with medusa-buds, Oct. 1906; hydroid attached to a cork and a piece of rope, Mewstone E. ½ N. 2½ m., surface, medusa-buds present, 4.10.06 (E.T.B.)

STAURIDIOSARSIA PRODUCTA (Wright) [*Allman*, 1871, p. 371, as *Stauridium*]

A small colony in a laboratory tank, June 1899 (E.T.B.)

## STAUROCORYNE FILIFORMIS Rees, 1936b, p. 135

Original colony reared from a stolon on dead *Eunicella verrucosa* from Mewstone Ledge, 9.3.36 (W.J.R.): small colony on a shell of *Chlamys opercularis*, dredged from New Grounds, 16.3.37 (W.J.R.)

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DIPURENA HALTERATA (Forbes) [Rees, 1939, p. 343] (Medusa, *D. halterata*)

On a sponge attached to *Lepralia foliacea* dredged off the Mewstone, 3.5.38 (W.J.R.)

Breeding: May (W.J.R.)

Family **Zanclidae**ZANCLEA COSTATA Gegenbaur [Russell and Rees, 1936, p. 107, as *Z. implexa*] (Medusa, *Z. costata*)

Single colony on an encrusting Polyzoan dredged from rocky ground between Penlee Point and Rame Head, Aug. 1899 (E.T.B.): on Eunicella, Eddystone Grounds, 3.2.36 (F.S.R.): on *Cellepora avicularis* dredged off Stoke Point, 17.3.36 (F.S.R., W.J.R.): common, encrusting Polyzoa on Eunicella from Mewstone Ledge, March-Oct. 1936 (W.J.R.)

Breeding: March-Sept. (W.J.R.): Aug. (E.T.B.)

Family **Myriotheleidae**MYRIOTHELE COCKSI (Vigurs) [Hincks, 1868, p. 77, as *M. phrygia*]

Common, under stones, at low tide (G.C.B.): Drake's Island (G.C.B., R.A.T., S.P.): Millbay Channel (E.J.A., A.J.S., T.V.H., R.A.T., S.P.): shore below Laboratory; Mount Edgcumbe (E.J.A.): Rame Head (T.V.H.): Asia Shoal, Reny Rocks (R.A.T.): Picklecombe, Bovisand Bay, Mewstone (G.C.B.): Rum Bay (A.J.S.): Wembury Bay (G.C.B., T.V.H., A.J.S., R.A.T.)

Gonophores ripe: The Bridge, Drake's Island, 1. 11.09, ripe gonophores and actinulae abundant (A.J.S.): Jan., March, April (R.A.T.): May-Aug. (G.C.B.): Sept. 1937 (J.E.F.)

SALCOMBE. Castle Rocks, Salcombe Estuary, low tide, 12.4.29 (G.M.S.)

Family **Clavidae**

## CLAVA MULTICORNIS (Forskål) [Allman, 1871, p. 246]

Common in tide pools, under Hoe (G.C.B., W.G.): common Wembury Bay, and inside Penlee (G.C.B.): Millbrook (T.V.H.): Cargreen on wood and stones (E.P.): Drake's Island, on a *Gibbula* shell (W.J.R.)

Bearing gonophores: Feb. (R.A.T.): March-April (W.G.): Aug. (W.J.R.): Nov. (T.V.H.)

## CLAVA SQUAMATA (O. F. Müller) [Allman, 1871, p. 243]

Fairly common between tide-marks; under Hoe; Drake's Island; Rum Bay; etc. (E.J.A., R.A.T.): Jennycliff Bay (A.J.S.): Barn Pool (E.T.B.): St. Germans River, abundant on *Fucus* (W.G.): River Tamar, on *Fucus*, etc., common; dredged (E.P.)

SALCOMBE. On *Fucus* and in tide pools, 14.4.37 (W.J.R.)

Breeding: Feb.-May (W.G.): Sept. (E.T.B.)

## MERONA CORNUCOPIAE (Norman) [Rees, 1956b, p. 499]

Not uncommon on shells of *Aporrhais*, *Dentalium* and *Turritella*, tenanted by *Phascolion strombi* (R.A.T., S.P.): Mewstone Grounds, (W.G. R.A.T., S.P.): Stoke Point Grounds (R.A.T., S.P.): on the fine sand S. of Eddystone (C.E.J.A.): Rame-Eddystone Grounds (R.A.T., S.P.): on *Dentalium entalis* at three positions, 8-17 m. S.W. of Eddystone, on *Pectunculus*

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(=Glycymeris) at 2 positions, 29-30 m. S.W. of Eddystone, 40-3 fm. (Crawshay, 1912, p. 323)  
Breeding: May (W.G., R.A.T.): June (W.G.)

TUBICLAVA LUCERNA Allman, 1871, p. 256

Millbay Channel, on stones (E.J.A.): on a stone Millbay Channel, Oct. 1907 (E.T.B.)

CORDYLOPHORA LACUSTRIS Allman, 1871, p. 252

River Tamar, Calstock viaduct and Ashburton Corner on wooden belting, pieces of rock, below half tide-mark; very abundant, down to within ½ mile of Halton Quay; observed above Calstock; always in brackish water (E.P.)

Breeding: July (E.P.)

Family **Hydractinidae**

HYDRACTINIA ECHINATA (Fleming) [Allman, 1871, p. 345]

Moderately common, on Buccinum and other shells inhabited by *Eupagurus bernhardus* (R.A.T., S.P.): occasionally taken on living Buccinum (R.A.T.): Cattewater (R.A.T., S.P.): Asia Shoal, Jennycliff Bay (R.A.T.): Cawsand Bay (G.C.B., R.A.T., S.P.): Yealm River (T.V.H., R.A.T.): Eddystone Grounds (E.J.A., S.P.): Mewstone Grounds, Rame-Eddystone Grounds (R.A.T., S.P.): one colony on a young *Colus (Fusus) islandicus* 31 m. S.W. of Eddystone, 43 fm. (Crawshay, 1912, p. 323)

Breeding: Aug. (W.G.): Sept. (W.J.R.): Nov. (S.P.)

PODOCORYNE CARNEA M. Sars [Allman, 1871, p. 349] (Medusa, *P. carnea*)

Occasionally on old shells, 10-20 fm. (G.C.B.): Cawsand Bay, small colonies common on living *Nassarius reticulatus* (R.A.T.): on a shell, of *Nassarius reticulatus* inhabited by *Eupagurus bernhardus* Duke Rock, dredged, medusae liberated, 21.8.06 (E.R.S.)

Breeding: May (E.T.B.): Sept. (W.J.R., E.R.S.)

Family **Trichyridae**

TRICHYDRA PUDICA (Wright) [Hincks, 1868, p. 216] (Medusa, ?*Lizzia blondina* Forbes)

Eddystone Grounds, fine gravel (E.T.B. and E.J.A.): Eddystone Buoy (E.T.B.): occasionally on clinkers from the Cattewater, Feb.-April (W.J.R.)

Family **Bougainvillidae**

BOUGAINVILLIA RAMOSA (Van Beneden) [Allman, 1871, p.311] (Medusa, *B. ramosa*)

Drake's Island, at low tide (G.C.B., R.A.T.): Millbay Pit; Millbay Dock, on piles; Asia Shoal (R.A.T.): Cawsand Bay, on old tin can (E.T.B.): Eddystone Grounds, practically confined to the fine sand ground, where it is frequently met with, generally on polychaete tubes or on other hydroids (E.J.A.): West Channel, 29.6.06 (W.B.): Duke Rock, 5 fm.; on stones and Laminaria holdfasts under Laboratory, 20.8.06 (E.R.S.): colony on a worm tube dredged 4½ miles S. of Rame Head, 27.9.04 (E.T.B.)

Medusae: April (W.F.R.W.): May (E.J.A.): Sept. (E.T.B.)

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## DICORYNE CONYBEAREI [Allman, 1871, p. 307, as Heterocordyle]

Abundant in the Sound on living *Nassarius reticulatus* (E.T.B., R.A.T.): Drake's Island, on *Nassarius* (T.V.H., W.J.R.): Cawsand Bay on *Nassarius* (R.A.T., S.P.): Eddystone Grounds, with *Eupagurus* (E.J.A.): near the East Rutts, on *Buccinum* shells containing *Eupagurus bernhardus* (E.T.B.)

With gonophores: Aug., Oct. (E.T.B.)

## GARVEIA NUTANS Wright [Allman, 1871, p. 295]

Rocks under Hoe (E.J.A., T.V.H., R.A.T.): on piles on the Promenade Pier, occasionally (R.A.T.): Millbay Channel and Pit (W.G., E.J.A., T.V.H., R.A.T.): Asia Shoal (R.A.T.)

Bearing gonophores: Feb.-April (R.A.T.)

## BIMERIA VESTITA Wright [Hincks, 1868, p. 103]

SALCOMBE. Dredged on other zoophytes, not uncommon (Hincks, 1868, p. 104)

Family **Pandeidae**AMPHINEMA DINEMA Péron and Lesueur [Allman, 1871, p. 327, as *Perigonimus serpens*] (Medusa, *A. dinema*)

Very small colonies often found on Scalpellum and Eunicella from Mewstone Ledge, March to Sept. (W.J.R.): on a piece of Eunicella, Eddystone Grounds, 3.2.36 (F.S.R., W.J.R.): older records in 1931 Fauna List are possibly this or the next species (W.J.R.)

AMPHINEMA RUGOSUM (Mayer) [Rees and Russell, 1937, p. 67] (Medusa, *A. rugosum*)

Fine colony with medusa-buds on a piece of floating cork off Drake's Island, 25.5.37 (W.J.R.)

LEUCKARTIARA OCTONA (Fleming) [Rees, 1938, p. 12] (Medusa, *L. octona*)

Drake's Island, on living *Nassarius reticulatus* (T.V.H., W.J.R.): Cawsand Bay, on *Nassarius*; Cattewater, large colony on abdomen of *Carcinus* (R.A.T.): on the skin of *Agonus cataphractus*, Feb. 1910 (A.J.S., W.J.R.): Mewstone Echinoderm Ground inside *Buccinum* shell (E.T.B., R.A.T.): Rame-Eddystone Grounds, on *Turritella* shells and opercula (G.C.B., W.J.R.), common on Scaphander shells, occasionally on claws and carapace of *Corystes* (W.J.R.): Eddystone Grounds, on claws of *Eupagurus bernhardus* (E.J.A.): rocks beyond Yacht Club on *Laminaria haptera*; a little on *Laminaria haptera* from rock pool below Laboratory, 17.8.06 (E.R.S.)

Breeding: Jan.-March (W.J.R.): April (R.A.T.)

Family **Eudendriidae**

## EUDENDRIUM ALBUM Nutting, 1898, p. 362

One of the most abundant hydroids at Plymouth during the spring; on stones from Millbay Channel often covering the stones with a dense growth of white cottony tufts (C.C.N.): Millbay Channel (E.J.A., T.V.H., A.J.S., R.A.T., S.P.): Asia Shoal, Duke Rock (R.A.T.)

Bearing gonophores: Jan., Feb. (A.J.S.): March (T.V.H.): April (C.C.N.): May (R.A.T.)

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EUDENDRIUM CAPILLARE Alder [*Allman*, 1871, p. 335]

Off Stoke Point on worm tubes and on *Nemertesia antennina* (G.C.B.): Eddystone Grounds (E.J.A.): small colonies at 9 positions 7-48 m. S.W. of Eddystone, 40-51 fm. (Crawshay, 1912, p. 324): Mewstone Ledge on Eunicella, 4.3.37 (W.J.R.)

Breeding: March (W.J.R.)

EUDENDRIUM RAMEUM (Pallas) [*Hincks*, 1868, p. 80]

Eddystone, 30 fm., not common (G.C.B.)

EUDENDRIUM RAMOSUM (L.) [*Allman*, 1871, p. 332]

Not uncommon in dredgings from the Sound (R.A.T.): Reny Rocks, at low tide (T.V.H.): off the Mewstone, very common (G.C.B.): Rame-Eddystone Grounds (R.A.T.): Eddystone Grounds, generally growing on shells or on the hydroids, most frequent on sandy grounds (E.J.A.): several small colonies 18 m. and four at 34 m. S.W. of Eddystone, 42-49 fm. (Crawshay, 1912, p. 324)

Breeding: Feb. (W.G.): March (W.G., R.A.T., A.J.S.): April, May, Nov. (R.A.T.): Eddystone S. by W. 1 m. Rame Head. N. by E. Otter trawl, 10.9.06 breeding (A.J.S.)

## Sub-Order LEPTOMEDUSAE (=THECATA)

Family **Laodiceidae**LAODICEA UNDULATA (Forbes and Goodsir) [*Russell*, 1936, p. 581; *Cuspidella costata* Hincks is probably this species]

Occasionally on stems of *Halecium* from fishing grounds (W.J.R.): on *Scalpellum* from Mewstone Ledge (W.J.R.)

Breeding: May (W.J.R.)

*Cuspidella costata* has been reported from:-Inner Eddystone trawling grounds (E.J.A.): growing on weed, trawl refuse (G.C.B.): at 4 positions 7-39m. S.W. of Eddystone, 40-49 fm., or over (Crawshay, 1912, p. 326)

Family **Mitrocomidae**COSMETIRA PILOSELLA Forbes [*Rees*, 1941, p. 55; *Cuspidella grandis* Hincks, 1868, p. 210, is probably this species]

Colony on a broken teacup dredged from Eddystone Grounds, 25.3.36 (W.J.R.)

*Cuspidella grandis* on stems of *Halecium tenellum* (C.C.N.)

Family **Campanulariidae**CAMPANULARIA VOLUBILIS (L.) [*Hincks*, 1868, p. 160]

Duke Rock on shells (G.C.B.): N. of Breakwater, 5½ fm., plentiful (W.H.)

CAMPANULARIA VERTICILLATA (L.) [*Hincks*, 1868, p. 167]

Mewstone Grounds; Eddystone Grounds, occasionally on the fine sand areas (E.J.A.): one colony, 8 m. S.W. of Eddystone, 40 fm. on *Cellaria* (Crawshay, 1912)

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CAMPANULARIA HINCKSI Alder [*Hincks*, 1868, p. 162]

Common in 10-30 fm. on shells, hydroids, Cellaria, etc.; Rame-Eddystone Grounds; Mewstone Grounds (R.A.T.); Eddystone Grounds (E.J.A.): at several positions 7-48 m. S.W. of Eddystone, 40-51 fm., on hydroids, Cellaria, dead shells and one Scalpellum; a single colony with gonangia (Crawshay, 1912, p. 325)

ORTHOPYXIS CALICULATA (Hincks, 1868, p. 164) (Medusa, *Agastra mira*)

On red seaweed, near Rame Head, 19.10.06 (E.T.B.)

CLYTIA JOHNSTONI (Alder) [*Hincks*, 1868, p. 143] (Medusa, *Phialidium hemisphaericum*)

Ubiquitous on algae and on other hydroids (G.C.B.): on *Delesseria sanguinea* New Grounds, March 1937 (W.J.R.): occasionally on *Maia squinado* from trawling grounds (W.J.R.): L.W. to 35 fm. (R.A.T., S.P.): 20 m. S.W. of Eddystone, 42 fm. on *Inachus dorsettensis* (Crawshay, 1912, p. 325): on Eunicella from Mewstone Ledge, 22.3.37 (W.J.R.)

Breeding: March (R.A.T., W.J.R.): April (A.J.S.): May (W.J.R.): July (E.T.B.): Aug.-Oct. (W.J.R.)

CLYTIA JOHNSTONI var. GRACILIS (Sars) [*Hincks*, 1868, p. 183 as *Gonothyraea gracilis*]

At 7 positions 20-46 m. S.W. of Eddystone, 42-50 fm., on Cellaria; gonothecae on those from 3 positions (Crawshay, 1912, p. 325): several small colonies on Eunicella from Mewstone Ledge, March 1937 (W.J.R.)

Breeding: March (W.J.R.)

OBELIA DICHOTOMA (L.) [*Hincks*, 1868, p. 156]

Rame Head (W.H.): Rame-Eddystone Grounds on *Nemertesia antennina* and *Sertularella gayi* (R.A.T.): Whitsand Bay, on worm-tubes (G.C.B.): Eddystone Grounds, on the fine sand area, growing on *Chlamys opercularis* shells, Hydrallmania, Bougainvillia, *Sertularia argentea* and Cellaria (E.J.A.): rock at low tide under Rame Church, 19.9.06, ripe gonads which gave off thousands of medusae the same evening (A.J.S.): Queen's Grounds (5 fm.) on *Nemertesia antennina*; Millbay Channel (14-23 fm.) a very small quantity on a piece of Alcyonidium, 7.8.06; Duke Rock (5 fm.) two colonies with ripe gonophores, 16.8.06; a single colony in shrimp trawl off North side of Drake's Island (3 fm.), 24.8.06 (E.R.S.)

OBELIA GENICULATA (L.) [*Hincks*, 1868, p. 149]

Very common, generally on Laminaria (G.C.B., W.H., R.A.T., S.P.): Millbay Dock, on the piles (R.A.T.): up to Cargreen Hard, River Tamar; shore above Ince Castle, June-Oct. 1928, hand and dredge; less common than *O. gelatinosa* (E.P.)

SALCOMBE. Dredged in Salcombe Harbour; a small colony growing on *Gibbula magus* shell (Allen and Todd, 1900, p. 185)

Bearing gonophores: March-Sept. (W.G.)

OBELIA LONGISSIMA (Pallas) [*Hincks*, 1868, p. 154]

From trawl refuse from outside Eddystone (G.C.B.): S. of Eddystone (E.J.A.): a single colony dredged near Drake's Island Buoy, 5 fm., 17.8.06 (E.R.S.)

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GONOTHYRAEA LOVENI (Allman) [*Hincks*, 1868, p. 181]

Millbay Channel; Hamoaze (E.J.A.): Millbay Dock, on piles; on hulks in Cattewater; between tide-marks Turnchapel, Rum Bay, and Yealm River; Asia Shoal (R.A.T.): Mount Edgcumbe, at low tide (C.C.N., E.J.A.): Barn Pool on *Fucus*; Saltash Pier (E.T.B.): beach above Ince Castle on *Fucus vesiculosus*; edge of mud bank above Saltash Bridge near wall, River Tamar, 1.8.28, 19.9.28 (E.P.): on *Mytilus* dredged in Cattewater, 30.1.36 (W.J.R.)

Sometimes grows in great profusion in the Laboratory tanks (E.J.A.)

Breeding: Jan.-Feb. (W.J.R.): March (R.A.T.): April (W.G., R.A.T.): Sept. (E.T.B.): Oct. (W.G., E.T.B.): Nov. (W.G.)

LAOMEDEA ANGULATA (Hincks, 1868, p. 170, as *Campanularia*)

Colony with gonophores, on floating *Zostera* 3 m. S.S.W. of Mewstone, June, 1898 (E.T.B.): Bovisand Bay, at low tide (G.C.B.): Jennycliff Bay (3-5 fm.) on *Zostera marina*, shrimp trawl, 16.8.06; on a stone in a rock pool under the Laboratory, 20.8.06; Cawsand Bay (5 fm.) on *Zostera marina* in shrimp trawl, 22.8.06 (E.R.S.): on *Balanus improvisus*, St. Germans Bridge, 14.9.36 (W.J.R.)

LAOMEDEA NEGLECTA Alder [*Hincks*, 1868, p. 171, as *Campanularia*]

On stems of *Tubularia indivisa*, Millbay (C.C.N.)

LAOMEDEA GELATINOSA (Pallas) [*Hincks*, 1868, p. 151, as *Obelia*]

Lynher River, large colonies up to 13 inches, in deep water under Sheviock Wood, July 1898 (E.W.L.H., W.I.B., E.T.B.): Bovisand Bay (T.V.H.): River Tamar, widely distributed on hard substratum up to North Hove; River Lynher, up to mud-flats above St. Germans Bridge, June-Oct. 1928; hand and dredge (E.P.)

LAOMEDEA FLEXUOSA Hincks [*Hincks*, 1868, p. 168, as *Campanularia*]

Very common on weeds and in rock-pools below the Hoe (G.C.B.): common on the shore between tide-marks; on hulks and buoys in Sound and Cattewater; Phoenix Wharf, and Millbay Dock, on piles; Millbay Pit (R.A.T.): Mount Edgcumbe (E.J.A.): Saltash Pier, very abundant, Oct. 1897 (E.T.B.): at 12 positions 20-48 m. S.W. of Eddystone, 40-51 fm., chiefly on *Cellaria*, also on other hydroids and one on a shell fragment (Crawshay, 1912, p. 325)

Family **Lovenellidae**LOVENELLA CLAUSA Lovén [*Hincks*, 1868, p. 177] (Medusa, *L. clausa*)

Occasionally on shells of *Turritella communis* from Rame-Eddystone Grounds (W.J.R.)

Breeding: March (F.S.R., W.J.R.)

CALYCELLA SYRINGA (L.) [*Hincks*, 1868, p. 2061]

Abundant on holdfasts of *Laminaria* (G.C.B.): abundant on young stems of *Tubularia indivisa* (C.C.N.): Penlee Point; Rame Head (G.C.B.): Saltash Pier, on *Sertularia* (E.T.B.): on *Lafoea dumosa* and *Halecium beani* dredged from Duke Rock (5 fm.), 16.8.06 (E.R.S.)



## COELENTERATA: HYDROIDA

STEGOPOMA FASTIGIATA (Alder) [*Hincks*, 1868, p. 208]

Eddystone Grounds (E.J.A.): at 2 positions, 17.29 m. S.W. of Eddystone, 43-44 fm., on *Porella* and *Cellaria* (Crawshay, 1912, p. 326)

Family **Phialellidae**PHIALELLA QUADRATA (Forbes) [*Hincks*, 1868, p. 189 as *Campanulina repens*] (Medusa, *Phialella quadrata*)

Winter Shoal, abundant on *Delesseria*; between Penlee Point and Rame Head, on algae and stems of *Tubularia*; Mewstone Grounds, many colonies on a piece of rope (E.T.B.)

Gonophores: July (E.T.B.)

OPERCULARELLA LACERATA (Johnston) [*Hincks*, 1868, p. 194]

Millbay Dock, on young stems of *Tubularia indivisa* and on *Eudendrium* (C.C.N.): at 10 positions 7-46 m. S.W. of Eddystone, 40-9 fm. or over, on hydroids and *Cellaria*, one specimen with gonangium (Crawshay, 1912, p. 326): colonies with gonophores, on *Obelia longissima* from bottom of coal hulk, Cattewater, April 1899; on *Sertularia* dredged from rocky ground, outside Breakwater, Nov. 1913 (E.T.B.): small colonies on *Alcyonidium* and bryozoa, dredged from Millbay Channel (14-23 fm.), 13.8.06 (E.R.S.): common on *Mytilus* dredged in the Cattewater (W.J.R.)

Breeding: Jan.-Feb. (W.J.R.): April (E.T.B.)

## OPERCULARELLA HISPIDA Nutting, 1898, p. 363

The type specimen from Plymouth, on a stone associated with *Clava multicornis* (C.C.N.)

Family **Aequoridae**AEQUOREA PARACUMINATA (Rees) [*Rees*, 1938, p. 33, as *Campanulina paracuminata*; this is possibly the hydroid of *Aequorea forskalea* Péron and Lesueur]

On a piece of clinker dredged in the Cattewater, 14.2.36 (W.J.R.)

Family **Lafoeidae**LAFOEA DUMOSA (Fleming) [*Hincks*, 1868, p. 200] (Gonosome, *Coppinia arcta*)

Common in 15-35 fm., on shells, worm tubes, other hydroids, etc. (R.A.T., S.P.): Eddystone Grounds, both the creeping and branched varieties, the latter especially upon the fine sand area, where it is attached to shells on polychaete tubes (E.J.A.): 48 m. S.W. of Eddystone, 40-52 fm. (Crawshay, 1912, p. 326): small colonies on tests of ascidians from Mewstone Area (W.J.R.)

Eddystone Grounds, abundant on the fine sand grounds (E.J.A.): Mewstone Grounds (A.J.S.): Rame-Eddystone Grounds; Mewstone Ledge, very occasionally (R.A.T., W.J.R.)

The neomenian *Nematonemia banyulensis* is frequently associated with the erect form of *L. dumosa* (E.J.A., S.P.): Duke Rock (5 fm.), 16.8.06 (E.R.S.)

LAFOEA FRUTICOSA (M. Sars) [*Hincks*, 1868, p. 202]

Not uncommon, 15-30 fm. (R.A.T., S.P.): Rame-Eddystone Grounds (E.T.B. and R.A.T., S.P.): Eddystone Grounds (E.J.A.): Stoke Point Grounds (G.C.B., S.P.): at 11 stations, 8-46 m. S.W. of Eddystone, 40-50 fm., mostly very small colonies (Crawshay, 1912, p. 326)

Family **Haleciidae**HALECIUM BEANI (Johnston) [*Hincks*, 1868, p. 224]

Not uncommon in Sound, on stones and shells, and outside in 15-30 fm., on shells, other hydroids, and on Chaetopterus tubes; not so abundant as *H. halecinum* (R.A.T., S.P.): Eddystone Grounds (E.J.A.)

SALCOMBE. Dredged between Salstone and Snape's Point (Allen and Todd 1900, p. 185)

Breeding: with gonophores: Jan. (W.G.): March, April (R.A.T.): May S.P.): July (W.G.): Oct. (R.A.T.): Duke Rock, 29.8.06, dredged, branches with male and female capsules (A.B., L.R.C.): 3 small colonies, one large with gonangia, 7-28 m. S.W. of Eddystone, 40-55 fm. (Crawshay, 1912, p. 326)

HALECIUM HALECINUM (L.) [*Hincks*, 1868, p. 221]

Not uncommon in Sound on stones and shells; common outside 15-30 fm., on Chaetopterus tubes, stones and shells (R.A.T., s.p.): Eddystone Grounds, abundant on certain grounds, and generally on Chaetopterus tubes (E.J.A., S.P.): Rame-Eddystone Grounds, Mewstone Grounds (R.A.T., S.P.): Stoke Point Grounds; Looe-Eddystone Grounds (S.P.): at several positions 8-34 m. S.W. of Eddystone, 40-49 fm. (Crawshay, 1912, p. 326)

Breeding: Jan. (W.G.): Feb.-June (R.A.T.): July (W.G.): Dec. (W.J.R.)

HALECIUM LABROSUM Alder [*Hincks*, 1868, p. 225]

Eddystone Grounds (E.T.B.): one small colony, 17 m. S.W. of Eddystone, 42 fm. (Crawshay, 1912, p. 327)

## HALECIUM LANKESTERI Bourne, 1890, p. 395, as Haloikema

Duke Rock, on flat stones (G.C.B., E.T.B.): S. end of Jennycliff Bay G.C.B., W.G.)

HALECIUM TENELLUM Hincks [*Hincks*, 1868, p. 226]

Plymouth 18 fm. (C.C.N.): off Stoke Point, Nov. 1913 (E.T.B.). at 4 positions, 30-48 m. S.W. of Eddystone, 47-51 fm. on Nemertesia, Cellaria, etc. (Crawshay, 1912, p. 327)

Breeding: April (C.C.N.)

HYDRANTHEA MARGARICA (Hincks) [*Hincks*, 1868, p. 100]

Colonies with gonophores, on broken whelk shells; dredged off Stoke Point, 23.10.13; on a stone dredged off Stoke Point, 24.2.14 (E.T.B.): on a broken china cup, Eddystone Grounds, 25.6.36 (W.J.R.)

Family **Sertulariidae**DIPHASIA ALATA Hincks [*Hincks*, 1868, p. 258]

Mewstone Ledge, dredged, 16.6.08, with gonophores (A.J.S.): one well

## COELENTRATA: HYROIDA

grown colony, 48 m. S.W. of Eddystone, 51 fm. (Crawshay, 1912, p. 328): Looe-Eddystone Grounds, 7 m. E. of Rame Head, 27 fm., one colony, 1913 (E.T.B.)

DIPHASIA ATTENUATA (Hincks) [*Hincks*, 1868, p. 247]

On the fine sand of the outer trawling grounds (E.J.A.): a little from Queen's Grounds (5 fm.), 7.8.06; a little from Asia Shoal, 23.8.06 (E.R.S.): from 10 positions 20-48 m. S.W. of Eddystone, 43-51 fm., chiefly on *Cellaria*, occasionally on other hydroids, once on a *Pallasia* tube, once with a few male gonangia, once with numerous female gonangia (Crawshay, 1912, p. 328)

DIPHASIA PINASTER (Ellis and Solander) [*Hincks*, 1868, p. 252]

Very common in trawl refuse, S. of Eddystone (G.C.B.): at 11 positions, 8-48 m. S.W. of Eddystone, 40-51 fm. (Crawshay, 1912, p. 328)

DIPHASIA PINNATA (Pallas) [*Hincks*, 1868, p. 255]

5 m. S. of Eddystone (G.C.B.): one or two specimens each from 7 positions 20-48 m. S.W. of Eddystone, 43-51 fm. or over, female gonangia on three (Crawshay, 1912, p. 328)

Breeding: April (W.G.): gonophores in May (G.C.B.)

DIPHASIA ROSACEA (L.) [*Hincks*, 1868, p. 245]

Millbay Channel, common on stones (W.G.): Millbay Dock, on the piles (W.G., R.A.T.): 2 m. S. of the Mewstone, small colony on piece of rope (E.T.B.): Eddystone Grounds, occasionally met with (E.J.A.)

Breeding: March (W.G., R.A.T.): April (W.G.)

DIPHASIA TAMARISCA (L.) [*Hincks*, 1868, p. 254]

Eddystone Grounds (E.J.A.)

DYNAMENA PUMILA (L.) [*Hincks*, 1868, p. 260, as *Sertularia*]

Abundant on rocks and weeds, especially *Fucus*, between tide-marks (G.C.B., R.A.T., S.P.): buoy near Breakwater (R.A.T.): on *Fucus vesiculosus*, etc., to Neille Point, River Tamar; to beach above Ince Castle, River Lynher; June-Oct. 1928 (E.P.)

SALCOMBE. Common on *Fucus* near low water (W.J.R.)

SERTULARELLA GAYI (Lamouroux) [*Hincks*, 1868, p. 237]

Not uncommon in Sound (R.A.T., S.P.): Eddystone Grounds, one of the most characteristic features of the fauna of the fine sand grounds (E.J.A., S.P.): Rame-Eddystone Grounds, Mewstone Grounds (R.A.T., S.P.): Stoke Point Grounds; Looe-Eddystone Grounds (S.P.): frequent S.W. of Eddystone, 40-51 fm. (Crawshay, 1912, p. 327)

SALCOMBE. Dredged in the "Bag" off Snape's Point, a clean shell-gravel ground (Allen and Todd, 1900, p. 185)

SERTULARELLA POLYZONIAS (L.) [*Hincks*, 1868, p. 235]

Occasionally in Sound (R.A.T., S.P.): Eddystone Grounds, with S.P.); but much less common (E.J.A., S.P.): Mewstone Grounds; Rame-Eddystone Grounds (R.A.T., S.P.): Stoke Point Grounds (S.P.): small colonies at 3 positions S.W. of Eddystone, 42-50 fm. (Crawshay, 1912, p. 327)

## COELENTERATA: HYDROIDA

SALCOMBE. A few pieces only dredged in the channel between Salstone and the mouth of Salcombe Harbour (Allen and Todd, 1900, p. 185)  
Breeding: Aug. (S.P.): Sept. (R.A.T.)

SERTULARELLA RUGOSA Gray [*Hincks*, 1868, p. 241]

Sound, growing on *Abietinaria abietina*; off Mewstone, July 1905 (G.E.B.)

ABIETINARIA ABIETINA (L.) [*Hincks*, 1868, p. 266, as Sertularia]

Common in trawl refuse (G.C.B.): abundant in depths below 30 fm. on the outer trawling grounds (E.J.A.): Millbay Channel, occasionally (R.A.T., S.P.): at 14 positions, 21-48 m. S.W. of Eddystone, on dead Pecten shells, 42-52 fm. or over (Crawshay, 1912, p. 329)

HYDRALLMANIA FALCATA (L.) [*Hincks*, 1868, p. 273]

Not uncommon in Sound, 15-30 fm., on stony ground, and on sand with stones and shells; always attached to stones or shells (R.A.T.): abundant in Hamoaze (E.J.A.): Millbay Pit; Duke Rock; Mewstone Grounds; Cawsand Bay; Rame-Eddystone Grounds (R.A.T., W.J.R.): Eddystone Grounds, occasional specimens (E.J.A.): generally distributed 8-48 m. S.W. of Eddystone, 40-51 fm., commonly attached to shells of Pecten, once on Porella, very commonly good-sized colonies on stones (Crawshay, 1912, p. 329): Rame-Eddystone, otter trawl, 16.12.13, many colonies with ripe gonophores (A.J.S.)

Breeding: Jan. (W.G.): Feb.-April (R.A.T.): Dec. (A.J.S.)

SERTULARIA CUPRESSINA (L.) [*Hincks*, 1868, p. 270, including *S. argentea* which, p. 268, is now regarded as a distinct species by *Hancock*, *Drinnan* and *Harris*, 1956, p. 307. It is not possible to separate the old records given below]

Common in trawl refuse from Eddystone (G.C.B.): Queen's Ground; Asia Shoal; Millbay Channel and Pit (R.A.T., S.P.): Eddystone Grounds, not infrequent on *Chlamys opercularis* shells, and on other hydroids (E.J.A.): Yealm River (R.A.T.): Stoke Point Grounds (R.A.T., S.P.): Saltash Pier (E.T.B.): at 10 positions 8-48 m. S.W. of Eddystone, on shells of *Chlamys opercularis*, *P. maximus*, *Lutraria*, *Modiolus*, etc., mostly small or young colonies, 40-51 fm. (Crawshay, 1912, p. 329)

SALCOMBE. Common in dredgings from the Channel West of the Salstone to the mouth of Salcombe Harbour (Allen and Todd, 1900, p. 185)

Gonophores ripe: March (R.A.T.)

SERTULARIA OPERCULATA (L.) [*Hincks*, 1868, p. 263]

Wembury Bay; Eddystone Rock, abundant April 1898; Eddystone Buoy (E.T.B.)

THUJARIA ARTICULATA (Pallas) [*Hincks*, 1868, p. 277]

Wembury Bay, stones and shells off Mewstone (G.C.B.): Mewstone Ledge (R.A.T.): a fragment 17 m. S.W. of Eddystone, 42 fm. (Crawshay, 1912, p. 329): Mewstone Ledge, Oct. 1913 (E.T.B.)

## COELENTERATA: HYDROIDA

## Family Plumulariidae

KIRCHENPAUERIA PINNATA (L.) (= *P. echinulata* Lam. = *P. similis* Hincks) [Hincks, 1868, p. 295, as Plumularia]

By far the most abundant PlumulariaN at Plymouth (C.C.N.): Millbay Channel (E.J.A., R.A.T., S.P.): Millbay Dock, on piles; Asia Shoal; Rum Bay occasionally (R.A.T.): common; Duke Rock; Barn Pool; off Mewstone (G.C.B.): Rame-Eddystone Grounds (E.T.B. and R.A.T., S.P.): Eddystone Grounds, generally distributed, particularly on the gravel W. of Eddystone, where it is usually attached to Chaetopterus tubes or to other hydroids (E.J.A.): Yealm River (E.J.A., R.A.T.): (also as *P. similis* common; rocks below Laboratory; Jennycliff Bay (G.C.B.): under Hoe; Bovisand Bay; Yealm River (T.V.H.): Church Reef, Wembury Bay, very occasionally; Millbay Channel, occasional specimens (R.A.T.): large quantities in rock pools beyond yacht club, with gonophores; large quantities with gonophores in rock pools under Laboratory; a little with gonophores from rock pools, Rum Bay, 20/22.8.06 (E.R.S.): small colonies at 8 positions 17-18 m. S.W. of Eddystone, 40-53 fm., on a tube of Pallasia, on *Chlamys opercularis* and on Porella, on *Abietinaria (Sertularia) abietina*, on Macropodia, Diphasia, Pisa, Cellaria, etc. gonangia on 3 (Crawshay, 1912, p. 330)

ANTENNELLA SECUNDARIA (Gmelin) [Hincks, 1868, p. 301, as *P. catherina* "stemless variety"]

Eddystone Grounds, on the gravels, on Chaetopterus tubes (as Hincks' "green variety") (E.J.A.): at 9 positions 7-48 m. S.W. of Eddystone, 40-51 fm., bearing gonangia at 3 positions (Crawshay, 1912, p. 330)

MONOTHECA OBLIQUA (Johnston) [Hincks, 1868, p. 304, as Plumularia]

Duke Rock, on red seaweed, dredge, 29.10.06; on stones, Mewstone Ledge, Nov. 1907; outside Breakwater, Nov. 1913; Duke Rock, Feb. 1914 (E.T.B.): on Laminaria, 7.4.23 (E.R.G.)

PLUMULARIA ALLENI Nutting, 1898, p. 364

Growing on *Nemertesia ramosa* (C.C.N.)  
Bearing gonophores: April or May (C.C.N.)

PLUMULARIA SETACEA (Ellis and Solander) [Hincks, 1868, p. 296]

Common in Sound; Hincks' branched variety is very common, generally on *Halichondria panicea* (G.C.B.): Millbay Channel and Pit, not uncommon; Millbay Dock, on piles; Tinside, occasionally; Asia Shoal, occasionally; Rame-Eddystone Grounds, on Chaetopterus tubes (R.A.T.): Eddystone Grounds, generally on other hydroids or on polychaete tubes (E.J.A.): at 4 positions 8-46 m. S.W. of Eddystone, 40-50 fm., one with gonangium (Crawshay, 1912, p. 331): on Mytilus, Millbay Dock, 1.1.36 (W.J.R.): on *Nemertesia ramosa* from Eddystone Grounds, 14.1.36 (W.J.R.)

SALCOMBE. Abundant, growing on Ascidiella from the Channel W. of the Salstone; several colonies dredged between Salstone and Snape's Point, and one or two small ones from Salcombe Harbour (Allen and Todd, 1900, p. 185)

Breeding: Jan. (W.J.R.): Feb.-June (W.G.)

PLUMULARIA HALECIOIDES Alder [*Hincks*, 1868, p. 306]

Parasitic on *P. setacea* and on *Nemertesia* (C.C.N.)

PLUMULARIA CATHARINA Johnston [*Hincks*, 1868, p. 299]

Not uncommon; Duke Rock; Winter Shoal; off Stoke Point (G.C.B.): Queen's Ground, occasionally (T.V.H., R.A.T., S.P.): Eddystone Grounds, the most abundant species on both the fine sand grounds, on other hydroids and on the gravels (E.J.A.): Rame-Eddystone Grounds, on Chaetopterus and Terebellid tubes, Cellaria, Nemertesia, *Ascidella scabra*, etc. (R.A.T.): a little, Millbay Channel, 17.8.06 (E.R.S.): at 15 positions, 8-48 m. S.W. of Eddystone, 40-51 fm., bearing gonophores at one position (Crawshay, 1912, p. 330): on ascidian, Asia Shoal, 1.1.36 (W.J.R.): common, Eddystone Grounds (W.J.R.)

With gonophores: March (W.J.R.): April-May (R.A.T.): Aug. (E.J.A.)

PLUMULARIA DIAPHANA (Heller) [*Heller*, 1868, p. 42, as *Anisocalyx diaphanus*]

A large quantity on a stone dredged from Asia Shoal, 3-5 fm., with gonophores, 20.8.26 (E.R.S.)

POLYPLUMULARIA FRUTESCENS (Ellis and Solander) [*Hincks*, 1868, p. 307]

Eddystone Grounds, single colony on shell, *Pecten maximus* (E.J.A.): Wembury Bay (G.C.B.): Stoke Point (S.P.): a fragment 30 m. S.W. of Eddystone, 43 fm., on Macropodia (Crawshay, 1912, p. 330)

Colonies with gonophores, Mewstone Ledge, Oct. 1913 (E.T.B.)

## POLYPLUMULARIA FLABELLATA G. O. Sars, 1873a, p. 101

One small colony 34 m. and one large colony 48 m. S.W. of Eddystone, 49-51 fm. (Crawshay, 1912, p. 331): Rame Head bearing N.N.E. 1 m. dredge, 21.4.14, 2 specimens without gonads (A.J.S.)

NEMERTESIA ANTENNINA (L.) [*Hincks*, 1868, p. 280, as Antennularia]

Not uncommon in Sound; common outside, 15-30 fm., especially on medium gravel and muddy sand (R.A.T., S.P.): Eddystone Grounds (E.J.A., S.P.): Cawsand Bay; Rame-Eddystone Grounds; Mewstone Grounds (R.A.T., S.P.): Stoke Point Grounds; Looe-Eddystone Grounds (S.P.): at 25 positions 7-48 m. S.W. of Eddystone, growing on shells and stones, at 2 positions, one colony bearing gonophores, 40-51 fm. (Crawshay, 1912, p. 329): new growths on old stock, Millbay Pit, 15.1.12, dredge, with *N. ramosa* (A.J.S.)

NEMERTESIA RAMOSA (Lamouroux) [*Hincks*, 1868, p. 282, as Antennularia]

With *N. antennina* but less abundant (E.J.A., R.A.T., S.P.): at 8 positions 8-40 m. S.W. of Eddystone, 40-50 fm., not numerous (Crawshay, 1912, p. 330): new growth of good small colonies with *N. antennina*, Millbay Pit, 15.1.12 (A.J.S.)

Breeding: April (R.A.T.): May (W.G., R.A.T., S.P.)

HALICORNARIA PENNATULA (Ellis and Solander) [*Hincks*, 1868, p. 292, as Aglaophenia]

Colony without gonophores, the Sound, Feb. 1914 (E.T.B.)

## COELENTERATA: HYDROMEDUSAE

THECOCARPUS MYRIOPHYLLUM (L.) [*Hincks*, 1868, p. 290, as *Aglaophenia*]

Moderately common, 15-30 fm., on fine sand and sand with gravel (R.A.T., S.P.): Eddystone Grounds (E.J.A., R.A.T., G.C.B., S.P.): Rame-Eddystone Grounds (R.A.T., S.P.): Stoke Point Grounds (S.P.): 2-4 miles S. of Mewstone, 6.9.06, gonothecae on four branches (A.B.): at 12 positions 17-40 m. S.W. of Eddystone, 40-50 fm., one colony with gonangia (Crawshay, 1912, p. 330)  
Breeding: April-June (R.A.T.): August (W.G.)

AGLAOPHENIA PLUMA (L.) [*Hincks*, 1868, p. 286]

Common on the fronds of *Halidrys siliquosa*; Bovisand Bay; off Mewstone (G.C.B.): Rame-Eddystone Grounds (R.A.T.): Yealm River (T.V.H., A.J.S.): Penlee-Rame Grounds; N. of Mewstone (E.J.A.): Millbay Channel; Queen's Ground, Wembury Bay; occasional specimens (E.J.A., R.A.T.): a little with *corbulae* from Asia Shoal, 23.8.06 (E.R.S.)  
Breeding: May (E.J.A., R.A.T.): Aug. (W.G.)

AGLAOPHENIA HELLERI Marktanner [*Nutting*, 1896, p. 153]

Eddystone Rock (C.C.N., E.T.B.)

AGLAOPHENIA TUBULIFERA (Hincks) [*Hincks*, 1868, p. 288]

Not uncommon, Aug.-Oct.; Wembury Bay; off the Mewstone (G.C.B.): Eddystone Grounds (E.J.A., E.T.B.): Rame-Eddystone Grounds; Mewstone Ledge (R.A.T.): Bovisand Bay (G.C.B.): 40 m. S.W. of Eddystone, several colonies on *Diphasia pinnata*, one with gonangia, 49 fm. (Crawshay, 1912, p. 330): off the Mewstone on Eunicea, 22.3.37 (W.J.R.)

## Sub-Order LIMNOMEDUSAE

## Family Proboscidae

PROBOSCIDA TYLA STELLATA Forbes [*Hincks*, 1872, p. 313, as *Lar sabellarum*]

Millbay Channel, on sabellid tubes (A.J.S.): on *Potamilla torelli* (E.T.B.): off Bigbury Bay, 25 fm., dredge, 27.9.06, many colonies on a cluster of worm tubes; medusa buds present (E.T.B.): on *Potamilla* tubes, Mewstone Ledge, dredge, 2.6.08, with medusae attached (A.J.S.): colony on *Sabella* tube, Mewstone Ledge, Oct. 1913 (E.T.B.): common on *Potamilla* tubes from Asia Shoal (W.J.R.)  
Breeding: Mar.-Nov. (W.J.R.): June (A.J.S.): Sept. (E.T.B.)

## Class HYDROZOA

## Order HYDROMEDUSAE\*

The information on seasonal distribution for the species credited to F.S.R. is from Russell, 1938a, in which a general account of the Plymouth medusa fauna is given.

## Sub-Order ANTHOMEDUSAE

## Family Corymorphidae

STEENSTRUPIA NUTANS (M. Sars) [*Russell*, 1953, p. 84] (Hydroid, *Corymorpha nutans*)

\*For convenience the Hydroid and Medusae are arranged separately (see p. 37).

## COELENTERATA: HYDROMEDUSAE

Abundant in spring and early summer (E.T.B.): April to June, common (M.V.L.): June-July, below 20 m. 1925, a few; April to July, most in April, abundant June, 1926, beyond Eddystone; offshore April to Sept., most abundant May, June (F.S.R.)

EUPHYSA AURATA Forbes [*Russell*, 1953, p. 90] (Hydroid, *E. aurata*)

Single specimen, 4 m. S. of Breakwater, Sept. 1897; April-June 1898, few specimens (E.T.B.)

Family **Tubulariidae**

ECTOPLEURA DUMORTIERI (Van Beneden) [*Russell*, 1953, p. 76] (Hydroid, *E. dumortieri*)

The Sound, single specimens of an early stage; 3.10.05 one; 26.10.06 one; 24.10.07 one (E.T.B.): offshore, occasional April, May, Sept., Oct., Nov. (F.S.R.)

HYBOCODON PROLIFER (L.) Agassiz [*Russell*, 1953, p. 79] (Hydroid, *H. prolifer*)

Not uncommon April 1898 (E.T.B.): few specimens with numerous buds, 1894 (W.G.): begins in March, common May, dwindles June (M.V.L.): Offshore, Feb. to June, most abundant May (F.S.R.)

*Incertae sedis*

EUCODONIUM BROWNEI Hartlaub [*Russell*, 1953, p. 93] (Hydroid, not known)

Two specimens from Plymouth, budding, Sept. 1895 (E.T.B.)

Family **Corynidae**

SARSIA EXIMIA Allman [*Russell*, 1953, p. 50] (Hydroid, *S. eximia*)

Plymouth, some specimens in July (W.G.): once in Sept. (M.V.L.): occasional offshore, April-July, Sept. (F.S.R.)

SARSIA PROLIFERA Forbes [*Russell*, 1953, p. 52] (Hydroid, not known)

Plymouth (W.G.): single specimen Aug. 1895; Whitsand Bay, about 100 specimens, May 1896, May 1898, few; July 1899, very abundant off Rame Head (E.T.B.) June-Oct., 1919, 1922, occasionally in Sound (M.V.L.): April-Nov., most abundant July and Nov. (F.S.R.)

SARSIA TUBULOSA (M. Sars) [*Russell*, 1953, p. 55] (Hydroid, *Syncoryne decipiens* Dujardin)

Plymouth, rare (W.G.): very abundant about Saltash Bridge, April 1898; occasionally taken in the Sound during May (E.T.B.): medusae appeared in a Laboratory tank April 1898, and were reared to the adult stage (E.T.B.): in tow-nets in Sound, April, May, July, Sept. (M.V.L., G.E.W.): Occasional offshore, March-Nov. (F.S.R.)

SARSIA GEMMIFERA Forbes [*Russell*, 1953, p. 61] (Hydroid, not known)

Plymouth, Sept. 1897; May 1898; 1899, fairly common in June, few in July; Cawsand Bay, a young stage with medusa buds, Sept. 1897 (E.T.B.): in Sound beyond Breakwater, July 1925, in numbers (M.V.L.): may be abundant June, July; occasional May, Sept., Nov. (F.S.R.)



## COELENTERATA: HYDROMEDUSAE

DIPURENA HALTERATA (Forbes) [*Russell*, 1953, p. 67] (Hydroid, *D. halterata*)  
Plymouth, Sept. 1893; July 1899, two early stages (E.T.B.): Offshore occasional April to Sept. (F.S.R.)

DIPURENA OPHIOGASTER Haeckel [*Russell*, 1953, p. 71] (Hydroid, *D. ophiogaster*)  
Single specimen July 1897 (E.T.B.): offshore, occasional June and July (*Russell*, 1938*a*, as *Purena strangulata*)

Family **Zancleidae**

ZANCLEA COSTATA Gegenbaur [*Russell*, 1953, p. 98] (Hydroid, *Zanclea costata*)  
Plymouth, 2 specimens, Aug. 1895; Cawsand Bay, single specimen, of an early stage, Sept. 1897 (E.T.B.): offshore, occasional May, July, Aug., Sept. (F.S.R.)

Family **Cladonemidae**

CLADONEMA RADIATUM Dujardin [*Russell*, 1953, p. 105]  
Numerous at L.W.S.T. Rum Bay, 19.8.55 (G.R.F., F.S.R.)

Family **Eleutheriidae**

ELEUTHERIA DICHOTOMA Quatrefages [*Russell*, 1953, p. 110] (Hydroid, *Clavatella prolifera* Hincks)  
In tank S. side of Laboratory, budding liberally, thousands on glass front of tank (A.J.S., J.H.O.): Wembury Bay (F.S.R.): abundant in weeds from rock pool, Drake's Island, near low water mark, mature, budding medusae, 23.6.37 (P.R.C., F.S.R.)

Family **Clavidae**

TURRITOPSIS NUTRICULA McCrady [*Russell*, 1953, p. 115] (Hydroid, probably *Dendroclava*)  
Offshore, Jan., Aug.-Dec., most abundant Oct. (F.S.R.)

Family **Hydractiniidae**

PODOCORYNE CARNEA M. Sars [*Russell*, 1953, p. 121] (Hydroid, *P. carnea*)  
Free-swimming medusae in March (W.F.R.W.): July-Aug. (W.G.): offshore, occasional, Feb., March, July, Aug. (F.S.R.)

PODOCORYNE BOREALIS (Mayer) [*Russell*, 1953, p. 125] (Hydroid, *P. borealis*)  
Offshore, occasional, Jan., June, Aug., Sept. (F.S.R.)

PODOCORYNE HARTLAUBI Neppi and Stiasny [*Russell*, 1953, p. 130] (Hydroid, not known)  
One (?), Jan. 1936 (F.S.R.)

PODOCORYNE MINIMA (Trinci) [*Russell*, 1953, p. 134] (Hydroid, not known)  
Plymouth Sound, few Sept. 1893, many Sept. 1897 (E.T.B.)

Family **Rathkeidae**

RATHKEA OCTOPUNCTATA (M. Sars) [*Russell*, 1953, p. 137] (Hydroid, *R. octopunctata*)  
Numerous specimens, during latter half of Feb. and March 1893; less

## COELENTERATA: HYDROMEDUSAE

abundant in 1894 (W.G.): 1898, few specimens, in April and March (E.T.B.): usually present in numbers in Sound and outside, Jan.-May; occasionally Nov., Dec. (M.V.L.): offshore Jan.-May, Nov., Dec., most abundant April, May (F.S.R.)

Family **Bougainvillidae**

**LIZZIA BLONDINA** Forbes [*Russell*, 1953, p. 145] (Hydroid, ?*Trichydra pudica*)

Plymouth, Sept. 1897, of varying frequency in the Sound and on outside grounds, a large shoal off the Eddystone on Sept. 15th; May 1898, a large shoal in the Sound on May 2nd, it disappeared from the Sound on the 12th and was off the Eddystone from the 16th to the 26th. but no specimens were then seen in the Sound or near the Mewstone; 1899, June-Aug. very scarce; 7.11.05, a young stage (E.T.B.): Station LA, 19.7.20, 18.7.22, in large numbers, budding from manubrium in some cases (M.V.L.): offshore, March-Sept., Nov., most abundant April-July, Sept. (F.S.R.)

**BOUGAINVILLIA RAMOSA** (Van Beneden) [*Russell*, 1953, p. 153] (Hydroid, *B. ramosa*)

Sept. 1897, very scarce; Sept. 1898, scarce (E.T.B.): Offshore, occasional, April, May, Aug.-Nov. (F.S.R.)

**BOUGAINVILLIA BRITANNICA** Forbes [*Russell*, 1953, p. 158] (Hydroid, ?*B. flavida* Hartlaub, 1911, p. 162)

1898, a young stage in May, 4 specimens in June; Plymouth, end of April (E.T.B.): 1917-18, Jan.-Oct., very common in plankton in Sound, June 1920, common Aug. 1922 (M.V.L.): offshore, April-July, most abundant May, June (F.S.R.)

**BOUGAINVILLIA PRINCIPIS** (Steenstrup) [*Russell*, 1953, p. 164] (Hydroid, not known)

Plymouth, end of April (W.G.): offshore, occasional, April, May (F.S.R.)

Family **Pandeidae**

**AMPHINEMA DINEMA** (Péron et Lesueur) [*Russell*, 1953, p. 180] (Hydroid, *A. dinema*)

Plymouth (W.G., E.T.B.): Sept. 1893, fairly common; Sept. 1895, scarce; Sept. 1897, several specimens, from Sound and outside grounds; May 1898, two specimens, near the Eddystone; June 1898, single specimen, near the Mewstone, July 1899, common (E.T.B.): offshore, July, Sept., Oct., Nov., Jan., most abundant Sept., Oct. (F.S.R.)

**AMPHINEMA RUGOSUM** (Mayer) [*Russell*, 1953, p. 183] (Hydroid, *A. rugosum*)

Between Mewstone and Rame Head; off Eddystone; many specimens, some adults, May and June, 1898; off Rame Head, 2 specimens, July, 1899 (E.T.B.): offshore, April-Oct., most abundant May-July (F.S.R.)

**LEUCKARTIARA OCTONA** (Fleming) [*Russell*, 1953, p. 188] (Hydroid, *L. octona*)

Plymouth (W.G.): Sept. 1897, 2 specimens, 4 m. S. of Breakwater and 2 specimens, 5 m. E. of the Eddystone, all young stages; May-June 1898, June 1899, 1 or 2 specimens occasionally (E.T.B.): common March-Oct. inside and outside Sound, commoner outside; abundant June, July, Oct.

## COELENTERATA: HYDROMEDUSAE

1928 (M.V.L.): May, June, July, Aug. below 20 metres, beyond Eddystone, 1925; offshore, Feb.-Dec., most abundant May-Sept. (F.S.R.)

## Sub-Order LEPTOMEDUSAE

Family **Laodiceidae**

**LAODICEA UNDULATA** (Forbes and Goodsir) [Russell, 1953, p. 230] (Hydroid, *Cuspidella* sp.)

23.9.05, 5 specimens, 5 m. S. of Rame Head (E.T.B.): Station LA, Aug., Oct. 1920-2, July-Oct. 1922, common; very common E.1, 25.9.28; very abundant Station LA, Young-fish Trawl, midwater and surface; also in tow-nets outside the Sound, 4.9.28 and for the next three weeks, gonads nearly ripe (M.V.L.): common early April, rare May, June, July, abundant Aug., Sept. 1926; common Aug.-Sept. 1929, beyond Eddystone, below 20 metres in daytime; offshore Feb.-Nov., most abundant Aug., Sept. (F.S.R.)

Family **Mitrocomidae**

**MITROCOMELLA BROWNEI** (Kramp) [Russell, 1953, p. 261] (Hydroid, *Cuspidella* sp.)

Off Plymouth, Sept. 1895, Aug.-Sept. 1897, May 1898 (E.T.B.): offshore, occasional, April, May, Aug., Sept. (F.S.R.)

SALCOMBE. Aug. 1900, off Start, May 1903 (E.T.B.)

**COSMETIRA PILOSELLA** (Forbes) [Russell, 1953, p. 266] (Hydroid, *Cuspidella* sp.)

Plymouth (E.T.B., E.J.A.): common every summer (W.G.): very common, April-Oct., commonest April-Aug., inside and outside Sound, commoner outside (M.V.L.): April-Aug., largest catches June, July, 1925; April-July, largest catches May 1926, below 20 metres, daytime, beyond Eddystone; offshore, March-Oct., most abundant April-Aug. (F.S.R.)

**TIAROPSIS MULTICIRRATA** (M. Sars) [Russell, 1953, p. 278] (Hydroid, *T. multicirrata*)

April 1895 (E.J.A.): offshore, occasional March, April (F.S.R.)

Family **Campanulariidae**

**PHIALIDIUM HEMISPHAERICUM** (L.) [Russell, 1953, p. 285] (Hydroid, *Clytia johnstoni*)

Sept. 1893; Sept. 1895; Sept. 1897, few specimens nearly always present in tow-nettings; June 1898, only once taken (E.T.B.): nearly always present from the spring until autumn (E.T.B.): present throughout the year, commonest May-Sept., often very abundant (M.V.L.): River Tamar to within 1 m. of Pentillie Quay; off Shevioc Wood, River Lynher; July, Aug., Oct. 1928 (E.P.): offshore, Jan.-Dec., most abundant March-Oct. (F.S.R.)

**OBELIA SPP.** [Russell, 1953, p. 296]

The identification of the species of *Obelia* is uncertain: it has been suggested that there are two species as follows:

**OBELIA NIGRA** Browne (Hydroid, ?*O. longissima*)

Common; 1898, very abundant April-May; .1899, abundant in

## COELENTERATA: HYDROMEDUSAE

June (E.T.B.): common spring and summer in Sound and outside (M.V.L.)

OBELIA LUCIFERA Forbes (Hydroid, ?*O. geniculata* and *O. dichotoma*)

Very plentiful, June 1898 (E.J.B.): by far the most abundant Leptomedusa in the Sound and outside, Sept. 1897 (E.T.B.): very common spring and summer, inside and outside Sound (M.V.L.)

AGASTRA MIRA Hartlaub [*Russell*, 1953, p. 303](Hydroid, *Orthopyxis caliculata*)

Single specimen, in Sound, Aug. 1897 (E.T.B.): 24.7.22, near Bigbury Bay, 5 specimens (M.V.L.): offshore, single specimen, Nov. (F.S.R.)

Family **Lovenellidae**

LOVENELLA CLAUSA Hincks [*Russell*, 1953, p. 307] (Hydroid, *L. clausa*)

Offshore, Jan., April, June, July, Sept.-Dec., most abundant Oct. (F.S.R.)

Family **Phialellidae**

PHIALELLA QUADRATA (Forbes) [*Russell*, 1953, p. 315] (Hydroid, *Phialella quadrata*)

Sept. 1893; Sept. 1897; April-May 1898; June-July 1899; never very abundant, but a few specimens generally taken (E.T.B.): offshore, March-July, Sept., Oct., most abundant May (F.S.R.)

Family **Eirenidae**

EIRENE VIRIDULA (Péron and Lesueur) [*Russell*, 1953, p. 321] (Hydroid, not known)

Oct. 1892, several specimens (W.G.): Sept. 1897, single specimen from Sound, 2 specimens, 3 m. S.W. of Mewstone, all young stages (E.T.B.): Offshore, July-Dec., most abundant Sept., Oct. (F.S.R.)

HELGICIRRHA SCHULZEI Hartlaub [*Russell*, 1953, p. 328] (Hydroid, not known)

Offshore, June-Oct., most abundant late summer and autumn (F.S.R.)

Family **Acquoreidae**

AEQUOREA FORSKALEA Péron and Lesueur [*Russell*, 1953, p. 342] (Hydroid, ?*A. paracuminata*)

Offshore, occasional March-Dec. (F.S.R.)

AEQUOREA VITRINA Gosse [*Russell*, 1953, p. 350] (Hydroid, ?*Campanulina acuminata*)

Offshore, June (F.S.R.)

AEQUOREA PENSILIS (Haeckel) (Modeer) and A. MACRODACTYLA (Brandy) [*Russell*, 1953, p. 355] (Hydroid, not known)

Offshore, Sept. 1938; abundant, Nov. 1948 (F.S.R.)

Family **Eutimidae**

EUTIMA GRACILIS (Forbes and Goodsir) [*Russell*, 1953, p. 359] (Hydroid, ?"*Campanopsis*" sp.)

Near Eddystone, July 1891, some hundreds (J.T.C.): off Penlee, at bottom

## COELENTERATA: HYDROMEDUSAE

in 9 fm., July 1892 (E.J.B.): 1897, single specimens in Aug. and Sept.; April-June 1898, few specimens; June-July 1899, few (E.T.B.): common outside Sound April-July, less common later (M.V.L.): below 20 m. April-Aug., most common July 1926; April-Aug., largest catches July 1925, beyond Eddystone; offshore Jan.-Dec., most abundant May-July (F.S.R.)

var. *INSIGNIS* (Keferstein)

Oct. 1893 (W.G., E.T.B.): Sept. 1895 single adult; June 1898, S. of Mewstone, 2 specimens; Aug. 1899, single specimen; 23.9.05 one adult, 5 m. S. of Rame Head (E.T.B.)

*OCTORCHIS GEGENBAURI* Haeckel [*Russell*, 1953, p. 367] (Hydroid, "*Campanopsis*" sp.)

Sept. 1895, single specimen; 1899, 4 specimens, in July, 1 in Aug.; 23.9.05, one adult, 5 miles S. of Rame Head (E.T.B.): Station L4, 2.10.28, Youngfish Trawl, several, gonads nearly ripe; outside Eddystone, Sept.-Oct. 1929, a few (M.V.L.): offshore, Jan., July-Oct., most abundant Aug. (F.S.R.)

## Sub-Order LIMNOMEDUSAE

Family **Proboscidae**

*PROBOSCIDACTYLA STELLATA* (Forbes) [*Russell*, 1953, p. 386] (Hydroid, *P. stellata*)

Single specimen, May 1896; Sept. 1897, earlier and intermediate stages frequently taken, adult very scarce; June-Aug. 1899, very scarce, only 2 specimens taken (E.T.B.): inside and outside Sound, not common, March Oct.; in fair numbers at Station E.1, 29.7.28 (M.V.L.): Offshore, Jan.-Dec., most abundant July and Sept. (F.S.R.)

*POCHELLA POLYNEMA* Hartlaub [*Russell*, 1953, p. 394] (Hydroid, not known)

Rare; offshore, May, June (F.S.R.)

Family **Olindiidae**

*GOSSEA CORYNETES* (Gosse) [*Russell*, 1953, p. 403] (Hydroid, not known)

Offshore, July-Dec. (F.S.R.)

## Sub-Order TRACHYMEDUSAE

Family **Geryonidae**

*LIRIOPE TETRAPHYLLA* (Chamisso and Eysenhardt) (chiefly "*exigua*" type) [*Russell*, 1953, p. 419]

Exceedingly abundant, Sept., Oct. 1893; absent Sept. 1895; scarce and only early stages in Sound and outside grounds, Sept. 1897 (E.T.B.): Jan. 1896 (E.J.A.): very abundant, Station LA, 4.9.25; (14-16 mm. across), abundant, 12.10.28, Station L4 (M.V.L.): Aug. 1925, outside Eddystone (F.S.R.): offshore, Jan., Feb., May-Dec., most abundant Aug.-Dec. (F.S.R.)

Family **Rhpalonematidae**

*AGLANTHA DIGITALIS* (O. F. Müller) var. *ROSEA* (Forbes) [*Russell*, 1953, p. 447]

## COELENTERATA: CHONDROPHORA-SIPHONOPHORA

June-July 1914, common, Eddystone (E.T.B.): inside and outside Sound occasionally, Aug., Sept., Oct. (M.V.L.): April outside Eddystone (F.S.R.): Feb. outside Eddystone (M.V.L.): offshore, Jan.-Dec., most abundant June Sept. (F.S.R.)

## Sub-Order NARCOMEDUSAE

Family **Solmaridae**

SOLMARIS CORONA Keferstein and Ehlers [*Russell*, 1953, p. 476]  
Plymouth, Sept. 1895 (E.T.B.)

## Order CHONDROPHORA

Family **Veellidae**

VELELLA VELELLA (L.) [*Vanhöffen*, 1906, p. 37; *Chun*, 1898, p. 93]

Skeletons frequently stranded on the Cornish and Devonshire coasts; living specimens abundant some years.

Jan. 1916, enormous number from rocks under Laboratory (A.J.S.): one in ring-trawl at L4, 3.8.34 (F.S.R.): one at Wembury, Sept. 1934; several living between E. 1 and Eddystone, 9.6.49; two living stranded at Bantham, July 1953 (D.P.W.): Rataria stage, 4.2.43 (Lebour, 1947*b*, p. 548)

## Order SIPHONOPHORA

## Sub-Order CYSTONECTAE

Family **Physaliidae**

PHYSALIA PHYSALIS (L.) [*Vanhöffen*, 1906, p. 35-6]

Drifted ashore in some years.

Plymouth Sound, March 1912 (J.H.O.): Feb.-April 1913, Plymouth Sound and Bigbury Bay; Jan. 1946, Whitsand Bay (Wilson, 1947, p. 140): in Oct. and Nov. 1954, during a period of severe gales, many specimens drifted ashore or seen at sea, environs of Plymouth (D.P.W.)

## Sub-Order PHYSONECTAE

Family **Agalmidae**

NANOMIA CARA Aggasiz [*Sars*, 1846, p. 32, pl. 5, figs. 1-6, pl. 6, as *Agalmopsis elegans*; *Browne*, 1900, p. 678, as *Cupulita sarsii*; *Totton*, 1954, p. 54]

Recorded in 1931 Fauna List as *Stephanomia bijuga*. Several entire specimens off Yealm Sand-bank and out to the mouth of River Yealm in tow-nets early May 1929 (O.D.H.): very abundant in plankton Feb.-Aug. 1930 (Russell, 1933, p. 74); occasionally in other years in association with *Sagitta elegans* (F.S.R.)

SALCOMBE. In the main and secondary channels of the estuary, May 1929 (Berrill, 1930, p. 753; *Totton*, 1954, p. 53)

AGALMA ELEGANS (Sars) [*Kolliker*, 1853, p. 10, pl. 3; *Totton*, 1954, frontispiece, p. 61]

Near Eddystone in ring-trawl Oct.-Dec. 1938 (Russell, 1939, p. 385)

## COELENTERATA: SCYPHOMEDUSAE

## Sub-Order CALYCOPHORAE

Family **Sphaeronectidae**

**SPHAERONECTES GRACILIS** (Claus, 1874, p. 30, pl. 4, fig. 8)

Single specimen in ring-trawl in mid-channel, 21.11.35 (F.S.R.)

Family **Diphyidae**

**MUGGIAEA ATLANTICA** Cunningham, 1892, p. 212

First met with 5 m. S. of Eddystone, afterwards in great abundance close to Breakwater, and even inside Sound, Sept. 1891 (Cunningham, 1892, p. 212): other records in 1931 Fauna List not certainly identified, though probably this species. Abundant some years in late summer to winter; distinguished from *M. kochi* since 1913 (Russell, 1934, p. 555; Corbin, 1948, p. 722)

**MUGGIAEA KOCHI** (Will, 1844, p. 77, Taf. II) [*Chun*, 1882, p. 1155, Taf XVII]

Abundant some years in late summer to winter; distinguished from *M. atlantica* since 1913 (Russell, 1934, p. 555; Corbin, 1948, p. 722)

Class **SCYPHOMEDUSAE**

## Order STAUROMEDUSAE

Family **Cleistocarpidae**

**DEPASTRUM CYATHIFORME** (M. Sars, 1846, p. 26)

Mount Edgcombe; Batten (E.J.A.); Drake's Island; Rame Head (W.G.): widely sought but not found recently (P.G.C.)

**CRATEROLOPHUS CONVOLVULUS** (Johnston, 1835, p. 59) including *C. tethys* Clark, 1863, p. 540 [*Johnston*, 1838, p. 231, as *Lucernaria campanulata*]

Occasional on algae and *Zostera*, low tide; Wembury; W. Looe *Zostera* beds; in winter, very occasional in pools up to half-tide (P.G.C.)

SALCOMBE. North Sands, but not on *Zostera* beds (P.G.C.)

Family **Eleutherocarpidae**

**HALICLYSTUS AURICULA** (Rathke) [*Johnston*, 1838, p. 229]

Not uncommon, sometimes abundant on algae and *Zostera*, half-tide to low tide; largest specimens in early summer (May); more numerous in mid-summer (June, July); scarcer in late autumn, winter and early spring (P.G.C.): Yealm Estuary, on *Zostera*, fairly common (S.P.): Reny Rocks, on *Enteromorpha*, in high-tide rock-pools (A.J.S.): Cawsand Bay, on *Zostera*, occasionally (S.P.): *Zostera* bed, mouth of River Yealm (N. Bank), low tide, many, 30.9.09; 3.3.15 plentiful; 6.3.16 rare (A.J.S.): Wembury; W. Looe, *Zostera* beds (P.G.C.)

SALCOMBE. North Sands, but no longer on *Zostera* beds; often numerous before decline of *Zostera* (P.G.C.)

**LUCERNARIOPSIS CAMPANULATA** Lamouroux [*Eales*, 1938, p. 167, as *Lucernaria discoides*]

Occasional, on algae and *Zostera*, low tide down to 10-12 fm., specimens

dredged from Mewstone Reef; in winter, very occasional in pools up to half-tide; smaller specimens in spring, larger in late summer and autumn (P.G.C.): Reny Rocks, several small specimens with *Haliclystus*; single specimens from Cawsand Bay and Whitsand Bay (W.I.B.): one specimen, *Zostera* bed (N. Bank), mouth of River Yealm, 3.3.15, deep red all over (A.J.S.): Wembury; W. Looe, *Zostera* beds (P.G.C.)  
SALCOMBE. North Sands, but no longer on *Zostera* beds (P.G.C.)

#### LUCERNARIOPSIS Sp.

An undescribed species, occasional, on algae, low tide; Wembury, Church Reef, moderate numbers (2-3 dozen) in one restricted area, Aug. Feb. 1955; elsewhere on Reef only 2 or 3 specimens, 1951-5; 3 specimens at half-tide in pools, 26.1.55; Wembury, W. Reef, occasional in one restricted area, 1951-5; W. Looe, 1 specimen only, 1951-5, in pool at half-tide, 12.5.52 (P.G.C.)

### Order SEMAEOSTOMAE

#### Family Pelagiidae

#### PELAGIA NOCTILUCA (Forskål) [Mayer, 1910, p. 572]

Several near Eddystone, April 1937 (Russell, 1938, p. 497): about 60 specimens 1 to 4 in. diameter, majority *ca* 2 in., in Yealm Estuary (Hunt, 1952, p. 934)

#### CHRYSAORA HYSOSCELLA (L.) [Mayer, 1910, p. 579]

Occasionally during the summer months (S.P., M.V.L.). Planulae liberated in Aug. and reared to *Scyphistoma* stage (E.T.B.)

#### Family Cyaneidae

#### CYANEA CAPILLATA (L.) var. LAMARCKI [Mayer, 1910, p. 596]

Occasionally every summer (A.J.S.): common outside Sound (M.V.L.): young common April-May 1926, almost all young less than 2 in., mostly less than 1 in. in April, in May ½-4 in., June full size 3-7 in.; 1927, few only in May, June, July; 1929, few below 1 in. diameter, April, young common May, June, full grown July, beyond Eddystone (F.S.R.)

#### Family Aureliidae

#### DISCOMEDUSA LOBATA Claus [Mayer, 1910, p. 607]

Single specimens near Eddystone, 31.10.36 and 24.2.37 (Russell, 1937, p. 683; 1938b, p. 497)

#### AURELIA AURITA (L.) [Mayer, 1910, p. 623]

Most abundant in the estuaries in spring and summer; River Tamar; Hamoaze; Yealm Estuary; carried out into the Channel towards the end of the summer (E.J.A.): Saltash (E.T.B.): up to within 1 mile of Pentillie Quay, River Tamar (E.P.): during the second world war the population of the Tamar disappeared; this population reappeared in 1954 (F.S.R.)

The ephyrae appear in Feb. and may be taken in shoals during the first fortnight of March, they metamorphose towards the end of the month and



## COELENTERATA: ANTHOZOA

begin to disappear; the young medusae reappear towards the end of May and reach their maximum abundance during June (W.G.): scyphistomae to beach 100 yards above Antony Creek, River Lynher; Cargreen Hard, River Tamar; very abundant on mussel bed off Neille Point, June-Oct., 1928 (E.P.): many scyphistomae, March 1909; ephyrae from small tank in Aquarium, 30.4.09; many strobilating in several tanks, March, April 1917, and thousands of ephyrae liberated in conger tank, 29.3.18; 6 specimens observed in large tank in Aquarium, 26.2.19; several hundreds in conger tank, 15.3.19; many ephyrae in conger tank, 12.4.20; seven ephyrae in same tank 29.1.26, a few 6.3.27, many 15.3.28, fairly numerous 4.2.29 (A.J.S.)

## Order RHIZOSTOMAE

Family **Rhizostomidae**

RHIZOSTOMA OCTOPUS (L.) [*Mayer*, 1910, p. 699]

Occasionally (S.P., M.V.L.)

## Class ANTHOZOA

Sub-Class *OCTOCORALLIA (ALCYONARIA)*

## Order ALCYONACEA

Family **Cornulariidae**

SARCODICTYON CATENATA Forbes [*Herdman*, 1895, p. 163]

Eddystone Grounds; the red form is found, often in abundance, on old shells, and is generally most plentiful on clean shell-gravel (E.J.A., S.P.): Stoke Point Grounds; Rame-Eddystone Grounds, etc. (S.P.): Mewstone Grounds (G.A.S.)

Family **Alcyonidae**

ALCYONIUM DIGITATUM (L.) [*Hickson*, 1895, p. 349]

Generally present in dredgings from Sound and outside grounds, but the colonies are usually small (R.A.T., S.P.): Promenade Pier, large colonies are occasionally common at extreme L.W. (E.J.A., R.A.T., S.P.): Eddystone Grounds, large colonies abundant on the fine sand of the Outer Trawling Grounds and S. of Eddystone, attached to valves of *Cardium echinatum*, etc. (E.J.A.): generally plentiful in outside waters from 8 to 41 m. S.W. of Eddystone, 40-52 fm., sometimes abundant; a single specimen of the yellow variety in 40 fm., 7.6 m. S.W. of Eddystone (Crawshay, 1912, p. 332)

Breeding: Oct., Jan. (R.A.T.): Nov.-Feb. (W.G.): Jan.-Feb. (A.M.): one from Mewstone, 20.12.26, gave off eggs during the night, a fair number segmenting when preserved (S.M.N.)

ALCYONIUM GLOMERATUM (Hassall) [*Hickson*, 1895, p. 353]

Mewstone Ledge (R.A.T.): Mewstone Ledge, 6.10.13, a very fine colony, dredge (A.J.S.): Stoke Point rocks, frequently found in gully below 10 fm.(G.R.F.)

ALCYONIUM PALMATUM Pallas [*Koch*, 1891, p. 663]

Mewstone Ledge (S.P.): 3 m. S.E. of Mewstone (E.J.A)

## COELENTERATA: ANTHOZOA

## Order GORGONACEA

Family **Plexauridae**

EUNICELLA VERRUCOSA (Pallas) [*Koch*, 1887, p. 58, as *Gorgonia cavolini*; *Thomson*, 1912, p. 482]

More or less common everywhere on rocky ground, 10-25 fm. (S.P.): Mewstone Ledge, very common (E.J.A., R.A.T., S.P.): Queen's Ground, rare (R.A.T., S.P.): Rame-Eddystone Grounds; Stoke Point Grounds (S.P.): Mewstone and Eddystone Grounds generally, latter half Aug. and first half of Sept. 1924; Captain Lord reported that a great amount of Eunicella brought up was dead; many colonies brought in were partially dead, none in such good condition as in the previous July (A.J.S.)

## Order PENNATULACEA

## Family Virgulariidae

VIRGULARIA MIRABILIS O. F. Müller [*Marshall and Marshall*, 1882, p. 51]

Single specimen near Eddystone (W.P.M.): 6 m. W.S.W. of Penlee Point (R.A.T.): Stoke Point Grounds (S.P.): one, Penlee Point 040°, 4-2 miles, 1949 (N.A.H.): one in silty sand 4 miles E. of Eddystone (Holme, 1953)

Sub-Class *HEXACORALLIA*

## Order CERIANTHARIA

Family **Cerianthidae**

CERIANTHUS LLOYDI Gosse, 1860, p. 268

Adult in muddy sand, N. side of Drake's island (R.A.T.): 23.3.09 (W.O.R.K.): Mallard Pit 20.1.11, 3 small specimens (1-2 in. when expanded), dredged, 32 tentacles instead of 64; 10.2.11, 14 specimens, dredged; 31.1.18, 3 specimens, one about 2 in. long, the others much smaller, dredged (A.J.S.): common on muddy grounds in Sound ¼m. E. of Drake's Island; Barn Pool; under Laboratory, 1951 (G.R.F.)

SALCOMBE. Common on the mud bank in front of the Marine Hotel; hundreds in March 1927 (T.A.S.)

Breeding: Arachnactis larva common in tow-netting from Sound and outside in spring and summer (R.A.T., M.V.L.)

## Order ZOANTHARIA

## Family Epizoanthidae

EPIZOANTHUS COUCHI (Johnston) [*Haddon and Shackleton*, 1891, p. 644]

Duke Rock, common (W.G.): Millbay Channel, not uncommon (W.G., R.A.T.): 2 colonies, 20 m. S.W. of Eddystone, 44 fm., each growing on a stone: polyps 7 and 15 respectively partly connected by a ribbon-shaped band; partly isolated (Crawshay, 1912, p. 333)

EPIZOANTHUS INCRUSTATUS (Düben and Koren) [*Haddon and Shackleton*, 1891, p. 636]

Mewstone Grounds, common on shells inhabited by *Anapagurus laevis*

**MESACMAEA MITCHELLI** (Gosse) [Stephenson, 1935, p. 79, as *Ilyanthus*]

From a Plymouth trawler, 2.5.03; Rame Mud, 3 m. S. of Breakwater Light, one, dredge, 13.2.29 (A.J.S., W.E.E.); Eddystone Grounds, Jan. 1924, 1925, both still alive, 10.2.29 (W.E.E.): not infrequent on Eddystone Grounds (T.A.S.)

Breeding: ova, Oct. and Nov. 1926, Sept. 1927 (W.E.E.)

**ANEMONACTIS MAZELI** (Jourdan) [Stephenson, 1935, p. 91, as *Eloactis*]

Single specimen, a few miles off Mewstone, 20 fm. (W.G.): head end only, Rame Mud, 3 m. S. of Breakwater Light, dredge, 13.2.29 (A.J.S., W.E.E.); Eddystone bearing N.E., 8-9 m. 17.5.29, trawl, 2 entire specimens (A.J.S., J.H.O.): 3 damaged specimens, dredged off Plymouth 1925 (W.E.E.)

Breeding: ova 26.10.26, Sept. 1927 (W.E.E.)

Family **Actiniidae****ACTINIA EQUINA** L. [Stephenson, 1935, p. 113]

Common on rocks between tide-marks (R.A.T., S.P.): upper tidal zone, on walls and rocks, up to boathouse near Ince Castle, River Lynher; on rocks up to Neille Point, River Tamar (E.P.)

SALCOMBE. On rocks at mouth of Harbour; one or two at Mill Bay (Allen and Todd, 1900, p. 187)

Breeding: Jan.-Aug. (R.A.T.): a large specimen (strawberry variety) from Whitsand Bay near Tregantle (shore) extruded large quantity of active sperm Nov. 26 (captured Oct. 24), when during the afternoon it had been kept in water with one-third the usual quantities of dissolved gases (c.c.s.): viviparous young habitual (T.A.S., W.E.E.)

**ANEMONIA SULCATA** (Pennant) [Stephenson, 1935, p. 124]

More or less common everywhere on rocks between tide-marks and on the *Zostera* beds; the slate-coloured variety is more abundant than the typical form with violet-tipped, green tentacles, and on the *Zostera* it alone is present; a flesh-coloured variety is occasionally met with; Yealm Sandbank, brownish var. only (S.P.)

Breeding: longitudinal fission habitual, e.g. 25.9.22, 28.4.24, 2.4.25, 1.9.23 (W.E.E.)

**TEALIA FELINA** (L.) var. **CORIACEA** (Cuvier) [Stephenson, 1935, p. 139]

Not uncommon on rocks between tide-marks and occasionally in 10-20 fm. in Sound; the specimens are not usually of great size; var. *tuberculata* (Cocks), large and very warty, occasionally trawled in 20-40 fm. (R.A.T.)

SALCOMBE. On the rocks at mouth of Harbour (Allen and Todd, 1900, p. 187)

Breeding: May (W.G.); sperm 5.11.22 (W.E.E.)

**BUNODACTIS VERRUCOSA** (Pennant) [Stephenson, 1935, p. 156]

Caves under the Laboratory (G.C.B.): Drake's Island, common on rocks (E.J.A., R.A.T., S.P.): Mount Edgumbe (E.J.A.): Rum Bay, not uncommon between tide-marks (R.A.T., E.J.A.): Jennycliff Bay, between tide-marks, rare (R.A.T.): Bovisand Cove (R.A.T.): Whitsand Bay, common between tidemarks (R.A.T.)

## COELENTERATA: ANTHOZOA

Breeding: March (R.A.T.): April-Sept. (W.G.): Rum Bay shore, 16.7.12, with young inside mother (J.H.O.): viviparous young habitual (W.E.E., T.A.S.): a brood of 27 young produced under the action of menthol, 30.5.27 (T.A.S.)

Family **Aureliidae**

AURELIANIA HETEROCERA (Thompson) [Stephenson, 1935, p. 174]

Ca. 3 miles off Mewstone, dredged, May 1927; a perfectly typical specimen (T.A.S.): one found about 1951 in a Laboratory tank in which newly collected material is deposited, and kept alive for several years (D.P.W.)

Family **Diadumenidae**

DIADUMENE CINCTA Stephenson [Stephenson, 1935, p. 187]

The Breakwater, under stones, April 1927 (T.A.S.): mussel-bed off Neille Point opposite mouth of Tavy; River Tamar, dredged in ca. 4 ft., 3.10.28 (E.P., W.E.E.): plentiful from mussels from Cattewater in 1927 (T.A.S.). This anemone had been known from the Breakwater and Pier for many years, before being recognized as a distinct species.

Breeding: laceration by tearing frequent (W.E.E., T.A.S.)

Family **Aiptasiomorphidae**

AIPTASIOMORPHA LUCIAE (Verrill) [Stephenson, 1935, p. 197, as Diadumene]

Drake's Island, under stones, near top of tide, 5.12.07 (C.L.W.): from a government ship which had been moored in the mouth of the River Lynher (opposite the Instructional Ship "Defiance") and was brought down to Queen Anne's Battery for breaking-up purposes; fine colonies on large mussels, as many as 30 specimens on a single mussel (*Mytilus edulis*), 12.4.23 (A.J.S.): the Breakwater, under stones, along with *D. cincta*, April 1927 (T.A.S.): Rum Bay and Drake's Island (C.L.W.): Millbay Docks and Cattewater (A.J.S.); River Tamar, rocks between "Defiance" and Saltash in lower tidal zone; Cargreen on Hard, 19.7.28 (E.P.): seems to be dying out at Plymouth; there was great difficulty in getting it in 1927 and then only a few small specimens (A.J.S.)

Breeding: longitudinal fission habitual (W.E.E., T.A.S.)

Family **Aiptasiidae**

AIPTASIA COUCHI (Cocks) [Stephenson, 1935, p. 208]

Rocks below the Laboratory, occasionally (MOB., R.A.T.): Reny Rocks, not uncommon (R.A.T.): two pools on Reny Rocks with about 12 in. of water near 14 foot tide-mark, on the main reef midway to high rocks, looking S., were full of this anemone, more than 150 of various sizes, *Corallina officinalis* carpeting the floors of the pools, 3.11.21 (A.J.S.): Winter shoal, dredge, 4 specimens 19.1.10, 8 specimens 26.3.18, 12 specimens from small to medium 2.1.20 (A.J.S.): some good ones from Winter Shoal, dredged, 1927 (T.A.S.)

Breeding: transverse fission Oct. 1925; viviparous young, Aug. 1925 (W.E.E.)

Family **Metridiidae****METRIDIUM SENILE** (L.) var. **DIANTHUS** (Ellis) [Stephenson, 1935, p. 214]

Promenade Pier, very common on the piles at extreme low water (R.A.T., S.P.): Millbay Channel, occasional specimens (R.A.T.): Yealm Sand-bank, occasionally (R.A.T.): Yealm Estuary, young specimens, common on the rocks between tide-marks (S.P.)

Breeding: in tanks, Aug.-Sept. (S.P.): in large tank shedding ova, 16.9.11 ; sperm afterwards obtained from another specimen and artificial fertilization tried, but only a few doubtful planulae were seen; one in Drake's Island tank extruding sperm in abundance, apparently from one end of siphonoglyph, 16.8.22 (J.H.O.): laceration habitual (T.A.S., W.E.E.): ova 4.8.22; sperm and ova at other times (W.E.E.)

var. **PALLIDUM** (Holdsworth). 2 specimens, on wooden mudguard lying on mud-bank, ½m. above Saltash Bridge, on left bank, 19.9.28 (E.P., W.E.E.)

Family **Hormathiidae****CALLIACTIS PARASITICA** (Couch) [Stephenson, 1935, p. 233]

More or less common everywhere 15-30 fm., associated with *Eupagurus bernhardus* (S.P.)

SALCOMBE. On shells inhabited by *Eupagurus bernhardus*: on the shore of Salstone, and dredged from the channel between Salstone and Snape's Point (Allen and Todd, 1900, p. 186)

Breeding: sperm, Sept. 22 (W.E.E.): specimen sent alive to Edinburgh arrived 2.4.27, eggs extruded next day (A.D.H.)

**ADAMSIA PALLIATA** (Bohadsch) [Stephenson, 1935, p. 245]

Generally distributed and common, 10-30 fm., associated with *Eupagurus prideauxi*; Eddystone Grounds, Rame-Eddystone Grounds, Mewstone Grounds, Cawsand Bay, Yealm River, etc. (S.P.): from 20-40m. S.W. of Eddystone, 42-49 fm., in most cases as single specimens and always with *Eupagurus prideauxi* when a pagurid was present (Crawshay, 1912, p. 332)

SALCOMBE. Dredged in channel between Salstone and mouth of Harbour; commensal with *Eupagurus prideauxi* (Allen and Todd, 1900, p.186): up the middle branch of the estuary (N.J.B.)

Breeding: ova, 29.10.25 and on several subsequent occasions W.E.E.)

**CATAPHELLIA BRODRICI** (Gosse) [Stephenson, 1935, p. 252]

Wembury, on shore, behind prominent insular rock; near low water of spring tide, March 1927 (T.A.S.)

SALCOMBE. Castle Rocks, under boulders in Laminarian zone, fairly common, not always at lowest levels exposed at spring tide, March 1927 (T.A.S.)

Breeding: viviparous young in quantity from specimens collected at Salcombe and Wembury in March and April 1927 (T.A.S.); viviparous young later (W.E.E.)

## COELENTERATA: ANTHOZOA

**HORMATHIA DIGITATA** (O. F. Müller) [*Stephenson*, 1935, p. 259]

Eddystone Grounds, a few specimens on the outer trawling grounds, and on the fine sand S. of the Eddystone, inside valves of *Cardium echinatum* (E.J.A.)

**HORMATHIA CORONATA** (Gosse) [*Stephenson*, 1935, p. 269]

Occasionally in the deeper water outside the Breakwater and in Millbay Channel (W.G.): Rame-Eddystone Grounds, single specimen on hydroid stem (R.A.T.): common from Chaetopterus tubes from Cattewater, in dozens, 1927; also in dredgings in twos and threes (T.A.S.): extending from about 8-50 m. S.W. of Eddystone, 40-53 fm., at intervals (Crawshay, 1912, p. 332): Jan. 1925 (one), April 1926 (two), dredged off Plymouth (W.E.E.)

Breeding: Jan.-April (W.G.): viviparous young, 15.3.25, 7.5.25, 10.6.25, 7.4.27 (W.E.E.): viviparity habitual (T.A.S.)

**PARAPHELLIA EXPANSA** (Haddon) [*Stephenson*, 1935, p. 276]

Eddystone Grounds, a few specimens, apparently living buried in the sand (E.J.A.): Rame-Eddystone Grounds (R.A.T.): extending from about 8-50 m. S.W. of Eddystone, 40-53 fm. (Crawshay, 1912, p. 332)

**AMPHIANTHUS DOHRNI** (von Koch) [*Stephenson*, 1935, p. 282]

Mewstone Ledge, on Eunicella, not uncommon (T.V.H., A.J.S., R.A.T., S.P.)

Breeding: laceration, 15.11.25 (W.E.E.); and at other times (T.A.S.)

Family **Sagartiidae****SAGARTIA ELEGANS** (Dalyell) [*Stephenson*, 1935, p. 306]

var. **MINIATA** (Gosse). Asia Shoal (A.J.S., R.A.T.): Millbay Channel (R.A.T.): extending from about 8-50 m. S.W. of Eddystone, 40-53 fm. (Crawshay, 1912, p. 332): Plymouth Pier and Millbay Pit, 1927 (T.A.S.)

var. **VENUSTA** (Gosse). Between Bolt Tail and the Avon (C.L.W.): Drake's Island shore (C.L.W.)

var. **NIVEA** (Gosse). Rocks below Laboratory, one specimen (G.C.B.): between Bolt Tail and the Avon (C.L.W.)

var. **ROSEA** (Gosse). Between Bolt Tail and the Avon (C.L.W.)

Breeding: laceration by tearing habitual (T.A.S., W.E.E.)

**SAGARTIA TROGLODYTES** (Price) [*Stephenson*, 1935, p. 324]

var. **ORNATA** (Holdsworth). On wooden mudguard lying on mud-bank ½m above Saltash Bridge, on left bank; mussel bed off Neille Point, 19.9.28, 3.10.28 (E.P., W.E.E.)

var. **DECORATA**. Salcombe, rocks on E. side of estuary, a few specimens 1927 (T.A.S.)

Breeding: viviparity habitual (T.A.S., W.E.E.) sperm, 11.6.22; ova, 9-10.6.23 (W.E.E.); and at other times (T.A.S., W.E.E.)

**CEREUS PEDUNCULATUS** (Pennant) [*Stephenson*, 1935, p. 363]

Common on the shore where the ground is suitable, this form seeming to prefer muddy sand with stone; not uncommon in dredgings from Millbay Channel, Mallard Shoal, etc. (R.A.T.): Asia Shoal, 5.12.07 (C.L.W.): especially common in the estuaries of the Yealm, Tamar, and Plym (E.J.A.)

## COELENTERATA ANTHOZOA

SALCOMBE. In extraordinary profusion in certain parts of the estuary, where stones or gravel lie from an inch to 3 or 4 in. beneath the surface of fine mud; Kingsbridge Estuary, Salstone and shore between Halwell Point and Pilworthy Point (Allen and Todd, 1900, p. 185)

Breeding: Jan.-Feb., Dec. (W.G.): Kelly's Slip (Mount Batten), 13. 10.11, discharging young on being squeezed (J.H.O.): Rat Island, River Lynher; St. John's Lake, 30.8.28, 16.9.28 (S.P.): viviparity habitual (W.E.E., T.A.S.)

ACTINOTHOË SPHYRODETA (Gosse) [*Stephenson*, 1935, p. 342]

Drake's Island, at low tide (W.H.): Mallard Shoal (J.C.S.): Millbay Channel, occasionally (R.A.T., E.J.A.): Reny Rocks and Asia Shoal (C.L.W.)

Breeding: longitudinal fission habitual (T.A.S., W.E.E.)

SAGARTIOGETON UNDATA (Müller) (= *anguicoma* of Price, *viduata* of Gosse, but not of Müller) [*Stephenson*, 1935, p. 355 as *Actinothoë anguicoma* (Price)]

Rare within Sound, but common in the neighbourhood (W.G.): Promenade Pier, not uncommon on the piles at extreme low tide (R.A.T., A.J.S.): Millbay Channel, not uncommon (R.A.T.): the so-called var. *melanops*, S. side of River Yealm, opposite houseboats (shore), spade, 7.3.16, one very good specimen (A.J.S.); this is only a colour form (W.E.E.)

SALCOMBE. Dug up (T.A.S., N.J.B.)

Breeding: sperm, Nov. 1925 (W.E.E.)

SAGARTIOGETON LACERATA (Dalyell) [*Stephenson*, 1935, p. 347, as *Actinothoë*

Cattewater, abundant, probably from trawl refuse (C.L.W.)

Breeding: laceration by constriction habitual (W.E.E., T.A.S.)

## Order MADREPORARIA

Family **Turbinolidae**

CARYOPHYLLIA SMITHI Stokes [*Gosse*, 1860, p. 310]

More or less abundant on all rocky stations, low water to 30 fm., under boulders and in rock crevices (S.P.): the Breakwater; Mewstone Ledge, etc. (E.J.A., S.P.): frequently from 21-48.9 m. S.W. of Eddystone, 42-53 fm., many at 48.9 m. (Crawshay, 1912, p. 333): very common, Eddystone and Hand Deeps, 5-10 fm., 1955 (G.R.F.)

The cirripede *Pyrgoma anglicum* is commonly found attached to the margin of the cup of this species, and frequently several occur upon a single coral (S.P.)

SPHENOTROCHUS MACANDREWANUS Milne Edwards [*Gosse*, 1860, p. 324]

Mewstone bearing N. ½ W. 1½ m., 10.6.12, dredge, 1 specimen (A.J.S.)

Family **Astracidae**

HOPLANGIA DUROTRIX Gosse, 1860, p. 338

Wembury Bay (shore) 2.9.09, a fine colony (C.L.W.)

Family **Eupsammiidae****BALANOPHYLLIA REGIA** Gosse, 1860, p. 343

A colony found whilst shore collecting at Sandway Cellar, Sandway Point, Cawsand Bay, about half tide, on the vertical sides of a small cave; only three patches seen; originally found by W.S. in May 1906, who removed some with hammer and chisel; since then they can always be found in the same place about two dozen together; a few found once on Reny Rocks, Feb. 1929, by W.S., not found since although searched for in the same place (A.J.S.)

Breeding: observed extruding planulae 28.4.30 (C.M.Y.)

## Order CORALLIMORPHARIA

Family **Corallimorphidae****CORYNACTIS VIRIDIS** Allman [*Gosse*, 1860, p. 289]

More or less common in crevices and under stones on all rocky stations low water to 15 fm. (S.P.): the Breakwater (E.J.A., R.A.T., S.P.): Millbay Channel (R.A.T., S.P.): several specimens on stones and on shells of Pinna 48.9 m. S.W. of Eddystone, 51 fm. (Crawshay, 1912, p. 332): Stoke Point rocks, common on vertical gully walls at around 10 fm. (G.R.F.)