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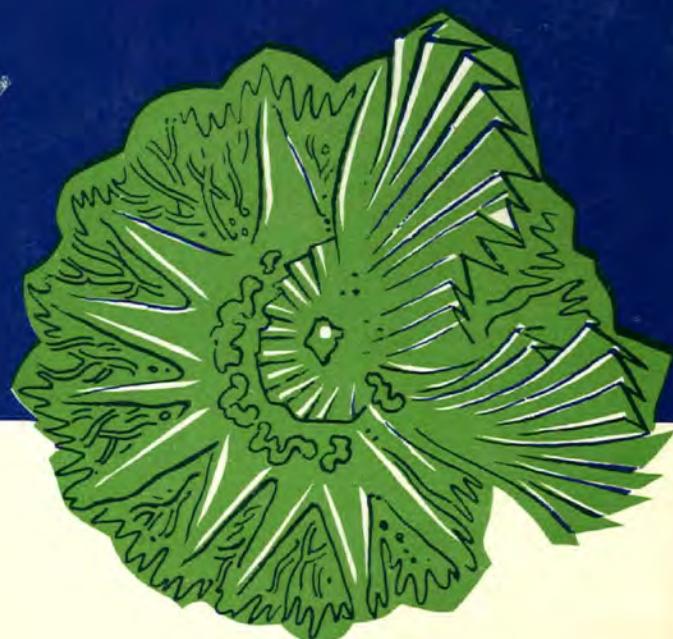


A synopsis of Canadian marine zooplankton

C.-T. Shih

A. J. G. Figueira

E. H. Grainger



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marine zooplankton**

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Canadian Oceanographic Identification Centre, Ottawa*

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ABSTRACT

This Bulletin compiles the literature published prior to 1970 on marine zooplankton of Canadian waters in three sections: Atlantic, Pacific, and Arctic, each containing Records of species and a Bibliography. Each entry of the Records is provided with the reference, information on occurrence of the species, and when available, remarks on life history, ecology, and taxonomy. The Bibliography gives a complete citation of all references. An integrated index of generic and specific names is included.

PREFACE

This Bulletin summarizes the literature on marine zooplankton (protozoans excluded) of Canadian coastal waters published prior to 1970. It comprises three parts, each by a separate author: Atlantic, C.-T. Shih; Pacific, A.J.G. Figueira; and Arctic, E.H. Grainger. The geographical limits are defined in the introduction to each part and are also shown on the map (see inside back cover). An integrated index of generic and specific names for all three sections is included.

"Zooplankton" considered in this book includes holozooplankton and merozooplankton as well as benthos found above bottom. All records of zooplanktonic species, including those from stomach contents of fishes, are included regardless of collecting methods. Forms which are mainly benthic but evidently not exclusively so are considered only from records which show capture together with the plankton or, in the absence of clear collecting information, possible occurrence in the plankton. For example, certain taxonomic groups such as ostracods, copepods (excluding calanoids), mysids, cumaceans, isopods and gammaridean amphipods are mainly benthic but are occasionally taken in collections of plankton. Laboratory experiments on planktonic forms are also included.

A similar format was adopted by the three authors, but slight individual modifications were accepted in each part. The three sections of the book contain: Records and a Bibliography. In the Records, phyla, classes and orders are arranged in phylogenetic sequence, following the system adopted by R. Barnes (1968, *Invertebrate Zoology*, 2nd Edition, W.B. Saunders Company, Philadelphia) who mainly follows Hyman's *The Invertebrates* and Grasse's *Traité de Zoologie*; but families, genera and species are arranged in alphabetical order. Records for each species, taken entirely on the authority of authors, are entered chronologically and alphabetically within a single year. An attempt has been made to give the latest accepted names of the species listed (based on recent taxonomic reviews or the advice of experts in each field) and in instances where different names are used, the author's published names are listed as well. Each entry in the Records section consists of two components: the first or principal component cites the author(s), year and pagination of the publication, and, if different from presently accepted nomenclature, the author's published name; the second or supplemental component (given within parentheses) generally mentions stage of life history, location, time and abundance of occurrence, remarks on ecology, and notes about morphology and/or taxonomy. Complete citations of the publication for each record are listed in the Bibliography.

During the course of preparing this text, the authors have received many constructive comments concerning preliminary drafts. Specific acknowledgements are listed in the introduction to each part. We are greatly indebted to Dr D.J. Faber, Head of the Canadian Oceanographic Identification Centre, for his generous assistance in overall planning of the present work.

C.-T. Shih

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Part I. Atlantic Zooplankton

INTRODUCTION

The Atlantic section reviews the literature on marine zooplankton occurring in Canadian Atlantic coastal waters south of the Hudson Strait, from the coast seaward to the 200-metre contour line, and includes all of two large embayments, namely, the Gulf of St. Lawrence and the Bay of Fundy. Animals found in this area generally belong to boreal and subarctic faunas. Sporadic arctic and tropical forms are occasionally encountered due to oceanic circulation: for instance, the Labrador Current from the north and the Gulf Stream from the south. The inclusion of the shelf water of the Gulf of Maine north of Cape Cod is justified because the faunistic composition of this water, which has been well recorded, has much in common with that in the Bay of Fundy and along the Atlantic Nova Scotian coast of Canada.

Several faunistic lists of marine invertebrates, mainly benthic forms, of eastern Canada have been published, including: Whiteaves (1901), Préfontaine and Brunel (1962), and the most recent addition, Brunel (1970, Catalogue d'invertébrés benthiques du golfe Saint-Laurent recueillis de 1951 à 1966 par la Station de Biologie marine de Grande-Rivière, Trav. Pêch. Qué., No. 32). The combination of these works and this Bulletin covers almost all species of marine invertebrates that are presently known to occur in Canadian Atlantic waters and represents a relatively thorough literature survey of the local fauna.

The accurate identification of fish eggs and larvae presents a difficult problem and the identification in some cases should be viewed with caution. The separation of fish eggs and larvae into different species usually is based on changing characteristics. Except through rearing experiments, a correct identification cannot be obtained unless a complete documentation of the metamorphosis is available.

It is a difficult task to list correctly all names according to the accepted nomenclature in a work such as the present one, in which the Atlantic part alone contains animals belonging to 484 species, 349 genera in 11 phyla. The synonymies are based on the latest available review of a group: Cnidaria, Kramp (1961) and Totton (1965); Ctenophora, Mayer (1912); Polychaeta, Pettibone (1965); Harpacticoida Copepoda, Lang (1948); Euphausiacea, Einarson (1945); Chaetognatha, Alvarino (1965); Urochordata, Thompson (1948); and Pisces, McAllister (1960) and Leim and Scott (1966). The assistance of the following persons who have confirmed the use and/or advised the change of nomenclature is gratefully acknowledged. However, I assume the responsibility for any errors that still exist.

Cnidaria: D.R. Calder (Virginia Institute of Marine Sciences)

Mollusca: A.H. Clarke (National Museum of Natural Sciences)

Bryozoa: N.A. Powell (National Museum of Natural Sciences)

Copepoda: E.H. Grainger (Fisheries Research Board, Arctic Biological Station); G.C.H. Harding (Dalhousie University); D.C. Maclellan (McGill University)

Amphipoda (Gammaridea only): E.L. Bousfield (National Museum of Natural Sciences)

Malacostraca (excluding Cumacea, Isopoda and Amphipoda), Chaetognatha and Urochordata: A.J.G. Figueira (National Museum of Natural Sciences)

Pisces: D.J. Faber and D.E. McAllister (both National Museum of Natural Sciences)

The completion of the present work was made possible through the assistance and cooperation of many individuals. I am greatly indebted to many people, particularly F.A. Aldrich, P. Brunel, R.J. Conover, C.C. Davis, V.M. Hodder, A.G. Huntsman, G. Lacroix, J. Roff, and W. Templeman, who have read and made comments on the preliminary draft of the Atlantic section. The directors of the Fisheries Research Board of Canada Biological Stations at St. Andrews, New Brunswick, and St. John's, Newfoundland, are thanked for their permission to quote several manuscript reports issued at their stations. Trevor Platt is also acknowledged for the same reason. Miss A. Dawe and her staff (Library, National Museums of Canada) assisted in borrowing many references through interlibrary loans and Mrs. J. Morris and Miss B. Richardson helped proofread and prepare the index. —C.-T. Shih

PHYLUM CNIDARIA

CLASS HYDROZOA

ORDER ANTHOMEDUSAE

FAMILY BOUGAINVILLIIDAE

Bougainvillia carolinensis (McCardy, 1857)

Bigelow 1914b: 9 (Casco Bay, G. of Maine)

Bougainvillia superciliaris (L. Agassiz, 1849)

Stimpson 1854: 11, as *Hippocrene superciliaris* (Grand Manan, Bay of Fundy)

Bigelow 1909: 305f, pl. 31, fig. 2 (SE of Nain, Labrador, surface; description)

Mayer 1910: 162, text-fig. 87, 88, pl. 17, fig. 1 (N of Cape Cod to W Greenland; description)

Bigelow 1914b: 8 (Eastport, Bay of Fundy)

Pinhey 1927a: 47f (Str. of Belle Isle)

Fish and Johnson 1937: 254 (Bay of Fundy, May, June, and Aug.)

Frost 1937: 26 (Nfld.)

Fraser 1969: 1755, fig. 6 (Logy Bay, Nfld.; in feeding experiment)

Nemopsis bachei L. Agassiz, 1849

Bousfield and Leim 1959: 13 (Bass R. estuary, Minas Basin, N. S., Sept.)

FAMILY CORYNIDAE

Sarsia princeps (Haeckel, 1879)

Bigelow 1909: 303, pl. 30, fig. 1 (St. Pierre, off Nfld.; description)

Pinhey 1927b: 337 (Atl. coast of Nfld., abundant at St. John's)

Frost 1937: 26 (Nfld.)

Brunel 1961b: 40 (G. of St. Lawrence)

Semenova 1962: 199, fig. 1 (Grand Banks)

Fraser 1969: 1753f, fig. 5 (Logy Bay, Nfld.; in feeding experiments)

Sarsia tubulosa (M. Sars, 1835)

Stimpson 1854: 11, as *S. mirabilis* (Grand Manan, Bay of Fundy)

Bigelow 1909: 302, pl. 30, fig. 2, as *S. mirabilis* (St. Pierre, off Nfld., Oct.; description)

Bigelow 1914b: 3, as *S. mirabilis* (Eastport, Bay of Fundy; Penobscot Bay, G. of Maine)

Bigelow 1926: 43 (G. of Maine)

Fish and Johnson 1937: 257, as *S. mirabilis* (G. of Maine)

Frost 1937: 26 (Grand Banks)

Dunbar 1942b: 71 (Hebron, Labrador)

Alvariño 1956a: 11, tab. 4 (Grand Banks, May, few)

Brunel 1961: 3, as *S. mirabilis* (Gaspé area, G. of St. Lawrence)

Brunel 1962: 40 (Chaleur Bay, G. of St. Lawrence)

Lacroix 1963: 51 (Chaleur Bay, G. of St. Lawrence)

Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)

Sarsia sp.

Pinhey 1927a: 48 (Str. of Belle Isle: N shore, from Cape Whittle to Labrador)

Platt and Irwin 1968: 104 (St. Margaret's Bay, June, rare, specimens damaged)

FAMILY HYDRACTINIIDAE

Podocoryne borealis (Mayer, 1900)

Mayer 1910: 154, pl. 15, fig. 1-3, as *Lymnorea borealis* (Eastport, Me., Bay of Fundy; description)

Bigelow 1914b: 7f, as *Lymnorea borealis* (Eastport, Me., Bay of Fundy)

Podocoryne carnea M. Sars, 1846

- Fish and Johnson 1937: 252, 256ff (Bay of Fundy)
 Bousfield and Leim 1959: 13 (Minas Basin and Bass estuary, N. S., Sept.)

FAMILY PANDEIDAE

Catablema vesicarium (A. Agassiz, 1862)

- Bigelow 1909: 304f, pl. 30, fig. 3, 4, pl. 31, fig. 6, as *C. vesicaria* (Labrador and Nfld., summer; description)
 Bigelow 1914b: 11, as *C. vesicaria* (Eastport, Me., Bay of Fundy)
 Bigelow 1917: 303 (Halifax, N.S.)
 Bigelow 1920: 17 (Black Tickle, Labrador)
 Fish and Johnson 1937: 254, 302, as *Turris vesicaria* (Bay of Fundy, Apr.-June; Passamaquoddy Bay, Sept.)

Halitholus cirratus Hartlaub, 1913

- Frost 1937: 26 (Nfld.)
 Carter 1965: 351 (Tessiaruk, a coastal meromictic L., Labrador)

Leuckartiara nobilis Hartlaub, 1913

- Frost 1937: 26 (Nfld.)
 Fraser 1969: 1751f, fig. 4 (Logy Bay, Nfld; in feeding experiment)

Leuckartiara octona (Fleming, 1823)

- Bigelow 1914b: 10 (Eastport, Me., Bay of Fundy)
 Bigelow 1917: 303 (G. of Maine)
 Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)

Neoturris pileata (Forskal, 1775)

- Bigelow 1909: 303f, pl. 30, fig. 5, pl. 31, fig. 7, as *Tiara pileata* (SE of Nain, Labrador, Aug.; description)

Stomotoca pterophylla Haeckel, 1879

- Bigelow 1926: 54 (G. of Maine)

FAMILY RATHKEIDAE

Rathkea octopunctata (M. Sars, 1835)

- Bigelow 1909: 306f, pl. 31, fig. 3-5, as *Lizzia octopunctata* (Fogo Is., Nfld., July, many specimens of budding and sexual phases and young; description)
 Pinhey 1927a: 48, as *R. blumenbachii* (N shore, Str. of Belle Isle)
 Fish and Johnson 1937: 257, as *Lizzia grata* (G. of Maine)
 Brunel 1963: 82 (Chaleur Bay, G. of St. Lawrence)
 Lacroix 1963: 51 (Chaleur Bay, G. of St. Lawrence)
 Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)

FAMILY TUBULARIIDAE

Euphyssa aurata Forbes, 1848

- Fish and Johnson 1937: 252, 257, 296, as *Steenstrupia virgulata* (G. of Maine and Passamaquoddy Bay)
 Brunel 1961b: 40 (G. of St. Lawrence)
 Lacroix 1961b: 24 (Chaleur Bay, G. of St. Lawrence, 40-83 m, June)
 Lacroix and Legendre 1964: 30ff (Restigouche estuary, G. of St. Lawrence, 10 m-surface, July and Aug., rare)
 Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
 Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., year round except Jan., rare)

Euphyssa flammea (Linko, 1905)

- Fish and Johnson 1937: 257, as *Sarsia flammea* (G. of Maine)
 Frost 1937: 26 (Nfld.)
 Pavshiks et al. 1962: 58, as *Euphyse* [sic] *flammea* (Grand Banks)
 Semenova 1962: 199, fig. 1 (Grand Banks)
 Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Mar.-May, Aug., and Oct., rare)

Euphyssa tentaculata Linko, 1905

- Brunel 1963: 82 (Chaleur Bay, G. of St. Lawrence)
 Lacroix 1963: 51 (Chaleur Bay, G. of St. Lawrence)

Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)

Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Aug., rare)

Hybocodon pendulus (L. Agassiz, 1862)

Mayer 1910: 41, pl. 2, fig. 2 (Vineyard Sd.—the mouth of St. Lawrence R.; description)

Bigelow 1914b: 51 (Eastport, Me., Bay of Fundy)

Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Apr., May, July, and Sept., rare)

Hybocodon prolifer L. Agassiz, 1862

Fish and Johnson 1937: 254, 299 (G. of Maine and Bay of Fundy, Aug.; Passamaquoddy Bay, Apr. and May)

Frost 1937: 26 (Nfld.)

ORDER LEPTOMEDUSAE

FAMILY AEQUOREIDAE

Aequorea albida A. Agassiz, 1862

Bigelow 1914b: 18f, as *Aequorea aequorea* var. *albida* (Eastport, Me., Bay of Fundy)

Aequorea tenuis (A. Agassiz, 1862)

Bigelow 1917: 303 (G. of Maine)

Rhacostoma atlanticum L. Agassiz, 1850

L. Agassiz 1850: 342 (G. of Maine; description of new species)

A. Agassiz 1865: 103ff, fig. 153–156, as *Zygodactyla groenlandica* (Maine, G. of Maine; description)

Whiteaves 1901: 22, as *Polycanna Groenlandica* (Buzzards Bay–Greenland)

Mayer 1910: 335, pl. 44, fig. 1–4, as *Zygodactyla groenlandica* (G. of Maine)

Bigelow 1914b: 19, as *Aequorea groenlandica* (Eastport, Me., Bay of Fundy)

FAMILY CAMPANULARIIDAE

Obelia spp.

Bigelow 1909: 310, as *O. geniculata* (Fogos Is., Nfld., July, and St. Pierre, Nfld., Oct., numerous)

Mayer 1910: 256, as *O. nigra* (Halifax Hbr., N.S.)

Bigelow 1914b: 14ff, as *O. geniculata*, *O. longissima*, *O. commissuralis*, and *O. dichotoma* (Eastport, Me., Bay of Fundy; Casco Bay and Penobscot Bay, Me., G. of Maine)

Bigelow 1917: 303 (G. of Maine)

Pinhey 1927a: 48 (Str. of Belle Isle)

Pinhey 1927b: 337 (Cabot Str. and Atl. off Nfld.)

Fish and Johnson 1937: 256, 290, 296 (Bay of Fundy; Passamaquoddy Bay, Dec.)

Frost 1937: 26 (Nfld.)

Lacroix 1961b: 24 (Chaleur Bay, G. of St. Lawrence, June)

Legaré 1961: 25 (St. Croix estuary, N.B., Mar.–June, pulses of abundance)

Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)

Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., May–Dec., abundant in July–Oct.)

Phialidium bicophorum (L. Agassiz, 1862)

Bigelow 1914b: 16, as *Clytea volubilis* (Eastport, Me., Bay of Fundy)

Phialidium languidum (A. Agassiz, 1862)

Whiteaves 1901: 22 (Bay of Fundy)

Bigelow 1914a: 125 (coastal waters, harbours, and bays, G. of Maine)

Bigelow 1914b: 17 (Eastport, Me., Bay of Fundy; Penobscot Bay and Casco Bay, Me., G. of Maine)

Bigelow 1915: 273, 316, 319f (G. of Maine)

Bigelow 1917: 303f (G. of Maine)

Bigelow 1926: 29, 46f, 350ff, fig. 98 (G. of Maine, young set free in May–July, adult from July to late Sept.; description)

Fish and Johnson 1937: 254, 256, 258, 290, 299 (G. of Maine, Apr. and Aug.;

Bay of Fundy, June, Aug.-Sept.; Passamaquoddy Bay, Dec.)

FAMILY DIPLEUROSOMATIDAE

Dipleurosoma typicum Boeck, 1866

- Boeck 1866: 136, fig. 1-4, as *D. stuvitzii* n.sp. (Nfld.; description)
Haeckel 1879: 155ff (Nfld.; description)
Mayer 1910: 224f, fig. 117 (Nfld.; synonymy and description)

FAMILY EUTIMIDAE

Tima formosa L. Agassiz, 1862

- Bigelow 1926: 38, as *T. bairdii* (G. of Maine)

FAMILY LAODICEIDAE

Laodicea undulata (Forbes and Goodsir, 1853)

- Bigelow 1926: 54, as *L. cruciata* (G. of Maine)
Alvariño 1956a: 12, tab. 4 (Grand Banks, May, common, diameter about 25 cm)
Fraser 1969: 1749f (Logy Bay, Nfld.; in feeding experiment)

Ptychogena lactea A. Agassiz, 1865

- Whiteaves 1901: 21 (Pendleton's Is., Passamaquoddy Bay)
Bigelow 1926: 59, 348 (G. of Maine)
Préfontaine and Brunel 1962: 246 (St. Lawrence estuary)

Stauropora mertensi Brandt, 1838

- Stimpson 1854: 11, as *S. laciniata* (Grand Manan, Bay of Fundy)
A. Agassiz 1865: 136f, fig. 215a, 216a, 217-219, as *S. laciniata* (Me.; description)
Bigelow 1909: 307f, as *S. laciniata* (Fogo Is., Nfld., surface, July, one specimen)
Bigelow 1914a: 123f (G. of Maine and Grand Manan, Bay of Fundy, neritic)
Bigelow 1914b: 12f (Eastport and Grand Manan, Bay of Fundy, summer; Penobscot Bay, G. of Maine, July)

Bigelow 1915: 273, 316, 319f (G. of Maine)

Willey 1915: 5, as *Staurostoma laciniatum* (St. Andrews Bay, N.B.)

Willey and Huntsman 1921: 2 (common in various localities of Passamaquoddy Bay)

Bigelow 1926: 38, 342ff, fig. 96 (G. of Maine, common but not found from Sept. to Dec., young set free in late Apr.)

Fish and Johnson 1937: 254 (G. of Maine, May)

Frost 1937: 26 (Nfld.)

Brunel 1961: 3 (Gaspé, G. of St. Lawrence, Aug.)

Legaré 1961: 26 (St. Croix estuary, June, one specimen)

Lacroix 1963: 51 (Chaleur Bay, G. of St. Lawrence)

Fraser 1969: 1750f, fig. 3 (Logy Bay, Nfld.; in feeding experiment)

Toxorchis kellneri Mayer, 1910

Bigelow 1926: 54 (G. of Maine)

FAMILY MELICERTIDAE

Melicertum octostatum (M. Sars, 1835)

A. Agassiz 1865: 130ff, fig. 202-214, as *M. campanula* (Grand Manan, Bay of Fundy; description)

Bigelow 1909: 308f, pl. 31, fig. 1, pl. 32, fig. 1, as *M. campanula* (Fogo Is., Nfld., July, few, in early stage; St. Pierre, off Nfld., few, with mature sexual product; description)

Bigelow 1914a: 125, as *M. campanula* (inner G. of Maine, at sexual maturity; also Grand Manan, Bay of Fundy)

Bigelow 1914b: 11f, as *M. campanula* (Eastport and Grand Manan, Bay of Fundy; Penobscot Bay, G. of Maine)

Bigelow 1915: 316, as *M. campanula* (G. of Maine)

Bigelow 1917: 303, as *M. campanula* (G. of Maine)

Bigelow 1922: 134, as *M. campanula* (G. of Maine)

Bigelow 1926: 33, 341f, fig. 95, as *M. campanula* (G. of Maine)

- Fish and Johnson 1937: 254, as *M. campanula* (G. of Maine and Bay of Fundy, Aug.)
 Alvariño 1956b: 6, tab. 2, as *M. campanula* (Grand Banks, Mar.)
 Fraser 1969: 1755f, fig. 7 (Logy Bay, Nfld.; in feeding experiment)

FAMILY MITROCOMIDAE

Cosmetira sp.

- A. Agassiz 1865: 128 (Magdalen Is., G. of St. Lawrence)

Halopsis ocellata A. Agassiz, 1863

- A. Agassiz 1863a: 219 (Nahant, G. of Maine)
 Bigelow 1914b: 13 (Grand Manan, Bay of Fundy)
 Fish and Johnson 1937: 254 (G. of Maine, May and June; Bay of Fundy, May, June, and Aug.)

Mitrocomella polydiademata (Romanes, 1876)

- Bigelow 1914b: 14, as *Mitrocoma cruciata* (G. of Maine)
 Bigelow 1915: 316, 320 as *Mitrocoma cruciata* (off N.S.)
 Bigelow 1917: 303ff, as *Mitrocoma cruciata* (G. of Maine)
 Bigelow 1926: 348ff, fig. 97, as *Mitrocoma cruciata* (G. of Maine, Feb.-Aug.)
 Fish and Johnson 1937: 254, as *Mitrocoma cruciata* (G. of Maine and Bay of Fundy, May and June)

Tiaropsis multicirrata (M. Sars, 1835)

- Whiteaves 1901: 21, as *T. diademata* (Bay of Fundy)
 Bigelow 1914a: 103, as *T. diademata* (inner G. of Maine)
 Bigelow 1914b: 13f, as *T. diademata* (Eastport, Me., Bay of Fundy; Casco Bay, G. of Maine)
 Kramp 1920: 10 (St. John's, Nfld., surface, July, numerous)
 Bigelow 1926: 43 (G. of Maine)
 Pinhey 1927a: 48, as *T. diademata* (Str. of Belle Isle)
 Pinhey 1927b: 335f, as *T. diademata* (St. John's and E coast, Nfld.)

- Fish and Johnson 1937: 252, 256f, as *T. diademata* (G. of Maine and Bay of Fundy)
 Frost 1937: 26 (Nfld.)
 Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
 Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Apr.-June, rare)

ORDER TRACHYMEDUSAE

FAMILY GERYONIDAE

Liriope tetraphylla (Chamisso and Eysenhardt, 1821)

- Bigelow 1926: 54, as *L. scutigera* (G. of Maine)

FAMILY HALICREATIDAE

Halicreas minimum Fewkes, 1882

- Bigelow 1926: 67, as *H. papillosum* (G. of Maine)
 Ranson 1936: 164 (SW of N.S.)

FAMILY PTYCHOGASTRIIDAE

Ptychogastria polaris Allman, 1878

- Haeckel 1879: 266, as *Pectyllis arctica* (Halifax; description)
 Bigelow 1909: 310f (between Cape Mungford and Hebron, Labrador, Aug., few)
 Broch 1929: 491ff, fig. 6a and b (N.S.)

FAMILY RHOPALONEMATIDAE

Aglantha digitale (O. F. Müller, 1776)

- Bigelow 1909: 312f, as *A. rosea* (between Cape Sable, N.S., and Cape Race, Nfld., July, abundant; St. Pierre, off Nfld., Oct., abundant; Fogo Is., Nfld., July, abundant; Gready Hbr. and Cape Harrison, Labrador, Aug.)
 Bigelow 1914a: 104 (Bay of Fundy, Aug.)
 Bigelow 1914b: 20 (Eastport, Me., Bay of Fundy, summer)
 Bigelow 1915: 314, 316 (between N.S. and Cape May)
 Bigelow 1917: 303ff (Cape Cod-N.S.)
 Bigelow 1922: 134 (G. of Maine)

- Bigelow 1926: 38ff, fig. 99 (G. of Maine, rare but year round, large winter race and small summer race)
- Pinhey 1927a: 47 (Str. of Belle Isle, abundant, especially in the S shore, Esquiman Channel, G. of St. Lawrence)
- Pinhey 1927b: 337ff (G. of St. Lawrence, Cabot Str., and Atl. off Nfld.)
- Fish and Johnson 1937: 240, 290, 296, as *A. digitalis* (Bay of Fundy and Passamaquoddy Bay)
- Frost 1937: 26, as *A. digitalis* (Nfld.)
- Dunbar 1942b: 74 (Hebron, Labrador)
- Alvariño 1956a: 12f, tab. 4 (Grand Banks, Mar.; Banquereau Bank, E of N.S., Apr.)
- Alvariño 1956b: 6f tab. 2, as *A. digitale* var. *rosea* (Grand Banks, Feb. and Mar., abundant)
- Steele 1957: tab. 4 (Gaspé area, G. of St. Lawrence; in stomachs of ocean perch, *Sebastes marinus*)
- Legaré and MacLellan 1960: 417ff (Passamaquoddy Bay area, winter-summer in Passamaquoddy Bay and passages, winter-spring in Cobscook Bay, and year round outside Passamaquoddy Bay)
- Brunel 1961b: 40 (G. of St. Lawrence)
- Lacroix 1961b: 24 (Chaleur Bay, G. of St. Lawrence, in upper 40 m, rare in June, Aug., and Sept., abundant in July, below 40 m, abundant in Aug.)
- Legaré 1961: 25 (Passamaquoddy Bay area, stray individuals)
- Brunel 1962: 43 (Bay of Islands, Nfld., Aug.)
- Préfontaine and Brunel 1962: 246 (St. Lawrence estuary)
- Lacroix and Bergeron 1963: 64ff (Bradelle Bank, G. of St. Lawrence, Aug.)
- Lacroix and Legendre 1964: 30ff (G. of St. Lawrence, abundant in Restigouche estuary, but rare in Chaleur Bay, July and Aug.)
- Semenova 1964: tab. 2, 3, 6 (Labrador shelf, Jan., July, and Aug., common; Grand Banks, Aug., common)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
- Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., rare in Feb., Apr., May, Sept., and Dec., abundant in June-Aug., Oct., and Nov.)
- Vladimirskaya 1965: 55 (Grand Banks)
- Bainbridge and Corlett 1968: 115f, tab. 16, chart 229 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
- Aglantha* sp.
- Brunel 1959: 21 (Chaleur Bay, G. of St. Lawrence)
- Brunel 1961a: 3 (Gaspé, G. of St. Lawrence, Aug.)
- Aglaura hemistoma* Péron and Lesueur, 1809
- Bigelow 1926: 54 (G. of Maine)
- Rhopalonema funerarium* Vanhoffen, 1902
- Bigelow 1926: 54, 67 (G. of Maine)
- Rhopalonema velatum* Gegenbaur, 1856
- Bigelow 1926: 54 (G. of Maine)
- ORDER NARCOMEDUSAE
- FAMILY AEGINIDAE
- Aeginopsis laurentii* Brandt, 1838
- Bigelow 1909: 314f, pl. 32, fig. 2-6 (Fogo Is., Nfld.) July, very abundant; Gready Hbr. and Nain, Labrador, rare; description)
- Mayer 1910: 472, 498, text-fig. 309a (arctic-New England, description)
- Dunbar 1942b: 74 (Hebron, Labrador)
- Brunel 1961b: 40 (G. of St. Lawrence)
- Lacroix 1961b: 24 (Chaleur Bay, G. of St. Lawrence, June, rare)
- Pavshiks et al. 1962: 58 (Grand Banks)
- Semenova 1962: 199, fig. 1 (Grand Banks)
- Aeginura grimaldii* Mass, 1904
- Bigelow 1920: 67 (G. of Maine)

ORDER SIPHONOPHORA

FAMILY AGALMIDAE

Agalma elegans (Sars, 1846)

Bigelow 1914a: 125f (G. of Maine)
Bigelow 1914b: 23 (Eastport, Bay of Fundy)

Nanomia cara A. Agassiz, 1865

Bigelow 1914b: 23, as *Stephanomia cara* (Eastport, Me., Bay of Fundy)
Bigelow 1926: 377ff, fig. 103, as *Stephanomia cara* (G. of Maine, maximum in winter and minimum in summer; one record off Grand Manan, Bay of Fundy)
Fish and Johnson 1937: 239, 293, 302, as *Stephanomia cara* (N.B. coast, Bay of Fundy; Passamaquoddy Bay)
Legaré and MacLellan 1960: 417ff, 435, as *Stephanomia cara* (Passamaquoddy Bay, year round, largest catches outside Passamaquoddy Bay and in the Passages)
Legaré 1961: 26, tab. 4, as *Stephanomia cara* (Passamaquoddy Bay area, fragments, rare)
Brunel 1961b: 40 (G. of St. Lawrence)
Lacroix 1961b: 24 (Chaleur Bay, G. of St. Lawrence, June and July)

Nanomia sp.

Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Oct., rare)

FAMILY DIPHYIDAE

Dimophyes arctica (Chun, 1897)

Bigelow 1926: 379 (G. of Maine and off Shelburne, N.S.)
Fish and Johnson 1937: 246ff, as *Diphyes arctica* (G. of Maine)

Diphyes dispar Chamisso and Eysenhardt, 1821

Bigelow 1909: 316, as *Diphyopsis campanulifera* (Fogo Is., Nfld., a single anterior nectophore, July)

Lensia conoidea (Kefferstein and Ehlers, 1860)

Bigelow 1926: 379, as *Diphyes truncata* (occasional in G. of Maine; one record off Grand Manan, Bay of Fundy)

FAMILY PHYSALIIDAE

Physalia physalis (Linnaeus, 1758)

Fewkes 1889: 821, as *P. arethusa* (Grand Manan and other parts of the Bay of Fundy)
Fewkes 1890: 431, as *P. arethusa* (Grand Manan, Bay of Fundy, summer)
Whiteaves 1901: 29, as *P. pelagica* (Grand Manan and N.S. coast, Bay of Fundy)
Bigelow 1914b: 24 (Eastport, Me., Bay of Fundy, one record)

FAMILY PHYSOPHORIDAE

Physophora hydrostatica Forskal, 1775

Bigelow 1914a: 125f (G. of Maine)
Bigelow 1914b: 23 (G. of Maine)

Physophora sp.

Brunel 1961a: 3 (Gaspé, G. of St. Lawrence, Aug.)

CLASS SCYPHOZOA

ORDER STAUROMEDUSAE

FAMILY CLEISTOCARPIDAE

Halimocyathus lagena (O.F. Müller, 1776)

Haeckel 1880: 394, as *Halicyathus lagena* (Grand Manan and Eastport, Bay of Fundy; description)
Bigelow 1914b: 26 (Eastport, Me., Bay of Fundy)

Halimocyathus platypus Clark, 1863

Frost 1937: 26 (Nfld.)

FAMILY ELEUTHEROCARPIDAE

ORDER CORONATAE

Haliclystus auricula (Rathke, 1806)

- Clark 1863: 559ff (Anticosti Is., G. of St. Lawrence; description)
 A. Agassiz 1865: 63f, fig. 88-90 (Anticosti Is., G. of St. Lawrence; description)
 Haeckel 1880: 389 (Anticosti Is., G. of St. Lawrence; description)
 Bigelow 1909: 316 (St. Pierre off Nfld., 5 fath, Oct., few)
 Bigelow 1914b: 25 (Eastport, Me., Bay of Fundy; Mt. Desert Is. and Casco Bay, G. of Maine)

Haliclystus salpinx Clark, 1863

- Clark 1863: 563ff (Mt. Desert Is., Me., G. of Maine; description)
 A. Agassiz 1865: 64 (Mt. Desert Is., G. of Maine)
 Haeckel 1880: 388f (Mt. Desert Is., G. of Maine; description)
 Bigelow 1914b: 26 (Mt. Desert Is., G. of Maine)
 Ranson 1945: 313 (Anticosti, G. of St. Lawrence)

Lucernaria quadricornis O. F. Müller, 1776

- Clark 1863: 552ff (Grand Manan, Bay of Fundy; description)
 A. Agassiz 1865: 62 (Grand Manan, Bay of Fundy)
 Haeckel 1880: 391, pl. 22 as *L. pyramidalis* n.sp. (Labrador coast; description)
 Mayer 1910: 527f, text-fig. 336 (N of Cape Cod; description), p. 528 as *L. pyramidalis* (noted probably indentical with *L. quadricornis*)
 Bigelow 1914b: 26 (Eastport, Bay of Fundy; Owl's Head and Casco Bay, Me., G. of Maine)
 Frost 1937: 26 (Nfld.)

FAMILY PERIPHYLLIDAE

Periphylla periphylla (Péron and Lesueur, 1809)

- Frost 1937: 26, as *P. hyacinthina* (Str. of Belle Isle)
 Brunel 1961a: 3, as *P. hyacinthina* (Gaspé, G. of St. Lawrence, Aug.)
 Préfontaine and Brunel 1962: 246 (St. Lawrence estuary)

ORDER SEMAEOSTOMEAE

FAMILY CYANEIDAE

Cyanea capillata (Linnaeus, 1758)

- A. Agassiz 1865: 44ff, fig. 67, as *C. arctica* (G. of St. Lawrence; description)
 Haeckel 1880: 530f, as *C. arctica* (Bay of Fundy; description)
 Whiteaves 1901: 30, as *C. arctica* (common in the G. of St. Lawrence, Bay of Fundy, Passamaquoddy Bay, and Str. of Belle Isle)
 Bigelow 1909: 316, as *C. arctica* (Indian Hbr., Labrador, surface, Aug., few)
 Rathburn 1909: 485, as *C. arctica* (Dominio Hbr., Labrador)
 Stafford 1912a: 40, as *C. arctica* (Malpeque of P.E.I., G. of St. Lawrence)
 Stafford 1912b: 59, as *C. arctica* (Gaspé, G. of St. Lawrence)
 Bigelow 1914b: 28 (Eastport, Me., Bay of Fundy, Penobscot Bay, Casco Bay, and G. of Maine; Aug. and Sept.)
 Bigelow 1915: 316, 318 (between N.S. and Chesapeake Bay)
 Bigelow 1917: 303 (G. of Maine)
 Willey and Huntsman 1921: 2, as *C. capillata* var. *arctica* (G. of St. Lawrence, common; Passamaquoddy Bay, rare and occasional, not found before July)
 Bigelow 1926: 357ff, fig. 100, as *C. capillata* var. *arctica* (G. of Maine, more frequent in coastal water, young set free in Apr. and May, spawning in June-mid-autumn)
 Fish and Johnson 1937: 254ff, also as *C. capillata* var. *arctica* (G. of Maine,

- May; Bay of Fundy, May–Aug., in coastal but deeper waters)
 Ranson 1945: 316 (N.S.)
 Kramp 1959: 24 (44°35'N, 61°17'W, off N.S., surface)
 Brunel 1961: 40 (G. of St. Lawrence)
 Préfontaine and Brunel 1962: 246 (St. Lawrence estuary)
 Fraser 1969: 1745f (Logy Bay, Nfld., in feeding experiment)

FAMILY PELAGIIDAE

Pelagia noctiluca (Forskal, 1775)

- Leim and Hachey 1935: 279f, fig. 1 (coastal waters from Halifax to St. Mary's Bay and offshore over LaHave Bank, N.S.)

FAMILY ULMARIDAE

Aurelia aurita (Linnaeus, 1758)

- Stimpson 1854: 11 (Grand Manan, Bay of Fundy)
 Bigelow 1914b: 28f (Eastport, Bay of Fundy, Mt. Desert Is., Blue Hill Bay, Penobscot Bay, Casco Bay, and Kittery, G. of Maine)
 Bigelow 1915: 316 (G. of Maine)
 Bigelow 1917: 303 (G. of Maine)
 Bigelow 1926: 362ff, fig. 100 (coastal waters, G. of Maine, possibly breeding in Aug.–Oct.)
 Fish and Johnson 1937: 254f (Bay of Fundy, usually coastal and surface, Apr.–June)
 Legaré and MacLellan 1960: 419ff, 435 (Passamaquoddy Bay area, year round, surface swarming in late summer, declined rapidly in late Sept.)
 Brunel 1961a: 3 (Gaspé, G. of St. Lawrence, Aug.)
 Legaré 1961: 25 (Passamaquoddy Bay area, fragments, mostly in Sept.)

Fraser 1969: 1746ff, fig. 1, 2 (Logy Bay, Nfld.; in feeding experiment)

Aurelia limbata (Brandt, 1838)

- A. Agassiz 1865: 42, fig. 65, 66, as *A. flavidula* (G. of St. Lawrence; description)
 Whiteaves 1901: 30, as *A. flavidula* (Bay of Fundy, Passamaquoddy Bay, G. of St. Lawrence, and Str. of Belle Isle)
 Bigelow 1909: 316, as *A. flavidula* (Indian Hbr. and Gready Hbr., Labrador, few, immature)
 Stafford 1912a: 40, as *A. flavidula* (Malpeque of P.E.I., G. of St. Lawrence, common)
 Stafford 1912b: 59, as *A. flavidula* (Gaspé, G. of St. Lawrence)
 Willey 1915: 5, as *A. flavidula* (St. Andrews Bay, N.B.)
 Willey and Huntsman 1921: 2, as *A. flavidula* (Passamaquoddy Bay, common, abundant in summer)
 Cox and Anderson 1922: 9, as *A. flavidula* (Passamaquoddy Bay, in stomachs of lumpfish, *Cyclopterus lumpus*, Sept.)
 Stephenson 1933: 4, as *A. flavidula* (planula stage; St. Croix estuary near St. Andrews, N.B., Aug.; vertical distribution)
 Legaré 1961: 25, as *A. flavidula* (Passamaquoddy Bay area, fragments, mostly in Sept.)

Aurelia sp.

- Wright 1926?: 19ff (Passamaquoddy Bay area; gut content examination)

Phacellophora camtschatica Brandt, 1838

- Bigelow 1914b: 28, as *P. ornata* (Eastport, Me., Bay of Fundy)
 Bigelow 1926: 264 as *P. ornata* (G. of Maine)

PHYLUM CTENOPHORA

CLASS TENTACULATA

ORDER CYDIPPIDA

Mertensia ovum (Fabricius 1780)

- A. Agassiz 1865: 26ff, fig. 29-37 (Eastport, Me., G. of Maine, description)
Whiteaves 1901: 42 (abundant from Str. of Belle Isle to as far N as Hopedale, Labrador)
Bigelow 1909: 316f (SE of Nain, and Gready Hbr., Labrador, Aug., few)
Mayer 1912: 8f, pl. 1, fig. 1 (arctic-G. of Maine, large numbers in Labrador Current; description)
Bigelow 1914b: 30 (Eastport, Me., Bay of Fundy)
Bigelow 1917: 249, 303, 306, fig. 81 (G. of Me., and Halifax, N.S.)
Bigelow 1926: 371 (G. of Maine, rare, mostly in autumn)
Huntsman et al. 1954; 240, fig. 35 (Str. of Belle Isle and N shore—the centre of the G. of St. Lawrence N of Anticosti Is., indicator of Labrador current)
Dunbar 1966: 30 (northern G. of St. Lawrence and Str. of Belle Isle)

Mertensia sp.

- Pinhey 1927a: 225 (Str. of Belle Isle, common in waters off N shore)
Pinhey 1927b: 33f (G. of St. Lawrence; Atl. coast, Nfld.)

Pleurobrachia pileus (O. F. Müller, 1776)

- Stimpson 1854: 11, as *P. rhododactyla* (Grand Manan, Bay of Fundy)
A. Agassiz 1865: 30ff, fig. 38-51, as *P. rhododactyla* (N.S., description)
Whiteaves 1901: 42, as *P. rhododactyla* (Grand Manan, Bay of Fundy; Casco Bay, G. of Maine, abundant about East Pt. of Anticosti Is. in July, and rare at Little Mecattina Is., G. of St. Lawrence)
Bigelow 1909: 316 (St. Pierre, off Nfld., Oct., few)
Mayer 1912: 10ff, text-fig. 4, 5 (arctic-G. of Maine; description)

Stafford 1912: 59, as *P. rhododactyla* (Gaspé, G. of St. Lawrence)

Mortensen 1913: 8 (S of Nfld., several specimens from two stations from surface to 300 m of wire, June and July)

Bigelow 1914a: 126 (G. of Maine; common)

Bigelow 1914b: 30 (Bay of Fundy; Penobscot Bay and Casco Bay, G. of Maine)

Bigelow 1915: 273, 316ff, fig. 80 (G. of Maine)

Bigelow 1917: 303f (G. of Maine; S of Halifax, N.S.)

Bigelow 1926: 365ff, fig. 101 (G. of Maine, common and widely distributed, more neritic than oceanic)

Pinhey 1927b: 37 (G. of St. Lawrence, Cabot Str., and southern Nfld. coast)

Fish and Johnson 1937: 240, 293ff (Bay of Fundy; Passamaquoddy Bay, early stage in Oct.)

Alvariño 1956a: 13f, tab. 4 (Grand Banks, May, common)

Alvariño 1956b: 7f, tab. 2 (Grand Banks, June, abundant)

Legaré and MacLellan 1960: 417, 435 (Passamaquoddy Bay area, year round and common, largest catches in outer western passage and Cobscook Bay)

Brunel 1961b: 40 (G. of St. Lawrence)

Lacroix 1961b: 24 (Chaleur Bay, G. of St. Lawrence, June)

Legaré 1961: 25, tab. 4 (N of Campobello Is., N.B., common but not abundant, pulses of juveniles in summer; St. Croix estuary, year round, abundant in Aug.-Feb.)

Carter 1965: 351 (Tessiaruk, a coastal meromictic L., Labrador)

Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., year round)

Pleurobrachia sp.

Stafford 1912a: 40 (Malpeque of P.E.I., G. of St. Lawrence)

Willey 1921: 188 (Passamaquoddy Bay, May)

Steele 1957: tab. 4 (Gaspé, G. of St. Lawrence, in stomachs of ocean perch *Sebastodes marinus*)

ORDER LOBATA

Bolinopsis infundibulum (O. F. Müller, 1776)

- Stimpson 1854: 11, as *Bolina alata* (Grand Manan, Bay of Fundy)
A. Agassiz 1865: 15ff, fig. 1–16, as *Bolina alata* (Bay of Fundy; description)
Whiteaves 1901: 43, as *Bolina alata* (Bay of Fundy; near Fox Bay of Anticosti, G. of St. Lawrence, June, abundant)
Mayer 1912: 21f, pl. 4, fig. 12–15 (Nfld., abundant; description)
Stafford 1912b: 59, as *Bolina alata* (Gaspé, G. of St. Lawrence)
Willey 1913: 288ff, as *Bolina alata* (St. Croix estuary, Passamaquoddy Bay, shallow water, Aug.)
Bigelow 1914a: 126, also as *B. septentrionalis* (common in G. of Maine and Grand Manan Channel)
Bigelow 1914b: 31 (Eastport, Me., Bay of Fundy; Penobscot Bay and Casco Bay, Me., G. of Maine)
Willey 1915: 5, as *Bolina alata* (St. Andrews Bay, N.B.)
Bigelow 1926: 372 (G. of Maine, common, more in July–Sept., spawning in late summer and early autumn)
Alvariño 1956a: 13, tab. 4 (Grand Banks, May, few)
Brunel 1962: 40 (Chaleur Bay, G. of St. Lawrence)

Bolinopsis sp.

- Stafford 1912a: 40, as *Bolina* sp. (Malpeque of P.E.I., G. of St. Lawrence)
Legaré 1961: 25 (Passamaquoddy Bay area, occasional)

CLASS NUDA

ORDER BEROIDA

Beroe cucumis Fabricius, 1780

- A. Agassiz 1865: 36ff, fig. 52–62, as *Idyia roseola* (Bay of Fundy; Alt. coast, N.S.)
Chun 1898: 26ff (Labrador and Nfld.)
Whiteaves 1901: 43, as *Idyia roseola* (Bay of Fundy, G. of St. Lawrence, along the Labrador coast from Salmon Bay,

just inside Str. of Belle Isle, to Cape Webuc)

Bigelow 1909: 317 (between Cape Sable, N.S., and Cape Race, Nfld., July, abundant; St. Pierre off Nfld., Oct.; Fogo Is., Nfld., July)

Mayer 1912: 52ff, text-fig. 12, pl. 15, fig. 67, pl. 17, fig. 76 (Halifax Hbr., N.S., Sept., large size race; description)

Stafford 1912b: 59, as *Idyia roseola* (Gaspé, G. of St. Lawrence)

Mortensen 1913: 8f (S of Nfld., several specimens from surface and 100-m wire, June)

Bigelow 1914a: 126 (G. of Maine)

Bigelow 1914b: 32 (Eastport, Me., Bay of Fundy; Penobscot Bay and Casco Bay, G. of Maine)

Bigelow 1915: 316ff, fig. 80 (G. of Maine)

Bigelow 1917: 303 (G. of Maine and SE off N.S.)

Bigelow 1922: 136 (identification uncertain; G. of Maine)

Bigelow 1926: 372ff, fig. 102 (G. of Maine, common but not abundant, spawning in July and Aug., may continue to Dec. but rare)

Pinhey 1927a: 225 (Labrador coast and N shore of Str. of Belle Isle)

Pinhey 1927b: 337 (Nfld. coasts and G. of St. Lawrence)

Fish and Johnson 1937: 240 (Bay of Fundy)

Huntsman et al. 1954: 240 (Str. of Belle Isle and northern G. of St. Lawrence, indicator of Labrador current)

Legaré 1961: 25 (Passamaquoddy Bay area, occasional)

Semenova 1964: 51 (Labrador shelf)

Dunbar 1966: 30 (Str. of Belle Isle and northern G. of St. Lawrence)

Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Jan.–Oct.)

Beroe sp.

Stafford 1912a: 40, as *Idyia* sp. (Malpeque of P.E.I., G. of St. Lawrence)

Jean 1953: 36 (Grande-Rivière, G. of St. Lawrence, in herring stomachs, May–Sept.)

Alvariño 1956b: 7, tab. 2 (Grand Banks, June rare)

PHYLUM ROTIFERA

CLASS MONOGONONTA

ORDER PLOIMA

FAMILY BRANCHIONIDAE

Notholca foliacea (Ehrenberg, 1838)

Fish and Johnson 1937: 242f (Porcupine Is. of Frenchmans Bay, Bay of Fundy)

FAMILY SYNCHAETIDAE

Synchaeta baltica (Ehrenberg, 1834)

Fish and Johnson 1937: 243 (near Laboratory Pt. of Frenchmans Bay, Bay of Fundy)

Synchaeta johanseni Harring, 1921

Fish and Johnson 1937: 242f, fig. 24
(Penobscot Bay, G. of Maine, Passamaquoddy Bay, Bay of Fundy, Apr.)

Synchaeta triophthalma Lauterborn, 1894

Fish and Johnson 1939: 242ff (Porcupine Is. of Frenchmans Bay, Bay of Fundy)

Synchaeta sp.

Semenova 1964: 61, tab. 5 (Grand Banks, July)

FAMILY TRICHOCERCIDAE

Trichocerca stylata (Levander, 1894)

Fish and Johnson 1937: 242ff, fig. 24, as
T. curvata (Penobscot Bay and other parts of inshore waters, G. of Maine, May and Aug.; Bay of Fundy, May and Aug.; Passamaquoddy Bay, June and Aug.)

PHYLUM MOLLUSCA

CLASS GASTROPODA

SUBCLASS PROSOBRANCHIA

ORDER MESOGASTROPODA

FAMILY LITTORINIDAE

Littorina littorea (Linnaeus, 1767)

Fish and Johnson 1937: 28ff (larvae and eggs; Bay of Fundy, Passamaquoddy Bay, May, Aug., Sept., Nov., and Dec.)
Legaré 1961: 28 (larvae, N of Campobello Is., N.B., fall, small number)

Littorina sp.

Legaré and MacLellan 1960: 417 (egg cases; spring and summer in Passamaquoddy Bay and passages, spring to fall in Cobscook Bay)
Legaré 1961: 28, tab. 4 (eggs; N of Campobello Is., N.B., Summer, frequent; St. Croix estuary, N.B., occasional)
Platt and Irwin 1968: 105 (floating egg capsule; St. Margaret's Bay, N.S., Apr. and Oct., rare)

SUBCLASS OPISTHOBRANCHIA

ORDER THECOSOMATA

FAMILY LIMACINIDAE

*Limacina helicina*¹ (Phipps, 1774)

Bigelow 1917: 298ff, fig. 81 (G. of Maine; S of Halifax, N.S.)
Bigelow 1926: 125 (off Cape Sable, near Lurcher Shoal, N.S.)

¹The generic name of this and the next species follows a recent monograph by Spoel 1967.

Pinhey 1927a: 227 (mostly young specimens; Str. of Belle Isle and off Labrador)

Pinhey 1927b: 338, 344 (G. of St. Lawrence; Cabot Str.; Atl. coasts of Nfld.)
Fish and Johnson 1937: 247 (Bay of Fundy, trace)

Kerswill 1940: 23ff (Hudson Str.-Sable Is.; G. of St. Lawrence)

Dunbar 1942b: 75 (Hebron, Labrador)

Huntsman et al. 1954: 244 (Str. of Belle Isle, generally associated with Labrador Current, but not a good indicator)

Kusmorskaya 1960: 107 (Grand Banks, spring 1958)

Lacroix 1961b: 25 (Chaleur Bay, G. of St. Lawrence, June-Sept., abundant)

Brunel 1962: 43 (Bay of Islands, Nfld., Aug.)

Lacroix and Bergeron 1963: 64ff (Bradelle Bank, G. of St. Lawrence, Aug.)

Pavshiks et al 1962: 58 (Grand Banks)
Semenova 1962: 199, fig. 1 (Grand Banks)

Lacroix and Legendre 1964: 3 (Restigouche estuary and Chaleur Bay, G. of St. Lawrence, July and Aug., few)

Semenova 1964: 51ff, tab. 2, 4, 6-8 (Labrador, Apr. in coastal waters, July and Aug., in shelf waters; Grand Banks, Feb., Mar., and Aug.)

Vladimirskaya 1965a: 55 (Grand Banks)

Lacroix 1966: 53 (Chaleur Bay, G. of St. Lawrence)

Platt and Irwin 1968: 105, as *Spiratella helicina* (St. Margaret's Bay, N.S., Jan.-May, July, Aug., Oct., and Nov., common)

Limacina retroversa Fleming, 1823

Herdman et al. 1898: 50ff (Str. of Belle Isle and northern G. of St. Lawrence, Aug. and Sept.)

Whiteaves 1901: 208f, as *L. Gouldii* (Labrador coast, abundant)

- Bigelow 1914a: 120f, as *L. balea* (G. of Maine, common)
- Bigelow 1915: 302ff, fig. 72, as *L. balea* (G. of Maine)
- Bigelow 1917: 298ff, as *L. balea* (G. of Maine)
- Bigelow 1922: 133, as *L. balea* (G. of Maine)
- Bigelow 1926: 116ff, fig. 43, 44 (G. of Maine, Bay of Fundy, and G. of St. Lawrence; study of seasonality)
- Pinhey 1927b: 338, 344 (G. of St. Lawrence, Str. of Belle Isle, and Nfld. E coast)
- Fish and Johnson 1937: 239, 290, 296 (Bay of Fundy; Passamaquoddy Bay, May and June)
- Hsiao 1939a: 7ff, fig. 1-7 (G. of Maine; microanatomy of reproductive system)
- Hsiao 1939b: 280ff, fig. 1-9 (G. of Maine; sexual development and reversal)
- Redfield 1939: 26ff, fig. 1-10 (G. of Maine; population study)
- Kerswill 1940: 23ff (Str. of Belle Isle-Sable Is., and G. of St. Lawrence)
- Kusmorskaya 1960: 107 (Grand Banks, spring 1958)
- Legaré and MacLellan 1960: 417 (Passamaquoddy Bay area, spring to fall in Passamaquoddy Bay and Cobscook Bay, fall to spring in passages, spring and summer outside Passamaquoddy Bay)
- Lacroix 1961: 25 (Chaleur Bay, G. of St. Lawrence, June-Sept., abundant in July at 0-40 m)
- Legaré 1961: 28f, tab. 4 (N of Campobello Is., N.B., year round but wanting in Nov., pulses of abundance at 18-23 m, in Apr.-June; St. Croix estuary, N.B., summer, occasional)
- Pavshiks et al. 1962: 58 (E of Nfld.)
- Travin and Pechenik 1962: 14 (Labrador-Nfld. area)
- Lacroix and Bergeron 1963: 64ff (Bradelle Bank, G. of St. Lawrence, Aug.)
- Lacroix and Legendre 1964: 31 (Chaleur Bay, G. of St. Lawrence, 20 m, July and Aug., few)
- Semenova 1964: tab. 2, 3, 6 (Labrador shelf, Jan., July, and Aug.; Grand Banks, mid-Aug.)
- Vladimirskaya 1965a: 55 (Grand Banks)
- Vladimirskaya 1965b: 368 (Grand Banks)
- Lacroix 1966: 53 (Chaleur Bay, G. of St. Lawrence)
- Bainbridge and Corlett 1968: 115, fig. 28, tab. 16, chart 214, as *Spiratella retroversa* (Labrador Sea, including few stations within shelf, in plankton recorder collections at 10 m)
- Glover and Robinson 1968: 124, fig. 29, as *Spiratella retroversa* (including few stations in Labrador coasts, annual quantitative study)
- Platt and Irwin 1968: 105, as *Spiratella retroversa* (St. Margaret's Bay, N.S., Oct.)
- Limacina* sp.
- Brunel 1961a: 4 (Gaspé, G. of St. Lawrence, Aug.)
- ORDER GYMNOSOMATA
- FAMILY CLIONIDAE
- Clione limacina* (Phipps, 1774)
- Wood 1869: 185ff, text-fig., as *Clio borealis* (House Is. in Portland Hbr., Me., G. of Maine, abundant in late Apr. and early May; description)
- Whiteaves 1901: 209 (Caribou Is., G. of St. Lawrence; Str., of Belle Isle, surface; New York-Hudson Str.)
- Wright 1907: 15, pl. 7, fig. 8, as *C. aurantiaca* (larvae; Canso, N.S.)
- Bonnevie 1913: 59f, text-fig. 50, 51, pl. 8, fig. 59, 60 (S of Nfld., upper 100 m, several specimens; description)
- Bigelow 1914a: 119f (G. of Maine, common but not abundant)
- Bigelow 1915: 303ff (G. of Maine)
- Bigelow 1917: 298ff (G. of Maine; S of Halifax, N.S.)
- Bigelow 1922: 132, 134, (G. of Maine, Bay of Fundy, Atl. coast of N.S., Grand Banks, and G. of St. Lawrence)
- Bigelow 1926: 125ff, fig. 45 (G. of Maine, Bay of Fundy)
- Pinhey 1927a: 227 (southern shore of Esquiman Channel, G. of St. Lawrence; Str. of Belle Isle)
- Pinhey 1927b: 338 (Atl. coasts of Nfld.)

- Battle et al. 1936: 422 (Passamaquoddy Bay, July)
- Fish and Johnson 1937: 239, 293ff (Bay of Fundy; Passamaquoddy Bay, Jan., May, July, Aug., Oct.-Dec.; larvae in Passamaquoddy Bay)
- Kerswill 1940: 23ff (Hudson Str.-Sable Is.; G. of St. Lawrence)
- Dunbar 1942: 75 (Hebron, Labrador)
- Huntsman et al. 1954: 244 (Str. of Belle Isle, generally associated with Labrador Current, but not a good indicator)
- Alvariño 1956b: 9f, tab. 2 (Grand Banks, Mar., one specimen)
- Steele 1957: tab 4 (Gaspé area, G. of St. Lawrence, in stomachs of ocean perch, *Sebastes marinus*)
- Kusmorskaya 1960: 107 (Grand Banks, spring 1958)
- Lambert 1960: 237ff (Nfld., in stomachs of ocean perch, *Sabastes marinus*)
- Legaré and MacLellan 1960: 417 (Passamaquoddy Bay area, spring in Passamaquoddy Bay, spring-summer in Cobscook Bay and passages, year round outside Passamaquoddy Bay)
- Brunel 1961a: 4 (Gaspé, G. of St. Lawrence, Aug.)
- Legaré 1961: 29, tab. 4 (N of Campobello Is., N.B., Nov.-July, abundant in Feb.-May; St. Croix estuary, N.B., Feb.-March, rare)
- Pavshiks and Gogoleva 1964: tab. 2 (43°N, 65°W, N.S. shelf, June)
- Vladimirskaya 1965a: 55 (Grand Banks)
- Bainbridge and Corlett 1968: tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
- Platt and Irwin 1968: 105 (St. Margaret's Bay, N.S., Feb.-June, rare)
- Clione* sp.
- FAMILY PNEUMODERMOPSIDAE
- Pneumodermopsis paucidens* (Boas, 1886)
- Cooper and Forsyth 1963: 34, pl. 7, 9 (G. of Maine and coastal waters, N.S., July-Dec., rare, in plankton recorder collections at 10 m)
- Paedoclione*² *doliiformis* Danforth, 1907
- Danforth 1907: 1ff, text-fig. A, B., pl. 1-3 (described as new genus and new species; in plankton on the nights of August 28, Sept. 5-8 1902, in Casco Bay, Me.)
- ORDER NUDIBRANCHIA
- FAMILY AEOLIIDAE
- Aeolis despecta*³
- Wright 1907: 15, pl. 7, fig. 7 (veliger; Canso, N.S., numerous)
- CLASS PELECYPODA
- ORDER PROTOBRANCHIA
- FAMILY LEDIDAE
- Yoldia limatula* (Say, 1831)
- Sullivan 1948: 32, pl. 22 (spat; G. of St. Lawrence, mid-July; description)
- ORDER FILIBRANCHIA
- FAMILY ANOMIIDAE
- Anomia aculeata* Müller, 1766
- Stafford 1912c: 239f, pl. 24, fig. 38-40 (larva; Bay of Fundy, Sept.; description)
- Fish and Johnson 1937: 279, fig. 36, 37 (larvae, identification uncertain; G. of Maine, widely distributed, late Aug.;

²Family status uncertain.

³Identity of species uncertain.

Bay of Fundy, early Sept., most abundant about Grand Manan)
Sullivan 1948: 29f, fig. 1, pl. 19 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, late June; description)

FAMILY MYTILIDAE

Modiolus demissus (Dillwyn 1817)

Sullivan 1948: 25ff, fig. 1, pl. 16, 17 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, mid-July-end of Aug.; description)

Mytilus edulis Linnaeus, 1758

Stafford 1912c: 230ff, pl. 22, fig. 1-7 (larvae; earliest record of the year; St. Andrews, N.B., June 12; Malpeque, P.E.I., June 20; Gaspé, Que., June 20; description)

Stevenson 1933: 3f (veligers; St. Croix estuary near St. Andrews, N.B., Aug.; vertical distribution)

Fish and Johnson 1937: 275ff, 302, fig. 32-35 (eggs and larvae; G. of Maine and Bay of Fundy, Apr.-Sept., shifting to spawning centre from gulf to bay; Passamaquoddy Bay)

Sullivan 1948: 15f, fig. 1, pl. 7, 8 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, late May-end of Aug.; description)

Legaré and Maclellan 1960: 418, 438 (larvae; Passamaquoddy Bay area, summer and fall in Passamaquoddy Bay, spring-fall in Cobscook Bay and passages, spring and summer outside Passamaquoddy Bay; common in stomachs of herring in Passamaquoddy Bay and vicinity)

FAMILY OSTREIDAE

Crassostrea virginica (Gmelin, 1792)

Stafford 1912c: 233ff, pl. 23, fig. 16-24, as *Ostrea virginica* (larvae; Malpeque of P.E.I., earliest finding on June 26 then increasing to highest peak on July 27, 1905, and Caraquet-Shediac, N.B., earliest finding July 22, 1905; description)

Needler 1931: 19f (scientific name not

given; larvae; G. of St. Lawrence, in plankton hauls from Bideford R. but not from Malpeque Bay and Curtain Is. of P.E.I.)

Clark 1934: 18 (larvae; scientific name not given; first appearance in Bideford R., P.E.I., between July 3 and 7, peak in mid-Aug.)

Medcof 1939: 287ff, as *Ostrea virginica* (larvae; Bideford R. of P.E.I., G. of St. Lawrence, early June-early Aug., several bursts)

Needler 1941: 6ff, fig. 1, as *Ostrea virginica* (larvae; eastern Canadian waters, spawning starts when water warms up to about 68 F, in plankton for about 3 weeks after hatching)

Sullivan 1942: 1ff, tab. 1-3 (scientific name not given; larvae; Malpeque Bay area, P.E.I.; measurements of larvae and predictions of sets)

Sullivan 1948: 28f, fig. 1, 3, pl. 19, as *Ostrea virginica* (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, early July-late Aug.; description)

Medcof 1961: 16ff, fig. 8-10 (larvae; eastern Canadian waters, spawning starts when water temperature warms up to 68 F, usually in late June or early July, and lasts for 4-6 weeks)

FAMILY PECTINIDAE

Pecten sp.

Legaré and Maclellan 1960: 419 (larvae; Passamaquoddy Bay and passages, fall, rare)

Placopecten magellanicus (Gmelin, 1792)

Drew 1906: 53ff, pl. 17, fig. 35, 36, as *Pecten tenuicostatus* (larval development; Bass Hbr. of Mt. Desert Is., G. of Maine, Aug.; description)

Stafford 1912c: 239, pl. 24, fig. 31-35, as *Pecten magellanicus* (larvae; St. Andrews-Seven Is., Bay of Fundy, July-Sept.; description)

Bourne 1964: 12f, fig. 9 (larvae reared in laboratory at St. Andrews, N.B.)

ORDER EULAMELLIBRANCHIA

FAMILY CARDIIDAE

Cerastoderma pinnulatum (Conrad, 1831)

Sullivan 1948: 10f, fig. 1, pl. 2 as *Cardium pinnulatum* (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, early June–mid-July; description)

FAMILY LEPTONIDAE

Rochefortia planulata (Stimpson, 1851)

Sullivan 1948: 16ff, fig. 1, 3, pl. 9 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, early July–early Sept.; description)

FAMILY MACTRIDAE

Mulinia lateralis (Say, 1822)

Sullivan 1948: 19ff, fig. 1, 3, pl. 11 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, mid-July–early Sept.; description)

Spisula solidissima (Dillwyn, 1817)

Sullivan 1948: 21, fig. 1, pl. 12 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, mid-June–mid-July, stragglers to end of Aug.; description)

FAMILY MYIDAE

Mya arenaria Linnaeus, 1758

Stafford 1912c: 231ff, pl. 22, fig. 8–15 (larvae; St. Andrews, Passamaquoddy Bay, July and Aug., abundant; G. of St. Lawrence: Malpeque of P.E.I., June, and Gaspé, July and Aug.; description)

Sullivan 1942: 12ff (larvae; Malpeque Bay area, P.E.I.)

Sullivan 1948: 11f, fig. 1, pl. 3 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, late May–late Aug.; description)

FAMILY PANDORIDAE

Pandora gouldiana (Dall, 1866)

Sullivan 1948: 31, pl. 21 (larvae; locality not mentioned, may be in the G. of St. Lawrence near P.E.I.; description)

FAMILY PETRICOLIDAE

Petricola pholadiformis Lamarck, 1818

Sullivan 1948: 22f, fig. 1, pl. 13 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, mid-July–early Sept.; description)

FAMILY PHOLADIDAE

Zirfaea crispata (Linnaeus, 1758)

Sullivan 1948: 13f, fig. 1, pl. 5 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, mid-June–mid-July; description)

FAMILY SAXICAVIDAE

Hiatella arctica (Linnaeus, 1758)

Sullivan 1948: 9f, fig. 1, 3, pl. 1, as *Saxicava arctica* (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, early June–early July)

FAMILY SEMELIDAE

Cumingia tellinoides (Conrad, 1831)

Sullivan 1948: 27f, fig. 1, pl. 18 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, 2nd and 3rd weeks of Aug.; description)

FAMILY SOLENIDAE

Ensis directus Conrad, 1893

Fish and Johnson 1937: 280 (juveniles; Bay of Fundy)

Sullivan 1948: 14f, fig. 1, pl. 6 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, early June–mid-July, stragglers to end of Aug.; description)

FAMILY TELLINIDAE

Macoma balthica (Linnaeus, 1758)

Sullivan 1948: 30f, pl. 20 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, late May–early June, rare; description)

Tellina agilis Stimpson, 1858

Sullivan 1948: 24f, fig. 1, 3, pl. 15, as *T. tenera* (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, early July–late Aug.; description)

FAMILY TEREDINIDAE

Teredo navalis (Linnaeus, 1758)

Sullivan 1948: 12f, fig. 1, 3, pl. 4 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, intervals from early June to early Sept.; description)

FAMILY VENERIDAE

Gemma gemma (Totten, 1834)

Sullivan 1948: 31, pl. 21 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, rare, only after heavy storms when larvae were carried up from bottom; description)

Mercenaria mercenaria (Linnaeus, 1758)

Stafford 1912c: 237ff, pl. 23, fig. 25–30, as *Venus mercenaria* (larvae; Buctouche and Cocagne of Northumberland Str. of Bay du Vin, G. of St. Lawrence, middle–late July, abundant; description)

Sullivan 1948: 18f, fig. 1, pl. 10, as *Venus mercenaria* (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, early July–mid-Aug.; description)

Pitar morrhuanus (Linsley, 1848(?)

Sullivan 1948: 23f, fig. 1, pl. 14 (larvae; Malpeque Bay of P.E.I., G. of St. Lawrence, last 3 weeks of Aug.; description)

CLASS SCAPHOPODA

FAMILY DENTALIIDAE

Dentalium entale stimpsoni Henderson, 1920

Fish and Johnson 1937: 286, as *D. entale* (G. of Maine; benthic invertebrate in plankton samples)

CLASS CEPHALOPODA

ORDER DECAPODA

FAMILY SEPIOLIDAE

Rossia⁴ palpebrosa Owen, 1835

Fish and Johnson 1937: 286, as *R. glaukopis* (G. of Maine; benthic invertebrate in plankton samples)

⁴For a recent review of the genus *Rossia* in Canadian waters, see Mercer, 1968.

PHYLUM ANNELIDA

CLASS POLYCHAETA

SUBCLASS ERRANTIA

FAMILY GLYCERIDAE

Glycera capitata Oersted, 1843

Pettibone 1954: 272ff, fig. 31a-d (epitokes at surface; off N.S.; description)

Pettibone 1963: 211ff, fig. 53 (epitokes at surface; St. Lawrence estuary and S of Anticosti Is., G. of St. Lawrence; description)

Glycera dibranchiata Ehlers, 1868

Pettibone 1963: 215ff, fig. 55 (Chaleur Bay, G. of St. Lawrence; Cape Breton, N.S.; St. Andrews and St. Croix estuary, Passamaquoddy Bay; description; planktonic larvae, swimming adults at surface observed in Woods Hole area)

Ophioglycera gigantea Verrill, 1885

Pettibone 1963: 223f, fig. 57c-e (mature specimens reported swimming at surface; Two Is. near Partridge Is., N.S.; St. Andrews, Passamaquoddy Bay; description).

FAMILY NEREIDAE

Nereis pelagica Linnaeus, 1753

Pettibone 1963: 179ff, fig. 42d-h (sexual epitokes appear sporadically at varying times of the year and may appear at surface, larvae pelagic; G. of St. Lawrence; off Labrador, Nfld., N.S., and N.B.; description)

Nereis succinea (Frey and Leuckart, 1847)

Berkeley and Berkeley 1953: 847 (Miramichi Bay, G. of St. Lawrence, heteronereid forms, swarming at surface, June)

Pettibone 1963: 165ff, fig. 44a-e, 45a-d (planktonic larvae known in Baltic Sea; P.E.I., G. of St. Lawrence; Cape Breton Is., N.S.; Nfld.; description)

Nereis virens Sars, 1835

Fish and Johnson 1937: 284ff (G. of Maine, Apr.; Bay of Fundy, May)

Legaré and MacLellan 1960: 418, 422 (Passamaquoddy Bay area, year round)

Pettibone 1963: 170ff, fig. 44f (sexually mature adults swarming at surface in Me., mid-Mar.-late June; Salisbury Bay and Grand Manan, Bay of Fundy; St. Andrews and St. Croix estuary, Passamaquoddy Bay; Chaleur Bay, Anticosti Is., and St. Lawrence estuary, G. of St. Lawrence; description)

Nereis zonata Malmgren, 1867

Pettibone 1956: 557 (epitokes at surface; Greater Melville area, Labrador)

Nereis sp.

Pinhey 1927b: 344 (larvae, eastern Nfld.)
Platt and Irwin, 1968: 104 (juveniles, St. Margaret's Bay, N.S., June and July, rare)

Platynereis dumerilii (Andouin and Milne-Edwards, 1833)

Pettibone 1963: 154ff, fig. 43 (S of Nfld., surface; young and sexual epitokes at surface, all stages in floating seaweed; description)

FAMILY PHYLLODOCIDAE

Eteone longa (Fabricius, 1780)

Pettibone 1963: 73f, fig. 16e (Gaspé Bay, Chaleur Bay, Anticosti Is., and Madeleine Is., G. of St. Lawrence; Atl. coasts off Nfld. and N.S.; Bay of Fundy; description; adults swimming near surface in Denmark)

Phyllodoce groenlandica (Oersted, 1842)

Pettibone 1963: 80f, fig. 18e (G. of St. Lawrence, and Labrador, Nfld. and N.S. coasts; pelagic larval stage found in Danish waters; description)

Phyllodoce maculata (Linnaeus, 1767)

Pettibone 1963: 78ff, fig. 18d (G. of St. Lawrence; Atl. coasts off Nfld., N.S., and N.B.; description; with planktonic larvae in Denmark)

Phyllodocid larvae

Pinhey 1927a: 226 (Str. of Belle Isle)

FAMILY POLYNOIDAE

Antinoella sarsi (Malmgren, 1865)

Pettibone 1963: 30, fig. 7e-j (Labrador; Chaleur Bay, G. of St. Lawrence; may be pelagic; description)

Harmothoe imbricata (Linnaeus, 1767)

Pinhey 1927a: 226, fig. 7 (nectochaeta stage; Str. of Belle Isle)
Pettibone 1963: 36ff, fig. 7a-d (may be semipelagic in early stage; Labrador and G. of St. Lawrence; description)

Lepidonotus squamatus (Linnaeus, 1758)

Fish and Johnson 1937: 290 (larvae; Larose, Bay of Fundy)

FAMILY SIGALIONIDAE

Leanira tetragona (Oersted, 1845)

Pettibone 1963, fig. 10e (may be in plankton; S of Anticosti Is., G. of St. Lawrence; description)

FAMILY SPHAERODORIDAE

Ephesiella minuta (Webster and Benedict, 1887)

Pettibone 1963: 208, fig. 52d-f (may be at surface at night; Chaleur Bay, G. of St. Lawrence; description)

Sphaerodorum gracilis (Rathke, 1843)

Pettibone 1963: 207, fig. 51a-c (Chaleur Bay and S of Anticosti Is., G. of St. Lawrence; description; found at surface in Iceland)

FAMILY SYLLIDAE

Amblyosyllis finmarchica (Malmgren, 1867)

Pettibone 1963: 128, fig. 34e, f (young may appear at surface; Ferryland, Atl. coast of Nfld.: description)

Autolytus alexandri Malmgren, 1867

Fish and Johnson 1937: 284ff (Bay of Fundy, Apr. and May, surface)

Pettibone 1954: 246f (Labrador, sexual stolons at surface; description)

Pettibone 1956: 555 (Str. of Belle Isle, sexual stolons at surface)

Pettibone 1963: 147f, fig. 37f, g (G. of St. Lawrence, sexual stolons at surface, June)

Autolytus cornutus A. Agassiz, 1863

A. Agassiz 1863b: 390ff, pl. 9-11 (New England; description of new species; development)

Fish and Johnson 1937: 284ff (Bay of Fundy, Apr. and May, surface)

Pettibone 1954: 247ff, fig. 29c-f, as *A. fallax* (Labrador, sexual stolons at surface; description)

Pettibone 1956: 555, as *A. fallax* (Nain, Labrador; Str. of Belle Isle; sexual stolons at surface)

Pettibone 1963: 144, fig. 37e (sexual stolons at surface; Chaleur Bay and St. Lawrence estuary, G. of St. Lawrence, June-Aug.; Atl. off Labrador and Nfld.; description)

Autolytus emertoni Verrill, 1881

Pettibone 1963: 139, fig. 37c (Chaleur Bay, G. of St. Lawrence, sexual stolons at surface, June; description)

Autolytus prismaticus (Fabricius 1780)

Moore 1910: 134, as *A. longisetosus* (Egg Hbr., Labrador, a male specimen in tow net, Aug.)

Fish and Johnson 1937: 284ff, as *A. longisetosus* (G. of Maine, Bay of Fundy, Jan., Apr.-June, Aug., and Sept., abundant in Apr.; Passamaquoddy Bay, Aug.-Dec.)

Legaré 1961: 26, as *A. longisetosus* (St. Croix estuary, year round, abundant in Apr.-June)

Pettibone 1963: 139ff, fig. 37d (sexual forms at surface; Chaleur Bay, G. of St. Lawrence; description)

Autolytus prolifer (O. F. Müller, 1788)

Fish and Johnson 1937: 284ff, as *A. varians* (Bay of Fundy, Apr. and May, surface)

Pettibone 1963: 145ff, fig. 40 (sexual stolons at surface; Cape Bon Ami, G. of St. Lawrence; description)

Autolytus sp.

Bousfield and Leim 1959: 14 (Scotsman Bay and Bass R., N.B.)

Legaré and Maclellan 1960: 418 (Passamaquoddy Bay area, year round)

Platt and Irwin 1968: 104 (juveniles; St. Margaret's Bay, N.S., May-June)

Brania clavata (Claparède, 1863)

Pettibone 1963: 133f, fig. 35b (St. Lawrence estuary; sexual adults may appear at surface; description)

Eusyllis blomstrandi Malmgren, 1867

Pettibone 1954: 260f, fig. 28g-i (epitokes at surface; Labrador; description)

Pettibone 1956: 555f (epitokes at surface; Hamilton Inlet, Labrador; Str. of Belle Isle)

Sphaerosyllis erinaceus Claparède, 1863

Pettibone 1954: 255ff, fig. 28m (sexual forms at surface; Labrador; description)

Pettibone 1956: 555 (sexual forms at surface; Str. of Belle Isle)

Syllis cornuta Rathke, 1843

Pettibone 1963: 118, fig. 31i, j (sexual stolons planktonic; G. of St. Lawrence and Atl. off N.S.; description)

FAMILY TOMOPTERIDAE

Tomopteris helgolandica Greeff, 1879

Wright 1907: 12, pl. 5, fig. 5, as *T. mariana* (Canso, N.S., young specimen of 1.5 mm)

Bigelow 1914a: 121 (coastal waters, G. of Maine)

Bigelow 1915: 301 (G. of Maine)

Huntsman 1921a: 86ff, fig. 1, 2, as *T. catharina* (centered over the banks S of Nfld., very much less in the G. of St. Lawrence, Bay of Fundy and Atl. off N.S.)

Bigelow 1922: 134 (Bay of Fundy)

Huntsman and Sparks 1924: 98, as *T. catharina* (two specimens from St. Andrews area in temperature experiment)

Bigelow 1926: 334ff, fig. 94, as *T. catharina* (G. of Maine, rare but widely distributed, may breed in summer)

Pinhey 1927b: 338 (Miquelon Is., Nfld.)

Frost et al. 1933: 70f, fig. 25 (southern coast of Nfld. and Cabot Str.; typical of mixed water of moderate temperature)

Frost et al. 1934: 49 (Nfld.)

Fish and Johnson 1937: 239, 293ff, as *T. catharina* (Bay of Fundy and Passamaquoddy Bay)

Alvariño, 1956a: 13f (Grand Banks, Mar., one specimen)

Legaré and Maclellan 1960: 417, as *T. catherina* (Passamaquoddy Bay area, year round)

Legaré 1961: 26, as *T. catharina* (N of Campobello Is., Passamaquoddy Bay, rare)

Brunel 1963: 84 (Chaleur Bay, G. of St. Lawrence)

- Lacroix 1963: 51 (Chaleur Bay, G. of St. Lawrence)
- Pettibone 1963: 95ff, fig. 24, 25a, b (G. of Maine, spawning in summer; description)
- Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Jan., Feb., Apr., and Oct., rare)
- Tomopteris planktonis* Apstein, 1900
- Huntsman 1921a: 91 (W of Sable Is., N.S.)
- Tomopteris septentrionalis* Quatrefages, 1865
- Huntsman 1921a: 90 (Breton Bank off Halifax, rare)
- Bigelow 1926: 340, fig. 94 (G. of Maine, very rare)
- Tomopteris* sp.
- Brunel 1961b: 41 (G. of St. Lawrence)
- Vladimirskaya 1965a: 55 (Grand Banks)
- Vladimirskaya 1965b: 370 (Grand Banks)
- Bainbridge and Corlett 1968: tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
- FAMILY TYPHLOSCOECIDAE
- Travisiopsis levinsi* Southern 1910
- Pettibone 1963: 100f, fig. 26b (Nfld.-S of Massachusetts; description)
- Travisiopsis lobifera* Levinsen, 1885
- Pettibone 1963: 99, fig. 26a (N.S.; description)
- SUBCLASS SEDENTARIA
- FAMILY CIRRATULIDAE
- Chaetozone setosa* Malmgren, 1867
- Pettibone 1954: 287f, fig. 33d (Labrador; may be at surface; description)
- Pettibone 1956: 562 (Hebron, Labrador; may be at surface)
- FAMILY FLABELLIGERIDAE
- Flabelligera affinis* Sars, 1829
- Pettibone 1954: 289f, fig. 33e-g (off Labrador; may be at surface; description)
- Pettibone 1956: 563 (Seven Islands Bay, Okak, and Davis Inlet, Labrador; may be at surface)
- FAMILY ORBINIIDAE
- Scoloplos robustus* (Verrill, 1873)
- Pettibone 1963: 288ff, fig. 76g (with short swimming ciliate larvae; off P.E.I., G. of St. Lawrence; near Halifax, N.S.; description)
- FAMILY PARAONIDAE
- Paraonis lyra* Southern, 1914
- Pettibone 1963: 300, fig. 79g (Gaspé, G. of St. Lawrence; description; mature males at surface water of Ireland)
- FAMILY SCALIBREGMIDAE
- Scalibregma inflatum* Rathke, 1843
- Pettibone 1954: 293f, fig. 33i-k (epitokes at surface; N.S. and Labrador; description)
- Pettibone 1956: 565f (epitokes at surface; L. Melville area, Labrador)
- FAMILY SPIONIDAE
- Polydora caulleryi* Mesnil, 1897
- Blake 1969: 3, 52, fig. 38 (larva; inshore water, Me.; description, in key)
- Polydora ciliata* (Johnston, 1838)
- Willey and Huntsman 1921: 2f (larvae; Passamaquoddy Bay, abundant)
- Polydora commensalis* Andrews, 1891
- Blake 1969: 3, 21ff, fig. 16-18 (larvae; Damariscotta estuary, Me., July, rare; laboratory observation on growth rate; description of larvae in egg capsule and plankton, in key)

Polydora concharum Verrill, 1879

Blake 1969: 3, 32ff, fig. 23-26 (larvae; inshore water, Me., Feb.-May; laboratory observation on growth rate; description of larvae in egg capsule and plankton, in key)

Polydora ligni Webster, 1880

Blake 1969: 3ff, fig. 1-4 (larvae; inshore water, Me., May-Sept.; description of larvae in egg capsule and plankton, in key)

Polydora quadrilobata Jacobi, 1883

Blake 1969: 3, 37ff, fig. 27-37 (larvae; Damariscotta estuary, Lamoine Beach and Cobscook Bay, Me., Mar. and Apr.; laboratory observation on growth rate; two types of larval development, description of larvae in egg capsule and plankton, metamorphosis, in key)

Polydora socialis (Schmarda, 1861)

Blake 1969: 3, 24ff, fig. 19-22 (larvae; inshore water, Me., June-Oct.; description of larvae in egg capsule and plankton, metamorphosis, in key)

Polydora websteri Hartman, 1943

Blake 1969: 3, 10ff, fig. 5-11 (larvae; inshore water, Me., Apr.-Aug., abundant in May and June; laboratory observation on growth rate; description of

larvae in egg capsule and plankton, metamorphosis, in key)

Polydora larvae

Wright 1907: 12 (common in Canso, N.S.)

Pinhey 1927b: 338, 344 (St. John's Nfld.; below Father Pt., St. Lawrence R.)

Willey 1931b: 83 (Trois-Pistoles region, St. Lawrence estuary, Aug.)

Prionospio malmgreni Claparède, 1868

Pettibone 1954: 282ff, fig. 32i-k (off Labrador; may be at surface; description)

Pettibone 1956: 561 (Hebron and St. Lewis Inlet, Labrador; may be at surface)

FAMILY STERNASPIDAE

Sternaspis scutata (Ranzani, 1817)

Fish and Johnson 1937: 286, as *S. fossor* (G. of Maine)

FAMILY TROCHOCHAETIDAE

Trochochaeta multisetosa (Oersted, 1843)

Pettibone 1963: 310ff, fig. 82, 83a-g (G. of St. Lawrence-Massachusetts; may have planktonic larvae; description)

PHYLUM ARTHROPODA

CLASS CRUSTACEA

SUBCLASS BRANCHIOPODA

ORDER DIPLOSTRACA

Suborder Cladocera

FAMILY BOSMINIDAE

Bosmina longirostris (O. F. Müller, 1785)

Herdman et al. 1898: 55 (St. Lawrence estuary, Aug.)

Willey 1923: 321, as *B. longirostris* var. *cornuta* (inner Miramichi Bay, G. of St. Lawrence, June)

Bousfield 1955: 52, as *B. longirostris* var. *cornuta* (Miramichi estuary, G. of St. Lawrence, surface)

Bosmina sp.

Rogers 1940: 168 (Margaree estuary, N.S., G. of St. Lawrence)

FAMILY DAPHNIDAE

Daphnia ambigua Scourfield, 1947

Willey 1931b: 82, as *D. longispina* var. *galeata* (St. Lawrence estuary at Trois-Pistoles area, July)

Daphnia sp.

Rogers 1940: 168 (Margaree estuary, N.S., G. of St. Lawrence, freshwater species)

FAMILY HOLOPEDIDAE

Holopedium gibberum Zaddach, 1855

Willey 1931b: 82 (Trois-Pistoles region, St. Lawrence estuary, July)

Holopedium sp.

Rogers 1940: 168 (Margaree estuary, N.S., G. of St. Lawrence)

FAMILY POLYPHEMIDAE

Evadne nordmanni Loven, 1836

Herdman et al. 1898: 52ff (G. of St. Lawrence)

Scott 1907: 52 (G. of St. Lawrence)

Wright 1907: 13 (Canso, N.S., abundant in late July)

Pinhey 1927a: 18ff (Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence)

Pinhey 1927b: 336, 344 (between Anticosti Is. and Nfld., G. of St. Lawrence; St. John's, Nfld.)

Fish and Johnson 1937: 254ff (G. of Maine, Apr.; Bay of Fundy and Passamaquoddy Bay, May, June, Aug., and Sept.)

Jean 1953: 36, 38, fig. 9 (Grande-Rivière, G. of St. Lawrence; in herring stomachs, May-Sept., most abundant in early July and late Aug.)

Huntsman et al. 1954: 244, tab. 2, 3 (S shore, Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence, more abundant in the Nfld. than the Qué. side)

Bousfield 1955: 37 (Miramichi estuary, G. of St. Lawrence)

Lacroix, 1960a; 17ff, fig. 4 (G. of St. Lawrence; reproductive cycle observed from samples taken in June-Sept.)

Legaré and MacLellan 1960: 418, 436 (inside and outside Passamaquoddy Bay, summer)

Brunel 1961a: 6 (Gaspé, G. of St. Lawrence, Aug.)

Lacroix 1961b: 26 (Chaleur Bay, G. of St. Lawrence, dominant cladocerans)

Legaré 1961: 30 (N of Campobello Is.,

- N.B., Sept, swarming; St. Croix estuary, small pulses)
- Lacroix and Bergeron 1963: 65 (Bradelle Bank, G. of St. Lawrence, Aug.)
- Lacroix and Legendre 1964: 30ff (G. of St. Lawrence, more abundant in Restigouche estuary than in Chaleur Bay, only in upper 10 m, July and Aug.)
- Semenova 1964: 61ff, tab. 6 (Grand Banks, dominant in Aug.)
- Vladimirskaya 1965b: 368 (Grand Banks)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
- Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., May-Dec., abundant in July-Nov.)

Evadne spinifera P. E. Müller, 1868

- Wright 1907: 13, pl. 6, fig. 3 (Canso, N.S., abundant in late Aug., winter eggs observed in it on Sept. 6; description)
- MacDonald 1912: 83 (between Dochét Is. and Grand Manan, Bay of Fundy)
- Lacroix, 1960a: 17 (G. of St. Lawrence)
- Brunel, 1961a: 6 (Gaspé, G. of St. Lawrence, Aug.)
- Lacroix 1961b: 26 (Chaleur Bay, G. of St. Lawrence)
- Vladimirskaya 1965b: 368 (Grand Banks)

Evadne sp.

- Willey 1913: 285 (St. Croix estuary, Passamaquoddy Bay, Aug.)
- Bigelow 1917: 252 (G. of Maine)
- Willey 1923: 321f (inner Miramichi Bay, G. of St. Lawrence, June and Aug.)
- Bigelow 1926: 308f (G. of Maine, rare, more frequent in Aug.-Sept.)
- Rogers 1940: 169 (Margaree estuary, N.S., G. of St. Lawrence)
- Brunel 1959: 21 (Chaleur Bay, G. of St. Lawrence)

*Podon finmarchicus*⁵

- MacDonald 1912: 83 (Dochet Is.-Grand Manan, Bay of Fundy)

Podon intermedius Lilljeborg, 1853

- Wright 1907: 13, pl. 6, fig. 1 (Canso, N.S., late Aug., abundant)
- MacDonald 1912: 83 (Dochet Is.-Grand Manan, Bay of Fundy)
- Fish and Johnson 1937: 291 (Boothbay Hbr., G. of Maine)
- Lacroix 1960a: 6 (G. of St. Lawrence)
- Brunel 1961a: 6 (Gaspé, G. of St. Lawrence, Aug.)
- Lacroix 1961b: 26 (Chaleur Bay, G. of St. Lawrence, rare)
- Vladimirskaya 1965b: 368 (Grand Banks)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)

Podon leuckarti G. O. Sars, 1862

- Scott 1907: 52 (G. of St. Lawrence)
- Pinhey 1927a: 19ff (Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence)
- Fish and Johnson 1937: 254ff (G. of Maine, Bay of Fundy, and Passamaquoddy Bay)
- Jean 1953: 36, 38, fig. 9 (Grande-Rivière, G. of St. Lawrence, in herring stomachs, May-Sept., most frequent in early July and late Aug.)
- Huntsman et al. 1954: 244, tab. 2, 3 (S shore, Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence, more abundant in the Nfld. than the Qué. side)
- Bousfield 1955: 37 (Miramichi estuary, G. of St. Lawrence)
- Lacroix 1960a: 17 (G. of St. Lawrence)
- Legaré and MacLellan 1960: 418, 436 (inside and outside Passamaquoddy Bay, summer)
- Brunel 1961a: 6 (Gaspé, G. of St. Lawrence Aug.)
- Lacroix 1961b: 26 (Chaleur Bay, G. of St. Lawrence, dominant cladocerans)
- Legaré 1961: 30 (St. Croix R estuary, N.B., small pulses)
- Lacroix and Legendre 1964: 30 (G. of St. Lawrence, more in Restigouche estuary than in Chaleur Bay, only in upper 10 m, July and Aug., rare, layer)
- Semenova 1964: 61, tab. 6 (Grand Banks, dominant species in Aug.)
- Vladimirskaya 1965b: 368 (Grand Banks)

⁵Identity of species uncertain.

Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)

Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Jan., July–Nov., abundant in Sept.–Nov.)

Podon polyphemoides Leuckart, 1859

Scott 1907: 52 (G. of St. Lawrence)

Wright 1907: 13, pl. 6, fig. 2 (Canso, N.S., abundant in late July; description)

McMurrich 1917a: 6 (Passamaquoddy Bay, adjacent waters of St. Andrews, Oct.)

Fish and Johnson 1937: 256ff, 296 (Bay of Fundy and Passamaquoddy Bay)

Lacroix 1960a: 17ff, fig. 3 (G. of St. Lawrence; reproductive cycles observed from samples taken in June–Sept.)

Brunel 1961a: 6 (Gaspé, G. of St. Lawrence, Aug.)

Lacroix 1961b: 26 (Chaleur Bay, G. of St. Lawrence, rare)

Legaré 1961: 30 (Passamaquoddy Bay area, possibly present)

Robertson 1964 (neritic waters, S of Nfld., rare)

Vladimirskaya 1965: 368 (Grand Banks)

Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., July–Oct.)

Podon sp.

Willey 1913: 285 (St. Croix estuary, Passamaquoddy Bay, Aug. with mature embryos)

Willey 1923: 322 (inner Miramichi Bay, G. of St. Lawrence, Aug.)

Rogers 1940: 169 (Margaree estuary, N.S.)

Brunel 1959: 21 (Chaleur Bay, G. of St. Lawrence)

Lacroix 1968: 45 (Chaleur Bay, G. of St. Lawrence)

Legendre 1969: 31, tab. 2 (juveniles; Chaleur Bay, G. of St. Lawrence, June)

SUBCLASS OSTRACODA

ORDER MYODOCOPA

FAMILY CYPRIDINIDAE

Cypridina norvegica Baird, 1860

Huling 1967: 311 (off Labrador and NE Nfld.)

Philomedes globosus (Lilljeborg, 1853)

Huling 1967: 311 (off Labrador and NE Nfld.)

Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Apr., rare)

FAMILY HALOCYPRIDAE

Conchoecia borealis G. O. Sars, 1865

Davidson 1924: 305ff, fig. 3 (off Labrador, Nfld., and N.S.; G. of St. Lawrence)

Huntsman et al. 1954: 245 (in deep water of Cabot Str.)

Huling 1967: 311 (off Labrador and S Nfld.)

Conchoecia elegans G. O. Sars, 1865

Davidson 1924: 298ff, fig. 1 (Atl. coast from Labrador to N.S.; G. of St. Lawrence)

Huntsman et al. 1954: 245 (in deep water of Labrador current, E coast of Nfld., Rich Pt., Nfld., Cabot Str., and G. of St. Lawrence)

Huling 1967: 311 (off Labrador and S Nfld.)

Conchoecia haddoni Brady and Norman, 1896

Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Feb., rare)

Conchoecia obtusata G. O. Sars, 1865

Davidson 1924: 320ff, fig. 2 (Atl. coast from Labrador to N.S.; G. of St. Lawrence; Cabot Str.)

Huntsman et al. 1954: 245 (deep water of outer part of Labrador current–Str. of Belle Isle; Cabot Str.)

- Conchoecia* sp.
Wright 1907: 13 (Canso, N.S.; two species)
- Halocypris globosa* (Claus, 1874)
Frost 1937: 27 (Nfld.)
- ORDER CLADOCOPA
- FAMILY POLYCOPIDAE
Polycopis orbicularis G. O. Sars, 1865
Huling 1967: 311 (off NE Nfld.)
- ORDER PODOCOPA
- FAMILY CYPRIDAE
Cypria sp.
Jermolajev 1958: 1226, tab 3 (Shubenacadie estuary, inner Bay of Fundy)
- SUBCLASS COPEPODA
- ORDER CALANOIDA
- FAMILY ACARTIIDAE
Acartia bifilosa (Giesbrecht, 1881)
Wright 1926?: 14, etc. (Passamaquoddy Bay area; examination of gut contents; numerical composition and length measurement in vertical tows, Aug.-Oct.)
Fish and Johnson 1937: 252, 290ff (inner G. of Maine, swarm in June in Frenchmans Bay)
- Acartia clausi* Giesbrecht, 1889
Herdman et al. 1898: 54 (mouth of St. Lawrence R., Aug.)
Scott 1907: 49, pl. 2, fig. 9, 10 (Shediac Bay and off Griffins Cove, G. of St. Lawrence; description)
Willey 1913: 284 (St. Croix estuary, Passamaquoddy Bay, very abundant in Aug.)
- Willey 1915: 3 (St. Andrews, Passamaquoddy Bay, abundant in July and Aug.)
McMurrich 1917a: 6f (St. Andrews, Passamaquoddy Bay, Oct.-May)
Currie 1919: 218, fig. 48-51 (St. Croix estuary, Passamaquoddy Bay, very abundant in late July-early Aug.)
Willey 1919: tab. 12 (Bay of Fundy)
Willey 1921: 187 (Passamaquoddy Bay, at 5 m, dominant species in a sample taken in Jan.)
Willey 1923: 313, 320ff (Scots Bay, Minas Channel, in stomach of shad *Alosa sapidissima*; inner Miramichi Bay, G. of St. Lawrence, Aug.-Sept.)
Huntsman 1924: 86f (St. Croix R. near St. Andrews, N.B.; light experiment)
Bigelow 1926: 171ff, fig. 58, 59 (G. of Maine, spawn in early spring and late summer)
Wright 1926?: 26ff (Passamaquoddy Bay area, Aug.-Oct.; numerical composition and length measurement in vertical tows)
Pinhey 1927a: 184ff, fig. 3, 4, as *A. clausi hudsonica* subsp.nov. (S shore, Str. of Belle Isle; description)
Pinhey 1927b: 336, 343, as *A. hudsonica* (G. of St. Lawrence)
Johnson 1934: 24 (Passamaquoddy Bay area, in stomach contents of herring)
Wilson 1935: 1ff (Passamaquoddy Bay; light effect on vertical distribution in nature and laboratory observations on phototropism and temperature tolerance)
Battle et al. 1936: 417ff (Campobello Is.-Oak Bay, Passamaquoddy Bay in stomach contents of herring, July-Sept., and in plankton samples, July)
Wilson 1936: 367 (Ben's Cove at Cape Aillik, Labrador, day and night surface tows, Aug. and Sept.)
Fish and Johnson 1937: 254ff, 290ff (important neritic species in the Bay of Fundy; dominant species of summer plankton in Passamaquoddy Bay)
Johnson 1938: 106ff, fig. 2-6 (inner Passamaquoddy Bay; field and laboratory study of light effect on vertical migration)
Johnson 1939?: 1ff (Passamaquoddy Bay; vertical migration)

- Bousfield 1955: 36 (Miramichi estuary, G. of St. Lawrence)
- Legaré and MacLellan 1960: 418, etc., fig. 6 (Passamaquoddy Bay area, year round except winter in Cobscook Bay; females in surface, major food of herring in Passamaquoddy Bay and vicinity)
- Legaré 1961: 18, tab. 4, 6, 7 (St. Croix estuary, N.B., the dominant species most abundant at 5–7 m, year round, but most abundant in June–Oct.; N of Campobello Is., N.B., Nov.–May, small numbers, move in July, and mostly at 5–7 m)
- Lacroix 1963: 51 (Chaleur Bay, G. of St. Lawrence)
- Lacroix and Legendre 1964: 33ff, fig. 4, 5 (Chaleur Bay to mouth of Restigouche R., G. of St. Lawrence, most dominant plankton species in upper 10m)
- Carter 1965: 351 (Tessiaruk, a coastal meromictic L., Labrador)
- Vladimirskaya 1965b: 368 (Grand Banks)
- Dunbar 1966: 30 (Nfld. and southward)
- Sherman 1965: 611ff (coastal waters, G. of Maine; seasonal quantitative study in 1963)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
- Sherman 1966a: 1ff (coastal waters, G. of Maine; seasonal quantitative study in 1964)
- Lacroix 1967: 37ff, fig. 2 (Chaleur Bay, G. of St. Lawrence, June–Sept., mainly in upper 40 m, not common)
- Lacroix 1968: 45ff (Chaleur Bay, G. of St. Lawrence, in upper 60 m, mid-May–late Aug.)
- Sherman 1968: 6 (coastal waters, G. of Maine; seasonal quantitative study in 1965 and 1966, rare)
- Sherman and Honey 1968: 79f, tab. 3 (Boothbay Hbr., G. of Maine, Nov; comparison of catching efficiencies of Bongo and Gulf III plankton samplers)
- McLaren et al. 1969: 486ff, fig. 1, 2, tab. 1 (Halifax, N.S.; development times to hatching of eggs in laboratory at different temperatures from 0 to 11.8 C, study of temperature adaptation in physiological processes of pio-kilotherms from different latitudes)
- Acartia denticornis*⁶
- Herdman et al. 1898: 51 (identification uncertain; Atl. off NE Nfld.; G. of St. Lawrence, northern part of the G.–St. Lawrence estuary)
- Acartia forcipata* Thompson and Scott, 1898
- Herdman et al. 1898: 53ff (G. of St. Lawrence, northern part of the G.–St. Lawrence estuary; description of new species)
- Acartia laxa*⁷
- Herdman et al. 1898: 57 (S of Anticosti Is., G. of St. Lawrence, Sept.)
- Acartia longiremis* (Lilljeborg, 1853)
- Herdman et al. 1898: 53ff (G. of St. Lawrence, northern part of the G.–St. Lawrence estuary, Aug. and Sept.)
- MacDonald 1912: 83, as *Dais longeremis* (Douchet Is.–Grand Manan, Bay of Fundy)
- Bigelow 1917: 291 (G. of Maine)
- Currie 1919: 218f, fig. 52 (St. Andrews, Passamaquoddy Bay, July; description)
- Willey 1919: tab. 1 (G. of St. Lawrence)
- Willey 1921: 187 (Passamaquoddy Bay, abundant in one sample taken in Jan. at 5 m)
- Bigelow 1926: 177ff, fig. 60, 61 (shallow water, G. of Maine, two peaks of abundance, early fall and perhaps late spring)
- Wright 1926?: 26ff (Passamaquoddy Bay area, Aug.–Oct.; numerical composition and length measurement in vertical tows)
- Pinhey 1927a: 186ff, fig. 5, also as *A. longiremis spiniremis* subsp.nov. (Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence; description)
- Pinhey 1927b: 336, as *A. spiniremis* (Bay of Exploits and St. John's, Nfld.)
- Willey 1931: 83f (Trois-Pistoles region, Qué., St. Lawrence estuary, late July, dominant species of planktonic copepods)

⁶Identity of species uncertain.

⁷Identity of species uncertain.

- Wilson 1936: 367 (Ben's Cove at Cape Aillik, Labrador, day and night surface tows, Aug. and Sept.)
- Fish and Johnson 1937: 253f, 256ff, 290ff (G. of Maine, June and Aug.; Bay of Fundy, June, Aug., and Sept.; Passamaquoddy Bay, Jan., May–Sept., Nov.)
- Lysholm and Nordgaard 1945: 42 (S of Nfld., 0–74 m, two specimens)
- Filteau 1948b: 72 (Chaleur Bay, G. of St. Lawrence, small numbers of adult males and females, spawning present but not successful)
- Huntsman et al. 1954: 240, fig. 35, tab. 2, as *A. longiremis* var. *spiniremis* and *A. spiniremis* (N shore, Str. of Belle Isle, and N of Anticosti Is., G. of St. Lawrence; indicator of Labrador current)
- Legaré and MacLellan 1960: 418 (outside Passamaquoddy Bay, summer and fall)
- Brunel 1961a: 6 (Chaleur Bay, G. of St. Lawrence)
- Préfontaine and Brunel 1962: 252 (St. Lawrence estuary)
- Semenova 1962: 201 (Grand Banks)
- Lacroix 1963: 51 (Chaleur Bay, G. of St. Lawrence)
- Pavshiks and Gogoleva 1964: tab. 2 (43°N, 65°W, N.S. shelf, June)
- Semenova 1964: 61ff, tab. 2, 3, 5, 6 (Labrador and Nfld. coasts and shelves, Jan., July, and Aug.; Grand Banks, July and Aug.)
- Carter 1965: 353 (Anaktalik Bay, Labrador)
- Sherman 1965: 61ff, fig. 5, 6 (coastal waters, G. of Maine, common, seasonal quantitative study in 1963)
- Dunbar 1966: 30 (Str. of Belle Isle and northern G. of St. Lawrence)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
- Sherman 1966a: 1ff, fig. 5 (coastal waters, G. of Maine, common, seasonal quantitative study in 1964)
- Sherman 1966b: 94, fig. 1 (coastal waters, G. of Maine, common)
- Lacroix 1967: 37ff, fig. 2 (Chaleur Bay, G. of St. Lawrence, June–Sept., not common)
- Lacroix 1968: 45ff (Chaleur Bay, in upper 110 m, G. of St. Lawrence, mid-May–late Aug., rare)
- Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., year round, abundant)
- Sherman 1968: 6, fig. 4 (coastal waters, G. of Maine, seasonal quantitative study in 1965 and 1966)
- Sherman and Honey 1968: 78f, tab. 3 (Boothbay Hbr., G. of Maine; comparison of catching efficiencies of Bongo and Gulf III plankton samplers)
- Acartia tonsa* Dana, 1848
- Scott 1907: 50, pl. 2, fig. 5–8, as *A. giesbrechti* (G. of St. Lawrence: Sheddac Bay; description)
- Willey 1913: 284 (St. Croix estuary, N.B., Passamaquoddy Bay, Aug., abundant)
- Willey 1923: 320ff (inner Miramichi Bay, N.B., G. of St. Lawrence, June, Aug.)
- Bousfield 1955: 36 (Miramichi estuary, N.B., G. of St. Lawrence)
- Jermolajev 1958: 122f, tab. 2, 3, fig. 1c (Minas Basin, N.B., inner Bay of Fundy, Sept., abundant with many young copepodites and females with spermatophores; Cobequid Bay, N.S., July)
- Acartia* sp.
- Willey 1919: tab. 5 (G. of St. Lawrence)
- Sherman 1966a: 1ff (coastal waters, G. of Maine, immature specimens)
- Bainbridge and Corlett 1968: tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
- Legendre 1969: 31, tab. 2 (copepodid I–III; Chaleur Bay, G. of St. Lawrence, June)
- FAMILY AETIDEIDAE**
- Aetideus armatus* (Boeck, 1872)
- Bigelow 1926: 182, fig. 62 (G. of Maine, rare)
- Pinhey 1927b: 340 (near Anticosti Is., G. of St. Lawrence)
- Fish and Johnson 1937: 246f (G. of Maine, and Bay of Fundy)
- Legaré and MacLellan 1960: 419 (outside Passamaquoddy Bay, summer)
- Pavshiks and Gogoleva 1964: tab. 2 (43°N, 65°W, N.S. shelf, June)

- Sherman 1965: 61ff (coastal waters, G. of Maine, very rare)
- Bradyidius similis* (G. O. Sars, 1903)
- Brunel 1963: 85 (Bradelle Bank, G. of St. Lawrence)
- Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, Aug., in hyperbenthic plankton sample)
- Sherman 1966a: 1ff, as *Undinopsis similis* (coastal waters, G. of Maine, trace; seasonal quantitative study in 1964)
- Sherman 1968: 6, as *Undinopsis similis* (coastal waters, G. of Maine, trace; seasonal quantitative study in 1965)
- Chiridius obtusifrons* G. O. Sars, 1903
- Bigelow 1926: 306 (Cape Sable, N.S.)
- Euchirella curticauda*, Giesbrecht, 1888
- Bigelow 1926: 306 (SE of N.S.)
- Euchirella rostrata* (Claus, 1866)
- Bigelow 1914: 116 (G. of Maine, rare)
- Bigelow 1915: 288, 297, fig. 69 (G. of Maine)
- Bigelow 1917: 291 (G. of Maine)
- Willey 1919: 189, fig. 9, tab. 11 (banks off N.S.)
- Bigelow 1926: 237, fig. 71 (G. of Maine, rare)
- Pinhey 1927a: 184, fig. 2 (Labrador current; description)
- Fish and Johnson 1937: 250f, fig. 25 (outer Bay of Fundy)
- Frost 1937: 27 (Nfld.)
- Lysholm and Nordgaard 1945: 17, tab. 11 (S of Nfld., 40–100 m)
- Legaré and Maclellan 1960: 419 (outside Passamaquoddy Bay, summer)
- Pavshiks and Gogoleva 1964: tab. 2 (43°N, 65°W, N.S. shelf, June)
- Bainbridge and Corlett 1968: tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
- Gaidius brevispinus* (G. O. Sars, 1900)
- Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)
- Gaidius tenuispinus* (G. O. Sars, 1900)
- Willey 1919: 187, tab. 8, 11 (G. of St. Lawrence and banks off N.S.)
- Bigelow 1926: 238f (G. of Maine, rare; near Shelburne, N.S., one specimen)
- Tremblay 1942: 20, as *Chiridius tenuispinus* (SW of Basque Is., G. of St. Lawrence)
- Legaré and Maclellan 1960: 434 (Passamaquoddy Bay area)
- Steele 1957: tab. 4 (Gaspé area, G. of St. Lawrence, in stomachs of ocean perch *Sebastes marinus*)
- Phyllopus bidentatus* Brady, 1883
- Bigelow 1926: 271f (Penobscot Bay, G. of Maine)

FAMILY CALANIDAE

*Calanus finmarchicus*⁸ (Gunnerus, 1765)

- Herdman et al. 1898: 50ff (Str. of Belle Isle area; G. of St. Lawrence, northern part of the G.-St. Lawrence estuary, Aug. and Sept.)
- Scott 1907: 47f, as *C. helgolandicus* (Anti-costi Is., G. of St. Lawrence)
- Wright 1907: 13f, pl. 6, fig. 4 (Canso, N.S., very abundant in early summer)
- MacDonald 1912: 83 (Duchet Is.–Grand Manan, Bay of Fundy)
- Willey 1913: 284 (St. Croix estuary, Passamaquoddy Bay, Aug., rare and immature)
- Bigelow 1914a: 117 (G. of Maine, abundant)
- Bigelow 1915: 286ff, fig. 69 (G. of Maine)
- Willey 1915: 3 (St. Andrews, N.B., Passamaquoddy Bay, few and immature)
- Bigelow 1917: 290f (G. of Maine and S of Halifax, N.S., dominant species in plankton)
- McMurrich 1917a: 6 (St. Andrews area, N.B., Passamaquoddy Bay, Oct.–May)
- Currie 1919: 208ff, fig. 1–4, 6–35, graph 1–3 (St. Andrews, N.B., Passamaquoddy Bay, June–early Aug.; observation

⁸For recent discussion of this species and *C. glacialis*, see Matthews (1967, 1968).

- on exuviation of copepodid III-VI, description)
- Willey 1919: 183ff, fig. 1, tab. 1-12 (G. of St. Lawrence; coastal waters; N.S., Bay of Fundy)
- Willey 1921: 185ff (Passamaquoddy Bay, dominant in winter collection of 1916-1917)
- Bigelow 1922: 132ff (G. of Maine)
- Huntsman 1924: 86 (Passamaquoddy Bay; for light experiments)
- Huntsman and Sparks 1924: 86 (Passamaquoddy Bay; temperature experiments)
- Bigelow 1926: 188ff, fig. 64-67 (G. of Maine; breeding in Apr. and May, and Sept.)
- Odell 1926?: 5ff, fig., tab. (St. Andrews, N.B.; laboratory observations of light intensity and bathymetric distribution)
- Wright 1926?: 5ff (Passamaquoddy Bay area; laboratory observations on temperature and salinity tolerance; gut content examination; numerical composition and length measurement in vertical tows, Aug.-Oct.)
- Pinhey 1927a: 183ff (Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence)
- Pinhey 1927b: 336ff (G. of St. Lawrence; Atl. coast, Nfld.)
- Cowie 1929: 123 (quoted from N. E. Wright's report; Bay of Fundy, animals entered the bay from G. of Maine, and did not breed within the bay)
- Willey 1931: 82ff (Trois-Pistoles area, St. Lawrence estuary, late July, dominant species in plankton)
- Kearney 1933: 26 (between Ship Hbr. and Lunenburg, N.S., June-Oct., dominant species in the plankton)
- Gardiner 1934: 560ff, fig. 3 (48-hr collection in 20 stations centered at 43°50'N, 64°30'W, roughly 17 miles from Liverpool, N.S., May, not dominant species in night plankton)
- Johnson 1934: 24 (summer of 1933, in stomach contents of herring, Passamaquoddy Bay area)
- Kearney 1934: 24 (Halifax region, N.S., in upper 50 m, May-July; the dominant copepodids: III in May, IV in June, and V in July)
- Johnson 1935: 1ff (Passamaquoddy Bay;
- light effect on vertical distribution in nature; laboratory observations of phototropism and temperature tolerance)
- Battle et al. 1936: 417ff (Campobello Is.-Oak Bay, Passamaquoddy Bay, in stomach contents of herring, July-Sept., and in plankton samples, July)
- Fish 1936a: 118ff, fig. 1-11 (most abundant plankton in G. of Maine and Bay of Fundy; observation of population fluctuation and breeding cycle)
- Wilson 1936: 367 (Hawkes Hbr.-Mugford Bay, Labrador, day and night surface tows, Aug. and Sept.)
- Fish and Johnson 1937: 239, 290, 296ff (Bay of Fundy and Passamaquoddy Bay)
- Frost 1937: 26 (Nfld.)
- Johnson 1939?: 1ff (Passamaquoddy Bay; vertical migration)
- Rogers 1940: 169 (Margaree estuary, N.S., G. of St. Lawrence)
- Johnson 1942: 370f, tab. 4 (inner Passamaquoddy Bay; light effect on vertical migration)
- Tremblay 1942: 11 (St. Lawrence estuary)
- Wilson 1942: 23 (Grand Banks, 50-100 m, Aug., abundant)
- Lysholm and Nordgaard 1945: 6, tab. 1 (S of Nfld., in upper 100 m, late June-early July, abundant)
- Filteau 1946: 89ff (Chaleur Bay, G. of St. Lawrence, dominant species in plankton; breeding cycle)
- Tremblay 1947: 80 (Chaleur Bay, G. of St. Lawrence; vertical distribution of nauplii and earlier copepodids of the upper 25 m layer)
- Filteau 1948a: 64ff (Chaleur Bay, G. of St. Lawrence, May-July; composition and vertical distribution of nauplii and copepodids)
- Filteau 1948b: 73ff (Chaleur Bay, G. of St. Lawrence; study of breeding period)
- Filteau 1949: 55ff, fig. 1, 2 (Chaleur Bay, G. of St. Lawrence, June-Aug.; development of nauplii and copepodids)
- Filteau and Tremblay 1953: 5ff, fig. 3-17 (Chaleur Bay, G. of St. Lawrence, May-Oct.; annual fluctuation and breeding cycle)
- Jean 1953: 36ff, fig. 9 (Grande-Rivière,

- G. of St. Lawrence, May–Sept.; most common food item in herring stomachs)
- Huntsman et al. 1954: 244, tab. 2 (Str. of Belle Isle, more abundant in waters moving outward to the Atl.)
- Bousfield 1955: 37 (Miramichi estuary, G. of St. Lawrence)
- Huntsman 1955: 324ff, fig. 2 (Passamaquoddy Bay; diurnal migration, freshets on distribution)
- Steele, 1957: tab. 4 (G. of St. Lawrence; Gaspé, in stomachs of ocean perch *Sebastes marinus*)
- Jermolajev 1958: 1221, tab. 1–3, fig. 1B (inner Bay of Fundy, only in deep water, none in Minas Basin)
- Brunel 1959: 21 (Chaleur Bay, G. of St. Lawrence)
- Kusmorskaya 1960; 106ff, fig. 3, 4, tab. 1 (Grand Banks, spring; horizontal quantitative distribution, composition of copepodid stages)
- Lambert 1960: 237ff (Nfld., in stomachs of ocean perch *Sebastes marinus*)
- Legaré and MacLellan 1960: 417ff, fig. 6, 8 (Passamaquoddy Bay area, year round, most dominant species in plankton, abundant in all depth but most numerous at 100 m, food of herrings)
- Brunel 1961a: 6 (Chaleur Bay, G. of St. Lawrence)
- Lacroix 1961b: 25 (Chaleur Bay, G. of St. Lawrence)
- Legaré 1961: 18, 20, tab. 4, 6, 7 (N of Campobello Is., N.B., the dominant species, year round; St. Croix estuary, N.B., mainly in fall and winter; vertical and seasonal distribution)
- Préfontaine and Brunel 1962: 252 (St. Lawrence estuary)
- Bainbridge and Jones 1962: 32 (E of Nfld.)
- Glover 1962: 48, fig. 3 (Atl. coasts, Nfld. and N.S.)
- Pavshiks et al. 1962: 56ff, fig. 2 (E of Nfld., spawning in Mar.–Apr., and June–July)
- Pechenik and Noskov 1962: 138 (Grand Banks, breeding in June)
- Travin and Pechenik 1962: 14 (Labrador–Nfld. area)
- Grainger 1963: 68ff, fig. 2, 5, 7, 8 (distributional study in eastern Canadian waters, at least breeds twice a year in the southern part, seasonal and geographic variation of size)
- Lacroix and Bergeron 1963: 64ff (Bradelle Bank, G. of St. Lawrence, Aug.)
- Lacroix and Legendre 1964: 35, fig. 4 (more in Chaleur Bay than in Restigouche estuary, G. of St. Lawrence, mainly in upper 20 m, not important species)
- Pavshiks and Gogoleva 1964: tab. 2, 4 (43°N, 65°W, N.S. shelf, Feb. and June)
- Semenova 1964: 51ff, fig. 3–6, tab. 1–7 (Labrador and Nfld. area and Grand Banks, dominant species of zooplankton; composition of copepodid stages and annual quantitative variation)
- Pavshiks 1965: 583ff, fig. 2 (coastal waters of southern N.S., quantitative distribution in 1962)
- Sherman 1965: 611ff, fig. 5, 6 (coastal waters, G. of Maine, abundant; seasonal quantitative study in 1963)
- Valdimirskaia 1965a: 53f (Grand Banks)
- Vladimirskaya 1965b: 369ff, fig. 8, 11, 12, tab. 5, 6 (Grand Banks, distribution of copepodid stages)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
- Pavshiks 1966: 118ff, fig. 2 (Labrador coasts)
- Sherman 1966a: 1ff, fig. 5 (coastal waters, G. of Maine, abundant; seasonal quantitative study in 1964)
- Sherman 1966b: 94ff, fig. 1 (coastal waters, G. of Maine, year round, abundant, especially in winter and summer)
- Glover 1967: 194ff, fig. 3B (Grand Banks, Atl. coasts of N.S. and G. of Maine, in plankton recorder collections at 10 m, 1958–64)
- Lacroix 1967: 35ff, fig. 2 (Chaleur Bay, G. of St. Lawrence, June–Sept., very abundant; vertical distribution of different stages)
- Matthews 1967: 161ff, fig. 2–5, 7, 8 (E of Nfld.; compared with *C. glacialis*)
- Vladimirskaya 1967: 41ff, fig. 3–10 (Grand Banks, annual quantitative study of nauplii and copepodids, spring breeding starting in late Feb. in the southern banks and late May or early

- June on Labrador shelf, second generation start in July on the banks)
- Bainbridge and Corlett 1968: 110ff, fig. 26, tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m, Apr., June, and July, quantitative study of copepodid stages)
- Colton 1968: 128 (shelf waters from N.S.-Long Is., main spawning of over-wintering stock occurred in Feb. and the progeny from that spawning reached maturity in May in 1953; corresponding dates for 1955: Mar. and late June)
- Glover and Robinson 1968: 123, fig. 29 (N Atl. survey, including Labrador coasts, annual quantitative variation of copepodid stages)
- Lacroix 1968: 45ff (Chaleur Bay, G. of St. Lawrence, vertical distribution of 1962 and 1964)
- Matthews 1968: 371ff, fig. 1-5 (Labrador coast; adult in Apr., copepodid III in June)
- Pavshiks 1968: 387, fig. 3 (Labrador coast at 57°30'N, 59°20'W; July, copepodid stages 1-6 present)
- Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Jan., Mar.-Nov., abundant)
- Sherman 1968: 6, fig. 4 (coastal waters, G. of Maine, most dominant copepod species in the area; seasonal quantitative study in 1965, 1966)
- Jones 1969: 280ff, fig. 3, 5, 6, tab. 1, 2 (Labrador coast and Grand Banks, in plankton recorder collections at 10 m from Aug. to Dec.)
- Legendre 1969: 31, tab. 2 (Chaleur Bay, G. of St. Lawrence)
- Matthews 1969: 251ff, fig. 1, 3, 6, 7, tab. 1, pl. 56, as *C. finmarchicus finmarchicus* (distribution in Labrador, Nfld., and N.S. coasts, and G. of Maine, in plankton recorder collections at 10 m, 1958-1965; seasonal variation of distribution)
- Calanus glacialis* Yashnov, 1955
- Kusmorskaya 1960: 107 (Grand Banks, spring)
- Bainbridge 1961: 1216 (off Str. of Belle Isle in Atl., Dec.)
- Bainbridge and Jones 1962: 35, tab. 1 (E of Nfld.)
- Pavshiks et al. 1962: 58 (Grand Banks)
- Semenova 1962: 199 (Grand Banks)
- Grainger 1963: 68ff, fig. 3, 5, 7, 9 (distributional study in eastern Canadian waters; an arctic species also found in Str. of Belle Isle and SE of Nfld.; seasonal but not geographical size variation)
- Semenova 1964: 51ff, tab. 1-3 (coastal and shelf waters, Labrador and Nfld., Jan., July, and Aug., dominant species in Jan.)
- Vladimirskaya 1965a: 55 (Grand Banks)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
- Glover 1967, 197, fig. 3C (Grand Banks and Labrador coast, in plankton recorder collection at 10 m, 1958-64)
- Lacroix 1967: 40 (Chaleur Bay, G. of St. Lawrence)
- Maclellan 1967: 105 (G. of St. Lawrence, adult females taken in the cold-water layer, late June)
- Matthews 1967: 161f, fig. 2-5, 7, 8 (E of Nfld.; compared with *C. finmarchicus*)
- Bainbridge and Corlett 1968: tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
- Glover and Robinson 1968: 126 (Grand Banks and N.S. coasts, in plankton recorder collections at 10 m)
- Pavshiks 1968: 387, fig. 3 (Labrador coast at 57°30'N, 59°20'W, July; copepodid stages 1-6 present)
- Jones 1969: 280ff, fig. 3, 5, 6, tab. 1, 2 (Labrador coasts and Grand Banks, Aug. 1961-Dec. 1962, in plankton recorder collections at 10 m)
- Matthews 1969: 251ff, fig. 1, 4, 6, tab. 1, pl. 87, as *C. finmarchicus glacialis* (Labrador coasts, Aug.-Dec.; Grand Banks, year round, abundant in Jan.-Apr.; N.S. coasts, year round, more abundant in Feb. and Mar.; G. of Maine, year round, more abundant in Feb. and Mar.; a study based on plankton recorder collections at 10 m in 1962-65)

Calanus helgolandicus (Claus, 1863)

Wilson 1942: 23 (Grand Banks, surface and 100 m, Aug., rare)
Glover 1967: 194ff, fig. 3C (Grand Banks and N.S. coasts, in plankton recorder collections at 10 m in 1958-64)

Calanus hyperboreus Krøyer, 1838

Bigelow 1914a: 117f (G. of Maine, rare)
Bigelow 1915: 286ff (G. of Maine)
Bigelow 1917: 290ff (G. of Maine; S of Halifax, N.S.)
McMurrich 1917a: 6 (St. Andrews area, N.B., Passamaquoddy Bay, one record)
Currie 1919: 216, fig. 5 (St. Andrews, N.B., Passamaquoddy Bay, rare; description)
Willey 1919: 185, tab. 2-10, 12 (G. of St. Lawrence; coastal waters, N.S.; Bay of Fundy)
Willey 1921: 185ff (Passamaquoddy Bay, Feb. and Aug.)
Bigelow 1922: 133 (G. of Maine)
Bigelow 1926: 212ff, fig. 68, 69 (G. of Maine, common but not numerous)
Pinhey 1927b: 339ff (G. of St. Lawrence)
Willey 1931: 82f (Trois-Pistoles region, St. Lawrence estuary, late July, immature specimens)
Gardiner 1934: 560ff, fig. 3 (48-hr collection in 20 stations centered at 43°50'N, 64°30'W, about 17 miles from Liverpool, N.S., May, frequent at night hauls)
Kearney 1934: 25 (between Ship Hbr. and Sambro Bank and near Lunenburg, N.S., May, June, and July)
Wilson 1936: 367 (Hawkes Is.-Mugford Bay, Labrador, day and night surface tows, Aug. and Sept.)
Fish and Johnson 1937: 246, 293ff (G. of Maine; central area of Bay of Fundy; Passamaquoddy Bay)
Frost 1937: 26 (Nfld.)
Tremblay 1942: 11 (St. Lawrence estuary)
Lysholm and Nordgaard 1945: 6, tab. 2 (S of Nfld., common in the upper 100 m, late June-early July)
Filteau 1948b: 72 (Chaleur Bay, G. of St. Lawrence, rare)
Steele 1957: tab. 4 (Gaspé area, G. of St.

Lawrence, in stomachs of ocean perch *Sebastes marinus*)

Brunel 1959: 21 (Chaleur Bay, G. of St. Lawrence)
Kusmorskaya 1960: 107, 109 (Grand Banks, spring)
Lambert 1960: 237ff (Nfld., in stomachs of ocean perch *Sebastes marinus*)
Legaré and MacLellan 1960: 419, 428, fig. 6 (in passages and outside Passamaquoddy Bay, more abundant below 75 m or deeper, fall and winter)
Brunel 1961a: 6 (Gaspé, G. of St. Lawrence, Aug.)
Lacroix 1961b: 25 (Chaleur Bay, G. of St. Lawrence)
Bainbridge and Jones 1962: 35, tab. 1 (E of Nfld.)
Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)
Préfontaine and Brunel 1962: 252 (St. Lawrence estuary)
Semenova 1962: 199 (Grand Banks)
Grainger 1963: 68ff, fig. 4, 10-12 (distributional study in eastern Canadian waters; an arctic water species but also occurs in the eastern part of G. of St. Lawrence, Atl. coasts of Labrador, Nfld., and N.S.; no size variation)
Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, in hyperbenthic plankton samples, Aug.)
Pavshiks and Gogoleva 1964: tab. 2 (43°N, 65°W, N.S. shelf, June)
Semenova 1964: 51ff, tab. 1-5 (Labrador and Nfld., Jan., July, and Aug. in shelf waters and Apr. in coastal waters; Grand Banks, July)
Sherman 1965: 611 (coastal waters, G. of Maine, trace; seasonal quantitative study in 1963)
Vladimirskaya 1965a: 55 (Grand Banks)
Vladimirskaya 1965b: tab. 369 (Grand Banks)
Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
Lacroix 1967: 35ff, fig. 3 (Chaleur Bay, G. of St. Lawrence, June-Sept.; vertical distribution of copepodids)
Bainbridge and Corlett 1968: tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
Glover and Robinson 1968: 126 (Grand

- Banks and coastal waters, N.S., in plankton recorder collections at 10 m)
 Lacroix 1968: 45ff (Chaleur Bay, G. of St. Lawrence, mainly at 40–110 m, spring and summer)
 Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., May and June)
 Sherman 1968: 6 (coastal waters, G. of Maine, rare; seasonal quantitative study in 1965, 1966)
 Pavshiks 1968: 387, fig. 3 (Labrador coast at 57°30'N, 59°20'W, July)
 Jones 1969: 280ff, fig. 3, 5, tab. 1 (Labrador coasts and Grand Banks, in plankton recorder collections at 10 m, Aug. 1961–Dec. 1962)
 McLaren et al. 1969: 486ff, fig. 1, 2, tab. 1 (Halifax, N.S., development time to hatching of eggs in laboratory at different temperatures, 0–6.89 C, study of temperature adaption in physiological processes of poikilotherms from different latitudes)
- Megacalanus longicornis* G. O. Sars, 1925
 Wilson 1942: 23 (Grand Banks at 50–100 m, Aug., rare)
- Nannocalanus minor* (Claus, 1863)
 Bigelow 1926: 305, as *Calanus minor* (Browns Bank)
 Wilson 1942: 23, as *Calanus minor* (Grand Banks, at 100 m, Aug., few)
 Legaré and Maclellan 1960: 434, as *Calanus minor* (Passamaquoddy Bay area)
 Colton et al. 1962: 167ff, fig. 3, as *Calanus minor* (S of N.S., Sept. 1956–Jan. 1957)
- Undinula vulgaris* (Dana, 1849)
 Colton et al. 1962: 168; fig. 3 (S of N.S., Sept.–Nov.)
- FAMILY CANDACIDAE
- Candacia armata* (Boeck, 1872)
 Fish and Johnson 1937: 250f, 295, fig. 25 (eastern G. of Maine–outer Bay of Fundy; Passamaquoddy Bay, a single record in Nov.)
 Jean 1953: 36 (Grande-Rivière, G. of St. Lawrence, May and Sept., in herring stomach)
 Legaré and Maclellan 1960: 419, 424, fig. 6 (winter in passages and fall outside Passamaquoddy Bay; male more abundant in upper 50 m)
 Colton et al. 1962: 167ff, fig. 3 (S of N.S., Sept. 1956–Jan. 1957)
 Sherman 1965: 611ff (coastal waters, G. of Maine, rare; seasonal quantitative study in 1963)
 Sherman 1966a: 1ff (coastal waters, G. of Maine, very rare; seasonal quantitative study in 1964)
 Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Jan., rare)
- Candacia bipinnata* (Giesbrecht, 1889)
 Willey 1919: tab. 11 (banks off N.S.)
 Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Oct., rare)
- Candacia pachydactyla* (Dana, 1852)
 Colton et al. 1962: 168, fig. 3 (S of N.S., Sept.–Nov.)
- Candacia varicans* (Giesbrecht, 1892)
 Willey 1919: tab 11 (banks off N.S.)
- Candacia* sp.
 Bigelow 1917: 291 (G. of Maine)
- Paracandacia simplex* (Giesbrecht, 1889)
 Willey 1919: tab. 11, as *Candacia simplex* (banks off N.S.)
- FAMILY CENTROPAGIDAE
- Centropages bradyi* Wheeler, 1889
 Willey 1919: 201, tab. 11 (banks off N.S.)
 Colton et al. 1962: 168, fig. 3 (S of N.S., Sept.–Nov.)
- Centropages hamatus* (Lilljeborg, 1853)
 Herdman et al. 1898: 50ff (Str. of Belle Isle area and near Anticosti Is., G. of St. Lawrence, Aug. and Sept.)
 Scott 1907: 48 (off Griffins Cove and in Shediac Bay, G. of St. Lawrence)
 Wright 1907: 17, pl. 6, fig. 6 (Canso, N.S.,

- more abundant and appears earlier in the season than *C. typicus*; description) Bigelow 1914a: 115 (coastal waters, G. of Maine, rare)
- Willey 1919: 200, fig. 25, tab. 1-12 (G. of St. Lawrence; Atl. coastal waters, N.S.; Bay of Fundy)
- Bigelow 1922: 135 (G. of Maine)
- Willey 1923: 322 (inner Miramichi Bay, N.B., G. of St. Lawrence, Aug.)
- Bigelow 1926: 220f, fig. 70 (G. of Maine; may breed in Aug. and Sept.)
- Pinhey 1927a: 183ff (Str. of Belle Isle area; Esquiman Channel, G. of St. Lawrence)
- Pinhey 1927b: 340f (G. of St. Lawrence)
- Fish and Johnson 1937: 254ff, 290, 299 (Bay of Fundy; Passamaquoddy Bay, Oct.)
- Huntsman et al. 1954: 244f, tab. 3 (Str. of Belle Isle, mainly in S shore where waters move out to the Atl.; Esquiman Channel, G. of St. Lawrence, more abundant in the Nfld. than the Qué. side)
- Bousfield 1955: 37, 52 (Miramichi estuary, N.B., G. of St. Lawrence, mainly surface)
- Jermolajev 1958: 1226 (Bay of Fundy)
- Legaré and MacLellan 1960: 418 (Cobscook Bay, Me., and outside Passamaquoddy Bay, summer)
- Semenova 1962: 201, fig. 3 (Grand Banks)
- Brunel 1963: 85 (Bradelle Bank, G. of St. Lawrence)
- Lacroix and Bergeron 1963: 65f (Bradelle Bank, G. of St. Lawrence, Aug.)
- Lacroix and Legendre 1964: 35, 37, fig. 4 (Chaleur Bay and Restigouche estuary, G. of St. Lawrence, mainly in upper 10 m; salinity and distribution)
- Semenova 1964: 61ff, tab. 2, 5-8 (coastal waters, Labrador and Nfld., July and Aug.; Grand Banks, Feb., Mar., July, and Aug., abundant)
- Carter 1965: 353 (Anaktalik Bay, Labrador)
- Sherman 1965: 611ff (coastal waters, G. of Maine, very rare; seasonal quantitative study in 1963)
- Vladimirskaya 1965b: 368 (Grand Banks)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
- Sherman 1966a: 1ff (coastal waters, G. of Maine; seasonal quantitative study in 1964)
- Lacroix 1967: 35ff, fig. 3 (Chaleur Bay, G. of St. Lawrence, in upper 40 m, June-Sept., common)
- Lacroix 1968: 45ff (Chaleur Bay, G. of St. Lawrence, mainly in upper 40 m, spring and summer)
- Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Jan., Mar.-Sept.)
- Sherman 1968: 6 (coastal waters, G. of Maine; seasonal quantitative study in 1965 and 1966)
- Centropages typicus* Krøyer, 1849
- Wright 1907: 14 (Canso, N.S., less abundant and appears later in the season than *C. hamatus*)
- Bigelow 1914a: 115f (G. of Maine)
- Bigelow 1915: 286ff, fig. 70 (G. of Maine)
- Bigelow 1917: 291 (G. of Maine)
- Willey 1919: 201, tab. 12 (Bay of Fundy)
- Bigelow 1926: 221ff, fig. 70 (G. of Maine; may breed in Aug. and Sept.)
- Fish and Johnson 1937: 239, 290ff (Bay of Fundy; Passamaquoddy Bay)
- Frost 1937: 26 (Nfld.)
- Legaré and MacLellan 1960: 417, 427, fig. 6, 8 (Passamaquoddy Bay area, common and year round, male, female and juveniles uniformly distributed in upper 100 m)
- Legaré 1961: 20, tab. 4, 6, 7 (N of Campobello Is., N.B., year round, irregular, most abundant in Sept.-Nov.; St. Croix estuary, N.B., rare)
- Glover 1962: 48, fig. 5 (coastal waters, Nfld. and N.S.)
- Sherman 1965: 611ff, fig. 5, 6 (coastal waters, G. of Maine, most abundant copepod species in plankton; seasonal quantitative study in 1963)
- Vladimirskaya 1965b: 368 (Grand Banks)
- Sherman 1966a: 1ff, fig. 5 (coastal waters, G. of Maine, common; seasonal quantitative study in 1964)
- Sherman 1966b: 94ff, fig. 1 (coastal waters, G. of Maine, year round, abundant, especially in spring and fall)
- Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Oct.-Dec., abundant)
- Sherman 1968: 6, fig. 4 (coastal waters,

- G. of Maine, very abundant; seasonal quantitative study in 1965, 1966)
- Centropages* sp.
- Bainbridge and Corlett 1968: tab. 16 (more than one species; Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
- Isias clavipes* Boeck, 1864
- Scott 1907: 48 (off Griffins Cove, G. of St. Lawrence)
- FAMILY DIAPTOMIDAE
- Diaptomus minutus* Lilljeborg, 1889
- Sherman 1966a: 1ff (coastal waters, G. of Maine, very rare; seasonal quantitative study in 1964)
- Diaptomus tyrrelli* Poppe, 1888
- Pinhey 1927a: 184, fig. 1 (Chateau Bay, Labrador, males; description)
- Diaptomus* sp.
- Roger 1940: 168 (Margaree estuary, N.S., G. of St. Lawrence; freshwater species)
- FAMILY EUCLANIDAE
- Eucalanus attenuatus* (Dana, 1849)
- Bigelow 1926: 228, fig. 71 (G. of Maine, an oceanic species, very rare and not permanent; Bay of Fundy, one record from deepwater sample)
- Colton et al. 1962: 168, fig. 3 (S of N.S., Sept. 1956-Jan. 1957)
- Eucalanus elongatus* (Dana, 1849)
- Bigelow 1917: 293 (G. of Maine, one record)
- Bigelow 1926: 228ff, fig. 71 (G. of Maine, rare and occasional)
- Wilson 1942: 23 (Grand Banks, at 50 m, Aug., common)
- Colton et al. 1962: 168, fig. 3 (S of N.S., Sept.-Oct.)
- Rhincalanus cornutus* Dana, 1853
- Bigelow 1926: 283, fig. 72 (G. of Maine, very rare and accidental)
- Colton et al. 1962: 168, fig. 3 (S of N.S., Sept. 1956-Jan. 1957)
- Rhincalanus nasutus* Giesbrecht, 1888
- Bigelow 1917: 293 (G. of Maine)
- Bigelow 1926: 248f, fig. 72 (G. of Maine, very rare; Yarmouth, N.S., one record)
- Fish and Johnson 1937: 250f, fig. 25 (G. of Maine, Bay of Fundy, June-Sept., rare)
- Legaré and MacLellan 1960: 419 (outside Passamaquoddy Bay, winter)
- Sherman 1965: 611ff (coastal waters, G. of Maine, very rare; seasonal quantitative study in 1963)
- FAMILY EUCHAETIDAE
- Euchaeta glacialis* Hansen, 1886
- Lambert 1960: 237ff, as *Pareuchaeta glacialis* (Nfld., in stomachs of ocean perch *Sebastes marinus*)
- Euchaeta marina* (Prestandrea, 1833)
- Herdman et al. 1898: 50ff (NE of Nfld.; Anticosti Is.-St. Lawrence estuary, G. of St. Lawrence, Aug.-Sept.)
- Scott 1907: 48 (identification uncertain; off Griffins Cove, G. of St. Lawrence)
- Colton et al. 1962: 168, fig. 3 (S of N.S., Sept.-Nov.)
- Euchaeta media* Giesbrecht, 1888
- Bigelow 1926: 230 (G. of Maine, very rare)
- Euchaeta norvegica* Boeck, 1872
- Bigelow 1914a: 118 (G. of Maine)
- Bigelow 1915: 286ff, fig. 69 (G. of Maine)
- Bigelow 1917: 291f (G. of Maine; S of Halifax, N.S.)
- Willey 1919: 194, tab. 2-12 (G. of St. Lawrence; coastal waters, N.S.; Bay of Fundy)
- Willey 1921: 185ff (Passamaquoddy Bay, late Feb.; abundant in stomachs of pollock *Pollachius virens*)
- Bigelow 1922: 133ff (G. of Maine)

- Bigelow 1926: 230ff, fig. 73 (G. of Maine, common but not numerous, may breed year round)
- Pinhey 1927a: 223 (Labrador)
- Pinhey 1927b: 340 (G. of St. Lawrence)
- Gardiner 1934: 560, as *Pareuchaeta norvegica* (about 17 miles off Liverpool, N.S., May)
- Fish and Johnson 1937: 239, 296ff, as *Pareuchaeta norvegica* (Bay of Fundy and Passamaquoddy Bay, rare)
- Frost 1937: 26f (Nfld.)
- Tremblay 1942: 11 (Chaleur Bay, G. of St. Lawrence)
- Lysholm and Nordgaard 1945: 23, tab. 15, as *Pareuchaeta norvegica* (S of Nfld., 20 m, few)
- Filteau 1948b: 72 (Chaleur Bay, G. of St. Lawrence)
- Steele 1957: tab. 4 (Gaspé, Qué., G. of St. Lawrence, in stomachs of ocean perch *Sebastes marinus*)
- Kusmorskaya 1960: 107, as *Pareuchaeta norvegica* (Grand Banks, spring)
- Lambert 1960: 237ff, as *Pareuchaeta norvegica* (Nfld., in stomachs of ocean perch *Sebastes marinus*)
- Legaré and MacLellan 1960: 417, 428, 438, fig. 6 (Passamaquoddy Bay area, more abundant below 75 m, year round; a common food of herrings in Passamaquoddy Bay and vicinity)
- Brunel 1961a: 6 (Gaspé, G. of St. Lawrence, Aug.)
- Lacroix 1961b: 26 (Chaleur Bay, G. of St. Lawrence)
- Brunel 1962: 43, as *Paraeuchaeta norvegica* (Bay of Islands, Nfld., G. of St. Lawrence)
- Lacroix 1964: 45ff (Chaleur Bay, G. of St. Lawrence, mainly in 40–80 m or deeper, spring and summer of 1962 and 1964, rare)
- Legaré 1961: 20f, tab. 4, 6, 7 (N of Campobello Is., N.B., year round but most abundant in Dec.; St. Croix estuary, winter, rare)
- Pavshiks and Gogoleva 1964: tab. 2, as *Pareuchaeta norvegica* (43°N, 65°W, N.S. shelf, June)
- Sherman 1965: 611ff (coastal waters, G. of Maine, very rare; seasonal quantitative study in 1963)
- Vladimirskaya 1965a: 55 (Grand Banks)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
- Sherman 1966a: 1ff (coastal waters, G. of Maine, very rare; seasonal quantitative study in 1964)
- Lacroix 1967: 35ff (Chaleur Bay, G. of St. Lawrence, mainly in the upper 110 m, June–Sept., rare)
- Bainbridge and Corlett 1968: tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
- Glover and Robinson 1968: 123, fig. 29 (Atl. survey, including few stations of Labrador coasts, in plankton recorder collections at 10 m; annual quantitative variation)
- Sherman 1968: 6 (coastal waters, G. of Maine, very rare)
- Jones 1969: 282ff, fig. 3, 5, 6, tab. 1, 2 (boreal species off Labrador and on Grand Banks, in plankton recorder collections at 10 m, Aug.–Dec.)

FAMILY HETERORHABIDAE

Heterorhabdus norvegicus (Boeck, 1872)

- Pinhey 1927b: 340f (Cabot Str.)
- Bainbridge and Corlett 1968: tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)

Heterorhabdus spinifrons (Claus, 1863)

- Bigelow 1926: 242 (G. of Maine, a northern form may appear in the G.)
- Fish and Johnson 1937: 250, fig. 25 (G. of Maine)

FAMILY METRIDAE

Metridia longa (Lubbock, 1854)

- Bigelow 1915: 288ff (G. of Maine)
- Currie 1919: 220, fig. 57, 58 (St. Andrews, N.B., Passamaquoddy Bay, June; description)
- Willey 1919: 202, tab. 2, 4–12 (G. of St. Lawrence; coastal waters, N.S., Bay of Fundy)
- Willey 1921: 186ff (Passamaquoddy Bay, 20 m, Aug. and Nov., also in stomach contents of pollack *Pollachius virens*)

- Bigelow 1926: 245ff, fig. 75, 76 (G. of Maine, immigrants from cold water, no evidence of spawning)
 Pinhey 1927a: 223 (Labrador, one record)
 Pinhey 1927b: 339f (G. of St. Lawrence; Cabot Str.)
 Préfontaine 1931: 78 (Trois-Pistoles, Qué., St. Lawrence estuary)
 Willey 1931: 83 (Trois-Pistoles, Qué., St. Lawrence estuary, rare, late July)
 Préfontaine 1932: 207 (St. Lawrence estuary)
 Gardiner 1934: 560 (about 17 miles off Liverpool, N.S., May)
 Wilson 1936: 367 (Hawkes Hbr., Labrador, Aug.)
 Fish and Johnson 1937: 246f, 293ff (coastal waters of N.B.; Bay of Fundy, Passamaquoddy Bay)
 Frost 1937: 26 (Nfld.)
 Tremblay 1942: 11 (St. Lawrence estuary)
 Wilson 1942: 23 (Grand Banks, at 100 m, Aug., few)
 Lysholm and Nordgaard 1945: 32, tab. 18 (S of Nfld., 50 m)
 Steele 1957: tab. 4 (Gaspé, Qué., G. of St. Lawrence, in stomach contents of sea perch, *Sebastes marinus*)
 Legaré and MacLellan 1960: 419, 428, fig. 6 (passages and outside Passamaquoddy Bay, fall and winter, females mainly in upper 50 m, males mainly below 75 m)
 Brunel 1961b: 6 (Gaspé, Qué., G. of St. Lawrence, Aug.)
 Bainbridge and Jones 1962: 35, tab. 1 (E of Nfld.)
 Pavshiks et al. 1962: 58 (Grand Banks)
 Préfontaine and Brunel 1962: 253 (St. Lawrence estuary)
 Travin and Pechenik 1962: 14 (Labrador-Nfld. area)
 Semenova 1962: 199 (Grand Banks, occasional)
 Lacroix and Bergeron 1963: 64, 66 (Bradelle Bank, G. of St. Lawrence, Aug.)
 Pavshiks and Gogoleva 1964: tab. 2, 4 (43°N, 65°W, N.S. shelf, Feb. and June)
 Semenova 1964: 51ff, tab. 1-4, 6, 7 (Labrador and Nfld., Jan., July, and Aug. in shelf waters and Jan., Apr., July, and Aug. in coastal waters, most abundant in Jan.; Grand Banks, Feb. and Aug., not abundant)
 Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
 Sherman 1966a: 1ff (coastal waters, G. of Maine, rare; seasonal quantitative study in 1964)
 Lacroix 1967: 35ff, fig. 2 (Chaleur Bay, G. of St. Lawrence, in upper 110 m, June-Sept., common)
 Bainbridge and Corlett 1968: tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
 Glover and Robinson 1968: 126 (Grand Banks and coastal waters, N.S., in plankton recorder collections at 10 m)
 Lacroix 1968: 45ff (Chaleur Bay, G. of St. Lawrence, mainly in 40-110 m, spring and summer)
 Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Feb. and Apr.)
 Sherman 1968: 6 (coastal waters, G. of Maine, very rare; seasonal quantitative study in 1966)
 Pavshiks 1968: 387, fig. 3 (Labrador coast at 57°30'N, 59°20'W, July)
 Jones 1969: 280ff, fig. 3, 5, 6, tab. 1, 2 (cold-water species, Labrador coasts and Grand Banks, in plankton recorder collections at 10 m, Aug. 1961-Dec. 1962)
 McLaren et al. 1969: 486ff, fig. 1, 2, tab. 1 (Halifax, N.S., development times to hatching of eggs in laboratory at different temperatures, 0-11.96 C, study of temperature adaptation in physiological processes of poikilotherms from different latitudes)
- Metridia lucens* Boeck, 1864
- Bigelow 1914a: 115f (G. of Maine, common)
 Bigelow 1915: 286ff, fig. 70 (G. of Maine)
 Bigelow 1917: 291f (G. of Maine; S of Halifax, N.S.)
 Currie 1919: 219, fig. 55, 56 (St. Andrews, N.B., Passamaquoddy Bay, June; description)
 Willey 1919: 202, fig. 27, tab. 7-10, 12

- (G. of St. Lawrence; coastal waters, N.S., Bay of Fundy; description)
- Willey 1921: 193 (Passamaquoddy Bay, 10 fath, Aug.)
- Bigelow 1922: 133, 135 (G. of Maine)
- Bigelow 1926: 253ff, fig. 77-79 (G. of Maine, very abundant, year round but July; may breed in Sept. and Oct.)
- Fish and Johnson 1937: 239, 290ff (Bay of Fundy, abundant; Passamaquoddy Bay)
- Lysholm and Nordgaard 1945: 32, tab. 19 (S of Nfld., rare)
- Kusmorskaya 1960: 107 (Grand Banks, spring)
- Legaré and Maclellan 1960: 417, 428, fig. 6 (Passamaquoddy Bay area, year round, very common, male and female more abundant below 75 m)
- Legaré 1961: 22, tab. 4, 6, 7 (N of Campobello Is., N.B., sporadic occurrence, lowest in early spring, most abundant in Aug.-Oct.; St. Croix estuary, small numbers, most frequent in late spring)
- Pavshiks and Gogoleva 1964: tab. 2, 4 (43°N, 65°W, N.S. shelf, Feb. and June)
- Sherman 1965: 611ff, fig. 5, 6 (coastal waters, G. of Maine, common; seasonal quantitative study in 1963)
- Vladimirskaya 1965a: 55 (Grand Banks)
- Sherman 1966a: 1ff, fig. 5 (G. of Maine coastal waters, common, seasonal quantitative study in 1964)
- Sherman 1966b: 94, fig. 1 (coastal waters, G. of Maine)
- Lacroix 1967: 40 (Chaleur Bay, G. of St. Lawrence, June-Sept., very rare)
- Bainbridge and Corlett 1968: tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
- Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Jan., Feb., July, Sept., and Oct.)
- Sherman 1968: 6, fig. 4 (coastal waters, G. of Maine, seasonal quantitative study, abundant in 1965, rare in 1966)
- Pleuromamma abdominalis* (Lubbock, 1856)
- Herdman et al. 1898: 53ff, as *Pleuromma abdominalis* (G. of St. Lawrence, northern part of the G. of St. Lawrence estuary, Aug. and Sept.)
- Bigelow 1917: 291 (G. of Maine)
- Willey 1919: tab. 11 (coastal waters, N.S.)
- Bigelow 1926: 272ff, fig. 82 (G. of Maine, occasional)
- Colton et al. 1962: 168, fig. 3 (S of N.S., Sept. 1956-Jan. 1957)
- Pleuromamma borealis* (Dahl, 1893)
- Willey 1919: tab. 11 (banks off N.S.)
- Jones 1969: 280ff, fig. 3 5, 6, tab. 1, 2 (warmwater species, Labrador coasts and Grand Banks, in plankton recorder collections at 10 m, Aug.-Dec. 1962)
- Pleuromamma gracilis* (Claus, 1863)
- Bigelow 1926: 272ff, fig. 82 (G. of Maine, occasional)
- Colton et al. 1962: 167f, fig. 3 (S of N.S., Sept.-Nov.)
- Pleuromamma robusta* (Dahl, 1893)
- Bigelow 1915: 288, 296f (G. of Maine, very rare)
- Bigelow 1926: 272ff, fig. 82 (G. of Maine, occasional)
- Fish and Johnson 1937: 250, fig. 25 (G. of Maine; outer Bay of Fundy)
- Kusmorskaya 1960: 107 (Grand Banks, spring)
- Legaré and Maclellan 1960: 419 (outside Passamaquoddy Bay, fall, rare)
- Sherman 1965: 611ff (coastal waters, G. of Maine, very rare; seasonal quantitative study in 1963)
- Vladimirskaya 1965: 55 (Grand Banks)
- Pleuromamma xiphias* (Giesbrecht, 1889)
- Willey 1919: tab. 11 (banks off N.S.)
- Bigelow 1926: 272ff, fig. 82 (G. of Maine, occasional)
- Colton et al. 1962: 167f, fig. 3 (S of N.S., Nov.)
- Sherman 1965: 611ff (coastal waters, G. of Maine, very rare; seasonal quantitative study in 1963)

FAMILY PARACALANIDAE

Paracalanus parvus (Claus, 1863)

- Scott 1907: 48 (Griffins Cove, G. of St. Lawrence)
Bigelow 1914: 116 (G. of Maine, rare)
Bigelow 1926: 264ff, fig. 80, 81 (G. of Maine, more numerous in winter, may breed in Sept. and Oct.)
Wilson 1936: 367 (Hawkes Hbr.-Mugford Bay, Labrador, day and night surface tows, Aug. and Sept.)
Fish and Johnson 1937: 246 (Bay of Fundy)
Wilson 1942: 23 (Grand Banks, at 50-100 m, Aug., common)
Legaré and MacLellan 1960: 419 (outside Passamaquoddy Bay, fall, rare)

FAMILY PHAENNIDAE

Cornucalanus chelifer I. C. Thompson, 1903

- Bigelow 1926: 306, as *C. magnus* (off Cape Roseway, N.S.)

FAMILY PONTELLIDAE

Anomalocera patersoni Templeton, 1837

- Herdman et al. 1898: 51ff (NE of Nfld. and northern G. of St. Lawrence, Aug.)
Scott 1907: 49 (G. of St. Lawrence)
Bigelow 1914a: 115f (G. of Maine, common)
Bigelow 1915: 288, 295f, fig. 69 (G. of Maine)
Bigelow 1917: 291ff (G. of Maine)
Willey 1919: tab. 5-8, 11 (G. of St. Lawrence; coastal waters, N.S., over banks off Nfld. and N.S.)
Bigelow 1926: 182ff, fig. 63 (G. of Maine, year round, rare, most numerous in Aug.)
Pinhey 1927a: 183ff (S shore, Str. of Belle Isle, Esquiman Channel, G. of St. Lawrence)
Pinhey 1927b: 333ff (G. of St. Lawrence and E coast, Nfld.)
Kearney 1933: 26 (Ship Hbr.-Lunenburg, and in Halifax Hbr., N.S., July)
Fish and Johnson 1937: 240, 293, 299 (central part of Nova Scotian coast, Bay of Fundy; Passamaquoddy Bay)

Frost 1937: 26 (Nfld.)

Lysholm and Nordgaard 1945: 42 (S of Nfld., surface, common)

Filteau 1946: 94 (Chaleur Bay, G. of St. Lawrence)

Huntsman et al. 1954: 244f, tab. 2, 3 (Str. of Belle Isle, mainly in the S shore where water moves out to the Atl.; Esquiman Channel, G. of St. Lawrence, more in the Nfld. than the Qué. side)

Legaré and MacLellan 1960: 417 (Passamaquoddy Bay area, fall in Cobscook Bay, summer in passages, summer and fall outside Passamaquoddy Bay, rare)

Brunel 1961a: 6 (Gaspé, Qué., G. of St. Lawrence, Aug.)

Lacroix 1961b: 25 (Chaleur Bay, G. of St. Lawrence)

Lacroix and Bergeron 1963: 64ff (Bradelle Bank, G. of St. Lawrence, surface, common)

Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)

Sherman 1966a: 1ff (coastal waters, G. of Maine, very rare; seasonal quantitative study in 1964)

Lacroix 1967: 40 (Chaleur Bay, G. of St. Lawrence, June-Sept., very rare)

Pennel 1967: 55ff, fig. 2, 3 (Grande-Rivière, G. of St. Lawrence, early Mar.-mid-Nov. in neuston collection; 2 peaks of adults and nauplii)

Pennel 1968: 55f (G. of St. Lawrence, mid-Aug.; not found in inshore samples from off Grande-Rivière, in Mar. and Apr.)

Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., July, rare)

Sherman 1968: 6 (coastal waters, G. of Maine, very rare; seasonal quantitative study in 1966)

Anomalocera sp.

Bigelow 1922: 133, 135 (G. of Maine)

Labidocera aestiva Wheeler, 1889

Scott 1907: 49, pl. 2, fig. 3, 4 (Shediac Bay, N.B., G. of St. Lawrence; description)

Willey 1919: 203, fig. 28, tab. 5, 7 (Northumberland Str. and between P.E.I. and Cape Breton, G. of St. Lawrence)

- Willey 1923: 321f (inner Miramichi Bay, N.B., G. of St. Lawrence, Aug.)
- Bigelow 1926: 243f (G. of Maine, occasional)
- Bousfield 1955: 37 (Miramichi estuary, N.B., G. of St. Lawrence)
- Legaré and Maclellan 1960: 434 (Passamaquoddy Bay area, rare)
- Pontellina plumata* (Dana, 1849)
- Colton et al. 1962: 168, fig. 3 (S of N.S., Oct. and Nov.)
- FAMILY PSEUDOCALANIDAE
- Clausocalanus arcuicornis* (Dana, 1849)
- Wilson 1942: 23 (Grand Banks, at 100 m, Aug., 1928, rare)
- Microcalanus pusillus* G. O. Sars, 1903
- Legaré and Maclellan 1960: 434 (Passamaquoddy Bay area)
- Vladimirskaya 1965b: 368 (Grand Banks)
- Microcalanus pygmaeus* (G. O. Sars, 1900)
- Kusmorskaya 1960: 107 (Grand Banks, spring)
- Microcalanus* sp.
- Pavshiks and Gogoleva 1964: tab. 2 (43°N, 65°W, N.S. shelf, June)
- Semenova 1964: tab. 1-4, 6, 7 (Labrador and Nfld., Jan., July, and Aug. in shelf waters, and Jan., Apr., July, and Aug. in coastal waters, very abundant in Jan.; Grand Banks, July and Aug.)
- Pavshiks 1968: 387, fig. 7 (57°30'N, 59°20'W, Labrador coast, July)
- Pseudocalanus minutus* (Krøyer, 1849)⁹
- Herdman et al. 1898: 50ff, as *P. elongatus* (Str. of Belle Isle; G. of St. Lawrence, Anticosti Is.-St. Lawrence estuary)
- Scott 1907: 48, as *P. elongatus* (G. of St. Lawrence)
- Wright 1907: 14, pl. 6, fig. 5, as *P. elongatus* (Canso, N.S., very abundant in July and Aug.)
- Bigelow 1914a: 115f, as *P. elongatus* (G. of Maine, common)
- Bigelow 1915: 286ff, as *P. elongatus* (G. of Maine)
- Bigelow 1917: 290, as *P. elongatus* (G. of Maine; S of Halifax, N.S.)
- McMurrich 1917a: 6, as *P. elongatus* (St. Andrews area, Passamaquoddy Bay, Oct.-Apr.)
- Currie 1919: 219, fig. 53, 54, as *P. elongatus* (St. Andrews, Passamaquoddy Bay, most dominant copepod species, June-early Aug.; discussed the anomaly of 5th legs in females, description)
- Willey 1919: 187, fig. 6, tab. 1-12, as *P. elongatus* (G. of St. Lawrence; coastal waters, N.S., Bay of Fundy)
- Willey 1921: 187ff, as *P. elongatus* (Passamaquoddy Bay, Feb., Aug., Nov., and Dec.)
- Willey 1923: 322, 325, as *P. elongatus* (inner Miramichi Bay, G. of St. Lawrence, Aug.)
- Huntsman 1924: 86f, as *P. elongatus* (St. Croix estuary near St. Andrews, N.B., Passamaquoddy Bay; light effect on survival)
- Bigelow 1926: 275ff, fig. 83, 84, as *P. elongatus* (G. of Maine, abundant)
- Wright 1925-26: 17, etc., as *P. elongatus* (Passamaquoddy Bay area; gut content examination; numerical composition and length measurement in vertical tows, Aug.-Oct.)
- Pinhey 1927a: 183, as *P. elongatus* (Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence)
- Pinhey 1927b: 340ff, as *P. elongatus* (G. of St. Lawrence; Str. of Belle Isle; eastern Nfld. coast)
- Willey 1931: 83, as *P. elongatus* (Trois-Pistoles, Qué., St. Lawrence estuary, late July, few)
- Johnson 1934: 24 (Passamaquoddy Bay area, summer, stomach contents of herring)
- Johnson 1935: 1ff (Passamaquoddy Bay; light effect on vertical distribution; laboratory observations on phototropism and temperature tolerance)
- Battle et al. 1936: 417ff, as *P. elongatus*

⁹Included under this heading are *P. elongatus*, *P. gracilis*, and *P. major*.

- (Campobello Is.-Oak Bay, Passamaquoddy Bay, July-Sept., in stomach contents of herring; also in plankton samples, July)
- Fish 1936b: 193ff, fig. 1-9 (G. of Maine, 3 broods in Apr.-May, June-July, and Aug.; Bay of Fundy, spawning not successful)
- Wilson 1936: 367, as *P. elongatus* (Hawkes Hbr.-Mugford Bay, Labrador, day and night surface tows, Aug. and Sept.)
- Fish and Johnson 1937: 239, 290ff (Bay of Fundy and Passamaquoddy Bay, dominant species in plankton)
- Johnson 1939?: 1ff (Passamaquoddy Bay; vertical migration)
- Johnson 1942: 369ff, tab. 3 (inner Passamaquoddy Bay; light effect on vertical migration)
- Tremblay 1942: 11, as *P. elongatus* (St. Lawrence estuary)
- Wilson 1942: 23 (Grand Banks, at 50-100 m, Aug., common)
- Lysholm and Nordgaard 1945: 10f (S of Nfld., in upper 150 m, common)
- Filteau 1948b: 72, as *P. elongatus* (Chaleur Bay, G. of St. Lawrence, rare)
- Huntsman et al. 1954: 244, tab. 2, as *P. elongatus* (Str. of Belle Isle, more abundant in waters moving out to the Atl.)
- Bousfield 1955: 37, 52, as *P. elongatus* (near bottom in Miramichi estuary, N.B., G. of St. Lawrence)
- Jermolajev 1958: 1225, tab. 1-3 (inner Bay of Fundy, decreasing toward inside and toward N.B. coast, few in Minas Basin)
- Legaré and MacLellan 1960: 417ff, fig. 6, 8 (Passamaquoddy Bay area, year round, males and juveniles scarce in Oct. and Nov., mostly in upper 20 m, females mostly below 75 m; also food of herring)
- Brunel 1961a: 6, as *P. elongatus* (Gaspé, G. of St. Lawrence, Aug.)
- Legaré 1961: 23, tab. 4, 6, 7 (Passamaquoddy Bay area, abundant; remarks on vertical and seasonal abundance inside and outside the bay)
- Pavshikis et al. 1962: 58, also as *P. elongatus* (E of Nfld.)
- Préfontaine and Brunel 1962: 253, as *P. elongatus* (St. Lawrence estuary)
- Semenova 1962: 201, fig. 3, as *P. elongatus* (above Grand Banks)
- Travin and Pechenik 1962: 14 (Labrador-Nfld. area)
- Lacroix and Bergeron 1963: 65ff (Bradelle Bank, G. of St. Lawrence, Aug.)
- Lacroix and Legendre 1964: 37, fig. 4 (G. of St. Lawrence, more in Chaleur Bay than in Restigouche estuary, mainly in upper 20 m, July and Aug.; salinity and distribution)
- Pavshikis and Gogoleva 1964: tab. 2, 4, as *P. minutus elongatus* (43°N, 65°W, N.S., Feb. and June)
- Semenova 1964: 54ff, fig. 6, tab. 1-8, also as *P. elongatus* (coasts and shelves, Labrador and Nfld., Jan., Apr., July, and Aug., breeding in July; Grand Banks, Feb., Mar., July, and Aug., abundant, breeding in Mar. and July)
- Carter 1965: 345ff, fig. 4-6 (Anaktalik Bay and Tessiarssuk, a coastal meromictic L., Labrador; study of life cycle, seasonal size variation and vertical distribution)
- Sherman 1965: 611ff, fig. 5, 6 (coastal waters, G. of Maine, common; seasonal quantitative study in 1963)
- Vladimirskaya 1965a: 55, as *P. minutus gracilis* (Grand Banks)
- Vladimirskaya 1965b: 368, as *P. minutus elongatus* (Grand Banks)
- Lacroix 1966a: 52, as *P. (minutus) elongatus*, *P. (minutus) gracilis*, and *P. (minutus) major* (Chaleur Bay, G. of St. Lawrence)
- Sherman 1966a: 1ff, fig. 5 (coastal waters, G. of Maine, common; seasonal and quantitative study in 1964)
- Sherman 1966b: 94, fig. 1 (coastal waters, G. of Maine)
- Lacroix 1967: 35ff, fig. 2 (Chaleur Bay, G. of St. Lawrence, evenly in upper 110 m, June-Sept., very abundant)
- Bainbridge and Corlett 1968: tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
- Lacroix 1968: 45ff (Chaleur Bay, G. of St. Lawrence, evenly in upper 110 m, spring and summer, abundant)
- McLaren et al. 1968: 1267ff (Halifax, N.S., laboratory observation of salinity

- effect on mortality and developmental rate of eggs)
- Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., abundant, year round)
- Sherman 1968: 6, fig. 4 (coastal waters, G. of Maine, abundant; seasonal quantitative study in 1965 and 1966)
- Sherman and Honey 1968: 79f, tab. 3 (Boothbay Hbr., Me., G. of Maine; comparison of catching efficiencies of Bongo and Gulf III plankton samplers)
- Corkett and McLaren 1969: 90ff, fig. 1-6 (Halifax, N.S., laboratory observation of egg production and oil storage)
- Legendre 1969: 31, tab. 2, as *P. elongatus* (Chaleur Bay, G. of St. Lawrence)
- McLaren et al. 1969: 486ff, fig. 1, 2, tab. 1 (Halifax, N.S., development times to hatching of eggs in laboratory at different temperatures, 0-12 C, study of temperature adaptation in physiological processes of poikilotherms from different latitudes)
- Kusmorskaya 1960: 107 (Grand Banks, spring)
- Legaré and Macellan 1960: 419, 428, fig. 6 (Passamaquoddy Bay area, fall and winter in passages, females below 75 m)
- Travin and Pechenik 1962: 14 (Labrador-Nfld. area)
- Pavshiks and Gogoleva 1964: tab. 2 (43°N, 65°W, N.S. shelf, June)
- Sherman 1965: 61ff (coastal waters, G. of Maine, very rare; seasonal quantitative study in 1963)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
- Bainbridge and Corlett 1968: tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
- Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Apr., rare)

Pseudocalanus sp.

- Bigelow 1922: 132, 135 (G. of Maine)
- Pavshiks 1968: 387, fig. 3 (57°30'N, 59°20'W, Labrador coast, July)

FAMILY PSEUDODIAPTOMIDAE

- Pseudodiaptomus coronatus* Williams, 1906
- Willey 1923: 321ff (inner Miramichi Bay, N.B., G. of St. Lawrence)
- Bousfield 1955: 36 (Miramichi estuary, N.B., G. of St. Lawrence)
- Jermolajev 1958: 1226, tab. 2, 3, fig. 1b (inner Bay of Fundy, abundant in Co-bequid Bay and absent in Minas Basin, N.S.)

FAMILY SCOLECITHRICELLIDAE

- Scolecithricella minor* (Brady, 1883)
- Willey 1919: tab. 5, 8-11, as *Scolecithrix minor* (G. of St. Lawrence; coastal waters, N.S.)
- Bigelow 1926: 285f, fig. 72 (G. of Maine, rare)
- Fish and Johnson 1937: 246ff (G. of Maine; Bay of Fundy, Sept.)

Scolecithrix danae (Lubbock, 1856)

- Legaré and Macellan 1960: 434 (Passamaquoddy Bay area, rare)
- Colton et al. 1962: 167f, fig. 3 (S of N.S., Sept.-Nov.)

FAMILY TEMORIDAE

Epischura lacustris S. A. Forbes, 1882

- Brunel 1963: 85 (Saquenay estuary, Qué., G. of St. Lawrence, brackish)

Eurytemora affinis (Poppe, 1880)

- Herdman et al. 1898: 54ff (St. Lawrence estuary, Aug. and Sept.)
- Brunel 1963: 85 (Saquenay estuary, G. of St. Lawrence, brackish)
- Sherman 1966a: 1ff (coastal waters, G. of Maine, very rare; seasonal quantitative study in 1964)

Eurytemora americana Williams, 1906

- Willey 1923: 314, fig. 7, described as *E. thomsoni*, n.sp. (Scots Bay, N.S., July, in stomach contents of shad *Alosa sapidissima*)
- Tremblay 1942: 11 (St. Lawrence estuary)
- Legaré and Macellan 1960: 434 (Passamaquoddy Bay area)

- Eurytemora herdmani* Thompson and Scott, 1898
- Herdman et al. 1898: 52ff (northern G. of St. Lawrence-St. Lawrence estuary, Aug. and Sept.; described as new species)
- Scott 1907: 49, pl. 2, fig. 1, 2 (off Griffins Cove and in Shediac Bay, N.B., G. of St. Lawrence; description)
- Willey 1913: 284 (St. Croix estuary, N.B., Passamaquoddy Bay, Aug., abundant)
- Bigelow 1914a: 115 (coastal waters, G. of Maine, rare)
- McMurrich 1917a: 6 (St. Andrews area, Passamaquoddy Bay, Jan.-Apr., Oct.)
- Currie 1919: 216f, fig. 36-42 (St. Andrews, N.B., Passamaquoddy Bay, most dominant copepod species, late June-early July; laboratory observation; description)
- Willey 1919: tab. 1, 2, 8, 12 (G. of St. Lawrence and Bay of Fundy)
- Willey 1921: 187 (Passamaquoddy Bay, Nov., females with ovisac)
- Willey 1923: 313, 320ff (Scots Bay, N.S., inner Bay of Fundy, in stomach contents of shad *Alosa sapidissima*; inner Miramichi Bay, N.B., G. of St. Lawrence, July and Aug.)
- Huntsman 1924: 86f (St. Croix estuary near St. Andrews, N.B., Passamaquoddy Bay; study of light effect on survival)
- Bigelow 1926: 238 (G. of Maine, estuarine form in all harbours)
- Odell 1926?: 5ff, fig., tab. (St. Andrews, N.B.; laboratory observations on light intensity and bathymetric distribution)
- Wright 1925-26: 15, etc. (Passamaquoddy Bay area; gut content examination; numerical composition and length measurement in vertical tows, Aug.-Oct.)
- Pinhey 1927a: 183ff, 204 (Str. of Belle Isle, one record from S shore)
- Pinhey 1927b: 342f (G. of St. Lawrence)
- Willey 1931: 83f (Trois-Pistoles region, Qué., St. Lawrence estuary, late July, abundant)
- Johnson 1934: 24 (Passamaquoddy Bay area, summer, in stomach contents of herring)
- Johnson 1935: 1ff (Passamaquoddy Bay; light effect on vertical distribution in nature; laboratory observations of phototropism and temperature tolerance)
- Battle et al. 1936: 419ff (Passamaquoddy Bay, July-Sept., in stomach contents of herring and in plankton samples)
- Fish and Johnson 1937: 254ff (Bay of Fundy, Aug. and Sept.; Passamaquoddy Bay, Apr., May, Aug., and Sept.; Sept. swarms in Frenchmans Bay and Passamaquoddy Bay)
- Johnson 1939?: 1ff (Passamaquoddy Bay; vertical migration)
- Johnson 1942: 365ff, tab. 1 (inner Passamaquoddy Bay; study of light effect on vertical distribution)
- Tremblay 1942: 11 (St. Lawrence estuary)
- Filteau 1948b: 73 (Chaleur Bay, G. of St. Lawrence, rare)
- Bousfield 1955: 36 (Miramichi estuary, N.B., G. of St. Lawrence)
- Jermolajev 1958: 1225f, tab. 2, 3 (inner Bay of Fundy, abundant in Minas Basin and Minas Channel, N.S.)
- Legaré and MacLellan 1960: 418, 438 (spring to fall in Passamaquoddy Bay, Cobscook Bay and passages, spring and summer outside Passamaquoddy Bay; most common food item in stomach contents of herring from Passamaquoddy Bay and vicinity)
- Brunel 1961a: 6 (Gaspé, Qué., G. of St. Lawrence)
- Lacroix 1961b: 26 (Chaleur Bay, G. of St. Lawrence)
- Legaré 1961: 21f, tab. 4, 6, 7 (Passamaquoddy Bay area, abundant; remarks on vertical and seasonal abundance inside and outside the bay)
- Préfontaine and Brunel 1962: 253 (St. Lawrence estuary)
- Lacroix and Legendre 1964: 37, fig. 4 (Chaleur Bay and Restigouche estuary, G. of St. Lawrence and in upper 10 m, July and Aug.; salinity and distribution)
- Carter 1965: 353 (Anaktalik Bay, Labrador)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
- Sherman 1966a: 1ff (coastal waters, G. of Maine; seasonal quantitative study in 1964)
- Lacroix 1967: 35ff (Chaleur Bay, G. of St.

- Lawrence, mainly in upper 40 m, June–Sept., not common)
- Lacroix 1968: 45ff (Chaleur Bay, G. of St. Lawrence, mainly in upper 40 m, spring and summer)
- Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Apr., Sept., and Oct.)
- Sherman 1968: 6 (coastal waters, G. of Maine; seasonal quantitative study in 1965 and 1966)
- Eurytemora hirundoides* (Nordquist, 1888)
- McMurrich, 1917a: 6 (St. Andrews area, N.B., Passamaquoddy Bay, Feb., Mar., May, Oct., and Nov.)
- Willey 1923: 320f (inner Miramichi Bay, N.B., G. of St. Lawrence, July and Aug.)
- Wright 1925–26: 15 etc. (Passamaquoddy Bay area; gut content examination; numerical composition, and length measurements in vertical tows, Aug.–Oct.)
- Tremblay 1942: 11 (St. Lawrence estuary)
- Bousfield 1955: 36 (Miramichi estuary, N.B., G. of St. Lawrence)
- Legaré and Macellan 1960: 418 (Passamaquoddy Bay area, year round but very rare in Passamaquoddy Bay, spring in Cobscook Bay and passages)
- Carter 1965: 351 (Tessiarusuk, a meromictic L., Labrador)
- McLaren et al. 1969: 486ff, fig. 1, 2, tab. I (Halifax, development time to hatching of eggs in laboratory at different temperatures, 0–11.8 C, study of temperature adaptation in physiological processes of poikilotherms from different latitudes)
- Eurytemora* sp.
- Sherman 1965: 611ff (coastal waters, G. of Maine, rare; seasonal quantitative study in 1963)
- Temora longicornis* (O. F. Müller, 1785)
- Herdman et al. 1898: 50ff (Str. of Belle Isle area and Anticosti Is.—St. Lawrence estuary, G. of St. Lawrence, Aug. and Sept.)
- Scott 1907: 48f (off Griffins Cove and in Shediac Bay, N.B., G. of St. Lawrence)
- Wright 1907: 14 (Canso, N.S., abundant)
- Bigelow 1914a: 115 (G. of Maine, rare)
- Bigelow 1915: 286ff, fig. 70 (G. of Maine)
- McMurrich 1917a: 6 (St. Andrews area, N.B., Passamaquoddy Bay, Oct.–Jan.)
- Willey 1919: 201, tab. 1–12 (coastal waters, N.S.; G. of St. Lawrence; Bay of Fundy)
- Willey 1921: 187f (Passamaquoddy Bay, Nov. and Dec., rare)
- Bigelow 1922: 135 (G. of Maine)
- Willey 1923: 322 (inner Miramichi Bay, N.B., G. of St. Lawrence, Aug.)
- Huntsman 1924: 86f (St. Croix estuary near St. Andrews, Passamaquoddy Bay; light effect on survival)
- Bigelow 1926: 287ff, fig. 85 (G. of Maine, widely spread, may breed in summer)
- Wright 1925–26: 15, etc. (Passamaquoddy Bay area, gut content examination; numerical composition and length measurement in vertical tows; Aug.–Oct.)
- Pinhey 1927a: 183ff (Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence)
- Pinhey 1927b: 340ff (Str. of Belle Isle; G. of St. Lawrence; Cabot Str.)
- Johnson 1934: 24 (Passamaquoddy Bay area, summer, in stomach contents of herring)
- Johnson 1935: 1ff (Passamaquoddy Bay; light effect on vertical distribution in nature; laboratory observations of phototropism and temperature tolerance)
- Battle et al. 1936: 419ff (Passamaquoddy Bay, July–Sept., in stomach contents of herring and in plankton samples)
- Wilson 1936: 367, (Hawkes Is.—Kaig-lapait Bay, Labrador, Aug. and Sept.)
- Fish and Johnson 1937: 239, 290ff (Bay of Fundy, rare; Passamaquoddy Bay, nauplii in June and July)
- Johnson 1939?: 1ff (Passamaquoddy Bay; vertical migration)
- Tremblay 1942: 11 (St. Lawrence estuary)
- Filteau 1946: 94 (Chaleur Bay, G. of St. Lawrence)
- Tremblay 1947: 80 (Chaleur Bay, G. of St. Lawrence)
- Filteau 1948a: 67 (Chaleur Bay, G. of St. Lawrence)
- Filteau 1948b: 75 (Chaleur Bay, G. of St. Lawrence, mature females at largest

- number on June 20 and completely disappear by July 9)
- Jean 1953: 36 (Grande-Rivière, Qué., G. of St. Lawrence, May–Sept., in herring stomachs)
- Hunstman et al. 1954: 244, tab. 2, 3 (Str. of Belle Isle, mainly in S shore; Esquiman Channel, G. of St. Lawrence, more abundant in the Nfld. than in the Qué. side)
- Bousfield 1955: 36 (Miramichi estuary, N.B., G. of St. Lawrence)
- Legaré and MacLellan 1960: 417, 428, 438 (Passamaquoddy Bay area, year round in Passamaquoddy Bay, spring to fall in Cobscook Bay and passages, summer and fall outside Passamaquoddy Bay; females in upper 75 m; also in stomach contents of herring)
- Brunel 1961a: (Gaspé, Qué., G. of St. Lawrence, Aug.)
- Legaré 1961: 23f, tab. 4, 6, 7 (N. of Campobello Is., N.B., Mar.–Nov., small numbers; St. Croix estuary, N.B., important species, most abundant in Oct. and Nov.)
- Glover 1962: 48, fig. 4 (Nfld. and N.S. coasts)
- Pavshitskis et al. 1962: 58 (E of Nfld.)
- Semenova 1962: 201, fig. 3 (Grand Banks)
- Lacroix and Bergeron 1963: 65f (Bradelle Bank, G. of St. Lawrence, Aug.)
- Lacroix and Legendre 1964: 37, fig. 4 (G. of St. Lawrence, decreasing from Chaleur Bay to Restigouche estuary, most abundant in upper 20 m; salinity and distribution)
- Pavshitskis and Gogoleva 1964: tab. 2, 4, (43°N, 65°W, N.S. shelf, Feb. and June)
- Semenova 1964: tab. 2, 3, 5–8 (Labrador and Nfld., July and Aug. in coastal waters and Jan. in shelf waters; Grand Banks, dominant species in Feb., Mar., July, and Aug.)
- Carter 1965: 353 (Anaktalik Bay, Labrador)
- Sherman 1965: 611, fig. 5, 6 (coastal waters, G. of Maine, common; seasonal quantitative study in 1963)
- Vladimirskaya 1965b: 368 (Grand Banks)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
- Sherman 1966a: 1ff, fig. 5 (coastal waters, G. of Maine, common; seasonal quantitative study in 1964)
- Sherman 1966b: 94, fig. 1 (coastal waters, G. of Maine)
- Lacroix 1967: 35ff, fig. 3 (Chaleur Bay, G. of St. Lawrence, mainly in upper 80 m, June–Sept., abundant)
- Bainbridge and Corlett 1968: tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
- Lacroix 1968: 45ff (Chaleur Bay, G. of St. Lawrence, mainly in upper 80 m, spring and summer, not dominant in plankton)
- Platt and Irwin 1968: 105 (St. Margaret's Bay, N.S., abundant, year round)
- Sherman 1968: 6, fig. 4 (coastal waters, G. of Maine, abundant; seasonal quantitative study in 1965 and 1966)
- Sherman and Honey 1968: 79f, tab. 3 (Boothbay Hbr., Me., G. of Maine; comparison of catching efficiencies of Bongo and Gulf III plankton samplers)
- Legendre 1969: 31, tab. 2 (Chaleur Bay, G. of St. Lawrence)
- McLaren et al. 1969: 486ff, fig. 1, 2, tab. 1 (Halifax, N.S., development times to hatching of eggs in laboratory at different temperatures, 0–11.83°C, study of temperature adaptation in physiological processes of poikilotherms from different latitudes)
- Temora stylifera* (Dana, 1849)
- Bigelow 1926: 307 (off Cape Roseway, N.S.)
- Wilson 1936: 367, 370 (Hawkes Is.–Kaig-la-pait Bay, Labrador, Aug. and Sept.)
- Legaré and MacLellan 1960: 434 (Passamaquoddy Bay area)
- Temora* sp.
- MacDonald 1912: 83 (Duchet Is.–Grand Manan, Bay of Fundy)

FAMILY TORTANIDAE

Tortanus discaudatus (Thompson and Scott, 1898)

- Herdman et al. 1898: 51ff, as *Corynura discaudata* n.sp. (Str. of Belle Isle area; northern G. of St. Lawrence)
- Scott 1907: 50 (Griffins Cove and Shediac Bay, G. of St. Lawrence)
- Wright 1907: 14, pl. 6, fig. 9-11 (Canso, N.S., very common in late July-mid-Aug.)
- Willey 1913: 284f (St. Croix estuary, N.B., Passamaquoddy Bay, Aug.)
- McMurrich 1917a: 7 (St. Andrews area, N.B., Passamaquoddy Bay, Oct.-Dec.)
- Currie 1919: 217, fig. 43-47 (St. Andrews, N.B., Passamaquoddy Bay; observations on moulting; description)
- Willey 1919: tab. 1-8, 10-12 (G. of St. Lawrence; coastal waters, N.S., Bay of Fundy)
- Willey 1921: 187ff (Passamaquoddy Bay, common in samples taken in Nov., Dec. and Feb.)
- Willey 1923: 320ff (inner Miramichi Bay, N.B., G. of St. Lawrence, June and Aug.)
- Bigelow 1926: 294f (G. of Maine, strictly estuarine)
- Odell 1926?: 5ff, fig., tab. (St. Andrews, N.B., laboratory observations on light intensities and bathymetric distribution)
- Wright 1925-26: 16, etc. (Passamaquoddy Bay area; gut content examination; numerical composition and length measurement in vertical tows; Aug.-Oct.)
- Pinhey 1927a: 183ff, also as *Corynura discaudata* (S shore, Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence)
- Pinhey 1927b: 335ff (G. of St. Lawrence; E Nfld. coast)
- Johnson 1935: 1ff (Passamaquoddy Bay; light effect on vertical distribution in nature; laboratory observations of phototropism and temperature tolerance)
- Battle et al 1936: 419ff (Passamaquoddy Bay, July-Sept., in stomach contents of herring and in plankton samples)
- Fish and Johnson 1937: 254ff (G. of Maine, Apr.; Bay of Fundy, May, June, Aug., and Sept.; Passamaquoddy Bay, dominant copepod species, with swarms in Aug. and Oct.)
- Johnson 1942: 368f, tab. 2 (inner Passamaquoddy Bay; light effect on vertical distribution)
- Bousfield 1955: 36 (Miramichi estuary, N.B., G. of St. Lawrence)
- Legaré and MacLellan 1960: 418ff (Passamaquoddy Bay area, year round, common, juveniles in upper 50 m only, adults most abundant in upper 20 m, important food item in stomach contents of herring)
- Legaré 1961: 24f, tab. 4, 6, 7 (N of Campobello Is., N.B., small numbers, mostly in Sept.-Jan; St. Croix estuary, very abundant, especially in summer and fall)
- Semenova 1962: 201, fig. 3 (Grand Banks)
- Brunel 1963: 85 (Bradelle Bank, G. of St. Lawrence)
- Lacroix and Bergeron 1963: 64ff (Bradelle Banks, G. of St. Lawrence, Aug.)
- Lacroix and Legendre 1964: 37, fig. 4 (G. of St. Lawrence; in upper 20 m, decreasing from Chaleur Bay to Restigouche estuary; salinity and distribution)
- Carter 1965: 353 (Anaktalik Bay, Labrador)
- Sherman 1965: 611ff, fig. 5, 6 (coastal waters, G. of Maine, common; seasonal quantitative study in 1963)
- Vladimirskaya 1965b: 368 (Grand Banks)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
- Sherman 1966a: 1ff, fig. 5 (coastal waters, G. of Maine, common; seasonal quantitative study in 1964)
- Sherman 1966b: 94, fig. 1 (coastal waters, G. of Maine)
- Lacroix 1967: 35ff (Chaleur Bay, G. of St. Lawrence, mainly in upper 40 m, June-Sept. rare)
- Lacroix 1968: 45ff (Chaleur Bay, G. of St. Lawrence, mainly in upper 40 m, spring and summer)
- Platt and Irwin 1968: 105 (St. Margaret's Bay, N.S., abundant, Jan.-Sept., Nov.)
- Sherman 1968: 6 (coastal waters, G. of

Maine, abundant, seasonal quantitative study in 1965 and 1966)

McLaren et al. 1969: 486ff, fig. 1, 2, tab. 1 (Halifax, N.S., development times to hatching of eggs in laboratory at different temperatures, 0–10.8 C, study of temperature adaptation in physiological processes of poikilotherms from different latitudes)

ORDER HARPACTICOIDA¹⁰

FAMILY CANTHOCAMPTIDAE

Mesochra pygmaea (Claus, 1863)

Willey 1931: 83 (Trois-Pistoles, Qué., St. Lawrence estuary, July, rare)
Préfontaine and Brunel 1962: 253 (St. Lawrence estuary)

FAMILY CANUELLIDAE

Canuella canadensis Willey, 1923

Jermolajev 1958: 1226: tab. 2–3 (Shubenacadie estuary, inner Bay of Fundy, abundant)

FAMILY CLETODIDAE

Acrenhydrosoma perplexum (T. Scott, 1880)

Semenova 1962: 201, as *Cletodes perplexus* (Grand Banks)

Leimia vaga Willey, 1923

Willey 1923: 313ff, fig. 8–12 (Scots Bay, inner Bay of Fundy, in stomach contents of shad *Alosa sapidissima*; description of new species)

Nannopus palustris Brady, 1880

Willey 1923: 319f, fig. 14, 15, as *N. littoralis* (Scots Bay, inner Bay of Fundy, in stomach contents of shad *Alosa sapidissima*; description)

¹⁰The synonymies of this order follow Lang 1948.

FAMILY DIOSACCIDAE

Diosaccus tenuicornis (Claus, 1863)

Legaré and MacLellan 1960: 434 (Passamaquoddy Bay area)

FAMILY ECTINOSOMIDAE

Ectinosoma neglectum G. O. Sars, 1904

Bigelow 1926: 277f (St. Andrews, N.B., Passamaquoddy Bay, Jan.)

Wilson 1936: 367, 372 (Hawkes Hbr., Labrador, dredge tow at bottom, Aug.)

Ectinosoma proximum G. O. Sars, 1919

Semenova 1962: 201 (Grand Banks)

Ectinosoma sarsi Boeck, 1872

Herdman et al. 1898: 54ff (St. Lawrence estuary, Aug. and Sept.)

Semenova 1962: 201 (Grand Banks)

Ectionsoma sp.

Willey 1931: 83 (Trois-Pistoles region, Qué., St. Lawrence estuary, July, rare)

Préfontaine and Brunel 1962: 253 (St. Lawrence estuary)

Microsetella norvegica (Boeck, 1864)

Herdman et al. 1898: 51ff, as *Ectinosoma atlanticum* (Str. of Belle Isle and northern G. of St. Lawrence, Aug.)

Wright 1907: 15, pl. 6, fig. 12, as *M. atlantica* (Canso, N.S., early July, frequent, description)

Pinhey 1927b: 342f (Str. of Belle Isle; G. of St. Lawrence)

Fish and Johnson 1937: 242 (Bay of Fundy, more abundant in Aug. and Sept. than in Apr.–June)

Wilson 1942: 23 (Grand Banks, 50–100 m, Aug., few)

Lacroix and Legendre 1964: 38 (Restigouche estuary, G. of St. Lawrence, one specimen)

Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Apr., rare)

Microsetella rosea (Dana, 1848)

Legaré and Maclellan 1960: 434 (Passamaquoddy Bay area)

FAMILY HARPACTICIDAE

Harpacticus chelifer (O. F. Müller, 1776)

Wright 1907: 15, pl. 6, fig. 13 (Canso, N.S., common; description)

McMurrich 1917a: 7 (identification uncertain; St. Andrews, N.B., Passamaquoddy Bay)

MacDonald 1912: 83 (Puchet Is.-Grand Manan, Bay of Fundy)

Wilson 1936: 367, 372 (Hawkes Is., Labrador, Aug.)

Fish and Johnson 1937: 286 (G. of Maine and Bay of Fundy; benthos in plankton samples)

Jean 1953: 36 (Grande-Rivière, Qué., G. of St. Lawrence, May-Sept., in stomach contents of herring *Clupea harengus*)

Legaré and Maclellan 1960: 434 (Passamaquoddy Bay area, rare)

Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Apr., July, Aug., and Oct., rare)

Harpacticus gracilis Claus, 1863

McMurrich 1917a: 7 (St. Andrews, N.B., Passamaquoddy Bay, rare)

Legaré and Maclellan 1960: 434 (Passamaquoddy Bay area, rare)

Harpacticus littoralis G. O. Sars, 1910

Bigelow 1926: 241 (St. Andrews, N.B., Passamaquoddy Bay, rare)

Harpacticus uniremis Krøyer, 1842

McMurrich 1917a: 7 (St. Andrews, N.B., Passamaquoddy Bay, common)

Willey 1920: 324 (Passamaquoddy Bay, important food for winter flounder *Pseudopleuronectes americanus*)

Bigelow 1926: 242 (St. Andrews, N.B., Passamaquoddy Bay, Mar.-May)

Pinhey 1927a: 197ff (Esquiman Channel, G. of St. Lawrence; S shore, Str. of Belle Isle)

Willey 1931: 83 (Trois-Pistoles, Qué., St. Lawrence estuary, July, rare)

Fish and Johnson 1937: 286 (Bay of Fundy, benthos in plankton)

Jean 1953: 36, 38, fig. 9 (Grande-Rivière, Qué., G. of St. Lawrence, May-Sept., common in stomach contents of herring *Clupea harengus*)

Legaré and Maclellan 1960: 434 (Passamaquoddy Bay area)

Préfontaine and Brunel 1962: 253 (St. Lawrence estuary)

Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)

Zaus abbreviatus G. O. Sars, 1904

McMurrich 1917a: 7 (St. Andrews, N.B., Passamaquoddy Bay)

Bigelow 1926: 296 (Passamaquoddy Bay, more in Nov.-Jan., less in Apr. and June, none in late summer and early fall)

Willey 1931: 83f (Trois-Pistoles region, Qué., St. Lawrence estuary, mid-July, common)

Préfontaine and Brunel 1962: 253 (St. Lawrence estuary)

Zaus goodsiri Brady, 1880

Jean 1953: 36 (Grande-Rivière, Qué., G. of St. Lawrence, rare, in stomach contents of herring *Clupea harengus*)

Legaré and Maclellan 1960: 434 (Passamaquoddy Bay area)

Zaus spinatus Goodsir 1845

McMurrich 1917a: 7 (St. Andrews, N.B., Passamaquoddy Bay)

Bigelow 1926: 296 (St. Andrews, N.B., Passamaquoddy Bay, Mar.)

Tremblay 1942: 20 (SW of Basque Is., Qué., G. of St. Lawrence)

Zaus sp.

Jean 1953: 36 (Grande-Rivière, Qué., G. of St. Lawrence, in stomach contents of herring *Clupea harengus*)

Platt and Irwin 1968: 105 (St. Margaret's Bay, N.S., Apr.-June, and Sept.)

FAMILY LAOPHONTIDAE

Laophonte elongata Boeck, 1872

Wilson 1936: 367 (Ben's Cove at Cape Aillik, Labrador, day and night surface tows, Aug. and Sept.)

Paronychocamptus huntsmani (Willey, 1923)

Willey 1923: 321ff, fig. 17, 18, described as *Laophonte huntsmani* n.sp. (inner Miramichi Bay, N.B., G. of St. Lawrence, July and Aug.)

Bousfield 1955: 36, as *Laophonte huntsmani* (Miramichi estuary, N.B., G. of St. Lawrence)

FAMILY METIDAE

Metis ignea Philippi, 1843

Bigelow 1926: 244f (G. of Maine, year round but rare, planktonic)

FAMILY MIRACIDAE

Macrosetella gracilis (Dana, 1848)

Bigelow 1926: 226, fig. 72, as *Dwightia gracilis* (G. of Maine; near Shelburne, N.S.)

FAMILY PELTIIDIIDAE

Alteutha oblonga (Goodsir, 1845)

Legaré and Maclellan 1960: 434, as *A. depressa* (Passamaquoddy Bay area)

FAMILY TEGASTIDAE

Tegastes falcatus (Norman, 1868)

Tremblay 1942: 20 (SW of Basque Is., Qué., G. of St. Lawrence)

FAMILY THALESTRIDAE

Dactylopodia signata (Willey, 1920)

Wilson 1936: 367, 371, as *Dactylopisia signata* (Hawkes Hbr., Labrador, dredge net at bottom, Aug.)

Dactylopodia tisbooides (Claus, 1863)

Bigelow 1926: 226, as *Dactylopisia thisbooides* (G. of Maine, very rare)

Legaré and Maclellan 1960: 434, as *Dactylopisia tisbooides* (Passamaquoddy Bay area)

Dactylopodia vulgaris (G. O. Sars, 1904)

Wilson 1936: 367, as *Dactylopisia vulgaris* (Hawkes Hbr., Labrador, dredge net tow at bottom, Aug.)

Legaré and Maclellan 1960: 434, as *Dactylopisia vulgaris* (Passamaquoddy Bay area)

Dactylopodia sp.

Préfontaine and Brunel 1960: 253, as *Dactylopisia* sp. (St. Lawrence estuary)

Dactylopisia distans Willey, 1931

Willey 1931: 84 (Trois-Pistoles region, Qué., St. Lawrence estuary; original description)

Parathalestris croni (Krøyer, 1845)

Herdman et al. 1898: 52, 56, as *Thalestris serrulata* (Str. of Belle Isle; W of Anticosti Is.; G. of St. Lawrence)

McMurrich 1917a: 7, as *Halithalestris croni* (Passamaquoddy Bay, one record)

Willey 1919: tab. 3, 8, 12, as *Halithalestris croni* (G. of St. Lawrence; Bay of Fundy)

Willey 1923: 318f, as *Halithalestris croni* (Scots Bay, inner Bay of Fundy, Aug.)

Bigelow 1926: 239ff, fig. 74, as *Halithalestris croni* (G. of Maine, common but not abundant; St. Andrews, N.B., Passamaquoddy Bay)

Fish and Johnson 1937: 239ff, as *Halithalestris croni* (Bay of Fundy and Passamaquoddy Bay)

Tremblay 1942: 20 (SW of Basque Is., Qué., G. of St. Lawrence)

Steele 1957: tab. 4, as *Halithalestris croni* (Gaspé area, Qué., G. of St. Lawrence, in stomach contents of ocean perch *Sebastes marinus*)

Legaré and Maclellan 1960: 434, as *Halithalestris croni* (Passamaquoddy Bay area)

- Brunel 1961b: 41 (G. of St. Lawrence)
 Lacroix 1961b: 25 (Chaleur Bay, G. of St. Lawrence)
 Lacroix and Legendre 1964: 38 (Chaleur Bay, G. of St. Lawrence, July–Aug., rare)
 Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
 Lacroix 1967: 40 (Chaleur Bay, G. of St. Lawrence, June–Sept., very rare)
- Parathalestris jacksoni* (T. Scott, 1898)
- McMurrich 1917a: 7 (St. Andrews, N.B., Passamaquoddy Bay, rare)
 Bigelow 1926: 271 (St. Andrews, N.B., Passamaquoddy Bay, year round but rare, most numerous in late winter and spring)
 Legaré and Maclellan 1960: 434 (Passamaquoddy Bay area)
- Parathalestris pygmaea*¹¹
- Legaré and Maclellan 1960: 434 (Passamaquoddy Bay area)
- Thalestris gibba* (Kroyer, 1842)
- Legaré and Maclellan 1960: 434 (Passamaquoddy Bay area)
- Thalestris longimana* Claus, 1863
- Willey 1923: 318 (Scots Bay, inner Passamaquoddy Bay, in stomach contents of shad *Alosa sapidissima*)
 Fish and Johnson 1937: 252, 293 (Bay of Fundy)
 Legaré and Maclellan 1960: 434 (Passamaquoddy Bay area)
- FAMILY TISBIDAE**
- Scutellidium longicauda* (Philippi, 1840)
- Tremblay 1942: 20, as *Psamathe longicauda* (SW of Basque Is., Qué., G. of St. Lawrence)
- Tisbe furcata** (Baird, 1837)
- McMurrich 1917a: 7, as *Idya furcata* (St. Andrews, N.B., Passamaquoddy Bay, occasional)
 Willey 1920: 323, as *Idya furcata* (Passamaquoddy Bay, abundant; important food for winter flounder, *Pseudopleuronectes americanus*)
 Bigelow 1926: 242f, as *Idya furcata* (St. Andrews, N.B., Passamaquoddy Bay)
 Pinhey 1927a: 192, 212, as *Idya furcata* (Esquiman Channel, G. of St. Lawrence; Str. of Belle Isle.)
 Willey 1931: 83 (Trois-Pistoles, Qué., St. Lawrence estuary; July, rare)
 Wilson 1936: 367 (Hawkes Hbr., Labrador, dredge tow at bottom, Aug.)
 Fish and Johnson 1937: 286 (Bay of Fundy, benthos in plankton)
 Legaré and Maclellan 1960: 434 (Passamaquoddy Bay area)
 Présentaine and Brunel 1962: 253 (St. Lawrence estuary)
- ORDER CYCLOPOIDA**
- FAMILY CYCLOPIDAE**
- Cyclops viridis* Jurine, 1820
- Bousfield 1955: 36 (Miramichi estuary, N.B., G. of St. Lawrence)
- Cyclops* sp.
- Rogers 1940: 168 (Margaree Bay, N.S., G. of St. Lawrence, freshwater species)
- FAMILY ERGASILIDAE**
- Ergasilus chautauquaensis* Fellows, 1887
- Willey 1923: 322 (inner Miramichi Bay, N.B., G. of St. Lawrence, Sept.)
 Bousfield 1955: 36, as *Ergasilis* [sic] *chautauquaensis* (Miramichi estuary, N.B., G. of St. Lawrence)
- Ergasilus sieboldi* Nordmann, 1832
- Lacroix and Legendre 1964: 38 (Restigouche estuary, G. of St. Lawrence, July and Aug.)

¹¹Identity uncertain.

FAMILY OITHONIDAE

Oithona atlantica Farran, 1908

- Bigelow 1926: 306 (SE of N.S.)
 Travin and Pechenik 1962: 14 (Labrador-Nfld. area)
 Semenova 1964: 52ff, tab. 1-3, 7 (Labrador and Nfld. shelves; Jan., July, and Aug.; Grand Banks, Feb.)

Oithona plumifera Baird, 1843

- Wright 1907: 14, pl. 6, fig. 8 (Canso, N.S., summer, common)
 Fish and Johnson 1937: 239ff (Bay of Fundy and Passamaquoddy Bay)
 Legaré and MacLellan 1960: 419, fig. 6 (outside Passamaquoddy Bay, females in 20-75 m, summer, rare)
 Sherman 1965: 611 (coastal waters, G. of Maine, very rare; seasonal quantitative study in 1963)

Oithona similis Claus, 1866

- Herdman et al. 1898: 50ff, as *O. spinifrons* (Str. of Belle Isle and northern G. of St. Lawrence-St. Lawrence estuary, Aug. and Sept.)
 Scott 1907: 51 (G. of St. Lawrence)
 McMurrich 1917a: 7 (St. Andrews, N.B., Passamaquoddy Bay, Nov.-Jan.)
 Willey 1923: 322 (inner Miramichi Bay, N.B., G. of St. Lawrence, Aug.)
 Bigelow 1926: 264, 305 (St. Andrews, N.B., Passamaquoddy Bay; G. of Maine, wide spreaded)
 Wright 1925-26: 26ff (Passamaquoddy Bay area, Aug.-Oct.; numerical composition and length measurement in vertical tows)
 Pinhey 1927a: 187ff (Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence)
 Pinhey 1927b: 342f (Str. of Belle Isle; G. of St. Lawrence)
 Willey 1931: 82ff (Trois-Pistoles, Qué., St. Lawrence estuary, mid-July, dominant species in plankton)
 Fish 1936c: 169ff, fig. 1-9 (G. of Maine, three broods per year, Apr., June, and Aug.; Bay of Fundy, breeding not successful; developmental period: 6-8 weeks)

- Wilson 1936: 367, 375 (Hawkes Hbr.-Kaig-la-pait Bay, Labrador, Aug. and Sept.; breeding extensively)
 Fish and Johnson 1937: 242, 293 (Bay of Fundy)
 Tremblay 1942: 11 (St. Lawrence estuary)
 Wilson 1942: 23 (Grand Banks, surface-100 m, Aug., abundant)
 Filteau 1946: 94 (Chaleur Bay, G. of St. Lawrence)
 Tremblay 1947: 80 (Chaleur Bay, G. of St. Lawrence)
 Filteau 1948a: 67 (Chaleur Bay, G. of St. Lawrence, May-Sept.)
 Filteau 1948b: 75 (Chaleur Bay, G. of St. Lawrence, females most abundant in June)
 Huntsman et al. 1954: 244, tab. 2 (Str. of Belle Isle)
 Bousfield 1955: 37 (Miramichi estuary, N.B., G. of St. Lawrence)
 Jermalov 1958: 1225, tab. 2-3 (inner Bay of Fundy)
 Legaré and MacLellan 1960: 417, fig. 6 (Passamaquoddy Bay area, fall in Cobscook Bay, summer in passages, year round outside Passamaquoddy Bay, in upper 50 m)
 Brunel 1961a: 6 (Gaspé, Qué., G. of St. Lawrence, Aug.)
 Legaré 1961: 22f, tab. 4, 6, 7 (N of Campobello Is., N.B., mostly at 5-7 m, most common in early summer and winter; St. Croix estuary, N.B., mostly at 5-7 m, most common in winter)
 Pavshiks et al. 1962: 58 (E of Nfld.)
 Préfontaine and Brunel 1962: 253 (St. Lawrence estuary)
 Travin and Pechenik 1962: 14 (Labrador-Nfld. area)
 Lacroix and Bergeron 1963: 65 (Bradelle Bank, G. of St. Lawrence, Aug.)
 Lacroix and Legendre 1964: 38, fig. 4 (Chaleur Bay and Restigouche estuary, G. of St. Lawrence, July and Aug., few; salinity and distribution)
 Pavshiks and Gogoleva 1964: tab. 2, 4 (43°N, 65°W, N.S. shelf, Feb. and June, the most abundant species of zooplankton in the samples)
 Semenova 1964: 51ff, fig. 4, 6, tab. 1-8 (Labrador and Nfld. shelves and coasts, dominant species in Jan., Apr.,

- July, and Aug.; Grand Banks, dominant species in Feb., Mar., July, and Aug.)
- Carter 1965: 351 (Tessiarsuk, a coastal meromictic L., Labrador)
- Sherman 1965: 611ff, fig. 5, 6 (coastal waters, G. of Maine, common; seasonal quantitative study in 1963)
- Vladimirskaya 1965b: 368 (Grand Banks)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
- Sherman 1966a: 1ff, fig. 5 (coastal waters, G. of Maine, abundant; seasonal quantitative study in 1964)
- Sherman 1966b: 94, fig. 1 (coastal waters, G. of Maine)
- Lacroix 1967: 35ff (Chaleur Bay, G. of St. Lawrence, mainly in upper 40 m, June-Sept., rare)
- Sherman 1968: 6, fig. 4 (coastal waters, G. of Maine, abundant; seasonal quantitative study in 1965 and 1966)
- Pavshiks 1968: 387, fig. 3 (57°30'N, 59°20'W, Labrador coast, July)
- Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., rare in May, common in Apr., June, Sept., Oct., and Dec.)
- Oithona spinirostris*¹² Claus, 1863.
- Wilson 1936: 367 (Ben's Cove and Cape Aillik, Labrador, day and night surface tows, Aug. and Sept.)
- Wilson 1942: 23 (Grand Banks, 100 m, Aug., few)
- Sherman 1965: 611ff (coastal waters, G. of Maine; seasonal quantitative study in 1963)
- Sherman 1966a: 1ff (coastal waters, G. of Maine, rare; seasonal quantitative study in 1964)
- Platt and Irwin 1968: 104 (St. Margaret's Bay, N.S., Jan., Apr.-July, Sept., Dec.)
- Sherman 1968: 6 (coastal waters, G. of Maine, rare; seasonal quantitative study in 1964, 1965)
- Oithona* sp.
- Bainbridge and Corlett 1968: tab. 16 (Labrador Sea, including few stations within the shelf, in plankton recorder collections at 10 m)
- Lacroix 1968: 45ff (Chaleur Bay, G. of St. Lawrence, more than one species, spring and summer)
- Oithonina nana* (Giesbrecht, 1892)
- Wilson 1936: 367 (Hawkes Hbr. and Is., Labrador, Aug.)
- Wilson 1942: 23 (Grand Banks, surface-100 m, Aug., abundant)
- FAMILY ONCAEIDAE
- Oncaeaa borealis* G. O. Sars, 1918
- Willey 1931: 82f (Trois-Pistoles, Qué., St. Lawrence estuary, mid-July, common)
- Wilson 1936: 367 (Ben's Cove at Cape Aillik, Labrador, day and night surface tows, Aug. and Sept.)
- Tremblay 1942: 11 (St. Lawrence estuary)
- Préfontaine and Brunel 1962: 253 (St. Lawrence estuary)
- Pavshiks and Gogoleva 1964: tab. 2 (43°N, 65°W, N.S. shelf, June)
- Semenova 1964: 55, tab. 1-7 (Labrador and Nfld. coasts and shelves, abundant in July and Aug., restricted to coastal waters in Jan. and Apr.; Grand Banks, Feb., July, and Aug.)
- Vladimirskaya 1965b: 368 (Grand Banks)
- Oncaeaa conifera* Giesbrecht, 1892
- Herdman et al. 1898: 56 (St. Lawrence estuary, Sept.)
- Legaré and MacLellan 1960: 434 (Passamaquoddy Bay area)
- Oncaeaa venusta* Philippi, 1843
- Wilson 1936: 367, 375 (Ben's Cove at Cape Aillik, Labrador, day and night surface tows, Aug. and Sept.)
- Oncaeaa* sp.
- Pavshiks 1968: 387, fig. 3 (57°30'N, 59°20'W, Labrador coast, July)
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- ¹²This is not a valid species; several species have been recorded under this name, including *O. atlantica*, *O. plumifera* and *O. similis*.

FAMILY SAPPHIRINIDAE

Sapphirina gemma Dana, 1849

Legaré and MacLellan 1960: 434 (Passamaquoddy Bay area)

ORDER MONSTRILLOIDA

FAMILY MONSTRILLIDAE

Monstrilla canadensis McMurrich, 1917

McMurrich 1917b: 47ff, fig. 1–6 (description of new species; Passamaquoddy Bay)

Willey 1921: 187 (Passamaquoddy Bay, Mar., one specimen)

Monstrilla dubia Scott, 1904

Legaré and MacLellan 1960: 419 (Passamaquoddy Bay and outside, winter–summer; Cobscook Bay, spring and fall)

Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)

Monstrilla helgolandica Claus, 1863

Bigelow 1926: 263, as *M. serricornis* (G. of Maine, occasional)

Legaré and MacLellan 1960: 434, as *M. serricornis* (Passamaquoddy Bay area)

Thaumaleus rigidum (Thompson, 1888)

Fish and Johnson 1937: 250f, fig. 25, as *Cymbasoma rigidum* (G. of Maine, Apr.; Bay of Fundy, June)

Thaumaleus sp.

Brunel 1963: 85, as *Cymbasoma* sp. (Chaleur Bay, G. of St. Lawrence)

Lacroix 1963: 51, as *Cymbasoma* sp. (Chaleur Bay, G. of St. Lawrence)

ORDER CALIGOVIDA

FAMILY CALIGIDAE

*Caligus rapax*¹³ Milne-Edwards, 1840

Legaré and MacLellan 1960: 418 (Passamaquoddy Bay and passages, summer and fall, Cobscook Bay and outside Passamaquoddy Bay, spring–fall, rare)

SUBCLASS BRANCHIURA

FAMILY ARGULIDAE

Argulus sp.

Willey 1923: 321 (Miramichi Bay, N.B., G. of St. Lawrence, from deep tow)

SUBCLASS CIRRIPEDIA

ORDER THORACICA

FAMILY BALANIDAE

Balanus balanoides (Linnaeus, 1767)

Fish and Johnson 1937: 271ff, fig. 31 (nauplii: Bay of Fundy, Apr., and Passamaquoddy Bay, Mar.–May; cypris: E of Pt. Leprean, N.B., Bay of Fundy, May)

Bousfield 1954: 133ff (St. Andrews, N.B., Passamaquoddy Bay, larval stages most abundant in Apr.; Halifax Hbr., N.S., nauplii I and II on Feb. 26, III on Mar. 10, IV on Mar. 21, V on Mar. 28, and VI on Apr. 4; Miramichi estuary, N.B., G. of St. Lawrence, predicted spawning season from early Apr. to late May)

Bousfield 1955: 23, fig. 8 (larvae; Miramichi Bay, N.B., G. of St. Lawrence, few and restricted to the bay mouth)

Legaré and MacLellan 1960: 418 (larvae;

¹³The identity of this species is doubtful. According to Parker and Margolis (1967), none of the reportings of this species after H. Milne-Edwards' account actually were *Caligus rapax* H. Milne-Edwards, 1840.

Passamaquoddy Bay area, more in spring and less in summer, and common in stomach contents of herring
Clupea harengus)

Legaré 1961: 30, tab. 4 (nauplii and larvae; Passamaquoddy Bay area, Mar.-June, most abundant in Apr.)

Balanus crenatus Bruguière, 1789

Fish and Johnson 1937: 275ff (larvae; Passamaquoddy Bay; breeding in Aug. and Sept. in Bay of Fundy)

Bousfield 1954: 137ff (nauplii and cypris; Bay of Fundy, in Minas Basin, July, and along the shore at Hampton and Noel, June; Miramichi estuary, G. of St. Lawrence, June)

Bousfield 1955: 23ff, fig. 7, 8, tab. 8 (larvae; Miramichi estuary, N.B., G. of St. Lawrence)

Balanus hameri (Ascanius, 1761)

Bousfield 1954: 141ff (Canadian Atl. coastal waters; liberation of nauplii mainly in late Mar.-early May)

Balanus improvisus Darwin, 1854

Bousfield 1954: 140f (larval stages; Bay of Fundy, in Minas Basin, July, and St. John's estuary, numerous in late Aug.-early Sept.; Miramichi estuary, G. of St. Lawrence, 2 broods, June and Sept.-Oct.)

Bousfield 1955: 23ff, fig. 6, 8-10, tab. 5-8, 10-14 (nauplii and cypris; Miramichi estuary, N.B., G. of St. Lawrence, distribution of larval stages in the estuary, main spawning season: June 13-July 29)

Balanus sp.

Herdman et al. 1898: 50ff (cypris; Str. of Belle Isle; northern G. of St. Lawrence-St. Lawrence estuary)

McMurrich 1917a: 7f (nauplii; St. Andrews, N.B., Passamaquoddy Bay, late Feb.-Apr. and Oct.)

Willey 1921: 188f (nauplii and cypris; Passamaquoddy Bay, surface, Apr.-May)

Willey 1923: 311f, 321 (nauplii and cypris; inner Miramichi Bay, N.B., G. of St. Lawrence, June and Aug.)

Pinhey 1927a: 227f (nauplii and cypris; Esquiman Channel, G. of St. Lawrence; Str. of Belle Isle)

Pinhey 1927b: 338 (nauplii: Bay of Exploits, Nfld., G. of St. Lawrence; cypris: Cabot Str. and SE of Nfld.)

Willey 1931: 83 (nauplii; Trois-Pistoles, Qué., St. Lawrence estuary, July)

Rogers 1940: 165f (nauplii; St. John estuary, N.B., Aug.)

Lacroix 1961b: 27 (nauplii and cypris; Chaleur Bay, G. of St. Lawrence, June and July)

Lacroix 1966: 52 (nauplii and cypris; Chaleur Bay, G. of St. Lawrence)

ORDER ACROTHORACICA

Dendrogaster sp.

McMurrich 1917b: 59ff, fig. 12-16 (larva; Passamaquoddy Bay; description)

SUBCLASS MALACOSTRACA

ORDER MYSIDACEA

FAMILY MYSIDAE

Boreomysis arctica (Krøyer, 1861)

Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)

Boreomysis nobilis G. O. Sars, 1879

Tattersall 1939: 282 (Bay of Exploits, Nfld., Sept., few specimens with eggs)

Erythrops erythrophthalma (Goës, 1864)

Fish and Johnson 1937: 285, 299 (G. of Maine; Passamaquoddy Bay, Nov., benthos in plankton)

Tattersall 1939: 282f (Mingan Channel, off Flat Is., off Bay of Islands, and St. Paul's Bay, G. of St. Lawrence, Aug.; Breton Banks, N.S., Aug.; Atl. coast, Nfld., Aug. and Sept.)

Legaré and MacLellan 1960: 419 (Passamaquoddy Bay and passages, fall)

- Lacroix 1961b: 27 (Chaleur Bay, G. of St. Lawrence, rare)
 Legaré 1961: 31 (Passamaquoddy Bay, rare)
 Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)
 Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, Aug., in hyperbenthic plankton collection)
 Poirier 1969: 67ff, fig. 1, 2, tab. 2B, 4 (Chaleur Bay, G. of St. Lawrence, June–Sept.; horizontal distribution and vertical migration)

Meterythrops robusta Smith, 1879

- Tattersall 1939: 283 (Bay of Islands, Nfld., G. of St. Lawrence, males, females, and juveniles, Aug.)
 Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)
 Poirier 1969: 67ff, fig. 1, 2, tab. 3A, 4 (Chaleur Bay, G. of St. Lawrence, June–Sept.; horizontal distribution and vertical migration)

Mysis mixta Lilljeborg, 1852

- Tattersall 1939: 284 (between Nfld., and Anticosti Is., G. of St. Lawrence, Aug.; S of Belle Isle and Bay of Exploits, Nfld., Sept.; W of Sable Is., N.S., females, May and July)
 Lacroix 1961b: 27 (Chaleur Bay, G. of St. Lawrence, rare)
 Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)
 Lacroix and Bergeron 1963: 64ff (Bradelle Bank, G. of St. Lawrence, Aug.)
 Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
 Poirier 1969: 67ff, fig. 1, 2, tab. 2A, 4 (Chaleur Bay, G. of St. Lawrence, June–Sept.; horizontal distribution and vertical migration)

Mysis oculata (Fabricius, 1780)

- Tattersall 1939: 284 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)
 Dunbar 1942a: 42 (Hebron, Labrador)
 Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)

Mysis stenolepis Smith, 1873

- Legaré and MacLellan 1960: 419 (Spring in Passamaquoddy Bay, and its passages, fall)
 Legaré 1961: 31 (Passamaquoddy Bay area, rare)

Neomysis americana (Smith, 1873)

- Fish and Johnson 1937: 284f, 296ff (G. of Maine and Bay of Fundy, surface, Apr.; Passamaquoddy Bay; benthos in plankton)
 Tattersall 1939: 285 (G. of St. Lawrence, in Malpeque Bay, P.E.I., Aug. and Sept., and Bideford estuary, P.E.I., Sept.)
 Legaré 1961: 31 (Passamaquoddy Bay area, rare)

Pseudomma truncatum Smith, 1879

- Tattersall 1939: 283 (Flat Is. and Bay of Islands, Nfld., G. of St. Lawrence, Aug.; Cape Bonavista, Nfld., males, females, and juveniles, Sept.)
 Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)
 Lacroix 1963: 51 (Chaleur Bay, G. of St. Lawrence)
 Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
 Poirier 1969: 67ff, fig. 1, 2, tab. 3B, 4 (Chaleur Bay, G. of St. Lawrence, June–Sept.; horizontal distribution and vertical migration)

ORDER CUMACEA

FAMILY DIASTYLIDAE

Diastylis abbreviata G. O. Sars, 1871

- Fish and Johnson 1937: 285 (G. of Maine; benthos in plankton)

Diastylis polita Smith, 1879

- Fish and Johnson 1937: 285 (G. of Maine; benthos in plankton)

- Diastylis quadrispinosa* G. O. Sars, 1871 *Eudorella truncatula* (Bate, 1856)
- Fish and Johnson 1937: 285 (G. of Maine; benthos in plankton)
- Diastylis rathkei* (Krøyer, 1841)
- Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, Aug., in hyperbenthic plankton collection)
- Diastylis sculpta* G. O. Sars, 1871
- Whiteaves 1901: 245, as *D. sculptus* (Bay of Fundy, surface)
- Fish and Johnson 1937: 285, 299 (G. of Maine, Bay of Fundy, and Passamaquoddy Bay; benthos in plankton)
- Legaré 1961: 31 (Passamaquoddy Bay area, rare)
- Diastylis* sp.
- Legaré and MacLellan 1960: 418 (several species; Cobscook Bay, Me., year round; Passamaquoddy Bay and passages, spring to fall)
- Leucon nasica* (Krøyer, 1841)
- Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)
- Leucon nasicoides* Lilljeborg, 1855
- Fish and Johnson 1937: 285 (Bay of Fundy; benthos in plankton)
- Leucon* sp.
- Bousfield and Leim 1959: 16 (Minas Channel, N.S., inner Bay of Fundy, Sept.)
- FAMILY NANNASTACIDAE
- Campylaspis rubicunda* (Lilljeborg, 1855)
- Fish and Johnson 1937: 285, as *Campylaspis rubicunda* (G. of Maine; benthos in plankton)
- FAMILY LAMPROPIDAE
- Lamprops fuscata* G. O. Sars, 1864
- Fish and Johnson 1937: 285 (G. of Maine; benthos in plankton)
- FAMILY LEUCONIDAE
- Eudorella emarginata* (Krøyer, 1846)
- Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)
- Eudorella hispida* G. O. Sars, 1871
- Fish and Johnson 1937: 285 (benthos in plankton; G. of Maine and Bay of Fundy)
- FAMILY PSEUDOCUMIDAE
- Petalosarsia declivis* (G. O. Sars, 1864)
- Fish and Johnson 1937: 285 (Bay of Fundy; benthos in plankton)
- ORDER ISOPODA
- Suborder Gnathiidea
- FAMILY ANTHRURIDAE
- Calathura brachiata* (Stimpson, 1853)
- Fish and Johnson 1937: 285, as *Cyathura brachiata* (G. of Maine; benthos in plankton)

Suborder Asellota

FAMILY JANIRIDAE

Jaera marina (Fabricius, 1780)

Préfontaine 1932: 207, as *J. abifrons* (St. Lawrence estuary, in fucoids)

Préfontaine and Brunel 1962: 255, as *J. abifrons* (St. Lawrence estuary)

FAMILY MUNNIDAE

Munna kroyeri Goodsir, 1848

Fish and Johnson 1937: 285 (G. of Maine; benthos in plankton)

FAMILY MUNNOPSISIDAE

Munnopsis typica M. Sars, 1860

Wallace 1919: 38 (at the mouth of Hbr. de Loutre, Campobello Is., N.B., Bay of Fundy, one specimen, swimming freely at the surface)

Suborder Valvifera

FAMILY IDOTEIDAE

Idotea baltica (Pallas, 1772)

Whiteaves 1901: 239f, as *I. marina* (Magdalen Is. and at Pointe du Chêne of Shediac Bay, G. of St. Lawrence; Halifax, N.S.; Bay of Fundy; attached to floating seaweed or swimming at surface)

Wallace 1919: 23 (Campobello Is., Grand Manan, and St. Mary's Bay, Bay of Fundy; Minister Is. and St. Croix estuary near St. Andrews, Passamaquoddy Bay; at low tide among seaweed and eelgrass)

Fish and Johnson 1937: 285 (G. of Maine; benthos in plankton)

Bousfield and Leim 1959: 16, as *Idothea baltica* (Scotsman Bay and Bass estuary, N.S., inner Fundy Bay, Sept., common; in fucoids)

Idotea metallica Bosc, 1802

Whiteaves 1901: 239, as *I. robusta* (Halifax, N.S., surface)

Willey and Huntsman, 1921: 3 (Bay of Fundy, from floating seaweeds)

Idotea phosphorea Harger, 1873

Préfontaine 1932: 207 (St. Lawrence estuary, in fucoids)

Préfontaine and Brunel 1962: 255 (St. Lawrence estuary)

Suborder Epicarida

FAMILY BOPYRIDAE

Phryxus abdominalis (Krøyer, 1841)

Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, Aug.; in hyperbenthic plankton collection)

ORDER AMPHIPODA

Suborder Gammaridea

FAMILY AMPELISCIDAE

Ampelisca eschrichtii Krøyer, 1842

Bousfield 1950?: tab. 20 (Str. of Belle Isle)

Byblis gaimardi (Krøyer, 1846)

Bousfield 1950?: tab. 20 (Str. of Belle Isle)

FAMILY CALLIOPIIDAE

Apherusa glacialis (Hansen, 1887)

Shoemaker 1930: 292 (G. of St. Lawrence)

Frost 1936a: 6 (NE of Nfld.; planktonic)

Dunbar 1942a: 41 (Hebron, Labrador)

Pavshiks et al. 1962: 58 (Grand Banks)

Semenova 1962: 199, fig. 1 (Grand Banks)

Semenova 1964: 51 (Labrador and Nfld. shelves)

Apherusa megalops (Buchholz, 1874)

Shoemaker 1930: 292ff, fig. 32–34 (G. of St. Lawrence; description)
Dunbar 1942a: 40 (Hebron, Labrador)

Calliopius laeviusculus (Krøyer, 1838)

Whiteaves 1901: 227 (Magdalen Is., Qué., G. of St. Lawrence, at surface in caverns under cliffs, abundant)
Pinhey 1927a: 228 (Str. of Belle Isle)
Pinhey 1927b: 344 (above Father Pt., Qué., G. of St. Lawrence)
Shoemaker 1930: 297f (G. of St. Lawrence)
Frost 1936a: 5 (NE Nfld.)
Fish and Johnson 1937: 285ff (G. of Maine, Bay of Fundy, and Passamaquoddy Bay; benthos in plankton)
Bousfield 1951: 148ff, fig. 10, tab. 2, 4, 5 (G. of St. Lawrence; Str. of Belle Isle; Atl. coastal waters, Nfld.)
Jean 1953: 36, as *Calliopus* [sic] *rathkei* (Grande-Rivière, Qué., G. of St. Lawrence, May–Sept., in stomach contents of herring *Clupea harengus*)
Bousfield 1956: 137 (N.S. and Nfld. coasts)
Legaré and MacLellan 1960: 418 (Passamaquoddy Bay and Cobscook Bay, summer and fall, rare)
Legaré 1961: 29 (St. Croix R. estuary, N.B., spring and summer, frequent)
Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)

Calliopius sp.

Bousfield 1950?: tab. 2–4, 6, 7, 12–17, 19–21 (Str. of Belle Isle)

Halirages fulvocinctus (M. Sars, 1858)

Bousfield 1950?: tab. 14 (Str. of Belle Isle)
Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)

FAMILY COROPHIIDAE

Corophium volutator (Pallas, 1766)

Fish and Johnson 1937: 285, as *C. cylindricum* (G. of Maine and Bay of Fundy; benthos in plankton)

Ericthonius hunteri (Bate, 1862)

Frost 1936a: 7 (NE of Nfld.; benthos in plankton)

FAMILY EUSIRIDAE

Eusirus cuspidatus Krøyer, 1845

Frost 1936a: 6 (Grand Banks; benthos in plankton)

Rhachotropis aculeata (Lepechin, 1780)

Frost 1936a: 7 (near Nfld., G. of St. Lawrence; Grand Banks; benthos in plankton)

Bousfield 1950?: tab. 4 (Str. of Belle Isle)

Rhachotropis inflata (G. O. Sars, 1882)

Frost 1936a: 7 (Grand Banks; benthos in plankton)

Rhachotropis oculata (Hansen, 1887)

Brunel 1962: 43 (Bay of Islands, G. of St. Lawrence, Aug.)

Rhachotropis sp.

Bousfield 1950?: tab. 4, 6, 20 (Str. of Belle Isle)

Rozinante fragilis (Goës, 1866)

Bousfield 1950?: tab. 10 (Str. of Belle Isle)

FAMILY GAMMARIDAE

Gammarellus angulosus (Rathke, 1843)

Bousfield 1956: 140 (N.S. and Nfld. coasts, may be free-swimming)

Gamarellus sp.

Bousfield 1950?: tab. 20 (Str. of Belle Isle)

Gammarus mucronatus Say, 1818

Bousfield 1969: 15 (SW G. of St. Lawrence)

Gammarus tigrinus Sexton, 1939

Bousfield 1969: 8f (G. of St. Lawrence to N Carolina)

Gammarus wilkitzkii (Birula, 1897)

Dunbar 1964: 1, pl. 8 (general distribution in N Atl. and Arctic waters, including record of Labrador coasts near Hudson Str.)

*Gammarus*¹⁴ sp.

Pinhey 1927b: 334, as *G. locusta* (above Father Pt., Qué., G. of St. Lawrence)

Frost 1936a: 7, as *G. locusta* (NE of Nfld.; benthos in plankton)

Bousfield 1950?: tab. 6, 10, 12, 13, 17, 18, 20, 21 (Str. of Belle Isle)

FAMILY ISCHYROCERIDAE

Ischyrocerus anguipes Kroyer, 1838

Frost 1936a: 7 (NE of Nfld.; benthos in plankton)

FAMILY LYSIANASSIDAE

Anonyx lilljeborgi Boeck, 1870

Shoemaker 1930: 226f, fig. 1, as *A. nugax* (G. of St. Lawrence; description)

*Anonyx nugax*¹⁵ (Phipps, 1774)

Frost 1936a: 5 (near Bonne Bay and Belle Is., Nfld.)

Fish and Johnson 1937: 285, as *A. nujax* (G. of Maine; benthos in plankton)

Bousfield 1950?: tab. 20 (Str. of Belle Isle)

Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)

¹⁴*Gammarus locusta* does not occur in N America. E. L. Bousfield suggests that the following species are likely to be found in plankton collection of this area: *G. oceanicus*, *G. wilkitzkii*, *G. lawrencianus*, *G. trigrinus*, and *G. mucronatus*.

¹⁵*Anonyx sarsi* and *A. lilljeborgi* were confused with *A. nugax* in the past. For recent discussion and description of *Anonyx* spp. in eastern Canada, see Steele and Brunel, 1968.

Orchomenella pinguis (Boeck, 1861)

Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)

Paratryphosites abyssi (Goës, 1866)

Frost 1936a: 7f, text-fig., described as *Hippomedon stephensi* n.sp. (Nfld., exact locality unknown; benthos in plankton)

Pseudalibrotus glacialis G. O. Sars, 1900

Frost 1936a: 4 (Labrador and E Nfld.)

Dunbar 1942a: 38 (Hebron, Labrador)

Bousfield 1951: 148ff, fig. 9, tab. 2-4 (Str. of Belle Isle; G. of St. Lawrence, in Esquiman Channel and northern part of the G. associated with Labrador current)

Huntsman et al. 1954: 241f, tab. 1 (Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence; in Labrador current in Aug. but eliminated by Sept.)

Lambert 1960: 237ff (Nfld., in stomach contents of ocean perch, *Sebastes marinus*)

Dunbar 1966: 30 (Str. of Belle Isle and northern G. of St. Lawrence)

Pseudalibrotus littoralis (Krøyer, 1845)

Huntsman et al. 1954: 241f, tab. 1 (Str. of Belle Isle; G. of St. Lawrence, from N shore of Esquiman Channel—the central part of the G.)

Pseudalibrotus nansenii G. O. Sars, 1900

Frost 1936a: 4 (Labrador and E of Nfld.)

Lambert 1960: 237ff (Nfld., in stomach of ocean perch, *Sebastes marinus*)

Pseudalibrotus sp.

Bousfield 1950?: tab. 1-4, 6-8, 10, 13 (Str. of Belle Isle)

Schisturella pulchra (Hansen, 1887)

Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)

<i>Tmetonyx nobilis</i> (Stimpson, 1853)	<i>Westwoodilla megalops</i> (G. O. Sars, 1882)
Frost 1936a: 5, as <i>T. similis</i> (NE of Nfld. and Grand Banks; benthos in plankton)	Shoemaker 1930: 290 (G. of St. Lawrence) Bousfield 1950?: tab. 6, as <i>Halimedon megalops</i> (Str. of Belle Isle)
FAMILY OEDICEROTIDAE	
<i>Acanthostepheia malmgreni</i> (Goës, 1886)	<i>Paramphithoe cuspidata</i> (Lepechin, 1780)
Bousfield 1950?: tab. 20 (Str. of Belle Isle)	Frost 1936a: 6, text-fig. (Nfld., exact locality unknown; benthos in plankton; description of a partial specimen)
Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)	
<i>Arrhis phyllonyx</i> (M. Sars, 1858)	
Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)	<i>FAMILY PHOXOCEPHALIDAE</i>
<i>Monoculodes intermedius</i> Shoemaker, 1930	<i>Harpinia cabotensis</i> Shoemaker, 1930
Bousfield 1950?: tab. 20 (Str. of Belle Isle)	Bousfield 1950?: tab. 10 (Str. of Belle Isle)
<i>Monoculodes packardi</i> Boeck, 1871	<i>Paraphoxus oculatus</i> ¹⁶ (G. O. Sars, 1879)
Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)	Frost 1936a: 5 (E of Nfld.; benthos in plankton)
<i>Monoculodes</i> sp.	<i>FAMILY PODOCERIDAE</i>
Fish and Johnson 1937: 285 (G. of Maine; benthos in plankton)	<i>Dulichia porrecta</i> (Bate, 1857)
<i>Oediceros saginatus</i> Krøyer, 1842	Fish and Johnson 1937: 285 (G. of Maine and Bay of Fundy; benthos in plankton)
Frost 1936a: 5 (Grand Banks; benthos in plankton)	<i>Podocerus variegatus</i> Leach 1814
<i>Paroedicerops propinquus</i> (Goës, 1866)	Herdman et al. 1898: 53f (G. of St. Lawrence, from N of Anticosti to St. Lawrence estuary, Aug.)
Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)	<i>Podocerus</i> sp.
<i>Westwoodilla brevicalcar</i> (Goës, 1866)	Fish and Johnson 1937: 285 (G. of Maine; benthos in plankton)
Shoemaker 1930: 289f (G. of St. Lawrence)	
<i>Westwoodilla caecula</i> (Bate, 1856)	
Shoemaker 1930: 290 (G. of St. Lawrence)	

¹⁶E. L. Bousfield questions Frost's identification of this species, which is the only Canadian record.

FAMILY PONTOGENEIDAE

Pontogeneia inermis (Krøyer, 1838)

- Shoemaker 1930: 107f (G. of St. Lawrence)
Frost 1936a: 7 (NE of Nfld., rare)
Bousfield 1950?: tab. 16, 19 (Str. of Belle Isle)
Bousfield 1956: 137 (N.S. coast)

FAMILY STEGOCEPHALIDAE

Stegocephalus inflatus Krøyer, 1842

- Fish and Johnson 1937: 285 (G. of Maine; benthos in plankton)
Bousfield 1950?: tab. 10 (Str. of Belle Isle)
Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)

FAMILY STENOPODIIDAE

Parametopella cypris (Holmes, 1905)

- Fish and Johnson 1937: 285, as *Stenothoe cypris* (G. of Maine; benthos in plankton)

FAMILY TIRONIDAE

Syrrhoe crenulata Goës, 1866

- Bousfield 1950?: tab. 10 (Str. of Belle Isle)

Tiron acanthurus Lilljeborg, 1865

- Bousfield 1950?: tab. 10 (Str. of Belle Isle)

Suborder Hyperiidea

FAMILY HYPERIIDAE

Hyperia galba (Montague, 1813)

- Bigelow 1914a: 103 (Grand Banks, SW of N.S.)
Bigelow 1915: 278ff (G. of Maine)
Bigelow 1926: 165 (G. of Maine, July and Aug., free or associated with *Aurelia* and *Cyanea* medusae)

Frost 1936a: (Labrador and Grand Banks)

Fish and Johnson 1937: 240 (Bay of Fundy)

Bousfield 1950?: tab. 4, 12, 20 (Str. of Belle Isle)

Bousfield 1951: 138, fig. 3 (Str. of Belle Isle, Esquiman Channel, G. of St. Lawrence; Bay of Exploits, Nfld., Aug. and Sept.)

Jean 1953: 36 (Grande-Rivière, Qué., G. of St. Lawrence, in stomach contents of herring *Clupea harengus*)

Bousfield 1956: 144 (Cape Breton, N.S., in medusa *Tima formosa*)

Steele 1957: tab. 4 (Gaspé, Qué., G. of St. Lawrence, in stomach content of ocean perch *Sebastes marinus*)

Legaré and Maclellan 1960: 436 (Passamaquoddy Bay area, common)

Legaré 1961: 29 (Passamaquoddy Bay area, Sept.-Dec., usually commensal with *Aurelia aurita*)

Brunel 1961a: 7 (Gaspé, Qué., G. of St. Lawrence, Aug.)

Lacroix 1961b: 26 (Chaleur Bay, Qué., G. of St. Lawrence, Sept.)

Hyperia medusarum (O. F. Müller, 1776)

Rathbun 1909: 485 (Domino Hbr., Labrador, in *Cyanea capillata*, and Dead Is., Labrador)

Stafford 1912b: 60 (Gaspé, Qué., G. of St. Lawrence, under bell of *Aurelia* and *Cyanea* medusae)

Bigelow 1915: 278ff (G. of Maine)

Bigelow 1926: 165 (G. of Maine, summer and winter, free or associated with *Aurelia* and *Cyanea* medusae)

Bousfield 1950: tab. 8 (Str. of Belle Isle)

Bousfield 1951: 138, fig. 3 (Str. of Belle Isle, Aug., one specimen)

Bousfield 1956: 144 (Cape Breton, N.S. immature, in medusa *Tima formosa*)

Brunel 1961a: 7 (Gaspé, Qué., G. of St. Lawrence, Aug.)

Hyperoche medusarum (Krøyer, 1838)

Whiteaves 1901: 218f (between Anticosti and Gaspé, Qué., G. of St. Lawrence, near surface)

Bigelow 1915: 278f, 284, fig. 68, as *H. kroyeri* (G. of Maine, near shore)

- Bigelow 1917: 289, as *H. abyssorum* (G. of Maine and Shelburne, N.S.)
 Bigelow 1926: 165f, as *H. tauriformis* (G. of Maine within 100-m contour line, year round)
 Pinhey 1927b: 339, as *H. kroyeri* (E and S of Nfld.)
 Shoemaker 1930: 350 (G. of St. Lawrence)
 Frost 1936a: 4 (Nfld., widely distributed, but not numerous)
 Bousfield 1951: 139, 151ff, fig. 3, tab. 2-5, 6 (Labrador coast; Str. of Belle Isle; G. of St. Lawrence in Esquiman Channel and northern part of the G.; associated with the Labrador current)
 Brunel 1961b: 42, as *H. kroyeri* (G. of St. Lawrence)
 Lacroix 1961b: 26, as *H. kroyeri* (Chaleur Bay, Qué., G. of St. Lawrence, June)
 Brunel 1962: 42 (Chaleur Bay, Qué., G. of St. Lawrence)
 Platt and Irwin 1968: 105 (St. Margaret's Bay, N.S., Mar.-Sept., rare)
- Hyperoche* sp.
- Bousfield 1950?: tab. 2-6, 8, 10, 12, 13, 17-21 (Str. of Belle Isle)

Parathemisto abyssorum Boeck, 1870

- Shoemaker 1930: 350f, as *Themisto abyssorum* (G. of St. Lawrence)
 Préfontaine 1933: 254, as *Themisto abyssorum* (inner G. of St. Lawrence)
 Dunbar 1942: 38, as *Themisto abyssorum* (Hebron, Labrador)
 Bousfield 1950?: tab. 1-8, 10, 14, 15, 17-20, as *Themisto abyssorum* (Str. of Belle Isle)
 Bousfield 1951: 139, 151ff, fig. 3, tab. 2-7, as *Themisto abyssorum* (Atl. coasts, Labrador and Nfld.; Str. of Belle Isle; G. of St. Lawrence in Esquiman Channel and northern part of the G.; strong negative phototropism)
 Steele 1957: tab. 4 (Gaspé, Qué., G. of St. Lawrence, in stomach contents of ocean perch *Sebastes marinus*)
 Brunel 1959: 21 (Chaleur Bay, Qué., G. of St. Lawrence)
 Bowman 1960: 368ff, fig. 11j-k, 12, 13 (Labrador and Nfld. coasts, G. of St. Lawrence; world distribution; description)
 Lambert 1960: 237ff, as *Themisto abyssorum* (Nfld., in stomach contents of ocean perch *Sebastes marinus*)
 Brunel 1961a: 8 (Gaspé, Qué., G. of St. Lawrence, Aug.)
 Lacroix 1961b: 26 (Chaleur Bay, Qué., G. of St. Lawrence, July-Sept., dominant amphipod species)
 Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)
 Préfontaine and Brunel, 1962: 256 (St. Lawrence estuary)
 Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, in hyperbenthic plankton collection, Aug.)
 Dunbar 1964: 1, pl. 6 (general distribution in N Atl. and Arctic waters, including record of Labrador coast)
 Pavshiks and Gogoleva 1964: tab. 2, as *Themisto abyssorum* (43°N, 65°W, N.S. shelf, June)
 Lacroix 1966: 52 (Chaleur Bay, Qué., G. of St. Lawrence)

Parathemisto gaudichaudii (Guérin, 1825)

- Herdman et al. 1898: 50ff, as *Euthemisto compressa* (Str. of Belle Isle; G. of St. Lawrence in northern part of the G. to St. Lawrence estuary, Aug.)
 Wright 1907: 15, pl. 6, fig. 14, as *Euthemisto compressa* (Canso, N.S., June, abundant)
 Bigelow 1914a: 119, as *Euthemisto compressa* (G. of Maine, common)
 Bigelow 1915: 278ff, fig. 68, as *Euthemisto compressa* and *E. bispinosa* (G. of Maine)
 Bigelow 1917: 286f, as *Euthemisto compressa* and *E. bispinosa* (G. of Maine; S of Halifax, N.S.)
 Bigelow 1922: 133, 135, as *Euthemisto compressa* and *E. bispinosa* (G. of Maine)
 Bigelow 1926: 156ff, fig. 55, 56, as *Euthemisto compressa* and *E. bispinosa* (G. of Maine, breeding in Feb.-Oct. and rarely in Nov. and Dec.)
 Pinhey 1927a: 228, as *Euthemisto compressa* and *E. bispinosa* (Labrador coast; Str. of Belle Isle area; Esquiman Channel, G. of St. Lawrence)

- Pinhey 1927b: 339, 342, as *Euthemisto compressa* and *E. bispinosa* (G. of St. Lawrence; Cabot Str.; E and S Nfld.)
 Shoemaker 1930: 351f, as *Themisto compressa forma compressa* and *forma bispinosa* (G. of St. Lawrence)
 Préfontaine 1933: 254, as *Themisto compressa* (inner G. of St. Lawrence)
 Gardiner 1934: 560, as *Themisto compressa forma compressa* (about 17 miles off Liverpool, N.S., May)
 Frost 1936a: 4, as *Themisto gaudichaudi*, including *Euthemisto bispinosa* and *E. compressa* (Nfld., common)
 Fish and Johnson 1937: 239ff, as *Euthemisto compressa* and *E. bispinosa* (Bay of Fundy; Passamaquoddy Bay)
 Bousfield 1950?: tab. 1-20, as *Themisto bispinosa*, *T. compressa* and *Themisto intermediate form* (Str. of Belle Isle)
 Bousfield 1951: 142, 151ff, fig. 5, 6, tab. 2-7, as *Themisto compressa forma compressa* and *forma bispinosa* (Atl. coasts, Labrador and Nfld.; Str. of Belle Isle; G. of St. Lawrence in Esquiman Channel and northern part of the G.; more numerous in Labrador current and also at surface by day than in night)
 Huntsman 1953: 329, as *Euthemisto compressa* (Passamaquoddy Bay; effect of freshets on distribution)
 Huntsman et al. 1954: 244, as *Themisto compressa* (Str. of Belle Isle area to G. of Maine, associated with both Labrador current and warmer waters)
 Steele 1957: tab. 4, as *Themisto gaudichaudi* (Gaspé, Qué., G. of St. Lawrence, in stomach contents of ocean perch *Sebastes marinus*)
 Bowman 1960: 379ff, fig. 16a, 17 (Labrador, Nfld. and N.S. coasts, G. of St. Lawrence, Bay of Fundy, and G. of Maine; world distribution; description)
 Lambert 1960: 237ff, as *Themisto gaudichaudi* (Nfld. in stomach contents of ocean perch *Sebastes marinus*)
 Legaré and Maclellan 1960: 436, as *Euthemisto compressa* (Passamaquoddy Bay area)
 Legaré 1961: 29, as *Euthemisto compressa* (N of Campobello Is., N.B., common in Oct. and Nov.; St. Croix estuary, rare)
 Brunel 1961a: 8, as *P. gaudichaudi forma compressa* and *forma bispinosa* (Gaspé, Qué., G. of St. Lawrence, Aug.)
 Lacroix 1961b: 26, as *P. gaudichaudi forma compressa* (Chaleur Bay, Qué., G. of St. Lawrence, July and Nov.)
 Préfontaine and Brunel 1962: 256, as *P. gaudichaudi forma compressa* (St. Lawrence estuary)
 Lacroix 1966: 52 (Chaleur Bay, Qué., G. of St. Lawrence)
- Parathemisto gracilipes* (Norman, 1869)
- Whiteaves 1901: 219, as *P. obliqua* (near Gaspé between Cap des Rosiers and SW point of Anticosti Is., G. of St. Lawrence)
 Bigelow 1917: 289, as *P. obliqua* (Halifax and Shelburne, N.S.)
 Bigelow 1922: 134, as *P. obliqua* (Bay of Fundy)
 Bigelow 1926: 160, as *P. obliqua* (G. of Maine, late summer)
 Pinhey 1927a: 228, as *P. obliqua* (Esquiman Channel, G. of St. Lawrence)
 Pinhey 1927b: 339, as *P. obliqua* (G. of St. Lawrence and Cabot Str.)
 Frost 1936a: 4, as *P. obliqua* (Nfld., common)
 Jean 1953: 37, as *P. obliqua* (Grande-Rivière, Qué., G. of St. Lawrence, May-Sept., in stomach contents of herring *Clupea harengus*)
 Legaré 1961: 29, as *P. obliqua* (N of Campobello Is., N.B., July, one specimen)
- Parathemisto libellula* (Lichtenstein, 1822)
- Whiteaves 1901: 219, as *Euthemisto libellula* (Bradelle Bank, G. of St. Lawrence)
 Rathbun 1909: 485, as *Euthemisto libellula* (Labrador)
 Pinhey 1927a: 228, as *Euthemisto libellula* (Str. of Belle Isle)
 Frost 1936a: 4, as *Themisto libellula* (Nfld., common)
 Dunbar 1942a: 37, as *Themisto libellula* (Hebron, Labrador)
 Bousfield 1950?: tab. 1-4, 6-11, 17, 20 as *Themisto libellula* (Str. of Belle Isle)
 Bousfield 1951: 144, 151ff, fig. 8, tab. 2-5, 7 as *Themisto libellula* (Atl. coasts, Labrador and Nfld.; Str. of Belle Isle;

G. of St. Lawrence in Esquiman Channel and northern part of the G.; associated with Labrador current)

Hunstman et al. 1954: 242, tab. 1, as *Themisto libellula* (Str. of Belle Isle; G. of St. Lawrence in Esquiman Channel—central part of the G.; associated with Labrador current)

Bowman 1960: 382ff, fig. 16d-o, 18, 19 (Labrador coast and G. of St. Lawrence; world distribution; description)

Lambert 1960: 237ff, as *Themisto libellula* (Nfld., in stomach contents of ocean perch *Sebastes marinus*)

Dunbar 1964: 1, pl. 7 (general distribution in N Alt. and arctic waters including records of Labrador coast and shelf)

Semenova 1964: 51, as *Themisto libellula* (Labrador and Nfld. shelves)

Dunbar 1966: 30 (Str. of Belle Isle and northern G. of St. Lawrence)

Parathemisto sp.

Bousfield 1950?: tab. 1-13, 15-21, as *Themisto* sp. or young (Str. of Belle Isle)

Alvariño 1956a: 10f, tab. 4, as *Themisto* sp. (Banquereau Bank, N.S., late Apr., common; Grand Banks, Mar., coincidence of abundance with *Sagitta elegans*, and May, rare)

Alvariño 1956b: 5f, tab. 2, as *Themisto* sp. (Grand Banks, Mar., rare)

Powles 1958: 1392, 1394, as *Themisto* sp. (southwestern part of the G. of St. Lawrence, in stomach contents of cod *Gadus morhua*)

Platt and Irwin 1968: 105 (St. Margaret's Bay, N.S., juveniles, Jan. and Apr., rare)

FAMILY PHRONIMIDAE

Phronima sedentaria (Forskal, 1775)

Fish and Johnson 1937: 250, fig. 25 (N of Grand Manan and at mouth of St. Mary's Bay, Bay of Fundy)

Phronima sp.

Bigelow 1917: 289 (G. of Maine on Brown's Bank)

Bousfield 1950?: tab. 21 (Str. of Belle Isle)

Bousfield 1951: 148 (Bradore Bay, Str. of Belle Isle, Sept., one specimen)

FAMILY VIBILIDAE

Vibiliya pyripes Bovallius, 1887

Frost 1936a: 4 (Bay Bulls, Nfld.; near Sable Is., N.S.)

Suborder Caprellidea

FAMILY CAPRELLIDAE

Aeginina longicornis (Krøyer, 1842-43)

Fish and Johnson 1937: 285, 299, as *Aeginella longicornis* (Bay of Fundy; Passamaquoddy Bay, Sept.; benthos in plankton)

Caprella linearis (Linnaeus, 1767)

Fish and Johnson 1937: 285 (G. of Maine; benthos in plankton)

Legaré and Maclellan 1960: 418 (Passamaquoddy Bay, Cobscook Bay and passages, summer to winter, and outside Passamaquoddy Bay, fall and winter, rare)

Legaré 1961: 31 (Passamaquoddy Bay area, rare)

ORDER EUPHAUSIACEA

FAMILY EUPHAUSIIDAE

Euphausia krohnii (Brandt, 1851)

Bigelow 1926: 146f (SE of Cape Sable, N.S.)

Jones 1969: 280ff, fig. 3, 5, 6, tab. 1, 2 (warmwater species, Labrador coasts and Grand Banks, in plankton recorder collections at 10 m, Aug.-Dec.)

Meganoctiphanes norvegica (M. Sars, 1857)

- Verrill 1879: 2, as *Thysanopoda norvegica* (between Cape Cod and G. of St. Lawrence)
- Herdman et al. 1898: 51ff, as *Nyctiphantes norvegica* (Str. of Belle Isle; northern part of the G. of St. Lawrence, Aug. and Sept.)
- Whiteaves 1901: 247f, as *Nyctiphantes norvegica* (Bay of Fundy, abundant; Cape Sable, N.S.)
- Hansen 1908: 86 (G. of St. Lawrence; N.S. coast)
- Bigelow 1914a: 118f (G. of Maine, common)
- Bigelow 1915: 274 (G. of Maine)
- Hansen 1915: 66ff (between Nfld. and Anticosti, W of Anticosti Is., and outside Chaleur Bay, G. of St. Lawrence, July and Aug.; near Eastport, Me., Bay of Fundy, Sept.; G. of Maine, July-Sept.)
- Bigelow 1917: 282ff (G. of Maine; N.S.; S of Halifax)
- Willey 1921: 192 (off Wilson's Beach of Campobello Is., Passamaquoddy Bay, in stomach contents of pollack *Pollachius virens*, Aug.)
- Bigelow 1922: 133, 135 (G. of Maine)
- Cox and Anderson 1922: 9 (Passamaquoddy Bay, in stomach contents of lumpfish, *Cyclopterus lumpus*)
- Huntsman 1924: 86 (Passamaquoddy Bay, specimen for study of light effect on survival)
- Huntsman and Sparks 1924: 98 (St. Andrews, Passamaquoddy Bay; study of temperature effect on survival)
- Bigelow 1926: 147ff, fig. 53, 54 (G. of Maine: Cape Cod-Cape Sable, spawning in summer months)
- Battle et al. 1933: 417ff (between Campobello Is. and Oak Bay, Passamaquoddy Bay, July-Sept., in stomach contents of herring *Clupea harengus*; also in plankton collection, July)
- Kearney 1933: 26 (NW of Sambro Bank, N.S.; July, 1932)
- Préfontaine 1933: 256, (inner G. of St. Lawrence)
- Fish and Johnson 1937: 239, 274, 290ff (eggs, larvae, and adults; Bay of Fundy and Passamaquoddy Bay)
- Einarsson 1945: 110ff, fig. 53-55 (distribution of adolescents and adults in G. of St. Lawrence, Scotian banks, G. of Maine, and Bay of Fundy, and spawning ground in G. of Maine, data compiled from literature)
- Jean 1953: 37, as *Nyctiphantes norvegica* (Grande-Rivière, Qué., G. of St. Lawrence, May-Sept., in stomach contents of herring *Clupea harengus*)
- Huntsman 1955: 328f (species name not given; Passamaquoddy Bay; effect of freshets on distribution)
- Steel 1957: tab. 4 (Gaspé, Qué., G. of St. Lawrence; in stomach contents of ocean perch *Sebastes marinus*)
- Lacroix 1958: 77f (Chaleur Bay, Qué., G. of St. Lawrence; thermocline and vertical migration)
- Powles 1958: 1393, 1399 (southwestern part of the G. of St. Lawrence, abundant in stomach of cod *Gadus morhua* of 21-30 cm in length, especially in Aug. and Sept.)
- Brunel 1959: 21 (Chaleur Bay, Qué., G. of St. Lawrence)
- Lacroix 1959: 91 (G. of St. Lawrence; vertical distribution of larvae)
- Lacroix 1960: 24 (Chaleur Bay, Qué., G. of St. Lawrence)
- Lambert 1960: 237ff (Nfld. waters, in stomach contents of ocean perch *Sebastes marinus*)
- Legaré and MacLellan 1960: 417, as *Meganoctiphanes* sp. (Passamaquoddy Bay area, year round, sporadic invasions of adult in summer)
- Brunel 1961a: 8 (Gaspé, Qué., G. of St. Lawrence, Aug.)
- Lacroix 1961a: 257ff, fig. 15, 18 (Chaleur Bay, Qué., G. of St. Lawrence, study of diurnal migration, absent in furcilia IV or younger stages)
- Legaré 1961: 31 (Passamaquoddy Bay area)
- Pavshiks et al. 1962: 58 (Grand Banks)
- Préfontaine and Brunel 1962: 256 (St. Lawrence estuary)
- Martin 1963: 17 (Bay of Fundy, main food for pollack *Pollachius virens*)
- Drobysheva 1964: 79ff, fig. 2, tab. 1 (Grand Banks, surface, Mar.-Aug.)
- Pavshiks and Gogoleva 1964: tab. 2 (43°N, 65°W, N.S. shelf, June)

Soulier 1965: 178f, fig. 6, 7 (larvae and adults; banks off Nfld. and N.S., June and July)

Ackman and Eaton 1966: 1561ff (Blandford, N.S., stomach, contents of fin whale, *Balaenoptera physalus*, July; analysis of fatty acids)

Lacroix 1966: 52 (Chaleur Bay, Qué., G. of St. Lawrence)

Jones 1969: 295f, fig. 16 (a slope species, Labrador coasts and Grand Banks, in plankton recorder collection at 10 m, Aug.-Dec.)

Nematoscelis megalops G. O. Sars, 1883

Bigelow 1917: 282ff (G. of Maine; S of Halifax, N.S.)

Bigelow 1926: 146, fig. 51 (G. of Maine, rare, mainly in summer months)

Jones 1969: 294, fig. 16 (Grand Banks, in plankton recorder collections at 10 m, Aug.-Dec.)

Thysanoessa gregaria G. O. Sars, 1883

Bigelow 1917: 282ff (G. of Maine; S of Halifax, N.S.)

Jones 1969: 280ff, fig. 3, 5, 6, 15, tab. 1, 2 (warmwater species, Labrador coasts and Grand Banks, in plankton recorder collections at 10 m, Aug.-Dec.; life cycle complete in 1 year)

Thysanoessa inermis (Krøyer, 1846)

Verrill 1879: 2, as *Thysanopoda inermis* (between Cape Cod and G. of St. Lawrence)

Whiteaves 1901: 248, as *Rhoda inermis* (Bay of Fundy, surface; between Grand Pabou and Cap d'Espoir and between Anticosti Is. and Gaspé, G. of St. Lawrence)

Hansen 1915: 93ff, pl. 2, fig. 2a-d (Atl. coast, N.S., July; Eastport, Me., Bay of Fundy, Oct.; coastal waters, G. of Maine, July and Aug.; description)

Bigelow 1917: 282ff (G. of Maine and S of Halifax, N.S., most dominant euphausiid species)

McMurrich 1917a: 8 (St. Andrews, N.B., Passamaquoddy Bay, Jan.)

Willey 1921: 192 (off Campobello Is.,

Passamaquoddy Bay, in stomach contents of pollack *Pollachius virens*)

Bigelow 1922: 133, 136 (G. of Maine)

Huntsman 1924: 86 (Passamaquoddy Bay; light effect on survival)

Huntsman and Sparks 1924: 98 (St. Andrews, N.B., Passamaquoddy Bay; temperature effect on survival)

Bigelow 1926: 135ff, fig. 48, 49 (G. of Maine and Bay of Fundy, common)

Gardiner 1934: 560ff (48-hour collections in 20 stations centered at 43° 50'N, 64°30'W, about 17 miles off Liverpool, N.S., May, abundant by night, rare during daytime)

Fish and Johnson 1937: 239, 299, 302, also as *T. neglecta* (Bay of Fundy; Passamaquoddy Bay, Sept., Nov., and Dec.)

Einarsson 1945: 121ff, fig. 59, 60 (distribution of adolescents and adults in Labrador coast, G. of St. Lawrence, N.S. coast, G. of Maine, and Bay of Fundy, and spawning ground in G. of Maine and Bay of Fundy, data compiled from literature)

Corbeil 1953: 14 (Gaspé at Banc de l'Orphelin and Banc de Miscou, Qué., G. of St. Lawrence, June-Oct., very common in stomach contents of cod *Gadus morhua*)

Jean 1953: 37f, fig. 9, as *Rhoda inermis* (Grande-Rivière, Qué., G. of St. Lawrence, May-Sept., very common in stomach contents of herring *Clupea harengus*)

Alvariño 1956a: 8ff, tab. 4 (more abundant on Grand Banks than on Banquereau Bank, N.S., late Apr.-early May)

Steele 1957: tab. 4 (Gaspé, Qué., G. of St. Lawrence, in stomach contents of ocean perch *Sebastes marinus*)

Lacroix 1958: 77f (Chaleur Bay, Qué., G. of St. Lawrence; thermocline and vertical distribution)

Powles 1958: 1392, 1399 (southwestern part of the G. of St. Lawrence, June and July, very common in stomach contents of cod *Gadus morhua* of the size of 16-20 cm)

Brunel 1959: 21 (Chaleur Bay, Qué., G. of St. Lawrence)

- Lacroix 1959: 91 (G. of St. Lawrence; vertical distribution of larvae)
- Lambert 1960: 237ff (Nfld., in stomach contents of ocean perch *Sebastes marinus*)
- Lacroix 1960b: 24ff (Chaleur Bay, Qué., G. of St. Lawrence)
- Brunel 1961a: 8 (Gaspé, Qué., G. of St. Lawrence, Aug.)
- Lacroix 1961a: 257ff, fig. 6, 8, 10, 12 (Chaleur Bay, Qué., G. of St. Lawrence, June-Oct.; vertical migration of larvae and adults, furcilia V or younger stages in upper 15 m consistently)
- Legaré 1961: 31 (Passamaquoddy Bay area)
- Lacroix 1961b: 26 (Chaleur Bay, Qué., G. of St. Lawrence, common)
- Lacroix 1961c: 29ff, fig. 1, 2 (Chaleur Bay, Qué., G. of St. Lawrence, below 40 m, most abundant in July and Sept.)
- Pavshitskis et al. 1962: 58 (Grand Banks)
- Pechenik and Noskov 1962: 139 (Grand Banks, abundant in late summer)
- Drobysheva 1964: 79ff, fig. 2, tab. 1 (Grand Banks, Mar.-Nov., a neritic species abundant in coastal or Laurentian waters)
- Dunbar 1964: 1, pl. 3 (general distribution in N Atl. and arctic waters, including record of Labrador coast near Hudson Str.)
- Semenova 1964: 51 (Labrador-Nfld. area)
- Lacroix 1966: 52 (Chaleur Bay, Qué., G. of St. Lawrence)
- Lacroix 1968: 45 (Chaleur Bay, Qué., G. of St. Lawrence)
- Platt and Irwin 1968: 105 (St. Margaret's Bay, N.S., May, rare)
- Jones 1969: 280ff, fig. 4-6, tab. 1, 2 (shelf and cold-water species; Labrador coasts and Grand Banks, in plankton recorder collections at 10 m, year round; largest animals in the first half of the year, with transference of spermatophores in Apr. and the resulting furcilia stages in July, which may give rise to the mature animals in the following year)
- Thysanoessa longicaudata* (Krøyer, 1846)
- Bigelow 1917: 282ff (G. of Maine; S of Halifax, N.S.)
- Bigelow 1926: 139ff, fig. 50 (G. of Maine)
- Gardiner 1934: 560ff (48-hr collections in 20 stations centered at 43°50'N, 64°30'W, May, rare, only found in night or early morning)
- Fish and Johnson 1937: 240 (Bay of Fundy, very rare)
- Einarsson 1945: 119 ff, fig. 57 (distribution of adolescents and adults in G. of Maine and Bay of Fundy, data compiled from literature)
- Steele 1957: tab. 4 (Gaspé, Qué., G. of St. Lawrence, in stomach contents of ocean perch, *Sebastes marinus*)
- Kusmorskaya 1960: 107 (Grand Banks, spring)
- Brunel 1961b: 42 (G. of St. Lawrence)
- Lacroix 1961b: 26 (Chaleur Bay, Qué., G. of St. Lawrence, rare)
- Lacroix 1961c: 31ff (Chaleur Bay, Qué., G. of St. Lawrence, upper 80 m, rare)
- Bainbridge and Jones 1962: 35, fig. 3 (furcilia; E of Nfld.)
- Pavshitskis et al. 1962: 58 (Grand Banks)
- Pechenik and Noskov 1962: 139 (Grand Banks, dominant species on the northern slope in Mar.)
- Travin and Pechenik 1962: 14 (Labrador-Nfld. area)
- Drobysheva 1964: 79ff, fig. 3 (Grand Banks, Mar.-May, July, Aug., and Nov., oceanic species rare within 200-m contour line)
- Semenova 1964: 52, 56, 64, tab. 3, 7 (Labrador and Nfld. shelves, Jan. and July; Grand Banks, Feb.)
- Soulier 1965: 180, fig. 11 (near edge of banks off N.S., June and July, rare)
- Vladimirskaya 1965a: 55 (Grand Banks)
- Jones 1969: 280ff, fig. 3, 5, 6, 9, 14, tab. 1, 2, 4, 5 (Labrador coasts and Grand Banks in plankton recorder collections at 10 m, year round; study of life history; monthly population change, variation in size of surcilia stages, segmentation of antennal endopodites)
- Legendre 1969: 31, tab. 2 (furcilia; Chaleur Bay, Qué., G. of St. Lawrence, June)

Thysanoessa raschii (M. Sars, 1864)

- Hansen 1915: 96ff (vicinity of Anticosti Is., G. of St. Lawrence, July and Aug.; Cape Pine, Nfld., July)
- Bigelow 1917: 282ff (G. of Maine; S of Halifax, N.S.)
- Bigelow 1922: 133, 135 (G. of Maine)
- Bigelow 1926: 143ff, fig. 52 (G. of Maine, more abundant in fall)
- Pinhey 1927a: 228, as *Rhoda raschii* (Esquiman Channel, G. of St. Lawrence)
- Pinhey 1927b: 339, as *Rhoda raschii* (G. of St. Lawrence; Cabot Str.; S and E coasts, Nfld.)
- Préfontaine 1933: 256 (inner G. of St. Lawrence)
- Gardiner 1934: 560ff (48-hr collections in 20 stations centered at 43°50'N, 64°30'W, May, very abundant by night, rare or absent during daytime)
- Fish and Johnson 1937: 240 (Bay of Fundy, rare)
- Einarsson 1945: 125ff, fig. 65 (distribution of adolescents and adults in G. of St. Lawrence, Grand Banks, G. of Maine, and Bay of Fundy, data compiled from literature)
- Alvariño 1956a: 10, tab. 4 (more abundant on Grand Banks than on Banc de la Baleine, N.S., Apr. and May)
- Alvariño 1956b: 8f, tab. 2 (Grand Banks, Feb. and June)
- Steele 1957: tab. 4 (Gaspé, Qué., G. of St. Lawrence, in stomach contents of ocean perch *Sebastodes marinus*)
- Lacroix 1958: 77f (Chaleur Bay, Qué., G. of St. Lawrence; thermocline and vertical migration)
- Powles 1958: 1392f, 1399 (southwestern part of the G. of St. Lawrence, very common in stomach contents of cod *Gadus morhua* of 16–30 cm)
- Lacroix 1959: 91 (G. of St. Lawrence; vertical distribution of larvae)
- Lacroix 1960b: 24ff (Chaleur Bay, Qué., G. of St. Lawrence; spawning from late Apr. to Aug.)
- Lambert 1960: 237ff (Nfld., in stomach contents of ocean perch *Sebastodes marinus*)
- Brunel 1961a: 3 (Gaspé, Qué., G. of St. Lawrence, Aug.)
- Lacroix 1961a: 257ff, fig. 5, 7, 9, 11, 16, 17 (Chaleur Bay, Qué., G. of St. Lawrence, June–Oct.; diurnal migration of adults and young, furcilia V and younger stages statically in upper 15 m)
- Lacroix 1961b: 26 (Chaleur Bay, Qué., G. of St. Lawrence)
- Lacroix 1961c: 29ff, fig. 1, 2 (Chaleur Bay, Qué., G. of St. Lawrence, 0–110 m, most abundant in July, a second smaller peak in Sept.)
- Pavshiks et al. 1962: 58 (Grand Banks)
- Préfontaine and Brunel 1962: 256 (St. Lawrence estuary)
- Semenova 1962: 199, fig. 1 (Grand Banks)
- Drobysheva 1964: 79ff, fig. 2, tab. 1 (Grand Banks, March–May, July, Aug., and Nov., a neritic species abundant in coastal or Laurentian waters)
- Dunbar 1964: 1, pl. 4 (general distribution in N Atl. and arctic waters, including record of Labrador coast)
- Lacroix and Legendre 1964: 31 (Chaleur Bay and Restigouche estuary, G. of St. Lawrence, mainly in 10 to 20-m layer, July and Aug.)
- Semenova 1964: 51 (Labrador–Nfld. area)
- Lacroix 1966: 52 (Chaleur Bay, Qué., G. of St. Lawrence)
- Platt and Irwin 1968: 105 (St. Margaret's Bay, N.S., Mar. and Apr., rare)
- Jones 1969: 280ff, fig. 4–6, tab. 1, 2 (cold-water shelf species, Labrador shelf and Grand Banks, in plankton recorder collections at 10 m, year round; adult may breed second time in 2nd year)

Thysanoessa sp

- Huntsman 1955: 328f (Passamaquoddy Bay; effect of freshets on distribution)
- Legaré and MacLellan 1960: 417 (Passamaquoddy Bay area, year round)
- Brunel 1962: 43 (Bay of Islands, Nfld., G. of St. Lawrence, Aug.)
- Legendre 1969: 31, tab. 2 (nauplii and calyptopis; Chaleur Bay, Qué., G. of St. Lawrence, June)

- ORDER DECAPODA
- Suborder Natantia
- Section Caridea
- FAMILY CRANGONIDAE
- Argis dentata* (Rathbun, 1902)
- Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, Aug., in hyperbenthic plankton collection)
- Crangon septemspinosa* Say, 1818
- Fish and Johnson 1937: 280ff, as *Crago septemspinosus* (larvae: Bay of Fundy; Passamaquoddy Bay, July-Oct.; benthic adults in plankton collection: G. of Maine and Bay of Fundy)
- Needler 1941: 193ff, fig. 1, 2 (larvae; P.E.I., G. of St. Lawrence, description of 1st-6th stages of larvae)
- Crangon* sp.
- Herdman et al. 1898: 53 (mysis stage; N of Anticosti Is., G. of St. Lawrence, Aug.)
- Legaré and Maclellan 1960: 419, as *Crago* sp. (Cobscook Bay, Me., spring and winter; passages and outside Passamaquoddy Bay, fall)
- Pontophilus norvegicus* (M. Sars, 1861)
- Frost 1936b: 20 (larvae; St. Pierre Bank, Laurentian Channel and W coast, Nfld.)
- Sabinea septemcarinata* (Sabine, 1824)
- Frost 1936b: 20 (larvae; Labrador; Str. of Belle Isle; SE coast of Nfld.; common but not numerous)
- Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, Aug., in hyperbenthic plankton collection)
- FAMILY HIPPOLYTIDAE
- Caridion gordoni* (Bate, 1858)
- Frost 1936b: 20 (larvae and postlarvae; Placentia Bay, Nfld., G. of St. Lawrence)
- Eualus fabricii* (Krøyer, 1841)
- Frost 1936b: 15, fig. 2, as *Spirontocaris fabricii* (larvae; Labrador, most abundant in spring; SE coast, Nfld., fall)
- Eualus gaimardii* (H. Milne-Edwards, 1837)
- Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, Aug., in hyperbenthic plankton collection)
- Eualus macilentus* (Krøyer, 1841)
- Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, Aug., in hyperbenthic plankton collection)
- Latreutes fucorum* (Fabricius, 1798)
- Frost 1936b: 18ff, fig. 7 (young stage; Nfld., rare; description)
- Lebbeus groenlandicus* (Fabricius, 1775)
- Frost 1936b: 18, fig. 6, as *Spirontocaris groenlandica* (one postlarva; Nfld., description)
- Lebbeus polaris* (Sabine, 1821)
- Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, Aug. in hyperbenthic plankton collection)
- Spirontocaris phippsii* (Krøyer, 1841)
- Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, Aug. in hyperbenthic plankton collection)
- Spirontocaris* sp.
- Frost 1936b: 16f, fig. 3-5 (larvae of 3 forms; Nfld. and Labrador coasts; description)
- Fish and Johnson 1937: 274f (larvae; Bay of Fundy, Aug.-Nov.)
- Legaré and Maclellan 1960: 419 (Cobscook Bay, Me., winter and spring; passages and outside Passamaquoddy Bay, fall)
- Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, Aug., in hyperbenthic plankton collection)

FAMILY PANDALIDAE

Pandalus borealis Krøyer, 1838

Frost 1936b: 14f (larvae; Labrador coast, spring; postlarvae; SE coast of Nfld., fall; compared with *P. montagui* larvae in morphology)

Pandalus montagui Leach, 1814

Frost 1936b: 14, fig. 1 (larvae; Nfld., all stages widely distributed in spring, a few later stages in fall; description)

Fish and Johnson 1937: 285 (G. of Maine; benthos in plankton)

Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, Aug., in hyperbenthic plankton collection)

Pandalus sp.

Legaré and MacLellan 1960: 419 (Quoddy region: Cobscook Bay, Me., winter and spring, passages and outside Passamaquoddy Bay, fall)

FAMILY PASIPHAEIDAE

Pasiphaea multidentata Esmark, 1866

Bigelow 1926: 131f, fig. 47 (G. of Maine, bathypelagic)

Préfontaine 1933: 256 (inner G. of St. Lawrence)

Steele 1957: tab. 4 (Gaspé, Qué., G. of St. Lawrence, in stomach contents of ocean perch, *Sebastes marinus*)

Suborder Reptantia

Section Macrura

FAMILY HOMARIDAE

Homarus americanus H. Milne-Edwards, 1837

Templeman 1936a: 349ff, fig. 1 (larvae; St. Andrews, N.B., Passamaquoddy Bay; rearing experiment; description of 4th stage morphologically intermediate between normal planktonic 3rd and nonplanktonic 4th stages)

Templeman 1936b: 485ff (larvae; hatched from females in laboratory at

St. Andrews N.B.; effects of temperature, salinity, food and light on survival and growth)

Templeman 1937: 343ff (larvae; Pictou-Canso, G. of St. Lawrence, July and Aug.; 1st and few 2nd stages)

Smith 1939: 16ff (Northumberland Str., G. of St. Lawrence; diurnal migration and horizontal distribution)

Templeman and Tibbo 1945: 60ff, fig. 13-20 (distribution of larvae in Placentia Bay, Notre Dame Bay, Fortune Bay, and Bay d'Espoir, Nfld., July and Aug.)

Corriveau and Tremblay 1948: 109f (records of hatching dates in Grande-Rivière, Qué., in 1942-1947, late June-mid-Aug.)

Templeman 1948a: 12ff, fig. 1-5 (larval stages 4-6; Nfld.; description)

Templeman 1948c: 27ff, tab. 1-3 (larvae; Bay of Islands and Notre Dame Bay, Nfld.)

Moisan and Tremblay 1949: 20ff, fig. 2-6 (larvae; G. of St. Lawrence, rearing from hatching to stage 4)

Saunders 1949: 40f (larvae; G. of St. Lawrence, stages 1-4; histology)

Wilder 1953: 371ff (larvae; between Richibucto, N.B., and Miminegash, P.E.I., Northumberland Str., June-Sept., surface; growth rate of larvae)

Mills 1957: 729f (scientific name not given; larvae; between Richibucto, N.B., and Miminegash, P.E.I., Northumberland Str., most abundant during the first 2 weeks of Aug.; also found in gut contents of a common tern)

Wilder 1960: 558f (larvae; Passamaquoddy Bay, very rare)

Scarratt 1964: 661ff (larvae; between Richibucto, N.B., and Miminegash, P.E.I., Northumberland Str.)

Wilder 1965: 26, tab. 2 (larvae, Northumberland Str., G. of St. Lawrence, relative abundance of 1st and 4th stage larvae from 1949 to 1961)

Scarratt and Raine 1967: 1403ff, fig. 1 (larvae; St. Andrews, N.B., in experiment on avoidance of low salinity)

Scarratt 1968: 472ff, fig. 1 (larvae; Northumberland Str., between Pictou Is., and southern coast, July and Aug.)

Sprague and McLeese 1968a: 1ff, fig. 2

- (larvae; obtained daily from egg-bearing females from Northumberland Str.; laboratory test of resistance to bleached kraft pulp mill effluent)
- Sprague and McLeese 1968b: 753ff, fig. 2 (larvae from egg-bearing females from Northumberland Str.; test for resistance of bleached kraft pulp mill effluent and survival under various salinities)
- Sprague and McLeese 1968c: 761ff, fig. 2, 3 (larvae from egg-bearing females from Northumberland Str.; comparison of effect on survival by fresh and stored bleached kraft pulp mill effluent)
- Sprague and McLeese 1968d: T431ff (scientific name not given; larvae from egg-bearing females; experiments of fresh and stored bleached kraft pulp mill effluents on survival of larvae)
- Scarratt, 1969: 1931ff, fig. 1 (larvae; Pictou Is., G. of St. Lawrence, July and Aug.; population not affected by bleached kraft mill effluent)

Section Anomura

FAMILY PAGURIDAE

Pagurus sp.

Fish and Johnson 1937: 274ff, as *Eupagurus* sp. larvae (Bay of Fundy, Mar. and July; Passamaquoddy Bay)

Pagurid larvae

Frost 1936b: 21 (Nfld., frequent)

Section Brachyura

FAMILY CANCRIDAE

Cancer irroratus Say, 1817

Connolly 1923: 337ff, text-fig. 1, 2, pl. 1-4, as *C. amoenus* (St. Andrews wharf, N.B., Passamaquoddy Bay, observation of development from protozoëa to megalops, 1st week of Aug.)

- Bigelow 1926: 34, as *C. amoenus* (larvae; G. of Maine)
- Frost 1936b: 21, fig. 8, as *C. amoenus* (zoëa; Nfld.)
- Fish and Johnson 1937: 281, 290 (larvae; Bay of Fundy)

Cancer sp.

- Bigelow 1917: 252 (larvae; G. of Maine)
- Fish and Johnson 1937: 280, 290 (zoëa; Bay of Fundy)
- Legaré and MacLellan 1960: 435 (zoëa; Passamaquoddy Bay and Cobscook Bay, large pulses during June and July)

FAMILY MAJIDAE

Hyas araneus (Linnaeus, 1758)

Frost 1936b: 22f, fig. 8 (zoëa and megalopa; centered SE coastal area, Nfld., spring)

Hyas coarctatus Leach, 1815

- Frost 1936b: 22 (zoëa and megalopa; Nfld., most abundant in spring, less in fall)
- Fish and Johnson 1937: 280, 290, 302 (larvae; Bay of Fundy and Passamaquoddy Bay)

FAMILY PORTUNIDAE

Carcinides maenas (Linnaeus, 1758)

Fish and Johnson 1937: 281 (larvae; Bay of Fundy)

FAMILY XANTHIDAE

Rhithropanopeus harrissi (Gould, 1841)

- Connolly 1925: 329ff, pl. 1, fig. 1, 2, pl. 2, fig. 3, 4, pl. 3, fig. 5, 6 (planktonic larvae; 1st-4th zoëa and megalops; Miramichi estuary and Northumberland Str., N.B., G. of St. Lawrence, description)
- Bousfield 1955: 52 (zoëa; Miramichi estuary, N.B., G. of St. Lawrence)

PHYLUM PHORONIDA

Phoronis sp.

Willey 1913: 290ff, text-fig. 55 (actinotrocha larvae; St. Croix estuary, N.B., Passamaquoddy Bay, Aug.; description)

Willey 1915: 6, fig. 1, as *Actinotrocha brownei* larvae (St. Andrews Bay, N.B., Passamaquoddy Bay; description)

PHYLUM BRYOZOA

CLASS GYMNOLEMATA

ORDER CHEILOSTOMATA

FAMILY MEMBRAIPORIDAE

?*Electra*¹⁷ sp.

Wright 1907: 13, pl. 5, fig. 12, as *Membranipora* sp. (cyphonautes; Canso, N.S., June and July, abundant; description)

¹⁷N. A. Powell suggests that these cyphonautes probably belong to species of the genus *Electra*. For distribution of Bryozoa in eastern Canadian waters, see Powell and Crowell (1967) and Powell (1968).

PHYLUM CHAETOGNATHA

Eukrohnia hamata (Mobius, 1875)

- Bigelow 1914a: 121ff (SW of N.S., rare)
Bigelow 1915: 298ff, fig. 71 (G. of Maine)
Bigelow 1917: 298 (G. of Maine; S of Halifax, N.S.)
Huntsman 1919: 472ff, fig. 11, 12 (G. of St. Lawrence; Atl. coasts of Nfld. and N.S.; Bay of Fundy)
Bigelow 1926: 328ff, fig. 91-93 (G. of Maine)
Redfield and Beale 1940: 463ff, fig. 3, 4, 8, tab. 4 (G. of Maine, breeding not successful within the G.)
Dunbar 1942b: 75 (Hebron, Labrador)
Alvariño 1956a: 7f, tab. 4 (Banquereau Bank, E of N.S., Apr., rare)
Legaré 1961: 28 (N of Campobello Is., N.B. summer, few)
Pavshiks et al. 1962: 58 (E of Nfld.)
Travin and Pechenik 1962: 14 (Labrador-Nfld. area)

Pterosagitta draco (Krohn, 1853)

- Huntsman 1919: 471 (above banks off N.S.)

Sagitta elegans Verrill, 1873

- Verrill 1879: 12 (between Cape Cod and G. of St. Lawrence)
Bigelow 1914a: 121ff (coastal waters, G. of Maine, abundant)
Bigelow 1915: 298ff, fig. 71 (G. of Maine)
Bigelow 1917: 294ff (G. of Maine; S of Halifax, N.S.)
Huntsman 1919: 445ff, fig. 7-10 (G. of St. Lawrence, arctic form in Bay of Islands, intermediate or typical forms in lower G.; coastal waters, N.S.; Bay of Fundy)
Huntsman and Reid 1921: 99ff (Bay of Fundy, adults spawn from Mar. to Sept., eggs in plankton from Apr. to Oct., development not normal, young

more abundant in near shore and estuary; Magdalen shallows, G. of St. Lawrence, eggs in plankton from May to June, development normal)

Willey 1921: 187ff (Passamaquoddy Bay, Dec., also in stomach contents of pollacks *Pollachius virens*, Aug.)

Bigelow 1922: 132, 134 (G. of Maine)

Huntsman and Sparks 1924: 98 (St. Andrews, Passamaquoddy Bay; temperature effect on survival)

Bigelow 1926: 308ff, fig. 86-88 (G. of Maine, year round and abundant, adult may spawn in late spring and summer)

Pinhey 1927a: 226f (Esquiman Channel, G. of St. Lawrence; Str. of Belle Isle; Labrador coast)

Pinhey 1927b: 338, 342, 344 (G. of St. Lawrence; Str. of Belle Isle, Cabot Str.; E and S coasts, Nfld.)

Kearney 1933: 26 (between Ship Hbr. and Lunenburg, N.S., June-Oct.)

Frost et al. 1934: 50 (Nfld., associated with ctenophores, medusae, and other arctic species)

Gardiner 1934: 560ff, fig. 2 (48-hr collections of 20 stations centered at 43°50'N and 64°30'W, May, abundant, especially at night)

Kearney 1934: 25 (Halifax region, May, most abundant in area between Halifax and Lunenburg)

Battle et al. 1936: 422 (Passamaquoddy Bay, July)

Fish and Johnson 1937: 239, 290ff (Bay of Fundy, common; Passamaquoddy Bay)

Redfield and Beale 1940: 477ff, fig. 11 (shallow waters of G. of Maine and mouth of Bay of Fundy; year-round distribution in the G. is discussed)

Rogers 1940: 165ff, tab. 1 (Saint John estuary, Passamaquoddy Bay, no adults)

Dunbar 1942b: 75 (Hebron, Labrador)

- Bousfield 1955: 37 (Miramichi estuary, G. of St. Lawrence)
- Huntsman 1955: 328f (Passamaquoddy Bay, effect of freshets on distribution)
- Alvariño 1956a: 4ff, tab. 4 (Grand Banks and E of N.S., Apr. and May, rare; also as *S. elegans arctica*, southwestern Grand Banks, Mar., very abundant in one sample)
- Alvariño 1956b: 4f, tab. 2, as *S. elegans arctica* (Grand Banks, Feb. and Mar., very abundant in one sample, size up to 30-40 mm)
- Steele 1957: tab. 4 (Gaspé area, G. of St. Lawrence, in stomach contents of ocean perch, *Sebastes marinus*)
- Jermolajev 1958: 1221ff, tab. 1-3 (inner Bay of Fundy, mainly young stages, adults restricted in deeper water, not found in Minas Basin)
- Bousfield and Leim 1959: 24 (Minas Channel and Basin, inner Bay of Fundy, Sept.)
- Brunel 1959: 21 (Chaleur Bay, G. of St. Lawrence)
- Legaré and MacLellan 1960: 417, 428, 435, fig. 7 (Passamaquoddy Bay area, year round and abundant, most numerous in July and at 100 m)
- Brunel 1961a: 3 (Gaspé, G. of St. Lawrence, Aug.)
- Lacroix 1961b: 24 (Chaleur Bay, G. of St. Lawrence, rare in July, abundant in Aug.)
- Legaré 1961: 27f (Passamaquoddy Bay area; remarks on vertical and seasonal abundance inside and outside the bay)
- Brunel 1962: 43, also as *S. elegans arctica* (Bay of Islands, G. of St. Lawrence, Aug.)
- Colton and Marak 1962: 243f, fig. 7 (G. of Maine, rare, in plankton recorder collections at 10 m)
- Lacroix and Morisset 1962: 33ff, fig. 1, 2 (Grande-Rivière, G. of St. Lawrence, vertical distribution of specimens of different sizes related to thermocline)
- Lacroix and Bergeron 1963: 64ff (Bradelle Bank, G. of St. Lawrence, Aug.)
- Lacroix and Legendre 1964: 31 (Chaleur Bay and Restigouche estuary, G. of St. Lawrence, July and August, mainly in 10-20 m)
- Payshtiks and Gogoleva 1964: tab. 2 (43°N, 65°W, off N.S., June)
- Semenova 1964: 56, tab. 5 (Labrador and Nfld. coasts, great number in late Aug., 5-7 mm; Grand Banks, July, juveniles)
- Vladimirskaya 1965b: 368 (Grand Banks)
- Lacroix 1966: 52 (Chaleur Bay, G. of St. Lawrence)
- Weinstein 1966: 55ff, fig. 1 (Grande-Rivière, G. of St. Lawrence, maturing specimens abundant at depth 109 m in Aug. and Sept., endoparasites noted)
- Weinstein 1967: 47ff, fig. 1, 2 (Grande-Rivière, G. of St. Lawrence, spawning from June to Sept., endoparasites noted; Str. of Belle Isle)
- Platt and Irwin 1968: 105 (St. Margaret's Bay, N.S., Feb.-Dec., abundant)
- Sherman and Schaner 1968: 618ff (coastal waters, G. of Maine, annual population fluctuation noted, spawning from spring to fall)
- Fraser 1969: 1757ff (Logy Bay, Nfld., in feeding experiment)
- Legendre 1969: 31, tab. 2 (Chaleur Bay, G. of St. Lawrence, June)
- Sagitta enflata* Grassi, 1881
- Huntsman 1919: 425f (banks off N.S.)
- Redfield and Beale 1940: 472f (G. of Maine, occasional)
- Sagitta hexaptera* d'Orbigny, 1843
- Bigelow 1917: 297 (G. of Maine, one record)
- Sagitta lyra* Krohn, 1853
- Bigelow 1914a: 121ff (G. of Maine, and SW of N.S., rare)
- Bigelow 1917: 297 (G. of Maine, rare)
- Bigelow 1926: 327f fig. 90 (G. of Maine, summer)
- Redfield and Beale 1940: 463ff, fig. 2, 8 (G. of Maine, rare)
- Sagitta maxima* (Conant, 1896)
- Huntsman 1919: 428ff, fig. 23 (Cabot Str.; banks off N.S.)
- Bigelow 1926: 325ff, fig. 90 (G. of Maine)
- Fish and Johnson 1937: 246ff, 302 (G. of Maine, April-June, Aug. and Sept.;

- Bay of Fundy, Jan., Mar., Sept., Oct., and Dec.; Passamaquoddy Bay; rare)
 Redfield and Beale 1940: 463ff, fig. 1, 7, 8, tab. 3 (G. of Maine)
 Lambert 1960: 237 (Nfld., in stomach contents of ocean perch, *Sebastes marinus*)
 Bainbridge and Jones 1962: 35, tab. 1 (E of Nfld.)
 Préfontaine and Brunel 1962: 247 (St. Lawrence estuary)

Sagitta serratodentata Krohn, 1853¹⁸

- Bigelow 1914a: 121ff (G. of Maine)
 Bigelow 1915: 298ff, fig. 71 (G. of Maine)
 Bigelow 1917: 294ff, fig. 89, 90 (G. of Maine and SE of N.S.)
 Huntsman 1919: 433ff, fig. 4-6 (Cabot Str.; banks off N.S.; description)
 Bigelow 1926: 320ff, fig. 89 (G. of Maine,

¹⁸According to Alvariño (1965), most specimens of this arca identified as *S. serratodentata* are *S. tasmaniaca* Thomson, 1947. *Sagitta serratodentata* is a warmwater species with a maximal size of about 14 mm. *Sagitta tasmaniaca* is a subarctic species and has a larger size.

- abundant in late summer and early fall)
 Frost et al. 1933: 69f, fig. 24 (Grand Banks; associated with the presence of squid)
 Kearney 1933: 26 (Sambro Bank, N.S.)
 Frost et al. 1934: 50f, fig. 6 (Grand Banks, a positive relation with the abundance of squid)
 Thompson and Frost 1936a: 23 (Nfld.; indicator of warm water)
 Fish and Johnson 1937: 246, 250f (G. of Maine; Bay of Fundy, rare, year round except Oct., most numerous in Mar.)
 Redfield and Beale 1940: 473ff, fig. 9 (G. of Maine, breeding unsuccessful within the G.)

Sagitta sp.

- Verrill 1879: 12 (between Cape Cod and G. of St. Lawrence)
 Herdman et al. 1898: 50ff (Str. OF Belle Isle and northern G. of St. Lawrence to St. Lawrence estuary, Aug. and Sept.)
 Willey 1923: 322 (inner Miramich Bay, G. of St. Lawrence, Aug.)
 Graham 1936: 115, fig. 12 (Bay of Fundy, January-June, greater concentration always present near Digby, N.S.)

PHYLUM ECHINODERMATA

CLASS ASTEROIDEA

ORDER FORCIPULATA

FAMILY ASTERIIDAE

Asterias vulgaris (Stimpson, 1853)

Wright 1907: 12, pl. 5, fig. 3 (bipinnariae; Canso, N.S., July; description)

Willey 1915: 9, fig. 2 (brachiolariae; St. Andrews, Passamaquoddy Bay; description)

Fish and Johnson 1937: 280, 290 (larvae; Bay of Fundy, Apr. and May)

Legaré and Macellan 1960: 419 (larvae; Passamaquoddy Bay area, spring in Passamaquoddy Bay, fall-spring in Cobscook Bay, spring and fall in passages, summer outside Passamaquoddy Bay)

CLASS ECHINOIDEA

ORDER ECHINOIDA

FAMILY STRONGYLOCENTROTIDAE

Strongylocentrotus drobachiensis (O. F. Müller, 1776)

Wright 1907: 11, pl. 5, fig. 1 (pluteus; Canso, N.S., June and July; description)

Fish and Johnson 1937: 280f (larvae; G. of Maine)

Legaré and Macellan 1960: 419 (Cobscook Bay, Me., fall, rare)

CLASS OPHIUROIDEA

ORDER OPHIURAE

FAMILY AMPHIURIDAE

Amphipholis squamata (D. Chiaje, 1828)

Legaré and Macellan 1960: 418 (Passamaquoddy Bay and passages, winter, rare)

CLASS HOLOTHUROIDEA

ORDER DENDROCHIROTA

FAMILY CUCUMARIIDAE

Cucumaria frondosa (Gunnerus, 1767)

Fish and Johnson 1937: 280, 296 (larvae; Bay of Fundy, Apr.-June; Passamaquoddy Bay, May, June, Aug., and Sept.)

FAMILY MYRIOTROCHIDAE

Myriotrochus rinki Steenstrup, 1852

Lacroix and Bergeron 1963: 64 (Bradelle Bank, G. of St. Lawrence, Aug; in hyperbenthic plankton collection)

PHYLUM CHORDATA

SUBPHYLUM UROCHORDATA

CLASS THALIACEA

ORDER DESMOMYARIA

FAMILY SALPIDAE

Iasis zonaria (Pallas, 1774)

Fish and Johnson 1937: 250ff, as *Salpa zonaria* (coastal waters, G. of Maine, occasional)

McKenzie and Homans 1938: 280, as *Salpa zonaria* (Halifax-Cape Sable, N.S.; Digby, N.S., Bay of Fundy; in plankton collection and in stomach contents of haddock)

McKenzie 1939: 19, as *Salpa zonaria* (Emerald, western part of Sable Is. Bank, and Halifax, N.S., Oct. and Nov., St. Margaret's Bay, Nov.; Grand Manan, Bay of Fundy, Oct., in stomach contents of cod *Gadus morhua*)

Huntsman 1955: 328f, as *Salpa zonaria* (Passamaquoddy Bay, Aug.; effect of freshets on distribution)

Salpa fusiformis Cuvier, 1804

Bigelow 1914a: 121 (G. of Maine, and SW of N.S., rare)

Fish and Johnson 1937: 250f (G. of Maine, occasional)

Huntsman 1955: 328f (Passamaquoddy Bay, Aug.; effect of freshets on distribution)

Legaré and MacLellan 1960: 419 (Passamaquoddy Bay and passages, fall, rare)

Legaré 1961: 32 (N of Campobello Is., N.B., Aug. and Sept.)

Salpa sp.

Fish and Johnson 1937: 246, fig. 25 (G. of Maine and outer Bay of Fundy)

Hachey 1938: 13ff (Halifax Hbr., N.S., swarming on Sept. 19, 1937, related its occurrence with a hurricane that did much damage in the New England States on Sept. 21)

Thalia democratica Forskal, 1775

Bigelow 1914a: 121, as *Salpa mucronata* (G. of Maine and SW of N.S., rare)

Thetys vagina Tilesius, 1802

Bigelow 1915: 275ff, fig. 67, as *Salpa tilesii* (G. of Maine, one specimen)

McKenzie and Homans 1938: 281, as *Salpa tilesii* (aggregate form; Halifax Hbr. and Portuguese Cove, N.S., surface)

CLASS COPELATA

FAMILY FRITILLARIIDAE

Fritillaria borealis Lohmann, 1896

Wright 1907: 16, pl. 7, fig. 11 (Canso, N.S., July; description)

Willey 1913: 284 (St. Croix estuary, N.B., Passamaquoddy Bay, Aug.)

Willey 1915: 3f (St. Andrews Bay, N.B., Passamaquoddy Bay)

Pinhey 1927a: 228 (Labrador; Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence)

Pinhey 1927b: 339, 344 (G. of St. Lawrence; E and S coasts, Nfld.)

Frost et al. 1933: 59, fig. 17-19 (Labrador-Nfld. area)

Frost et al. 1934: 52f, fig. 9 (G. of St. Lawrence, Cabot Str., Grand Banks; abundant in mixed water of warm and cold origins, numbers increase in spring and decrease in fall)

- Fish and Johnson 1937: 240, 290, 296 (G. of Maine, Bay of Fundy, and Passamaquoddy Bay)
- Udvardy 1954: 433, fig. 3 (Atl. coasts, Labrador and Nfld.; Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence)
- Legaré 1961: 31 (Passamaquoddy Bay area, May–Sept., small pulses)
- Semenova 1962: 201, fig. 3 (Grand Banks)
- Semenova 1964: 55 ff (Labrador and Nfld. shelves and coasts, Jan., July, and Aug.; Grand Banks, Mar., July, and Aug.)
- Platt and Irwin 1968: 105 (St. Margaret's Bay, N.S., Jan.–May, July, Sept., and Oct.)

Fritillaria sp.

- Stafford 1912b: 64 (Gaspé, Qué., G. of St. Lawrence)
- McMurrich 1917a: 8 (St. Andrews, N.B., Passamaquoddy Bay, Oct.)
- Thompson and Frost 1936a: 20 (Nfld., spring and fall)
- Legaré and Maclellan 1960: 417 (Passamaquoddy Bay area, spring to fall, rare)

FAMILY OIKOPLEURIDAE

Oikopleura dioica Fol, 1872

- Wright 1907: 16, pl. 7, fig. 12, 13 (Canso, N.S., Aug., abundant)
- Frost et al. 1933: 61f, fig. 17–19 (S of Nfld. and Cabot Str., not found in spring and fall)
- Frost et al. 1934: 52, 54ff, fig. 10 (Labrador, Str. of Belle Isle, G. of St. Lawrence, and Cabot Str.; of warm-temperate water of Atl. origin, the appearance of squid followed the trend of the present species)
- Thompson and Frost 1936: 20 (Nfld., spring and fall)
- Platt and Irwin 1968: 105 (St. Margaret's Bay, N.S., Oct., abundant)

Oikopleura labradoriensis Lohman, 1892

- Wright 1907: 16 (Canso, N.S., July, abundant)
- Willey 1915: 4 (St. Andrews, N.B., Passamaquoddy Bay)
- Pinhey 1927a: 229 (Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence)
- Pinhey 1927b: 339 (Cabot Str., and E coast of Nfld.)
- Frost et al. 1933: 66, fig. 20–22 (Nfld., widely distributed and abundant in spring, rare and more northerly restricted in fall)
- Frost et al. 1934: 52f, fig. 7, 8 (Nfld., not abundant, typical of mixed temperature water)
- Thompson and Frost 1936a: 20 (Nfld., spring and fall)
- Fish and Johnson 1937: 239, 290, 299 (G. of Maine and Bay of Fundy; Passamaquoddy Bay, Oct. and Dec.)
- Udvardy 1954: 431ff, fig. 4–11 (Atl. coasts, Labrador and Nfld.; Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence, mainly in water of warmer origin or in Labrador current diluted with more southern water)
- Brunel 1961a: 9 (Gaspé, Qué., G. of St. Lawrence, Aug.)
- Legaré 1961: 31 (Passamaquoddy Bay area, fall, stray individuals)
- Pavshiks et al. 1962: 58 (E of Nfld.)
- Semenova 1962: 199, fig. 1 (Grand Banks)
- Travin and Pechenik 1962: 14 (Labrador–Nfld. area)
- Semenova 1964: 51, tab. 8 (Labrador and Nfld. shelves; Grand Banks, Mar.)
- Vladimirskaya 1965: 55 (Grand Banks)

Oikopleura vanhoeffeni Lohmann, 1896

- Bigelow 1917: 248, fig. 81 (G. of Maine; Shelburne, N.S.)
- Pinhey 1927a: 229 (Labrador; Str. of Belle Isle, Esquiman Channel, G. of St. Lawrence)
- Pinhey 1927b: 339 (E and S coasts, Nfld.)
- Frost et al. 1933: 64ff, fig. 20–22 (Nfld., very abundant along the E coast in spring, northerly restricted and rare in fall)
- Frost et al. 1934: 52f, fig. 7, 8 (Nfld.,

typical of arctic water, most numerous in spring)
 Thompson and Frost 1936a: 20 (Nfld., spring and fall)
 Thompson and Frost 1936b: 25ff, fig. 1, 2 (Labrador, G. of St. Lawrence, and E coast, Nfld.)
 Thompson 1943: 95, fig. 12 (Nfld., an indicator of arctic water)
 Huntsman et al. 1954: 242 (Str. of Belle Isle; Esquiman Channel, G. of St. Lawrence; associated with Labrador current)
 Udvardy 1954: 431ff, fig. 4-15 (Nfld., associated with Labrador current)
 Alvariño 1956a: 7f, tab. 4 (Banquereau Bank, N.S., Apr.)
 Brunel 1961a: 9 (Gaspé, Qué., G. of St. Lawrence, Aug.)
 Semenova 1964: 51, tab. 1, 2 (Labrador and Nfld., July and Aug. in shelf waters and July in coastal waters, abundant)

Oikopleura sp.

Stafford 1912b: 64 (Gaspé, Qué., G. of St. Lawrence)
 McMurrich 1917a: 8 (St. Andrews, N.B., Passamaquoddy Bay)
 Legaré and MacLellan 1960: 417 (Passamaquoddy Bay area, spring-fall, rare)
 Lacroix 1961: 27 (Chaleur Bay, Qué., G. of St. Lawrence, abundant in outer part of the bay)
 Lacroix 1966: 53 (Chaleur Bay, Qué., G. of St. Lawrence)

SUBPHYLUM VERTEBRATA

CLASS PISCES

SUBCLASS NEOPTERYGII

ORDER ISOSPONDYLI

Suborder Clupeoidea

FAMILY CLUPEIDAE

Alosa pseudoharengus (Wilson, 1811)

Prince 1907: 98ff, pl. 8, fig. 6c, 7, pl. 10,

fig. 26-33, as *Pomolobus pseudoharengus* (larvae; Canadian Atl. coast; description)

Bigelow 1917: 268, as *Pomolobus pseudoharengus* (young fish, 23-65 mm; Booth Bay, Me., G. of Maine)

Alosa sapidissima (Wilson, 1811)

Prince 1907: 98ff, pl. 9, fig. 17-22, 24, pl. 10, fig. 36-38 (eggs and larvae; Canadian Atl. coast; description)

Leim 1924: 29ff, fig. 16-27 (Minas Basin and Shubenacadie estuary, inner Bay of Fundy; adults spawn in late May; description)

Brevoortia tyrannus (Latrobe, 1802)

Bigelow 1917: 269 (young fish, 7.5-15 mm; SE of N.S.)

Clupea harengus Linnaeus, 1758

Prince 1907: 98ff, pl. 8, fig. 1-5, pl. 10, fig. 31, 34, 35 (larvae; Canadian Atl. coast; description)

Bigelow 1917: 268 (young fish, 13-19 mm; G. of Maine; S of Halifax, N.S.)

Huntsman 1917: 1ff (larvae; Magdalen Is., G. of St. Lawrence, spring and fall; Cape Breton, N.S., fall; Grand Manan, Bay of Fundy; spring and fall)

Gardiner 1934: 560 (scientific name not given; larvae; 48-hr collection in 20 stations centered at 43°50'N, 60°30'W, about 17 miles SE of Liverpool, N.S., May; geographical rather than day-night discrepancy shown)

Graham 1936: 110ff, fig. 8 (scientific name not given; larvae; Bay of Fundy, Sept. at Grand Manan, 10-11 mm or smaller, larger specimens at St. John, and Dec. on N.S. side of the bay)

Fish and Johnson 1937: 258ff, fig. 28-30 (larvae and fry; G. of Maine and Bay of Fundy, Apr., Aug., and Sept.)

Tremblay 1942: 25, 52 (larvae; SW of Basque Is., G. of St. Lawrence; June and July; size increases from 7-8 mm to 10-12 mm; Chaleur Bay, Qué., G. of St. Lawrence, July)

Bigelow and Schroeder 1953: 90ff, fig. 42,

- 43 (larvae; G. of Maine; Grand Manan, Bay of Fundy; St. Andrews, N.B., Passamaquoddy Bay; description)
- Jean 1953: 22ff, fig. 2B, tab. 8 (larvae; between Grande-Rivière and Brèche-à-Manon, Qué., G. of St. Lawrence, May–Sept.; also in stomach contents of the adult herring)
- Jean 1956: 23ff (larvae; Grande-Rivière, Qué., G. of St. Lawrence; two broods; late May–mid-July and late Aug.–mid-Sept.)
- Squires 1957: 31ff (scientific name not given; larvae; Esquiman Channel, G. of St. Lawrence, mainly at 1–20 m, Sept.)
- Leim 1958: 1ff, fig. 1, 2 (scientific name not given; larvae; adjacent waters of Grand Manan and Sea Cove, Bay of Fundy, with yolk sac in late Sept., without yolk sac in mid-Oct.–May)
- Tibbo et al. 1958: 1451ff (larvae; Bay of Fundy, Sept.–Feb.)
- Legaré and Macellan 1960: 436 (larvae; Passamaquoddy Bay area)
- Tibbo and Legaré 1960: 933ff, fig. 1, 2, tab. 1–3 (larvae; Bay of Fundy, 90% taken in Oct. and Nov., hatched in fall, less than 10% taken in May and June, hatched in spring)
- Colton and Temple 1961: 286f, fig. 7 (larvae; SW of N.S. and mouth of Bay of Fundy, Sept. and Oct.)
- Marak and Colton 1961: 1ff (larvae; G. of Maine, May)
- Marak et al. 1962a: 1ff, as *C. harengus harengus* (larvae; G. of Maine, May)
- Marak et al. 1962b: 1ff, as *C. harengus harengus* (larvae; G. of Maine, Feb., Apr.–June)
- Bergeron and Lacroix 1963: 70ff (larvae; Chaleur Bay and Restigouche estuary, G. of St. Lawrence, May–Nov.)
- Martin 1963: 18 (study of larval dispersal at the mouth of Bay of Fundy; newly hatched larvae, 5–7 mm, Passamaquoddy Bay, May)
- Tibbo and Graham 1963: 445f, tab. 5 (larvae; western entrance to Northumberland Str., G. of St. Lawrence, spring brood in June and July, fall brood in late July–Sept.; spring spawnings were very much dominant before 1952, and the dominance became declined since then due to fungus disease)
- Kennedy and Powles 1964: 5 (larvae; western G. of St. Lawrence)
- Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae; Grande-Rivière, Qué., G. of St. Lawrence, mainly in upper 30 m., June and July; in key)
- Lacroix and Legendre 1964: 32 (larvae; Chaleur Bay and Restigouche estuary, Qué., G. of St. Lawrence, July and Aug., very rare)
- Graham and Boyar 1965: 625ff, fig. 6, 7 (larvae; Sheepscot–Boothbay–Damariscotta area, Me., G. of Maine, Oct. 1961–May 1962; average size from 9 mm in Oct. 1961 to 43 mm in May 1962)
- Lacroix 1966: 53 (larvae; Chaleur Bay, Qué., G. of St. Lawrence)
- Das 1968: 1ff (larvae; Bay of Fundy, greatest abundance in Sept. and Oct. in the St. Mary's Bay, decreases sharply by late Nov.)
- Graham and Venno 1968: 1169ff (larvae; coastal waters, G. of Maine)
- Suborder Salmonoidea
- FAMILY ARGENTINIDAE**
- Argentina silus* Ascanius, 1763
- Bigelow 1914a: 107 (larva, G. of Maine, Aug.)
- Fish and Johnson 1937: 258, 268 (fry; G. of Maine and Bay of Fundy, Aug.)
- Bigelow and Schroeder 1953: 134, fig. 59 (eggs and larvae; G. of Maine; description)
- FAMILY BATHYLAGIDAE**
- Bathylagus* sp.
- Serebryakov 1965: 432 (larvae; Nfld.)

FAMILY OSMERIDAE

Mallotus villosus (Müller, 1776)

- Dannevig 1919: 30f, pl. 3, fig. 26, 27, tab. 2K, text-fig. 21, 22 (larvae; G. of St. Lawrence; description)
- Templeman 1948a: 68ff, fig. 17-20 (larvae; Bonavista Bay-Placentia Bay, Holyrood, and Fortune Bay, Nfld., June-Sept.; description of larvae from 5 to 40 mm)
- Alvariño 1956a: 16f, tab. 4 (young fish, 61-80 mm; Grand Banks, May, common)
- Alvariño 1956b: 10f, tab. 2 (larvae, 20-30 mm; Grand Banks, Mar.)
- Pitt 1958: 281ff, fig. 5-7 (embryonic development of eggs from stomach contents of cod *Gadus morhua*, Nfld. and G. of St. Lawrence)
- Serebryakov 1962: 222, as *M. villosus villosus* (prolaryae and larvae, S of Nfld., 36-48 mm in Feb. and Mar., 13-21 mm in Aug.; prolaryae, near N.S., 4-12 mm in waters above 50 m)
- Bergeron and Lacroix 1963: 70ff (larvae; Bradelle Bank of Chaleur Bay, Qué., G. of St. Lawrence, May-Aug.)
- Lacroix and Bergeron 1964: 25f, fig. 2 (larvae; 5-87 mm; Grande-Rivière, Qué., G. of St. Lawrence, in upper 80 m)
- Lacroix and Legendre 1964: 32 (larvae; Chaleur Bay and Restigouche estuary, G. of St. Lawrence, July and Aug., rare)
- Serebryakov 1965: 431, as *M. villosus villosus* (larvae; Nfld.)
- mordax* (larvae; Passamaquoddy region)
- Bergeron and Lacroix 1963: 70ff (larvae; Restigouche estuary, G. of St. Lawrence; early Aug., abundant)
- Lacroix and Bergeron 1964: 29, as *O. mordax* (larvae; Grande-Rivière; Qué., G. of St. Lawrence; in key)
- Lacroix and Legendre 1964: 32, as *O. mordax* (larvae; Restigouche R. and estuary, G. of St. Lawrence; July, very rare)
- McKenzie, 1964: 20, as *O. mordax* (larvae; Miramichi Bay and estuary, G. of St. Lawrence, concentrate at water close to bottom but ascend to surface at night)

Suborder Stomiatoidea

FAMILY STERNOPTYCHIDAE

- Cyclothona braueri* Jespersen and Tåning, 1926
- Bigelow 1917: 270, as *C. signata* (young fish, 21-23 mm; G. of Maine)

ORDER INIOMI

FAMILY MYCTOPHIDAE

- Benthosema glaciale* (Reinhardt, 1837)
- Serebryakov 1965: 432 (larvae; Nfld. and N.S.)

ORDER APODES

FAMILY ANGUILLIDAE

Anguilla rostrata (Leseur, 1817)

- Bigelow 1914a: 107, as *O. mordax* (larvae; G. of Maine, July)
- Willey 1920: 324 (larvae; Miramichi estuary, N.B., G. of St. Lawrence, June)
- Rogers 1940: 166ff, tab. 2, 3, as *O. mordax* (larvae; 7-30 mm; St. John estuary, N.B., Bay of Fundy, June and July)
- Marcotte and Tremblay 1948: 61f, fig. 9 tab. 26 pl. 7, fig. 1-3, as *O. mordax* (larvae, 5-20 mm; Chaleur Bay, G. of St. Lawrence)
- Legaré and Maclellan 1960: 436, as *O.*
- Fish and Johnson 1937: 258ff (elver; G. of Maine and Bay of Fundy, Apr.)*
- Legaré and Maclellan 1960: 436 (elver; Passamaquoddy Bay area)*
- Graham and Boyar 1965: 632 (elver, 55-60 mm; Sheepscot-Boothbay-Damariscotta area, Me., G. of Maine, Feb.-May)*
- Vladkyov 1966: 1007ff (elvers; Bay of*

Fundy, N.S. coast, and G. of St. Lawrence)

FAMILY CONGRIDAE

Conger oceanicus (Mitchill, 1818)

Fish and Johnson 1937: 259, 268, as *Lepidotecephalus conger* (leptocephalus; G. of Maine, Aug.)

Leim and Scott 1966: 161 (leptocephalus; LaHave Bank, N.S., Aug.; Passamaquoddy Bay, July)

ORDER SOLENICHTHYES

FAMILY SYNGNATHIDAE

Syngnathus fuscus Storer, 1839

Bigelow 1914a: 108, as *Siphostoma fuscum* (larva; Portland Hbr., Me., G. of Maine, July)

Graham and Boyar 1965: 632 (larvae, 16.7–18.5 mm; Sheepscot–Boothbay–Damariscotta area, Me., G. of Maine, Aug. and Sept.)

ORDER THORACOSTEI

FAMILY GASTEROSTEIDAE

Apeltes quadratus (Mitchill, 1815)

Bigelow 1917: 270 (young fish, 40 mm; Yarmouth Hbr., N.S., one specimen)

Legaré and MacLellan 1960: 436 (young fish; Passamaquoddy Bay area)

Gasterosteus aculeatus Linnaeus, 1758

Bigelow 1914a: 107 (young fish; G. of Maine, July and Aug.; also as *G. bispinosus*?)

Bigelow and Schroeder 1953: 309f, fig. 168–170 (young fish; G. of Maine and Bay of Fundy; adults spawn in May and June, eggs not buoyant; description)

Marak et al. 1962b: 1ff (young fish, G. of Maine, June)

Lacroix and Bergeron 1964: 25ff, fig. 2

(young fish, 16–59 mm; Grande-Rivière; Que., G. of St. Lawrence, from upper 60 m)

Graham and Boyar 1965: 632 (young fish, 18.5–34.0 mm; Sheepscot–Boothbay–Damariscotta area, Me., G. of Maine, May, June, Aug., and Nov.)

Gasterosteus wheatlandi Putman, 1867

Lacroix 1966: 53 (young fish; Chaleur Bay, Qué., G. of St. Lawrence)

ORDER ANACANTHINI

FAMILY GADIDAE

Brosme brosme (Müller, 1776)

Bigelow 1914a: 110, as *Brosmius brosme* (larva; G. of Maine, July)

Bigelow 1917: 275, as *Brosmius brosme* (young fish, 7.5–8.5 mm; Shelburne, N.S.)

Fish and Johnson 1937: 258ff, as *Brosmius brosme* (eggs and larvae; Bay of Fundy, June and Aug.; G. of Maine, Aug.)

Bigelow and Schroeder 1953: 239, fig. 116–118 (eggs and larvae; G. of Maine; adults spawn in Apr.–June)

Marak and Colton 1961: 1ff (larvae; G. of Maine, Apr.)

Marak et al. 1962a: 1ff (eggs and larvae; G. of Maine, May)

Marak et al. 1962b: 1ff (eggs and larvae; G. of Maine, May and July)

Serebryakov 1965: 432 (eggs; off N.S.)

Enchelyopus cimbrius (Linnaeus, 1776)

Bigelow 1914a: 110 (larvae; G. of Maine; July and Aug.)

Bigelow 1917: 276 (young fish, 4–21 mm; G. of Maine)

Dannevig 1919: 25ff, pl. 3, fig. 21, 22, text-fig. 17–19, as *Onos cimbrius* (eggs and larvae; G. of St. Lawrence and banks off N.S.; description)

Huntsman 1922: 69 (eggs; Passamaquoddy Bay, common in summer)

Battle 1929: 109ff, fig. 2–29 (laboratory observation and experiments on eggs collected from Passamaquoddy Bay)

- Battle 1930: 363ff, fig. 1-11 (eggs; Passamaquoddy Bay, May-Oct.; laboratory observation of development; description)
- Fish and Johnson 1937: 259ff (eggs; G. of Maine, May, June, and Aug.; Bay of Fundy, May, June, Aug., and Sept.; in Passamaquoddy Bay, Aug. and Sept.; larvae: G. of Maine and Bay of Fundy, June-Aug.)
- Bigelow and Schroeder 1953: 236ff, fig. 114 (eggs and larvae; G. of Maine, Bay of Fundy and N.S. off shore waters; description)
- Legaré and MacLellan 1960: 436 (larvae; Passamaquoddy Bay area)
- Marak and Colton 1961: 1ff (larvae; G. of Maine, Apr. and May)
- Marak et al. 1962a: 1ff (eggs; G. of Maine, May; larvae, G. of Maine, Mar. and May)
- Marak et al. 1962b: 1ff (eggs and larvae; G. of Maine, May and June)
- Serebryakov 1962: 222 (eggs; Grand Banks)
- Bergeron and Lacroix 1963: 70ff (larvae; Chaleur Bay and Restigouche estuary, G. of St. Lawrence, June-Oct., abundant)
- Kennedy and Powles 1964: 5 (larvae; western G. of St. Lawrence)
- Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae; 3-11 mm; Grande-Rivière, Qué., G. of St. Lawrence, mainly in upper 10 m; few larger specimens, 12-40 mm, from 10 to 70 m)
- Serebryakov 1965: 432 (eggs and larvae; Nfld.)
- Lacroix 1966: 53 (larvae; Chaleur Bay, Qué., G. of St. Lawrence)
- Pennel 1967: 55ff, fig. 4 (larvae; Grande-Rivière, Qué., G. of St. Lawrence, in upper 10 cm, mid-Aug.-early Sept.)
- Gadus morhua* Linnaeus, 1758
- Bigelow 1914a: 110, as *G. callarias* (larvae; G. of Maine, July)
- Bigelow 1917: 257ff, fig. 82, as *G. callarias* (eggs and larvae; G. of Maine and Cape Sable, N.S.; adults spawn in spring and summer)
- Dannevig 1919: 21ff, fig. 14, 15, as *G. callarias* (larvae; G. of St. Lawrence and banks off N.S. and Nfld.; description)
- Huntsman 1922: 68, as *G. callarias* (eggs, Bay of Fundy, spring)
- McKenzie 1933: 27 (scientific name not given; eggs; Bay of Fundy, sequence of appearance: St. Mary's Bay, Digby neck-Petit passages, Saint John and Point Lepreau, mid-Mar.-late Apr.)
- Fish and Johnson 1937: 259, 268, as *G. callarias* (eggs: G. of Maine, Apr., and Bay of Fundy, Apr. and May; larvae: G. of Maine, May, and Bay of Fundy, June)
- Frost 1938: 13f, fig. 1, chart 5, as *G. callarias* (eggs and larvae; Labrador coast and adjacent waters of Nfld., mainly in spring, but eggs also numerous in fall; description of developing eggs)
- McKenzie 1940: 105ff, fig. 1-3, tab. 3-7 (eggs: Halifax Hbr. and St. Margaret's Bay, N.S., late Sept.-mid-Nov.; larvae: Halifax Hbr., N.S., Oct.-Dec.)
- Tremblay 1942: 52, 72 (eggs and larvae; Chaleur Bay, Qué., G. of St. Lawrence, July)
- Thompson 1943: 90ff, fig. 10, 11, as *G. callarias* (eggs and larvae; Nfld. and adjacent waters, spring and early fall)
- Bigelow and Schroeder 1953: 186ff, fig. 91, 92 (eggs and larvae; G. of Maine; description)
- Alvariño 1956b: 11, tab. 2 as *G. callarias* (eggs; Grand Banks, June, rare)
- Squires 1957: 31ff (scientific name not given; eggs; G. of St. Lawrence, Str. of Belle Isle and Labrador coast, mainly at surface, Sept.)
- Legaré and MacLellan 1960: 436 (larvae; Passamaquoddy Bay area)
- Marak and Colton 1961: 1ff (eggs and larvae; G. of Maine, Mar.-May)
- Marak et al. 1962a: 1ff (G. of Maine, eggs in Mar. and May, larvae in Feb., Mar., and May)
- Marak et al. 1962b: 1ff (eggs and larvae; G. of Maine, Apr. and May)
- Pechenik and Noskov 1962: 139 (scientific name not given; judged from ichthyoplankton collections, spawning in Grand Banks takes place in Mar.-Aug., especially in Apr. and May)
- Serebryakov 1962: 223, fig. 2, as *G.*

- morhua morhua* (eggs, 1.3–1.7 mm, Nfld. area, most numerous near east coast of Nfld. and southern part of Labrador coast, Mar., Apr., July and Aug., stages I–II predominated; prolarvae, near eastern and northeastern coast of Nfld.)
- Bergeron and Lacroix 1963: 70ff (larvae; Chaleur Bay and Bradelle Bank, Qué., G. of St. Lawrence, surface, June and Aug.)
- Martin 1963: 15 (eggs and larvae; southwestern G. of St. Lawrence, eggs, in surface tows from May to Nov., greatest number in May, larvae usually rare)
- Kennedy and Powles 1964: 4ff, fig. 8–22, 30–36 (eggs and larvae, western G. of St. Lawrence and central N.S. banks; 2 peaks of eggs, May and Nov., larvae most numerous in June)
- Lacroix and Legendre 1964: 32 (Chaleur Bay and Restigouche estuary, Qué., G. of St. Lawrence, in upper 10 m, rare)
- Graham and Boyar 1965: 632 (larvae, 28.3 mm, Sheepscot–Boothbay–Damariscotta area, Me., G. of Maine, June)
- Serebryakov 1965: 425ff, fig. 1A–D, as *G. morhua morhua* (eggs and larvae; coastal waters, Labrador, Nfld. and N.S., Mar.–Aug.)
- Hansen 1968: 129, fig. 32 (scientific name not given; eggs; Labrador shelf, Apr., all of stage I, an indication of recent spawning and at least from a nearby spawning ground)
- Postolaky 1968: 139, fig. 39 (southern Labrador shelf, eggs, Apr. and May; larvae, 3.0–6.3 mm, May)
- Melanogrammus aeglefinus* (Linnaeus, 1758)
- Bigelow 1914a: 110 (larvae; G. of Maine, July)
- Bigelow 1917: 257ff, fig. 82 (eggs and young fish; G. of Maine; adults spawn in spring)
- Dannevig 1919: 21ff, fig. 14, 15, as *Gadus aeglefinus* (larvae; above banks off N.S. and Nfld.)
- Needler 1931: 12ff, fig. 6 (in eastern Canadian waters, spawning from Feb. to June or July)
- Fish and Johnson 1937: 259f, 268, fig. 26 (larvae; G. of Maine, June, Aug., and Sept.; Bay of Fundy, Aug. and Sept.)
- Bigelow and Schroeder 1953: 202ff, fig. 96 (eggs and larvae; G. of Maine and Bay of Fundy, description)
- Graham 1959: 89 (larvae; 4.5–20.0 mm; G. of Maine, in the upper 20 m)
- Legaré and MacLellan 1960: 436 (larvae; Passamaquoddy Bay area)
- Colton and Temple 1961: 283ff, fig. 3–5 (eggs and larvae; S of N.S., Feb.–May)
- Marak and Colton 1961: 1ff (eggs and larvae; G. of Maine, Mar.–May)
- Colton and Marak 1962: 235ff, fig. 1–4 (eggs and larvae; Browns Bank and coastal waters, G. of Maine, Mar.–June, in plankton recorder collections at surface and 10 m; description)
- Marak et al. 1962a: 1ff (eggs and larvae; G. of Maine, Feb.–May)
- Marak et al. 1962b: 1ff (G. of Maine, eggs, Feb.–June, larvae, Apr.–June)
- Pechenik and Noskov 1962: 139 (eggs; Grand Banks, May; N.S. coast, Apr.)
- Martin 1963: 16 (eggs; Sable Is.–Emerald Bank, N.S., Mar. and Apr., corresponding with the winter distribution of adults in the area)
- Kennedy and Powles 1964: 5 (larvae; western G. of St. Lawrence)
- Colton 1965: 317ff, fig. 2–4 (scientific name not given; eggs, pro- and post-larvae; G. of Maine, eggs most abundant in the upper 20 m, larvae at 10–40 m within the thermocline)
- Graham and Boyar 1965: 632 (larvae, 5.9 mm; Sheepscot–Boothbay–Damariscotta area, Me., G. of Maine, Apr.)
- Serebryakov 1965: 432 (eggs and larvae; off Nfld. and N.S.)
- Merluccius bilinearis*¹⁹ (Mitchill, 1814)
- Bigelow 1914a: 109 (larvae; G. of Maine, July and Aug.)
- Bigelow 1917: 260f, fig. 83, as *M. merluccius* (eggs and young fish; G. of Maine,

¹⁹Faber and McAllister (*in litt.*) suggest including here eggs and larvae of *Merluccius merluccius*, which is a European species.

- mouth of Bay of Fundy and off Shelburne, N.S.; adults spawn from June to mid-Oct.)
- Dannevig 1919: 28f, as *M. merluccius* (larvae; N.S.)
- Bigelow and Schroeder 1953: 175ff, fig. 84, 85, as *M. merluccius* (eggs and larvae; G. of Maine and banks off N.S.; adults spawn in summer, description)
- Legaré and Maclellan 1960: 436 (larvae; Passamaquoddy Bay area)
- Marak et al. 1962b: 1ff (larvae; G. of Maine, June)
- Serebryakov 1962: 222f, fig. 1 (eggs and larvae; near N.S. and southwestern edge of Grand Banks; description of eggs)
- Graham and Boyar 1965: 632 (larvae; 3.2 mm; Sheepscot-Boothbay-Damariscotta area, Me., G. of Maine, Aug. and Sept.)
- Serebryakov 1965: 432 (eggs and larvae; Nfld. and N.S.)

Molva molva (Linneaus, 1758)

- Serebryakov 1965: 432 (eggs; N.S.)

Pollachius virens (Linnaeus, 1758)

- Bigelow 1917: 260 (eggs; G. of Maine; adults spawn in late summer and early winter)
- Fish and Johnson 1937: 259f, 268 (larvae; Bay of Fundy, Apr.)
- Bigelow and Schroeder 1953: 219f, fig. 99, 100 (eggs and larvae; G. of Maine and Bay of Fundy; description)
- Marak and Colton 1961: 1ff (larvae; G. of Maine, Apr.)
- Marak et al. 1962a: 1ff (larvae; G. of Maine, Mar. and Apr.)
- Marak et al. 1962b: 1ff (larvae; G. of Maine, May and June)
- Serebryakov 1962: 223 (prolarvae, 3.7-4.3 mm; near northeastern coast of Nfld.)
- Steele 1963: 1272ff, fig. 9 (larvae; G. of Maine, common; Lucher Lightship, N.S., winter, few and small; Bay of Fundy, none reported; adults spawn from Nov. to Feb. off the mouth of Massachusetts Bay)
- Kennedy and Powles 1964: 6 (larvae; banks off N.S.)

- Serebryakov 1965: 432 (eggs and larvae; Nfld.)

*Urophycis chuss*²⁰ (Walbaum, 1792)

- Bigelow 1917: 262f, 275 (eggs: G. of Maine; young fish: Shelburne, N.S.)
- Fish and Johnson 1937: 259, 268ff (egg; G. of Maine, Aug.)
- Bigelow and Schroeder 1953: 225f, fig. 107-109 (eggs and larvae; G. of Maine and Bay of Fundy; description)
- Alvariño 1956a: 19f, tab. 4 (larvae, 40 mm; Grand Banks, May, one specimen)
- Miller and Marak 1959: 248ff, fig. 1-8 (larvae, 3-86 hr after hatching; G. of Maine; description)
- Marak et al. 1962b: 1ff (eggs; G. of Maine, June)
- Graham and Boyar 1965: 632 (larvae, 3.2-9.4 mm; Sheepscot-Boothbay-Damariscotta area, Me., G. of Maine, June-Nov., more abundant in Aug.-Oct.)

Urophycis tenuis (Mitchill, 1815)

- Legaré and Maclellan 1960: 436 (larvae; Passamaquoddy Bay area)
- Marak et al. 1962a: 1ff (larvae; G. of Maine, May)
- Marak et al. 1962b: 1ff (larvae; G. of Maine, June)

Urophycis sp.

- Bergeron and Lacroix, 1963: 71ff (larvae; Chaleur Bay, Qué., G. of St. Lawrence, surface, July and Aug.)
- Serebryakov 1965: 432 (eggs and larvae; N.S.)
- Lacroix 1966: 53 (larvae; Chaleur Bay, Qué., G. of St. Lawrence, surface, July and Aug.)

²⁰The separation of this species from *U. tenuis* is difficult even at adult stage (Leim and Scott, 1966: 217).

ORDER PERCOMORPHI

Suborder Percoidea

FAMILY AMMODYTIDAE

Ammodytes hexapterus Pallas, 1814²¹

Bigelow 1917: 271, as *A. americanus* (young fish, 32–63 mm; outer Bay of Fundy and Shelburne, N.S.)

Dannevig 1919: 29, pl. 3, fig. 23, 24, tab. 2j, as *A. tobianus* (larvae; banks off N.S.; G. of St. Lawrence; description)

Fish and Johnson 1937: 258ff, as *A. americanus* (larvae; G. of Maine and Bay of Fundy, Apr.)

Frost 1938: 15f, chart 8, as *A. americanus* (eggs and larvae; S of Nfld., mainly in spring)

Bigelow and Schroeder 1953: 489ff, fig. 255, 256, as *A. americanus* (larvae; G. of Maine and N.S. coast; description)

Jean 1953: 37 (larvae; Grande-Rivière, Qué., G. of St. Lawrence, May–Sept., in stomach contents of herring *Clupea harengus*)

Alvariño 1956a: 14ff, fig. 2, tab. 4, as *A. americanus* (larvae; Grand Banks, May, abundant; description, noted may be identical with *A. marinus*)

Legaré and MacLellan 1960: 436, as *A. americanus* (larvae; Passamaquoddy Bay area)

Marak and Colton 1961: 1ff, as *A. americanus* (larvae; G. of Maine, Mar.)

Marak et al. 1962a: 1ff, as *A. americanus* (larvae; G. of Maine, Mar.)

Marak et al. 1962b: 1ff, as *A. americanus* (larvae; G. of Maine, May and June)

Serebryakov 1962: 223, as *A. americanus* (prolarvae; southeastern edge of Grand Banks, Mar.)

Bergeron and Lacroix 1963: 71ff (larvae; Chaleur Bay, Qué., G. of St. Lawrence, surface, May, July, and Aug.)

Kennedy and Powles 1964: 5 (larvae; western G. of St. Lawrence and N.S. Banks, May, June)

Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae in key; Grande-Rivière, Qué.,

G. of St. Lawrence, mainly in upper 10 m, June and July)

Graham and Boyar 1965: 632, as *A. americanus* (larvae; Sheepscot-Boothbay-Damariscotta area, Me., G. of Maine, Jan.–May, most abundant in Mar.–May; average size from 6.5 mm in Jan to 21.2 mm in May)

Serebryakov 1965: 433, as *A. americanus* (larvae; off Nfld. and N.S.)

Lacroix 1966: 53 (larvae; Chaleur Bay, Qué., G. of St. Lawrence)

Ammodytes sp.

Richards et al. 1963: 358ff, fig. 4 (larvae; Cape Cod–Labrador coasts, distinction of *A. hexapterus* and *A. dubius*)

Richards 1965: 1313ff, tab. 1, fig. 1 (postlarvae of *A. dubius* and *A. hexapterus*; Labrador and N.S. coasts; description)

FAMILY LABRIDAE

Tautoga onitis (Linnaeus, 1758)

Bigelow and Schroeder 1953: 481, fig. 520 (eggs and larvae; G. of Maine; adults spawn in summer; description)

Tautogolabrus adspersus (Walbaum, 1792)

Bigelow 1914a: 108 (larvae; G. of Maine, July and Aug.; identification uncertain)

Bigelow 1917: 267 (eggs; G. of Maine and Shelburne, N.S.; young fish, 10 mm, Cape Elizabeth, G. of Maine, one specimen)

Dannevig 1919: 5ff, fig. 2–4, as *Ctenolabrus adspersus* (eggs and larvae; Atl. coasts: Halifax, Sable Is. Shoal, and Canso, N.S.; St. George Bay and P.E.I., G. of St. Lawrence)

Huntsman 1922: 63 (eggs; Passamaquoddy Bay)

Johansen 1925: 440ff (developing eggs and planktonic larvae; between Cape Breton and Magdalen Is., G. of St. Lawrence, late May–mid-Sept.)

Reid 1929: 431ff (eggs: Miramichi Bay and Cheticamp, N.B., G. of St. Lawrence, June–Aug., Chamcook Hbr., N.B., Passamaquoddy Bay, and Shelburne, N.S., June and July; larvae:

²¹Two species may be included here, *A. hexapterus* and *A. dubius*. See Richards et al. 1963.

- Miramichi Bay and Cheticamp, N.B., G. of St. Lawrence, June–Aug.)
- Fish and Johnson 1937: 259, 270, 290, 302 (eggs; G. of Maine, Aug., Passamaquoddy Bay, Sept., and Bay of Fundy, Aug. and Sept.)
- Bigelow and Schroeder 1953: 479ff, fig. 249 (eggs and larvae; G. of Maine and Bay of Fundy; adults spawn in late spring and early summer; description)
- Marak et al. 1962b: 1ff (larvae; G. of Maine, June)
- Bergeron and Lacroix 1963: 70ff (larvae; Chaleur Bay, Restigouche estuary and Bradelle Bank, Qué., G. of St. Lawrence, surface, July and Aug., abundant)
- Kennedy and Powles 1964: Appendix (larvae; G. of St. Lawrence)
- Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae, 3–9 mm; Grande-Rivière, Qué., G. of St. Lawrence, surface, June and July, common)
- Lacroix and Legendre 1964: 32 (larvae; Chaleur Bay, Qué., G. of St. Lawrence, 20 m, July and Aug., few)
- Graham and Boyar 1965: 632 (larvae, 4.4–5.3 mm; Sheepscot–Boothbay–Damariscotta area, Me., Aug.–Oct.)
- Lacroix 1966: 53 (larvae; Chaleur Bay, Qué., G. of St. Lawrence)
- western N Atl. coastal waters, from G. of St. Lawrence to Chesapeake Bay)
- Bigelow and Schroeder 1953: 322ff, fig. 175 (eggs and larvae; G. of Maine–southern G. of St. Lawrence; adults spawn in late spring and summer; description)
- Jean 1953: 37 (eggs; Grande-Rivière, Qué., G. of St. Lawrence, May–Sept., in stomach contents of herring *Clupea harengus*)
- Marak and Colton 1961: 1ff (eggs and larvae; Chaleur Bay and Bradelle Bank, Qué., G. of St. Lawrence, June and Aug.)
- Kennedy and Powles 1964: 5f (eggs; western G. of St. Lawrence and N.S. banks, May–Sept.)
- Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae, 3–27 mm; Grande-Rivière, Qué., G. of St. Lawrence, mainly in upper 10 m, June and July)
- Graham and Boyar 1965: 632, as *Scomber* sp. (larvae, 5.3 mm; Sheepscot–Boothbay–Damariscotta area, Me., G. of Maine, Aug.)
- Serebryakov 1965: 433 (larvae; N.S.)
- Lacroix 1966: 53 (larvae; Chaleur Bay, Qué., G. of St. Lawrence)

FAMILY SPARIDAE

Stenotomus chrysops (Linnaeus, 1766)

- Bigelow and Schroeder 1953: 414f, fig. 214 as *S. versicolor* (eggs and larvae; G. of Maine; adults spawn from May to Aug.; description)

FAMILY SCIAENDAE

Cynoscion regalis (Bloch and Schneider, 1801)

- Bigelow and Schroeder 1953: 420, fig. 217 (eggs and larvae; G. of Maine; adults spawn from May to Oct.; description)

FAMILY SCOMBRIDAE

Scomber scombrus Linnaeus, 1758

- Dannevig 1919: 8ff, fig. 5–7 (eggs and larvae; southern G. of St. Lawrence, Halifax, N.S.)
- Sparks 1929: 443ff, fig. 1–4 (scientific name not given; eggs; N.S. coast, May–Sept.)
- Fish and Johnson 1937: 259, 268 (eggs; G. of Maine, Aug.)
- Sette 1943: 149ff (early life history in the

SUBORDER BLENNIOIDEA

FAMILY ANARHICHADIDAE

Anarhichas lupus Linnaeus, 1758

- Fish and Johnson 1937: 258f (larvae; G. of Maine and N.S. coast; eggs not buoyant; winter spawner; description)
- Legaré and MacLellan 1960: 436 (larvae; Passamaquoddy Bay area)
- Marak and Colton 1961: 1ff (larvae; G. of Maine, Apr. and May)

Marak et al. 1962a: 1ff (larvae; G. of Maine, Mar.)

Marak et al. 1962b: 1ff (larvae; G. of Maine, Apr. and May)

Graham and Boyar 1965: 632 (larvae, 5.0–8.5 mm; Sheepscot–Boothbay–Damariscotta area, Me., G. of Maine, Feb. and Mar.)

FAMILY CRYPTACANTHODIDAE

Cryptacanthodes maculatus Storer, 1839

Bigelow 1917: 273 (young fish, 40 mm; G. of Maine)

Huntsman 1922: 66 (larvae; Passamaquoddy Bay, late spring)

Legaré and Maclellan 1960: 436 (larvae; Passamaquoddy Bay area)

Marak et al. 1962a: 1ff (larvae; G. of Maine, Mar.)

Marak et al. 1962b: 1ff (larvae; G. of Maine, Apr.)

Bergeron and Lacroix 1963: 71ff (larva; Chaleur Bay, Qué., G. of St. Lawrence, surface, early Aug., one specimen)

Lacroix and Bergeron 1964: 25ff (larvae; Grande-Rivière, Qué., G. of St. Lawrence; in key)

Graham and Boyar 1965: 632 (larvae, 18.9–30.0 mm; Sheepscot–Boothbay–Damariscotta area, Me., G. of Maine, Feb.–May, most abundant in Mar. and Apr.)

FAMILY PHOLIDAE

Pholis gunnellus (Linnaeus, 1758)

Bigelow 1914a: 109 (larva; G. of Maine, Aug.)

Bigelow 1917: 273 (young fish, 21–32 mm; G. of Maine; Cape Sable and Shelburne, N.S.)

Hunstman 1922: 66 (larvae; Bay of Fundy and Passamaquoddy Bay, early summer)

Fish and Johnson 1937: 259f, 268, fig. 26 (larvae; G. of Maine, May; Bay of Fundy, Apr.–June)

Bigelow and Schroeder 1953: 493f, fig. 258, 259 (larvae; G. of Maine and Bay of Fundy; description)

Marak et al. 1962a: 1ff (larvae; G. of Maine, Mar.)

Kennedy and Powles 1964: 5 (larvae; western G. of St. Lawrence)

Lacroix and Bergeron 1964: 29 (larvae; Grande-Rivière, Qué., G. of St. Lawrence; in key)

Graham and Boyar 1965: 632 (larvae, 11.9–13.1 mm; Sheepscot–Boothbay–Damariscotta area, Me., G. of Maine, Jan.–May, most abundant in Feb.–Apr.)

Lacroix 1966: 53 (larvae; Chaleur Bay, Qué., G. of St. Lawrence)

FAMILY STICHAEIDAE²²

*Chirolophis ascanii*²³ (Walbaum, 1792)

Serebryakov 1965: 433 (larvae; N.S.)

*Chirolophis*²⁴ sp.

Dannevig²⁵ 1919: 15f, pl. 2, fig. 8, pl. 2D (larvae; G. of St. Lawrence and Grand Banks, description)

Bergeron and Lacroix 1963: 71ff (identification uncertain; larvae; Chaleur Bay, Qué., G. of St. Lawrence, surface)

Leptoclinus maculatus (Fries, 1837)

Bergeron and Lacroix 1963: 71ff (larva; Chaleur Bay, Qué., G. of St. Lawrence, surface, May, one specimen)

Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae, 27–97 mm; Grande-Rivière, Qué., G. of St. Lawrence, mainly below 10 m, June and July; in key)

Serebryakov 1965: 433 (larvae; Nfld.)

²²Morphological descriptions of larval fishes not in literature.

²³Identity uncertain (McAllister 1960: 31).

²⁴Identify uncertain.

²⁵Probably *Ulvaria subbifurcata* (Faber, in litt.).

Lumpenus lampretaeformis (Walbaum, 1792)

Fish and Johnson 1937: 259, 268ff (larvae; G. of Maine and Bay of Fundy, Aug.)

Bergeron and Lacroix 1963: 71ff (larvae; Chaleur Bay, Qué., G. of St. Lawrence, June and July)

Kennedy and Powles 1964: 5 (larvae; western G. of St. Lawrence, May–July, Sept., and Oct.)

Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae, 34–53 mm; Grande-Rivière, Qué., G. of St. Lawrence, mainly below 30 m, June and July; in key)

Graham and Boyar 1965: 632 (larvae, 17.8–18.4 mm; Sheepscot–Boothbay–Damariscotta area, Me., G. of Maine, Jan.–May)

Lumpenus medius (Reinhardt, 1838)

Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae, 25–138 mm; Grande-Rivière, Qué., G. of St. Lawrence, June and July; in key)

Lacroix 1966: 53 (larvae; Chaleur Bay, Qué., G. of St. Lawrence)

Stichaeus punctatus (Fabricius, 1780)

Bergeron and Lacroix 1963: 71ff (larva; Chaleur Bay, Qué., G. of St. Lawrence, surface, July, one specimen)

Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae, 20–42 mm; Grande-Rivière, Qué., G. of St. Lawrence, below 30 m, June and July)

Ulvaria subbifurcata (Storer, 1839)

Bigelow 1914a: 109 (larvae; G. of Maine, July and Aug.)

Bigelow 1917: 273 (young fish, 7–34 mm; G. of Maine, Bay of Fundy and SE of N.S.)

Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae, 5–19 mm; Grande-Rivière, Qué., G. of St. Lawrence, mainly in upper 20 m, June and July; in key)

Graham and Boyar 1965: 632 (larvae; Sheepscot–Boothbay–Damariscotta area, Me., G. of Maine, June–Nov. 1961 and Apr. and May 1962, very

abundant in May and July–Sept.; average size from 7.0 mm in Apr. to 11.8 mm in Nov.)

FAMILY ZOARCIDAE

Macrozoarces americanus (Bloch and Schneider, 1801)

Bigelow and Schroeder 1953: 513, fig. 270 (larvae; G. of Maine and Bay of Fundy; adults spawn in fall, eggs not buoyant; description)

Suborder Stromateoidea

FAMILY STROMATEIDAE

Poronotus triacanthus (Peck, 1800)

Bigelow and Schroeder 1953: 364ff, fig. 193 (eggs and larvae; G. of Maine and Bay of Fundy; adults spawn in June and July; description)

Suborder Mugiloidea

FAMILY ATHERINIDAE

Menidia menidia (Linnaeus, 1766)

Bigelow and Schroeder 1953: 303f, fig. 160–162 (larvae; G. of Maine and G. of St. Lawrence; adults spawn in summer, eggs not buoyant; description)

Suborder Cottoidea

FAMILY AGONIDAE

*Aspidophoroides monopterygius*²⁶ (Bloch, 1786)

Bigelow 1917: 272 (young fish, 25–29 mm; Penobscot Bay and Cape Sable, G. of Maine)

Dannevig 1919: 15 (larva, 15 mm; Gaspé, Qué., G. of St. Lawrence)

Huntsman 1922: 17 (larvae; Passamaquoddy Bay, Apr.–June)

Fish and Johnson 1937: 258ff (fry; G. of

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²⁶Larvae not described in literature.

- Maine, Aug.; Bay of Fundy, May and June)
 Legaré and Maclellan 1960: 436 (larvae; Passamaquoddy Bay area)
 Marak and Colton 1961: 1ff (larvae; G. of Maine, May)
 Bergeron and Lacroix 1963: 71ff (larvae; Chaleur Bay, Qué., G. of St. Lawrence, July, few)
 Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae; Grande-Rivière, Qué., G. of St. Lawrence)
 Graham and Boyar 1965: 632 (larvae, 9.6–12.2 mm; Sheepscot–Boothbay–Damariscotta area, Me., G. of Maine, Apr. and May)
 Serebryakov 1965: 433 (larvae; N.S.)

Aspidophoroides olrikii (Lütken, 1876)

- Serebryakov 1965: 433, as *Ulcina olrikii* (larvae; Nfld. and N.S.)

Leptogonus decagonus (Bloch and Schneider, 1801)

- Dannevig 1919: 15, as *Agonus decagonus* (larva, 24 mm; S of Sable Is., N.S., one specimen)
 Serebryakov 1965: 433 (larvae; Nfld. and N.S.)

FAMILY COTTIDAE²⁷

- Artediellus atlanticus* Jordan and Everman, 1898
 Bigelow 1914a: 108 (larvae; G. of Maine, July and Aug.)

Icelus bicornis (Reinhardt, 1841)

- Dannevig 1919: 15 (larvae; G. of St. Lawrence; S of Sable Is., N.S.)

Myoxocephalus octodecemspinosis (Mitchill, 1815)

- Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae, 21 mm; Grande-Rivière, Qué., G. of St. Lawrence, 40–70 m, July)

- Marak and Colton 1961: 1ff (larvae; G. of Maine, Mar.)
 Marak et al. 1962b: 1ff (larvae; G. of Maine, May)
 Graham and Boyar 1965: 632 (larvae, 6.4–6.8 mm; Sheepscot–Boothbay–Damariscotta area, Me., G. of Maine, Apr. and May)
 Serebryakov 1965: 433 (larvae; Nfld. and N.S.)

Myoxocephalus scorpius (Linnaeus, 1758)

- Dannevig 1919: 15, as *Cottus scorpius* (larvae; G. of St. Lawrence)
 Fish and Johnson 1937: 258ff (larvae; G. of Maine, Apr. and May; Bay of Fundy, Apr.–June)
 Bigelow and Schroeder 1953: 447, fig. 230–233 (larvae; G. of Maine; adults spawn in winter, eggs not buoyant; description)
 Legaré and Maclellan 1960: 436 (larvae; Passamaquoddy Bay area)
 Graham and Boyar 1965: 632 (larvae, 7.5–15 mm; Sheepscot–Boothbay–Damariscotta area, Me., G. of Maine, Jan.–May, very abundant in Feb.–Apr.)

Myoxocephalus sp.

- Bigelow 1917: 272 (young fish, 8–11 mm; G. of Maine)
 Kennedy and Powles 1964: 5f (larvae; western G. of St. Lawrence and banks off N.S.)

FAMILY CYCLOPTERIDAE²⁸

Cyclopterus lampus Linnaeus, 1758

- Bigelow 1914a: 109 (larva; G. of Maine, Aug.)
 Bigelow 1917: 272ff (young fish 6–46 mm; G. of Maine and outer Bay of Fundy)
 Cox and Anderson 1922: 3ff, fig. 1–13 (larvae; western Cape Breton and Magdalen Is., G. of St. Lawrence; adults

²⁷Morphological descriptions of larval fishes not in literature.

²⁸Morphological descriptions of larval fishes not in literature.

- perhaps spawn from Apr. to May; description)
- Fish and Johnson 1937: 259, 270 (larvae, G. of Maine, Aug.)
- Bigelow and Schroeder 1953: 461ff, fig. 240, 241 (larvae; G. of St. Lawrence and G. of Maine; adults spawn in Feb.-May; eggs not buoyant; description)
- Jean 1953: 37 (larvae; Grande-Rivière, Qué., G. of St. Lawrence, May-Sept., in stomach contents of herring *Clupea harengus*)
- Legaré and Maclellan 1960: 436 (larvae; Passamaquoddy Bay area)
- Marak et al. 1962b: 1ff (larvae; G. of Maine, May and June)
- Bergeron and Lacroix 1963: 71ff (larvae; Chaleur Bay, Qué., G. of St. Lawrence, surface, July)
- Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae 5-7 mm; Grande-Rivière, Qué., G. of St. Lawrence, in upper 10 m, mid-July)
- Graham and Boyar 1965: 632 (larvae; Sheepscot-Boothbay-Damariscotta area, Me., G. of Maine, June 1961-May 1962, most abundant in Mar. and Apr.; average size from 4.7 mm in July to 11.6 mm in Apr.)
- Liparis atlanticus* (Jordan and Everman, 1898)
- Bigelow 1917: 273, as *Neoliparis atlanticus* (young fish, 7-11 mm; S of Sable Is., N.S.)
- Fish and Johnson 1937: 258ff, as *Neoliparis atlanticus* (larvae; Bay of Fundy, June)
- Legaré and Maclellan 1960: 436, as *Neoliparis atlanticus* (larvae; Passamaquoddy Bay area)
- Serebryakov 1962: 226, as *Neoliparis atlanticus* (larvae, 4.7 and 5.25 mm; eastern Nfld. coast and southwestern Grand Banks)
- Bergeron and Lacroix 1963: 71ff, as *Neoliparis atlanticus* (larvae; Chaleur Bay, Restigouche estuary, and Bradelle Bank, G. of St. Lawrence, June-Aug.)
- Lacroix and Bergeron 1964: 25ff, fig. 2, as *Neoliparis atlanticus* (larvae, 6-7 mm; Grande-Rivière, Qué., G. of St. Lawrence, in upper 40 m, July, rare)
- Serebryakov 1965: 433, as *Neoliparis atlanticus* (larvae; off N.S.)
- Liparis koefoedi* Parr, 1932
- Dannevig 1919: 16, as *L. major* (larvae; G. of St. Lawrence)
- Liparis liparis* (Linnaeus, 1776)
- Bigelow 1914a: 109 (larvae; G. of Maine, July and Aug.)
- McMurrich 1917a: 8 (larvae; St. Andrews area, N.B., Passamaquoddy Bay, Apr., one specimen)
- Liparis* sp.
- Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae, 14 and 16 mm; Grande-Rivière, Qué., G. of St. Lawrence, 60-70 m, July)
- Lacroix 1966: 53 (larvae; Chaleur Bay, Qué., G. of St. Lawrence)

FAMILY SCORPAENIDAE

*Sebastes marinus*²⁹ (Linnaeus, 1758)

- Bigelow 1914a: 108 (larvae; G. of Maine, July and Aug., common)
- Bigelow 1917: 271f, fig. 87 (young fish, 6.7-22 m; SE coast of N.S.-G. of Maine, common within 200-m line)
- Dannevig 1919: 12ff, fig. 8-10 (larvae; G. of St. Lawrence; N.S. coast; description)
- Huntsman 1922: 64 (larvae; Bay of Fundy)
- Fish and Johnson 1937: 259ff, fig. 27 (larvae, G. of Maine and Bay of Fundy, May, June, Aug., and Sept.)
- Frost 1938: 15, chart 7 (larvae; adjacent waters of Nfld.)
- Bigelow and Schroeder 1953: 432f, fig. 223 (larvae; G. of Maine; reproduction viviparous)

²⁹Two types of larvae are included here: *marius-* and *mentella-* type. These two types are now recognized as distinct species (Travin, 1951).

- Jean 1955: 33ff, fig. 1, 2 (larvae; Chaleur Bay, Qué., G. of St. Lawrence, May-Aug.)
- Alvariño 1956a: 18f (larvae, 5-6 mm; Grand Banks)
- Steele 1957: 904ff, fig. 3, 4 (larvae; Gaspé, Qué., G. of St. Lawrence, June and Aug.)
- Kelly and Wolf 1959: 9ff, fig. 6, tab. 4-14 (G. of Maine, study of growth of young fish based on original and literature data)
- Templeman 1959: 12ff, fig. 7-16 (larvae; G. of St. Lawrence, Str. of Belle Isle, Atl. coast of Nfld., and G. of Maine; sequence of occurrence in the area studied; composed of two forms: *mentella*, dominant, and *marinus*, rare)
- Day 1961: 195ff, fig. 1, 2 (larvae; Bay of Fundy, N.S., and G. of St. Lawrence, Aug.-Oct. 1954, Apr.-Sept. 1955)
- Henderson 1961: 104, fig. 2, 3 (young fish; Grand Banks, Apr., in plankton recorder collections at 10 m)
- Kelly and Barker 1961: 220ff (larvae and young fish; G. of Maine; vertical distribution)
- Bergeron and Lacroix 1963: 71ff (larva; Chaleur Bay, Qué., G. of St. Lawrence, July, one specimen)
- Kennedy and Powles 1964: 5f (larvae; western G. of St. Lawrence and N.S. banks)
- Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae, 5-7 mm; Grande-Rivière, Qué., G. of St. Lawrence, in upper 10 m, July, rare)
- Lacroix and Legendre 1964: 32 (larvae; Chaleur Bay, Qué., G. of St. Lawrence, 20 m, very rare)
- Graham and Boyar 1965: 632 (larvae, 38.0 mm; Sheepscot-Boothbay-Damariscotta area, Me., G. of Maine, Sept.)
- Lacroix 1966: 53 (larvae; Chaleur Bay, Qué., G. of St. Lawrence)
- Sebastodes mentella* Tarvin, 1951
- Travin et al. 1961: 88f (extrusion of larvae beginning on the eastern slope of the Hamilton Inlet Bank in May or early June, discussing the probable drift of the larvae from the Labrador current to Fleming Cap)
- Sebastodes* sp.
- Henderson 1961a: 105f, fig. 4 (young fish; G. of St. Lawrence, Nfld. coast, Grand Banks, Scotian banks, and G. of Maine; general distribution compiled from literature)
- Henderson 1961b: 182ff, fig. 6 (distribution of young fish in N Atl. from available published sources, including G. of Maine, G. of St. Lawrence, and Atl. coasts of N.S., Nfld., and Labrador)
- Templeman and Sandeman 1961: 763ff, fig. 1-5 (Atl. coast, Nfld.; description of perextraction larvae from *marinus*- and *mentella*-type female)
- Glover 1962: 48 (*mentella*-type larvae; Nfld. and N.S. coasts)
- Henderson 1962: 43ff, fig. 1, 4 (larvae with subcaudal melanophores, 6-35 mm; Grand Banks and Scotian banks, between St. John's and Boston, July and Aug., in plankton recorder collections at 10m)
- Serebryakov 1962: 224ff, fig. 2C, 3 (including *S. marinus* and *S. mentella*; prolarvae, 5-10 mm, and larvae, 11-20 mm; adjacent waters of Nfld.; description)
- Henderson 1963: 64f, fig. 5 (young fish, 4-16 mm, with subcaudal pigments; Cape Race, Nfld.-Boston, Mass., July and Aug., in plankton recorder collections at 10 m)
- Henderson 1965a: 309ff, fig. 1 (larvae, 8.1 mm; northeastern edge of Grand Banks, without subcaudal melanophores, the so-called *marinus*-type; doubts of the two types of *S. marinus*, as adults caught from the same area belong to the *mentella*-type)
- Henderson 1965b: 86, fig. 2 (young fish with subcaudal pigments; Grand Banks, May and July; N.S. shelf and G. of Maine, July and Aug., in plankton recorder collections at 10 m)
- Serebryakov 1965: 433, as *mentella*-type larvae (Labrador, Nfld., and N.S.)
- Henderson 1967: 61f, fig. 77 (young fish with subcaudal pigments; Grand

- Banks, July; N.S. shelf and G. of Maine, July and Aug.; in plankton recorder collections at 10 m)
- Glover and Robinson 1968: 124, fig. 29 (larvae; N Atl. survey, including few stations within Labrador shelf)
- Henderson 1968a: 157ff, fig. 44, 45 (young fish with two subcaudal melanophores; Scotian shelf, Grand Banks and Labrador shelf, in plankton recorder collections at 10 m, Apr.)
- Henderson 1968b: 85 (young fish with subcaudal pigments; Grand Banks, few; N.S. shelf and G. of Maine, July and Aug., few; in plankton recorder collections at 10 m)
- Bainbridge and Cooper 1969: 81 (larvae with subcaudal pigmentation; Str. of Belle Isle, Aug., few, 6–9 mm; G. of Maine, July, few)

FAMILY TRIGLIDAE

Prionotus carolinus (Linnaeus, 1771)

Bigelow and Schroeder 1953: 469ff, fig. 245 (eggs and larvae; G. of Maine and Bay of Fundy; adults spawn from June to Sept.; description)

ORDER HETEROSOMATA

FAMILY BOTHIDAE

Bothus ocellatus (Agassiz, 1831)

Colton 1961: 274ff, fig. 1, 3 (larvae; 4.5–42 mm; S of N.S., Oct.; description)

Scopthalmus aquosus (Mitchill, 1815)

Bigelow 1917: 277, as *Lophopsetta maculata* (young fish, 6 mm; G. of Maine)

Huntsman 1922: 70, as *Lophopsetta maculata* (larvae; Minas Channel and Scotsman Bay, N.S.)

Bigelow and Schroeder 1953: 292ff, fig. 152, 153, as *Lophopsetta maculata* (buoyant eggs and larvae; G. of Maine; N.S. and Nfld. coastal waters; adults spawn in late spring and summer; description)

Bergeron and Lacroix 1963: 72ff, as *Rhombus aquosus* (larvae; Bradelle

- Bank, G. of St. Lawrence, surface, late Aug.)
- Lacroix and Bergeron 1964: 25ff, fig. 2, as *Rhombus aquosus* (larvae; Grande-Rivière, Qué., G. of St. Lawrence, surface, mid-July)
- Graham and Boyar 1965: 632 (larvae, 3.1–3.9 mm; Sheepscot-Boothbay-Damariscotta area, Me., G. of Maine, Aug.–Oct.)

FAMILY PLEURONECTIDAE

Glyptocephalus cynoglossus (Linnaeus, 1758)

- Bigelow 1914a: 111 (larva; G. of Maine, July and Aug.)
- Bigelow 1917: 267 (eggs; G. of Maine)
- Dannevig 1919: 17, pl. 2, fig. 11 (larvae; G. of St. Lawrence; S of Nfld.; description)
- Fish and Johnson 1937: 259ff, fig. 26 (larvae; G. of Maine, Aug.; Bay of Fundy, June, Aug., and Sept.)
- Frost 1938: 14f, chart 6 (larvae; adjacent waters of Nfld.)
- Bigelow and Schroeder 1953: 287ff, fig. 147–150 (eggs and larvae; G. of Maine and Bay of Fundy; description)
- Alvarino 1956a: 22 (eggs; Banquereau Bank, N.S., Apr., common)
- Legaré and MacLellan 1960: 436 (larvae; Passamaquoddy Bay area)
- Marak et al. 1962a: 1ff (eggs and larvae; G. of Maine, May)
- Marak et al. 1962b: 1ff (G. of Maine, eggs, June, larvae, May and June)
- Serebryakov 1962: 227 (larvae, 4.6–6.5 mm; E coast, Nfld.)
- Bergeron and Lacroix 1963: 71ff (larvae; Chaleur Bay and Restigouche estuary, Qué., G. of St. Lawrence, surface, June and Aug.)
- Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae, 3–7 mm; Grande-Rivière, Qué., G. of St. Lawrence, in upper 80 m, July)
- Graham and Boyar 1965: 632 (larvae, 5.2–6.7 mm; Sheepscot-Boothbay-Damariscotta area, Me., G. of Maine, Aug.–Oct., rare)
- Serebryakov 1965: 433 (eggs and larvae; Nfld., and N.S.)

- Lacroix 1966: 53 (larvae; Chaleur Bay, Qué., G. of St. Lawrence)
- Hippoglossoides platessoides* (Fabricius, 1780)
- Bigelow 1914a: 111 (larvae; G. of Maine, July and Aug.)
- Bigelow 1917: 266, 276, fig. 85 (eggs: G. of Maine, May-June; young fish, 8-30 mm: Halifax, N.S.-G. of Maine)
- Huntsman 1918: 14ff, fig. 3, 5-9 (eggs and larvae; G. of St. Lawrence, Canadian Atl. coasts, Bay of Fundy and G. of Maine; spawning starting from Apr. in Bay of Fundy to July on E coast of Nfld.; description of development from fertilized eggs to 2-inch young fish)
- Dannevig 1919: 18ff, pl. 2, fig. 13-15, pl. 2f, text-fig. 11-13, as *Drepanopsetta (H.) platessoides* (eggs and larvae; G. of St. Lawrence; above banks off N.S. and Nfld.; description)
- Huntsman 1922: 69 (eggs; Bay of Fundy, spring)
- Cox 1924: 411f (larvae; Baccaro Pt. and Liverpool, N.S., June)
- Fish and Johnson 1937: 259f, 268 (eggs: G. of Maine and Bay of Fundy, Apr. and May; larvae: G. of Maine, Aug., and Bay of Fundy, June)
- Frost 1938: 8ff, chart 2, 3 (eggs and larvae; adjacent waters, Nfld., especially on the E coast of Labrador and Nfld.)
- Bigelow and Schroeder 1953: 262ff, fig. 129-133 (eggs and larvae; G. of Maine, Bay of Fundy, and N.S. coast; adults spawn in spring; description)
- Jean 1953: 37 (eggs; Grande-Rivière, Qué., G. of St. Lawrence; May-Sept., in stomach contents of herring *Clupea harengus*)
- Alvariño 1956a: 20ff (eggs; Banquereau Bank, N.S., Apr., abundant; Grand Banks, May, rare)
- Alvariño 1956b: 12f, tab. 2 (eggs; Grand Banks, Mar. and June)
- Legaré and MacLellan 1960: 436 (larvae; Passamaquoddy Bay area)
- Marak and Colton 1961: 1ff (G. of Maine, eggs, Mar. and Apr., larvae, Mar.-May)
- Marak et al. 1962a: 1ff (larvae; G. of Maine, Feb.-Mar.)
- Marak et al. 1962b: 1ff (eggs and larvae; G. of Maine, Apr. and May)
- Pechenik and Noskov 1962: 139 (southern Labrador coast and southern Grand Banks, judged from ichthyoplankton collections, spawning takes place during Apr.-June)
- Serebryakov 1962: 226, fig. 2D (eggs and larvae of 4.9-6.1 mm; adjacent waters of Nfld., June and July)
- Bergeron and Lacroix 1963: 70ff (larvae; Bradelle Bank, Chaleur Bay, and Restigouche estuary, Qué., G. of St. Lawrence, July and Aug.)
- Lacroix and Bergeron 1964: 25ff, fig. 2 (larvae, 4-10 mm; Grande-Rivière, Qué., G. of St. Lawrence, surface, July)
- Lacroix and Legendre 1964: 32 (larvae; Chaleur Bay, Qué., G. of St. Lawrence, 20 m, rare)
- Serebryakov 1965: 433, as *H. platessoides limandooides* (eggs and larvae; Labrador, Nfld., and N.S.)
- Lacroix 1966: 53 (larvae; Chaleur Bay, G. of St. Lawrence)
- Hippoglossus hippoglossus* (Linnaeus, 1758)
- Bigelow and Schroeder 1953: 253f, fig. 124, 125 (eggs and larvae; G. of Maine)
- Kennedy and Powles 1964: 3ff, fig. 1-7, 23-29 (eggs and larvae; western G. of St. Lawrence and N.S. banks, May and June)
- Serebryakov 1965: 433 (eggs and larvae; N.S.)
- Limanda ferruginea*³⁰ (Storer, 1839)
- Bigelow 1917: 266f, fig. 85 (eggs; G. of Maine, mouth of Bay of Fundy, and S of Yarmouth, N.S., May-Sept., most numerous in July)
- Fish and Johnson 1937: 259, 268, 290 (eggs; G. of Maine, Aug.; Bay of Fundy)
- Bigelow and Schroeder 1953: 273ff, fig. 137-139 (eggs and larvae; G. of Maine and N.S. coast; adults spawn in spring; description)

³⁰Eggs are easily confused with those of *Tautogolabrus adspersus* (Faber, *in litt.*).

Alvariño 1956b: 11f, tab. 2 (eggs; Grand Banks, June, abundant)
Marak and Colton 1961: 1ff (larvae; G. of Maine, Mar.-May)
Marak et al. 1962a: 1ff (larvae; G. of Maine, May)
Marak et al. 1962b: 1ff (G. of Maine, eggs, Apr. and June, larvae; Apr.-June)
Serebryakov 1962: 226 (eggs; Nfld. and N.S. coasts)
Bergeron and Lacroix 1963: 70ff (larvae; Chaleur Bay and Restigouche estuary, Qué., G. of St. Lawrence, surface, July and Aug.)
Graham and Boyar 1965: 632 (larvae, 5.2 mm; Sheepscot-Boothbay-Damariscotta area, Me., G. of Maine, May)
Serebryakov 1965: 433 (eggs and larvae; Nfld. and N.S.)

Pseudopleuronectes americanus (Walbaum, 1792)

Bigelow 1914a: 111 (identification uncertain; larvae; G. of Maine, July)
Huntsman 1922: 70 (larvae; Bay of Fundy, abundant near estuaries)
Bigelow and Schroeder 1953: 280ff, fig. 141-144 (eggs and larvae; G. of Maine; adults spawn in early spring; description)

Legaré and Maclellan 1960: 436 (larvae; Passamaquoddy Bay area)

ORDER PEDICULATI

Suborder Lophioidea

FAMILY LOPHIDAE

Lophius americanus Valenciennes, 1873

Bigelow 1914a: 11, as *L. piscatorius* (larvae; G. of Maine, July)
Bigelow 1917: 277, as *L. piscatorius* (young fish, 5 mm; G. of Maine)
Dannevig 1919: 12, as *L. piscatorius* (larvae; N.S.)
Connolly 1922: 115f, as *P. piscatorius* (floating egg bands; Pleasant Pt., June, and Deer Pt. of Campobello Is., Aug., Passamaquoddy Bay; adults spawn in eastern Canadian waters from June to Aug.)
Berrill 1929: 143ff, fig. 1-7 (laboratory observation on eggs collected from St. Andrews, Passamaquoddy Bay, July; description)
Bigelow and Schroeder 1953: 536ff, fig. 285, 286 (eggs in floating veil and larvae; G. of Maine, Bay of Fundy and N.S. coast; adults spawn in summer and fall; description)

BIBLIOGRAPHY

- ACKMAN, R. G., AND C. A. EATON. 1966. Lipids of the fin whale (*Balaenoptera physalus*) from North Atlantic waters. III. Occurrence of eicosenoic and docosenoic fatty acids in the zooplankton *Meganyctiphanes norvegica* (M. Sars) and their effect on whale oil composition. Can. J. Biochem. 44: 1561-1566.
- AGASSIZ, A. 1863a. *Halopsis ocellata*. Proc. Boston Soc. Natur. Hist. 9: 219-220.
- 1863b. On alternate generation in annelids, and the embryology of *Autolytus cornutus*. Boston J. Natur. Hist. 7: 384-409.
1865. North American Acalephae. Cat. Mus. Comp. Zool. Harvard 2: 1-234.
- AGASSIZ, L. 1850. [*Rhacostoma atlanticum*]. Proc. Boston Soc. Natur. Hist. 3: 342-343.
- ALVARIÑO, A. 1956a. Estudio del zooplancton reco-gido en la Campana "Vendaval," en Terranova. Marzo, abril mayo de 1953. Bol. Inst. Espan. Oceanogr. 76: 28 p.
- 1956b. Zooplancton de Terranova (Febrero, marzo y junio de 1955). Bol. Inst. Espan. Oceanogr. 77: 18 p.
1965. Chaetognaths. Oceanogr. Mar. Biol. Annu. Rev. 3: 115-194.
- BAINBRIDGE, V. 1961. Warm-water species in the plankton off Newfoundland during winter months. Nature 191(4794): 1216-1217.
- BAINBRIDGE, V., AND G. A. COOPER. 1969. *Sebastes* in continuous plankton records in 1968. Ann. Biol. 25: 80-81.
- BAINBRIDGE, V., AND J. CORLETT. 1968. The zooplankton of the NORWESTLANT surveys. Int. Comm. Northwest Atl. Fish. Spec. Publ. 7: 101-122, charts 192-231.
- BAINBRIDGE, V., AND L. T. JONES. 1962. The distribution of plankton off Newfoundland. Int. Comm. Northwest Atl. Fish. Redbook 1962 (Pt. 3): 31-42.
- BATTLE, H. I. 1929. Effects of extreme temperatures and salinities on the development of *Enchelyopus cimbricus* (L.) Contrib. Can. Biol. Fish. N.S. 5(6): 107-192.
1930. Spawning periodicity and embryonic death rate of *Enchelyopus cimbricus* (L.) in Passamaquoddy Bay. Contrib. Can. Biol. Fish. N.S. 5(11): 361-380.
- BATTLE, H. I., A. G. HUNTSMAN, A. M. JEFFERS, G. W. JEFFERS, W. H. JOHNSON, AND N. A. McNAIRN. 1936. Fatness, digestion and food of Passamaquoddy young herring. J. Biol. Board Can. 2(4): 401-429.
- BERGERON, J., AND G. LACROIX. 1963. Prélèvements de larves de poissons dans le sud-ouest du golfe Saint-Laurent, en 1962. Rapp. Annu. 1962, Sta. Biol. Mar. Grande-Rivière: 69-79.
- BERKELEY, C., AND E. BERKELEY. 1953. Swarming of *Nereis succinea* (Leuckart) off the east coast of Canada. Nature 171: 847.
- BERRILL, N. J. 1929. The validity of *Lophius americanus* Val. as a species distinct from *L. piscatorius* Linn., with notes on the rate of development. Contrib. Can. Biol. Fish. N.S. 4(12): 143-155.
- BIGELOW, H. B. 1909. Coelenterates from Labrador and Newfoundland. Proc. U.S. Nat. Mus. 37(1706): 301-320, pl. 30-32.
- 1914a. Explorations in the Gulf of Maine, July and August, 1912, by the U.S. fisheries schooner *Grampus*. Oceanography and notes on the plankton. Bull. Mus. Comp. Zool. Harvard 58(2): 29-148, pl. 1-9.
- 1914b. Fauna of New England, 12. List of the Medusae Craspedotae, Siphonophorae, Scyphomedusae, Ctenophorae. Occas. Pap. Boston Soc. Natur. Hist. 7: 1-37.
1915. Exploration of the coast water between Nova Scotia and Chesapeake Bay, July and August, 1913, by the U.S. Fisheries schooner "Grampus." Oceanography and plankton. Medusae, Siphonophores and Ctenophores. Bull. Mus. Comp. Zool. Harvard 59: 149-359.
1917. Explorations of the coast water between Cape Cod and Halifax in 1914 and 1915, by the U.S. Fisheries schooner "Grampus." Oceanography and plankton. Bull. Mus. Comp. Zool. Harvard 61: 163-357.
1922. Exploration of the coastal water off the north-eastern United States in 1916 by the U.S. Fisheries schooner "Grampus." Bull. Mus. Comp. Zool. Harvard 65: 85-188.
1926. Plankton of the offshore waters of the Gulf of Maine. Bull. U.S. Bur. Fish. 40(2): 1-509.
- BIGELOW, H. B., AND W. C. SCHROEDER. 1953. Fishes of the Gulf of Maine. U.S. Fish Wildlife Serv. Fish. Bull. 74: 1-577.
- BLAKE, J. A. 1969. Reproduction and larval development of *Polydora* from northern New England (Polychaeta: Spinoidae). Ophelia, 7(1): 1-63.

- BONNEVIE, K. 1913. Pteropoda from the "Michael Sars" North Atlantic Deep-Sea Expedition 1910. Rep. "the Michael Sars" N Atl. Deep-Sea Exped. 1910, 3(2): 69 p., 9 pl.
- BOURNE, N. 1964. Scallops and the offshore fishery of the maritimes. Bull. Fish. Res. Board Can. 145: 60 p.
- BOUSFIELD, E. L., MS 1950? Distributional records of marine Amphipoda of eastern Canada. Fish. Res. Board Can. MS Rep. (Biol.) 404: 19 p.
1951. Pelagic Amphipoda of the Belle Isle Strait region. J. Fish. Res. Bd. Canada 8(3): 134-162.
1954. The distribution and spawning seasons of barnacles on the Atlantic coast of Canada. Bull. Nat. Mus. Can. 132: 112-154.
1955. Ecological control of the occurrence of barnacles in the Miramichi estuary. Bull. Nat. Mus. Can. 137: 69 p.
1956. Studies on the shore Crustacea collected in eastern Nova Scotia and Newfoundland, 1954. Bull. Nat. Mus. Can. 142: 127-152.
1969. New records of *Gammarus* (Crustacea: Amphipoda) from the middle Atlantic region. Chesapeake Sci. 10(1): 1-17.
- BOUSFIELD, E. L., AND A. H. LEIM. 1959. The fauna of Minas Basin and Minas Channel. Bull. Nat. Mus. Canada 166: 1-30.
- BOWMAN, T. E. 1960. The pelagic amphipod genus *Parathemisto* (Hyperiidea: Hyperiidae) in the North Pacific and adjacent Arctic Ocean. Proc. U.S. Nat. Mus. 112(3439): 343-392.
- BROCH, H. 1929. Craspedote Medusen. Teil II, Trachylinen (Trachymedusen und Narcomedusen). Nordisches Plankton Lief. 21: xii, p. 481-539.
- BRUNEL, P. 1959. Le zooplancton de la Baie des Chaleurs en 1955: Distribution horizontale quantitative et correlations hydroclimatiques. Contrib. Dépt. Pêch. Qué. 73: 65 p.
- 1961a. Liste taxonomique des invertébrés marins des parages de la Gaspésie identifiés au 3 août 1959. Cah. Inform. Sta. Biol. Mar. Grande-Rivière 7: 9 p.
- 1961b. Inventaire taxonomique des invertébrés marins du golfe Saint-Laurent. Rapp. Annu. 1960 Sta. Biol. Mar. Grande-Rivière: 39-44.
1962. Inventaire taxonomique des invertébrés marins du golfe Saint-Laurent. Rapp. Ann. 1961, Sta. Biol. Mar. Grande-Rivière: 39-44.
1963. Inventaire taxonomique des invertébrés marins du golfe Saint-Laurent. Rapp. Ann. 1962, Sta. Biol. Mar. Grande-Rivière: 81-89.
- CARTER, J. C. H. 1965. The ecology of the calanoid copepods *Pseudocalanus minutus* Kroyer in Tessiaruk, a coastal meromictic lake of northern Labrador. Limnol. Oceanogr. 10(3): 345-353.
- CHUN, C. 1898. Dic Ctenophoren der Plankton Expedition. Ergebn. Planktonexped. 2, K. a.
- CLARK, A. E. 1934. Oyster spawning in Bideford River - 1933. Biol. Board Can. Annu. Rep. 1933: 18.
- CLARK, H. J. 1863. Prodromus of the history, structure, and physiology of the Order Lucernariae. J. Boston Soc. Natur. Hist. 7: 531-567.
- COLTON, J. B., JR. 1961. The distribution of eyed flounder and lanternfish larvae in the Georges Bank area. Copeia 1961 (3): 274-279.
1965. The distribution and behaviour of pelagic and early demersal stages of haddock in relation to sampling techniques. Int. Comm. Northwest Atl. Fish. Spec. Publ. 6: 317-333.
1968. A comparison of current and long-term temperatures of continental shelf waters, Nova Scotia to Long Island. Int. Comm. Northwest Atl. Fish. Res. Bull. 5: 110-129.
- COLTON, J. B., JR., AND R. R. MARAK. 1962. Use of the Hardy continuous plankton recorder in a fishery research programme. Bull. Mar. Ecol. 5: 231-246.
- COLTON, J. B., JR., AND R. F. TEMPLE. 1961. The enigma of Georges Bank spawning. Limnol. Oceanogr. 6(3): 280-291.
- COLTON, J. B., JR., R. F. TEMPLE AND K. A. HONEY. 1962. The occurrence of oceanic copepods in the Gulf of Maine-Georges Bank area. Ecology 43(1): 166-171.
- CONNOLLY, C. J. 1922. On the development of the angler (*Lophius piscatorius*, L.). Contrib. Can. Biol. 1921 (7): 115-124.
1923. The larval stages and megalops of *Cancer amoenus* (Herbst). Contrib. Can. Biol. N.S. 1(17): 337-354.
1925. The larval stages and megalops of *Rhithropanopeus Harrisii* (Gould). Contrib. Can. Biol. N.S. 2(15): 327-334.
- COOPER, G. A., AND D. C. T. FORSYTH. 1963. Continuous plankton records: Contributions towards a plankton atlas of the North Atlantic and the North Sea. Part VII: The seasonal and annual distributions of the pteropod *Pneumodermopsis* Keferstein. Bull. Mar. Ecol. 6: 31-38, pl. 6-9.
- CORBEIL, H. E. 1953. Analyse du contenu stomacal de la Morue *Gadus callarias* Rapp. Annu. 1952, Sta. Biol. Mar. Grande-Rivière: 13-18.
- CORKETT, C. J., AND I. A. MCLAREN. 1969. Egg production and oil storage by the copepod *Pseudocalanus* in the laboratory. J. Exp. Biol. Ecol. 3: 90-105.
- CORRIVAUT, G. W., AND J. L. TREMBLAY. 1948. Contribution à la biologie du Homard dans la Baie-des-Chaleurs et le golfe Saint-Laurent. Contrib. Sta. Biol. St-Laurent 19: 222 p.
- COWIE, J. J. 1929. Report on the work of the Biological Board for 1928-29. Fish. Res. Board Can. Annu. Rep. 62: 121-138.
- COX, P. 1924. Larvae of the halibut (*Hippoglossus hippoglossus* L.) on the Atlantic coast of Nova Scotia. Contrib. Can. Biol. N.S. 1(21): 409-412.
- COX, P., AND M. ANDERSON. 1922. A study of the lumpfish (*Cyclopterus lumpus* L.). Contrib. Can. Biol. N.S. 1(1): 1-20.

- CURRIE, M. E. 1919. Exuviation and variation of plankton copepods with special reference to *Calanus finmarchicus*. Trans. Roy. Soc. Can. 12(3)(Sect. 4): 207-233.
- DANFORTH, C. H. 1907. A new pteropod from New England. Proc. Boston Soc. Natur. Hist. 34: 1-19.
- DANNEVIG, A. 1919. Canadian fish-eggs and larvae. In: J. Hjort [ed.] Canadian fisheries' expedition, 1914-15. Dep. Nav. Serv. Can. King's Printer, Ottawa. p. 1-74.
- DAS, N. MS 1968. Spawning, distribution, survival, and growth of larval herring (*Clupea harengus* L.) in relation to hydrographic conditions in the Bay of Fundy. Fish. Res. Board Can. Tech. Rep. 88: 129 p., 27 fig.
- DAVIDSON, V. M. 1924. The distribution of certain marine Ostracoda in the Canadian waters of the eastern coast. Contrib. Can. Biol. N.S. 2(13): 295-306.
- DAY, L. R. 1961. Summer surface distribution of redfish larvae in ICNAF subarea 4, 1954-1955. Int. Comm. Northwest Atl. Fish. Spec. Publ. 3: 195-198.
- DREW, G. A. 1906. The habits, anatomy, and embryology of the giant scallop, (*Pecten tenuicostatus* Mighels). Univ. Maine Stud. 6: 71 p., 17 pl.
- DROBYSHEVA, S. S. 1964. Distribution of euphausiid in the Grand Newfoundland Bank area depending on the dynamics of water mass. Tr. PINRO 16: 79-88. (Transl. from Russian by Fish. Res. Board Can. Transl. Ser. No. 1308)
- DUNBAR, M. J. 1942a. Marine macroplankton from the Canadian eastern Arctic. I. Amphipoda and Schizopoda. Can. J. Res. D 20(1): 33-46.
- 1942b. Marine macroplankton from the Canadian eastern Arctic. II. Medusae, Siphonophora, Ctenophora, Pteropoda and Chaetognatha. Can. J. Res. D 20(3): 71-77.
1964. Euphausiids and pelagic amphipods. Distribution in North Atlantic and Arctic waters. Scr. Atlas Mar. Environ. Amer. Geogr. Soc. Folio 6.
1966. The sea waters surrounding the Québec-Labrador peninsula. Cah. Géogr. Québec 19: 13-35.
- ENARSSON, H. 1945. Euphausiacea. I. Northern Atlantic species. Dana Rep. 27: 185 p.
- FEWKES, J. W. 1889. *Physalia* in the Bay of Fundy. Amer. Natur. 23: 821.
1890. A zoological reconnaissance in Grand Manan. Amer. Natur. 24: 423-438.
- FILTEAU, G. 1946. Les copépodes marins de la Baie-des-Chaleurs. Univ. Laval, Sta. Biol. St. Laurent, Rapp. Gen. 1943-45, Rapp. 5 (App. 4): 88-96.
- 1948a. Les copépodes marins de la Baie-des-Chaleurs. Univ. Laval, Sta. Biol. Saint-Laurent, Rapp. 6: 61-68.
- 1948b. Recherches sur les copépodes marins de la Baie-des-Chaleurs. Univ. Laval, Sta. Biol. Saint-Laurent Rapp. 7 (App. 7): 69-76.
1949. Les copépodes marins de la Baie-des-Chaleurs. Univ. Laval, Sta. Biol. Saint-Laurent, Rapp. 1948 Rapp. 8 (App. 3): 55-65.
- FILTEAU, G., AND J. L. TREMBLAY. 1953. Ecologie de *Calanus finmarchicus* dans la Baie-des-Chaleurs. Natur. Can. 80(1-2): 5-80.
- FISH, C. J. 1936a. The biology of *Calanus finmarchicus* in the Gulf of Maine and Bay of Fundy. Biol. Bull. (Woods Hole) 70(1): 118-141.
- 1936b. The biology of *Pseudocalanus minutus* in the Gulf of Maine and Bay of Fundy. Biol. Bull. (Woods Hole) 70(2): 193-216.
- 1936c. The biology of *Oithona similis* in the Gulf of Maine and Bay of Fundy. Biol. Bull. (Woods Hole) 71(1): 169-187.
- FISH, C. J., AND M. W. JOHNSON. 1937. The biology of the plankton population in the Bay of Fundy and Gulf of Maine with special reference to production and distribution. J. Biol. Board Can. 3(3): 189-322.
- FRASER, J. H. 1969. Experimental feeding of some Medusae and Chaetognatha. J. Fish. Res. Bd. Canada 26(7): 1743-1762.
- FROST, N. 1936a. Amphipoda from Newfoundland waters, with a description of a new species. Nfld. Dep. Natur. Resour. Div. Fish. Res. Rep. Faunistic Ser. 1: 1-10.
- 1936b. Decapod larvae from Newfoundland waters. Nfld. Dep. Natur. Resour. Div. Fish. Res. Rep. Faunistic Ser. 1: 11-24.
1937. Further plankton investigations. Rep. Fish. Res. Inst. Nfld. 1936-37: p. 25.
1938. Some fishes of Newfoundland waters (with notes on the distribution of eggs and larvae). Dep. Natur. Resour. Res. Bull. 4: 16 p.
- FROST, N., S. T., LINDSAY, AND H. THOMPSON. 1933. Plankton more abundant in 1932 than 1931. Rep. Nfld. Fish. Res. Comm. 2(1): 58-74.
1934. Plankton. Rep. Nfld. Fish. Res. Comm. 2(2): 47-59.
- GARDNER, A. C. 1934. Variations in the amount of macroplankton of day and night. J. Mar. Biol. Ass. U.K. 19(2): 559-567.
- GLOVER, R. S. 1962. Continuous plankton recorders: Preliminary notes on sampling between St. John's, Newfoundland and Boston, Massachusetts. Int. Comm. Northwest Atl. Fish. Redbook 1962 (Pt. 3): 47-55.
1967. The continuous plankton recorder survey of the North Atlantic. Symp. Zool. Soc. London 19: 189-210.
- GLOVER, R. S., AND G. A. ROBINSON. 1968. Continuous plankton records during the NORWESTLANT surveys, 1963 — Zooplankton. Int. Comm. Northwest Atl. Fish. Spec. Publ. 7: 123-126.
- GRAHAM H. W. 1959. Fishery and biology. Int. Comm. Northwest Atl. Fish. Annu. Proc. 9(1958-1959): 87-89.

- GRAHAM J. J., AND H. C. BOYAR. 1965. Ecology of herring larvae in the coastal waters of Maine. Int. Comm. Northwest Atl. Fish. Spec. Publ. 6: 625-634.
- GRAHAM J. J., AND P. M. W. VENNO. 1968. Sampling larval herring from tidewaters with buoyed and anchored nets. J. Fish. Res. Bd. Canada 25(6): 1169-1179.
- GRAHAM M. 1936. Investigations of the herring of Passamaquoddy and adjacent regions. J. Biol. Board Can. 2(2): 95-140.
- GRAINGER, E. H. 1963. Copepods of the genus *Calanus* as indicators of eastern Canadian waters. In: M. J. Dunbar [ed.] Marine Distributions. Roy. Soc. Can. Spec. Publ. 5: 68-94.
- HACHEY, H. B. 1938. "Jellyfish" forecast the hurricane of September 21st. Fish. Res. Board Can. Atl. Progr. Rep. 23: 13-15.
- HAECKEL, E. 1879. Das System der Medusen. Erster Theil einer Monographie der Medusen. Jena, 360 p., 20 pl.
1880. System der Acraspeden. Zweite Halfte des System der Medusen. Jena, p. 361-672, 20 pl.
- HANSEN, H. J. 1908. Crustacea Malacostraca, I: Decapoda, Euphausiaceae, Mysidacea. Danish Ingolf-Exped. 3(2): 1-120, 5 pl.
1915. The Crustacea Euphausiacea of the United States National Museum. Proc. U.S. Nat. Mus. 48(2065): 59-114, 4 pl.
- HANSEN, P. 1968. Report on cod eggs and larvae. Int. Comm. Northwest Atl. Fish. Spec. Publ. 7: 127-137.
- HENDERSON, G. T. D. 1961a. Continuous plankton records: The distribution of young *Sebastodes marinus* (L.). Int. Comm. Northwest Atl. Fish. Annu. Proc. 11(1960-1961): 103-110.
- 1961b. Continuous plankton records: The distribution of young *Sebastodes marinus* (L.). Bull. Mar. Ecol. 5: 173-193.
1962. Continuous plankton recorders: The distribution of young redfish in 1961. Int. Comm. Northwest Atl. Fish. Redbook 1962 (Pt. 3): 43-46.
1963. *Sebastodes* in continuous plankton records in 1961. Ann. Biol. 18: 63-65.
- 1965a. Redfish larvae in the North Atlantic. Int. Comm. Northwest Atl. Fish. Spec. Publ. 6: 309-315.
- 1965b. *Sebastodes* in continuous plankton records in 1963. Ann. Biol. 20: 85-87.
1967. *Sebastodes* in continuous plankton records in 1965. Ann. Biol. 22: 61-62.
- 1968a. Continuous plankton records during the NORWESTLANT surveys, 1963 - young redfish. Int. Comm. Northwest Atl. Fish. Spec. Publ. 7: 157-161.
- 1968b. *Sebastodes* in continuous plankton records in 1966. Ann. Biol. 23: 85.
- HERDMAN, W. A., I. C. THOMPSON, AND A. SCOTT. 1898. On the plankton collected continuously during two traverses of the North Atlantic in the summer of 1897; with descriptions of new species of Copepoda; and an appendix on dredging in Puget Sound. Proc. Trans. Liverpool Biol. Soc. 12: 33-90, pl. 5-7.
- HSIAO, S. C. T. 1939a. The reproductive system and spermatogenesis of *Limacina (Spiratella) retroversa* (Flem.). Biol. Bull. (Woods Hole) 29(1): 7-25.
- 1939b. The reproduction of *Limacina retroversa*. Biol. Bull. (Woods Hole) 76(2): 280-303.
- HULINGS, N. C. 1967. Marine Ostracoda from the western North Atlantic Ocean: Labrador Sea, Gulf of St. Lawrence and off Nova Scotia. Crustaceana 13(3): 310-328, pl. 4.
- HUNTSMAN, A. G. 1917. MS Herring investigations — Spawning, behaviour and growth of the young, summer of 1917. Fish. Res. Board Can. MS. Rep. (Biol.) 352: 23 p.
1918. Histories of new food fishes. I. The Canadian plaice. Biol. Board Can. Bull. 1: 32 p.
1919. Some quantitative and qualitative plankton studies of the eastern Canadian plankton. 3. A special study of the Canadian chaetognaths, their distribution etc., in the waters of the eastern coast, p. 421-485. In: J. Hjort [ed.] Canadian Fisheries Expedition, 1914-15. Dep. Nav. Serv., Ottawa.
- 1921a. Eastern Canadian plankton — the distribution of the Tomopteridae obtained during the Canadian Fisheries Expedition 1914-1915. Contrib. Can. Biol., 1918-1920, 7: 85-91.
- 1921b. Eastern Canadian plankton — the distribution of floating tunicates (Thaliacea) obtained during the Canadian Fisheries Expedition, 1914-1915. Contrib. Can. Biol., 1918-1920, 8: 93-97.
1922. The fishes of the Bay of Fundy. Contrib. Can. Biol., 1921, 3: 49-72.
1924. Limiting factors for marine animal. I. The lethal effect of sunlight. Contrib. Can. Biol. N.S. 2: 81-88.
1955. Effect of freshets on Passamaquoddy plankton. Deep-Sea Res. 3 (Suppl): 321-330.
- HUNTSMAN, A. G., W. B. BAILEY, AND H. B. HACHEY. 1954. The general oceanography of the Strait of Belle Isle. J. Fish. Res. Bd. Canada 11(3): 198-260.
- HUNTSMAN, A. G., AND M. E. REID. 1921. The success of reproduction in *Sagitta elegans* in the Bay of Fundy and the Gulf of St. Lawrence. Trans. Roy. Can. Inst. 13: 99-112.
- HUNTSMAN, A. G., AND M. I. SPARKS. 1924. Limiting factors for marine animals. 3. Relative resistance to high temperature. Contrib. Can. Biol. N.S. 2(6): 95-114.
- JEAN, Y. 1953. Recherches sur le hareng *Clupea harengus*. Rapp. Annu. 1952, Sta. Biol. Mar. Grande-Rivière: 21-46.

1955. Présence de larves de *Sabastes marinus* dans la Baie-des-Chaleurs et leurs caractères distinctifs. *Natur. Can.* 82(2-3): 33-43.
1956. A study of spring and fall spawning herring (*Clupea harengus* L.) at Grande-Rivière, Bay of Chaleur, Québec. *Contrib. Dép. Pêch. Qué* 49: 76 p.
- JERMOLAJEV, E. G. 1958. Zooplankton of the inner Bay of Fundy. *J. Fish. Res. Bd. Canada* 15(6): 1219-1228.
- JOHANSEN, F. 1925. Natural history of the cunner (*Tautogolabrus adspersus* Walbaum). *Contrib. Can. Biol. N.S.* 2(17): 423-468.
- JOHNSON, W. H. 1934. Herring food in Passamaquoddy Bay. *Biol. Board Can. Annu. Rep.* (1933): p. 24.
- MS 1935. The food and feeding of the herring (*Clupea harengus* L.). *Biol. Board Can. MS Rep. (Biol.)* 195: 60 p.
1938. The effect of light on the vertical movements of *Acartia clausi* (Giesbrecht). *Biol. Bull. (Woods Hole)* 75: 106-118.
- MS 1939? Changes in the vertical distribution of the common free swimming copepods of Passamaquoddy Bay, New Brunswick. *Fish. Res. Board Can. MS Rep. (Biol.)* 137: 24 p.
1942. Effect of light on copepods as food for Passamaquoddy herring. *J. Fish. Res. Bd. Canada* 5(4): 365-376.
- JONES, L. T. 1969. Continuous plankton records: Studies on the zooplankton east of Newfoundland and Labrador, with particular reference to the euphausiid *Thysanoessa longicaudata* (Kroyer). *Bull. Mar. Ecol.* 6(8): 275-300.
- KEARNEY, C. E. 1933. The animal plankton of the Halifax area. *Biol. Board Can. Annu. Rep.* (1932): p. 26.
1934. Animal plankton of the Halifax area. *Biol. Board Can. Annu. Rep.* (1933): 24-25.
- KELLY, G. F., AND A. M. BAKER. 1961. Vertical distribution of young redfish in the Gulf of Maine. *Int. Comm. Northwest Atl. Fish. Spec. Publ.* 3: 220-233.
- KELLY, G. F., AND R. S. WOLF. 1959. Age and growth of the redfish (*Sebastodes marinus*) in the Gulf of Maine. *U.S. Fish Wildlife Serv. Fish. Bull.* 156: 1-31.
- KENNEDY, V. S., AND P. POWLES. MS 1964. Plankton collections for the western Gulf of St. Lawrence and central Nova Scotia banks, 1958-1962. *Fish. Res. Board Can. MS Rep.* 799: 10 p., 36 fig.
- KERSWILL, C. J. 1940. The distribution of pteropods in the waters of eastern Canada and Newfoundland. *J. Fish. Res. Bd. Canada* 5(1): 23-31.
- KRAMP, P. L. 1920. Anthomedusae and Leptomedusae. Rep. "Michael Sars" N Atl. Deep-Sea Exped. 1910, 3(2): 1-14, pl. 1.
1959. Medusae, mainly from the west coast of Africa. *Mém. Inst. Sci. Natur. Belg.* 3(6): 1-33, text-fig. 1-5.
1961. Synopsis of the medusae of the world. *J. Mar. Biol. Ass. U.K.* 40: 1-469.
- KUSMORSKAYA, A. P. 1960. Zooplankton of the frontal zone of the North Atlantic in spring 1958. *Int. Comm. Northwest Atl. Fish. Ann. Proc.* 10(1959-1960): 106-111.
- LACROIX, G. 1958. L'effet d'un thermocline sur les migrations verticales journalières du zooplankton marin: aspect technique et quelques résultats. *Ann. ACFAS* 24: 77-78.
1959. Le dynamisme dans la distribution verticale des larves d'Euphausiacés du golfe Saint-Laurent. *Ann. ACFAS*, 25: 91.
- 1960a. Reproduction cyclique des Cladocères marins dans le golfe Saint-Laurent. *Rapp. Annu. Sta. Biol. Mar. Grande-Rivière*: 17-23.
- 1960b. Distribution horizontale et biologie des Euphausides de la Baie des Chaleurs en 1959. *Rapp. Annu. 1959, Sta. Biol. Mar. Grande-Rivière*: 24-26.
- 1961a. Les migrations verticales journalières des euphausides à l'entrée de la Baie-des-Chaleurs. *Natur. Can.* 88(11): 257-316.
- 1961b. Production de zooplancton dans la Baie-des-Chaleurs en 1960. *Rapp. Annu. 1960, Sta. Biol. Mar. Grande-Rivière*: 11-28.
- 1961c. Distribution et biologie des Euphausides dans la Baie-des-Chaleurs en 1960. *Rapp. Annu. 1960, Sta. Biol. Mar. Grande-Rivière*: 29-37.
1963. Production de zooplancton dans la Baie-des-Chaleurs en 1962. *Rapp. Annu. 1962, Sta. Biol. Mar. Grande-Rivière*: 39-52.
1966. Recherches sur le zooplancton de la Baie-des-Chaleurs en 1965. *Rapp. Annu. 1965, Sta. Biol. Mar. Grande-Rivière*: 45-53.
1967. Recherches sur le zooplancton de la Baie-des-Chaleurs. *Rapp. Annu. 1966, Sta. Biol. Mar. Grande-Rivière*: 37-53.
1968. Recherches sur le zooplancton de la Baie-des-Chaleurs en 1967. *Rapp. Annu. 1967, Sta. Biol. Mar. Grande-Rivière*: 45-53.
- LACROIX, G., AND J. BERGERON. 1963. Liste préliminaire des invertébrés du banc de Bradelle, 1962. *Rapp. Annu. 1962, Sta. Biol. Mar. Grande-Rivière*: 59-67.
1964. Prélèvements de larves de poissons dans la sud-ouest du Golfe Saint-Laurent en 1963. *Rapp. Annu. 1963, Sta. Biol. Mar. Grande-Rivière*: 25-37.
- LACROIX, G., AND L. LEGENDRE. 1964. Le zooplancton et l'estuaire de la Rivière Restigouche (Baie des Chaleurs): quantités et composition en août 1962. *Natur. Can.* 91(1): 21-40.
- LACROIX, G., AND P. MORRISSET. MS 1962. Observations sur les migrations verticales de *Sagitta elegans* Verriell. *Cah. Inf. Sta. Biol. Mar. Grande-Rivière* 14: 33-38.
- LAMBERT, D. G. 1960. The food of the redfish *Sebastodes marinus* in the Newfoundland area. *J. Fish. Res. Bd. Canada* 17(2): 235-243.

- LANG, K. 1948. Monographic der Harpacticiden. A-B. Nordiska Bokhandeln, Stockholm. 1682 p.
- LÉGARE, J. E. H. MS 1961. The zooplankton of the Passamaquoddy region. Fish. Res. Board Can. MS Rep. (Biol.) 77: 37 p.
- LÉGARE, J. E. H., AND D. C. MACLELLAN. 1960. A qualitative and quantitative study of the plankton of the Quoddy region in 1957 and 1958 with special reference to the food of the herring. J. Fish. Res. Bd. Canada 17(3): 409-448.
- LEGENDRE, L. 1969. Etude des associations planctoniques en 1968. Rapp. Annu. 1968, Sta. Biol. Mar. Grande-Rivière: 27-39.
- LEIM, A. H. 1924. The life history of the shad (*Alosa sapidissima* (Wilson)) with special reference to the factors limiting its abundance. Contrib. Can. Biol. N.S. 2(11): 161-284.
- MS 1958. Distribution of herring larvae in the Lower Bay of Fundy. Fish. Res. Board Can. MS Rep. (Biol.) 652: 8 p.
- LEIM, A. H., AND H. B. HACHEY. 1935. A transgression of marginal waters over the Scotian shelf. Trans. Amer. Fish. Soc. 65: 279-283.
- LEIM, A. H., AND W. B. SCOTT. 1966. Fishes of the Atlantic Coast of Canada. Fish. Res. Board Can. Bull. 155: 485 p.
- LYSHOLM, B., AND O. NORDGAARD. 1945. Copepoda from the "Michael Sars" North Atlantic Deep-Sea Expedition 1910. Rep. "Michael Sars" N Atl. Deep-Sea Exped. 1910, 5(7): 1-60.
- MACDONALD, D. L. 1912. On a collection of Crustacea made at St. Andrews, N.B. Contrib. Can. Biol. 1906-1910: 83-84.
- MACLELLAN, D. C. 1967. The annual cycle of certain calanoid species in west Greenland. Can. J. Zool. 45: 101-115.
- MARAK, R. R. AND J. B. COLTON, JR. 1961. Distribution of fish eggs and larvae, temperature, and salinity in the Georges Bank-Gulf of Maine area, 1953. U.S. Fish Wildlife Serv. Spec. Sci. Rep. Fish. 398: 61 p.
- MARAK, R. R., J. B. COLTON, JR., AND D. B. FOSTER. 1962. Distribution of fish eggs and larvae, temperature, and salinity in the Georges Bank-Gulf of Maine area, 1955. U.S. Fish Wildlife Serv. Spec. Sci. Rep. Fish. 411: 66 p.
- MARAK, R. R., J. B. COLTON, JR., D. B. FOSTER, AND D. MILLER. 1962b. Distribution of fish eggs and larvae, temperature, and salinity in the Georges Bank-Gulf of Maine area, 1956. U.S. Fish Wildlife Serv. Spec. Sci. Rep. Fish. 412: 95 p.
- MARCOTTE, A., AND J.-L. TREMBLAY. 1948. Notes sur la biologie de l'épertan (*Osmerus mordax*, Mitchell) de la province de Québec. Contrib. Univ. Laval Sta. Biol. Saint-Laurent 18: 107 p.
- MARTIN, W. R. 1963. Canadian research report, 1962. B. Subarea 4 and 5, biology. Int. Comm. Northwest Atl. Fish. Redbook 1963 (Pt. 2): 14-21.
- MATTHEWS, J. B. L. 1967. *Calanus finmarchicus* s. l. in the North Atlantic. The relationships between *Calanus finmarchicus* s. str., *C. glacialis* and *C. helgolandicus*. Bull. Mar. Ecol. 6: 159-179.
1968. On the acclimatization of *Calanus finmarchicus* (Crustacea, Copepoda) to different temperature conditions in the North Atlantic. Sarsia 34: 371-382.
1969. Continuous plankton records: The geographical and seasonal distribution of *Calanus finmarchicus* s. l. in the North Atlantic. Bull. Mar. Ecol. 6(8): 251-273, pl. 86-88.
- MAYER, A. G. 1910. Medusae of the World. Hydromedusae, Vol. I, II, p. 1-498, pl. 1-55. Scyphomedusae, Vol. III, p. 499-735, pl. 56-76. Carnegie Institution. Washington, D.C.
1912. Ctenophores of the Atlantic coast of North America. Carnegie Inst. Wash. Publ. 162: 58 p. 16 pl.
- MCALLISTER, D. E. 1960. List of the marine fishes of Canada. Bull. Nat. Mus. Canada No. 168: 76 p.
- MCKENZIE, R. A. 1933. Cod eggs in the Bay of Fundy. Biol. Board Can. Annu. Rep. (1932): 27.
1939. Some marine fish and salp records. Proc. Nova Scotian Inst. Sci. 20(1): 13-20.
1940. Nova Scotian autumn cod spawning. J. Fish. Res. Bd. Canada 5(2): 105-120.
1964. Smelt, life history and fishery in the Miramichi River, New Brunswick. Fish. Res. Board Can. Bull. 144: 77 p.
- MCKENZIE, R. A., AND R. E. S. HOMANS. 1938. Rare and interesting fishes and salps in the Bay of Fundy and off Nova Scotia. Proc. Nova Scotian Inst. Sci., 19(3): 277-281.
- MCLAREN, I. A., C. J. CORKEET, AND E. J. ZILLIOUX. 1969. Temperature adaptations of copepod eggs from the arctic to the tropics. Biol. Bull. (Woods Hole) 137(3): 486-493.
- MCLAREN, I. A., D. A. WALKER, AND C. J. CORKEET. 1968. Effects of salinity on mortality and development rate of eggs of the copepod *Pseudocalanus minutus*. Can. J. Zool. 46(6): 1267-1269.
- McMURRICH, J. P. 1917a. The winter plankton in the neighbourhood of St. Andrews. Contrib. Canadian Biol. 1915-1916: 1-10.
- 1917b. Notes on some crustacean forms occurring in the plankton of Passamaquoddy Bay. Trans. Roy. Soc. Can. 11(Sect. 4): 47-61.
- MEDCOF, J. C. 1939. Larval life of the oyster (*Ostrea virginica*) in Bideford River. J. Fish. Res. Bd. Canada 4(4): 287-301.
1961. Oyster farming in the maritimes. Fish. Res. Board Can. 131: 158 p.
- MERCER, M. C. MS 1968. Systematics and biology of the sepiolid squids of the genus *Rossia* Owen, 1835 in Canadian waters with a preliminary review of the genus. M.Sc. Thesis. Memorial University of Newfoundland, St. John's, Nfld. 96 p.

- MILLER, D., AND R. R. MARAK. 1959. The early larval stages of the red hake *Urophycis chuss*. Co-pcia 1959(3): 248-250.
- MILLS, D. H. 1957. Herring gulls and common terns as possible predators of lobster larvae. J. Fish. Res. Bd. Canada 14(5): 729-730.
- MOISON, G., AND J. L. TREMBLAY. 1949. Elevage des larves de homard. Univ. Laval., Sta. Biol. Saint-Laurent Rapp. 8: 20-32.
- MOORE, J. P. 1910. The polychaetous annelids dredged in 1908 by Mr. Owen Bryant off the coasts of Labrador, Newfoundland, and Nova Scotia. Proc. U.S. Nat. Mus. 37(1703): 133-146.
- MORTENSEN, T. 1913. Ctenophora from the "Michael Sars" North Atlantic Deep-Sea Expedition 1910. Rep. "Michael Sars" N. Atl. Deep-Sea Exped. 1910, 3(Pt. 2): 9 p.
- NEEDLER, A. B. 1931. The haddock. Biol. Board Can. Bull. 25: 28 p.
1941. Karvak stages of *Crago septemspinosis* Say. Trans. Roy. Can. Inst. 23(2): 193-199.
- NEEDLER, A. W. H. 1931. The oysters of Malpeque Bay. Biol. Board Can. Bull. 22: 35 p.
1941. Oyster farming in eastern Canada. Fish. Res. Board Can. Bull. 60: 83 p.
- ODELL, E. C. MS 1926? The correlation between light intensity and the bathymetric distribution of marine copepods. Biol. Board Can. MS Rep. (Biol.) 89: 23 p.
- PARKER, R. R., AND L. MARGOLIS. 1967. A redescription of the syntypes of *Caligus rapax* H. Milne Edwards, 1840 (Copepoda, Caligidae) and the misuse of this name since 1850. Crustaceana, 12(1): 87-101.
- PAVSHTIKS, E. A. 1965. Distribution of plankton and summer feeding of herring in the Norwegian Sea and on Georges Bank. Int. Comm. Northwest Atl. Fish. Spec. Publ. 6: 583-589.
1966. The quantitative distribution of zooplankton in the southern part of Davis Strait. Materialy PINRO 6: 118-122. (In Russian)
1968. The influence of currents upon seasonal fluctuations in the plankton of the Davis Strait. Sarsia 34: 383-392.
- PAVSHTIKS, E. A., AND M. A. GOGOLEVA. 1964. Plankton distribution in the area of the Georges Bank and the Browns Bank in 1962. Tr. PINRO 16: 25-48. (In Russian)
- PAVSHTIKS, E. A., T. M. SANJONOVA, AND S. S. DROBISHEVA. 1962. Plankton investigations carried out by the PINRO in the ICNAF area during 1960 and 1961. Int. Comm. Northwest Atl. Fish. Redbook 1962 (Pt. 3): 56-61.
- PECHENIK, L. N., AND A. S. NOSKOV. 1962. U.S.S.R. research report 1961: plankton investigation. Int. Comm. Northwest Atl. Fish. Redbook 1961 (Pt. 2): 138-139.
- PENNELL, W. 1967. Preliminary report on a study of neuston in the Gulf of St. Lawrence. Rapp. Annu. 1966, Sta. Biol. Mar. Grande-Rivière: 56-61.
1968. Report on field work for neuston project, 1967. Rapp. Annu. 1967, Sta. Biol. Mar. Grande-Rivière: 55-56.
- PETTIBONE, M. H. 1954. Marine polychaete worms from Point Barrow, Alaska, with additional records from the North Atlantic and North Pacific. Proc. U.S. Nat. Mus. 103(3324): 203-356.
1956. Marine polychaete worms from Labrador. Proc. U.S. Nat. Mus. 105(3361): 531-584.
1963. Marine polychaete worms of the New England region. I. Aphroditidae through Trochocochaeidae. U.S. Nat. Mus. Bull. 227(I): 1-356.
- PINHEY, K. F. 1927a. Entomostraca of the Belle Isle Strait Expedition, 1923, with notes on other planktonic species. Pt. I. Contrib. Can. Biol. Fish. N.S. 3(6): 179-234.
- 1927b. Entomostraca of the Belle Isle Strait Expedition, 1923, with notes on other planktonic species. Pt. II; and a record of other collections in the region. Contrib. Can. Biol. Fish. N.S. 3(13): 331-346.
- PITT, T. K. 1958. Distribution, spawning and racial studies of the capelin, *Mallotus villosus* (Müller), in the offshore Newfoundland area. J. Fish. Res. Bd. Canada 15(3): 275-293.
- PLATT, T., AND B. IRWIN. MS 1968. Primary productivity measurements in St. Margaret's Bay, 1967. Fish. Res. Board Can. Tech. Rep. 77: 123 p.
- POIRIER, L. 1969. Distribution horizontale et verticale des mysidacés à l'entrée de la baie des Chaleurs en 1968. Rapp. Annu. 1968, Sta. Biol. Mar. Grande-Rivière: 67-76.
- POSTOLAKY, A. I. 1968. The life-cycle pattern of Labrador cod, *Gadus morhua* L., in ICNAF subarea 2. Int. Comm. Northwest Atl. Fish. Spec. Publ. 7: 139-144.
- POWELL, N. A. 1968. Studies on Bryozoa (Polyzoa) of the Bay of Fundy region. II. Bryozoa from fifty fathoms, Bay of Fundy. Cah. Mar. Biol. 9(3): 247-259.
- POWELL, N. A., AND G. D. CROWELL. 1967. Studies on Bryozoa (Polyzoa) of the Bay of Fundy region. I. Bryozoa from the intertidal zone of Minas Basin and Bay of Fundy. Cah. Biol. Mar. 8(4): 331-347.
- POWLES, P. 1958. Studies of reproduction and feeding of Atlantic cod (*Gadus callarias* L.) in the southwestern Gulf of St. Lawrence. J. Fish. Res. Bd. Canada 15(6): 1383-1402.
- PRÉFONTAINE, G. 1931. Notes préliminaires sur la faune de l'estuaire du Saint-Laurent dans la région de Trois-Pistoles. Univ. Laval., Sta. Biol. St-Laurent à Trois-Pistoles. Rapp. I: 76-81.
1932. Notes préliminaires sur la faune de l'estuaire du Saint-Laurent dans la région de Trois-Pistoles. Trans. Roy. Soc. Can. 26(Sect. V): 205-209.
1933. Additions à la liste des espèces animales de l'estuaire du Saint-Laurent. Trans. Roy. Soc. Can. 27(Sect. V): 253-258.

- PRÉFONTAINE, G., AND P. BRUNEL. 1962. Liste d'invertébrés marins recueillis dans l'estuaire du Saint-Laurent de 1929 à 1934. *Natur. Can.* 89(8-9): 237-263.
- PRINCE, E. E. 1907. The eggs and early life-history of the herring, gaspereau, shad and other clupeoids. *Contrib. Can. Biol.* 1902-1905, 11: 95-110, pl. 8-10.
- RANSON, G. 1945. Les Scyphoméduses de la collection du Muséum National d'Histoire Naturelle Paris. II. Catalogue raisonné; origine des récoltes. *Bull. Mus. Natl. Hist. Natur. Paris*, 17(2): 312-320.
- RATHBUN, M. J. 1909. List of Crustacea on the Labrador coast, p. 480-487. In: W. T. Grenfell et al. *Labrador, the country and the people*. New York. MacMillan Co.
- REDFIELD, A. C. 1939. The history of a population of *Limacina retroversa* during its drift across the Gulf of Maine. *Biol. Bull. (Woods Hole)* 76(1): 26-47.
- REDFIELD, A. C., AND A. BEALE. 1940. Factors determining the distribution of populations of chaetognaths in the Gulf of Maine. *Biol. Bull. (Woods Hole)* 79(3): 459-487.
- REID, M. E. 1929. The distribution and development of the cunner (*Tautogolabrus adspersus* Walbaum) along the eastern coast of Canada. *Contrib. Can. Biol. Fish. N.S.* 4(27): 431-442.
- RICHARDS, S. W. 1965. Description of the postlarvae of the sand lance (*Ammodytes*) from the east coast of North America. *J. Fish. Res. Bd. Canada* 22(5): 1313-1317.
- RICHARDS, S. W., A. PERLMUTTER, AND D. C. MCANEY. 1963. A taxonomic study of the genus *Ammodytes* from the east coast of North America (Teleostei: *Ammodytes*). *Copeia* 1963(2): 358-375.
- ROBERTSON, A. E. 1964. Distribution of the Cladocera in the North Atlantic. *Rep. Challenger Soc.* 3(XVI).
- ROGERS, H. M. 1940. Occurrence and retention of plankton within the estuary. *J. Fish. Res. Bd. Canada* 5(2): 164-175.
- SAUNDERS, J. W. 1949. Histophysiological work on lobster. *Univ. Laval., Sta. Biol. St-Laurent Rapp.* 8: 33-43.
- SCARRATT, D. J. 1964. Abundance and distribution of lobster larvae (*Homarus americanus*) in Northumberland Strait. *J. Fish. Res. Bd. Canada* 21(4): 661-680.
1968. Distribution of lobster larvae (*Homarus americanus*) off Pictou, Nova Scotia. *J. Fish. Res. Bd. Canada* 25(2): 427-430.
1969. Lobster larvae off Pictou, Nova Scotia, not affected by bleached kraft mill effluent. *J. Fish. Res. Bd. Canada* 26(7): 1931-1934.
- SCARRATT, D. J., AND G. E. RAINES. 1967. Avoidance of low salinity by newly hatched lobster larvae. *J. Fish. Res. Bd. Canada* 24(6): 1403-1406.
- SCOTT, T. 1907. On some Entomostraca from the Gulf of St. Lawrence. *Trans. Natur. Hist. Soc. Galsgow N.S.* 7: 46-52, pl. 2.
- SEMENOVA, T. N. 1962. Zooplankton in the area of the Newfoundland Banks in spring 1960. *Sov. Fish. Invest. Northwest Atl.* (Transl. from Russian by Israel Program for Sci. Transl., Jerusalem, 1963, p. 196-204)
1964. The seasonal phenomena in the plankton of the Labrador shelf, the Grand Banks of Newfoundland and Flemish Cap Bank. *Tr. PINRO* 16: 49-77. (Transl. from Russian by Transl. Bur. Dep. Secretary of State, Canada)
- SEREBRYAKOV, V. P. 1962. Studies of ichthyoplankton in the areas of Newfoundland and Labrador. *Sov. Fish. Invest. Northwest Atl.* (Transl. from Russian by Isreal Program for Sci. Transl., Jerusalem, 1963, p. 221-227)
1965. Some results of Soviet research work on ichthyoplankton in the nothwest Atlantic: eggs and larvae of cod. *Int. Comm. Northwest Atl. Fish. Spec. Publ.* 6: 425-434.
- SETTE, O. E. 1943. Biology of the Atlantic mackerel (*Scomber scombrus*) of North America. Part 1. Early life history, including growth, drift, and mortality of the egg and larval populations. *U.S. Fish Wildlife Serv. Fish. Bull.* 38: 149-237.
- SHERMAN, K. 1965. Seasonal and areal distribution of Gulf of Maine coastal zooplankton, 1963. *Int. Comm. Northwest Atl. Fish. Spec. Publ.* 6: 611-623.
- 1966a. Seasonal and areal distribution of zooplankton in coastal waters of the Gulf of Maine, 1964. *U.S. Fish Wildl. Serv. Spec. Sci. Rep. Fish.* 530: 11 p.
- 1966b. Copepods of Gulf of Maine coastal waters. *Maine Field Natur.* 22(6): 94-97
1968. Seasonal and areal distribution of zooplankton in coastal waters of the Gulf of Maine, 1965 and 1966. *U.S. Fish Wildlife Serv. Spec. Sci. Rep. Fish.* 562: 11 p.
- SHERMAN, K., AND K. A. HONEY. 1968. Observations on the catching efficiencies of two zooplankton samplers. *Int. Comm. Northwest Atl. Fish. Red-book* 1968 (Pt. 3): 75-80
- SHERMAN, K., AND E. G. SCHANER. 1968. Observations on the distribution and breeding of *Sagitta elegans* (Chaetognatha) in coastal waters of the Gulf of Maine. *Limnol. Oceanogr.* 13(4): 618-625.
- SHOEMAKER, C. R. 1926. Results of the Hudson Bay Expedition in 1920. V. Report on marine amphipods collected in Hudson and James Bay by Fritz Johansen in the summer of 1920. *Contrib. Can. Biol. Fish. N.S.* 3(1): 1-11
1930. The Amphipoda of the Cheticamp Expedition of 1917. *Contrib. Can. Biol. Fish. N.S.* 5(10): 219-359.

- SMITH, G. F. M. 1939. The free swimming stages of the lobster. Fish. Res. Board Can. Atl. Progr. Rep. 24: 16-18.
- SOULIER, B. 1965. Euphausiacés des bancs de Terre-Neuve de Nouvelle-Ecosse et du golfe du Maine. Rev. Trav. Inst. Pêches Marit. 29(2): 173-190.
- SPARKS, M. I. 1929. The spawning and development of mackerel on the outer coast of Nova Scotia. Contrib. Can. Biol. Fish. N.S. 4(28): 443-452.
- SPOEL, S. VAN DER. 1967. Euthercosomata. A group with remarkable developmental stages (Gastropoda, Pteropoda). J. Noorduijn en Zoon N. V., Gorinchem. 375 p., 366 fig.
- SPRAQUE, J. B., AND D. W. MCLEESE. MS 1968a. Lethal concentrations of neutralized bleached kraft pulp mill effluent for larval lobsters, adult lobsters and juvenile salmon. Fish. Res. Board Can. MS Rep. 985: 15 p.
- 1968b. Toxicity of kraft pulp mill effluent for larval and adult lobsters, and juvenile salmon. Water Res. 2: 753-760.
- 1968c. Different toxic mechanisms in kraft pulp mill effluent for two aquatic animals. Water Res. 2: 761-765.
- 1968d. Toxicity of bleached kraft mill effluent to larval and adult lobsters and Atlantic salmon. Pulp Paper Mag. Can. Dec. 1968: T431-T433.
- SQUIRES, H. J. MS 1957. Cod eggs and herring larvae in late September an indication of fall spawning in the Gulf of St. Lawrence. Fish. Res. Board Can. Progr. Rep. Atl. 67: 31-33.
- STAFFORD, J. 1912a. On the fauna of the Atlantic coast of Canada. Second report-Malpeque, 1903-1904. Contrib. Can. Biol. 1906-1910: 37-44.
- 1912b. On the fauna of the Atlantic coast of Canada. Third report-Gaspé, 1905-1906. Contrib. Can. Biol. 1906-1910: 45-67.
- 1912c. On the recognition of bivalve larvae in plankton collections. Contrib. Can. Biol. 1906-1910: 221-242, pl. 22-24.
- STEELE, D. H. 1957. The redfish (*Sebastes marinus* L.) in the western Gulf of St. Lawrence. J. Fish. Res. Bd. Canada 14(6): 899-924.
1963. Pollock (*Pollachius virens* (L.)) in the Bay of Fundy. J. Fish. Res. Bd. Canada 20(5): 1267-1314.
- STEELE, D. H., AND P. BRUNEL. 1968. Amphipoda of the Atlantic and Arctic coasts of North America: *Anonyx* (Lysianassidae). J. Fish. Res. Bd. Canada 25(5): 943-1060.
- STEVENSON, J. A. MS 1933. The daily vertical distribution in St. Croix River zooplankton. Fish. Res. Board Can. MS Rep. Biol. 198: 8 p.
- STIMPSON, W. 1854. Synopsis of the marine Invertebrates of Grand Manan: or the region about the mouth of the Bay of Fundy, New Brunswick. Smithson. Contrib. Knowl. 6 (Art. 5): 67 p. 3 pl.
- SULLIVAN, C. M. MS 1942. Report on predictions of sets in Malpeque Bay area and investigation of the soft-shelled clam, *Mya arenaria*. Fish. Res. Board Can. MS Rep. (Biol.) 265. 36 p.
- SULLIVAN, C. M. 1948. Bivalve larvae of Malpeque Bay, P.E.I. Fish. Res. Board Can. Bull. 77: 36 p., 22 pl.
- TATTERSALL, W. M. 1939. The Mysidacea of eastern Canadian waters. J. Fish Res. Bd. Canada 4(4): 281-286.
- TEMPLEMAN, W. 1936a. Fourth stage larvae of *Homarus americanus* intermediate in form between normal third and fourth stages. J. Fish. Res. Bd. Canada 2(4): 349-354.
- 1936b. The influence of temperature, salinity, light and food conditions on the survival and growth of the larvae of the lobster (*Homarus americanus*). J. Biol. Board Can. 2(5): 485-497.
1937. Habits and distribution of larval lobsters (*Homarus americanus*). J. Fish. Res. Bd. Canada 3(4): 343-347.
- 1948a. The life history of the capelin (*Mallotus villosus* O. F. Müller) in Newfoundland waters. Nfld. Govt. Lab. Res. Bull. 17. 151 p.
- 1948b. Body form and stage identification in the early stages of the American lobster. Nfld. Govt. Lab. Res. Bull. 18: 12-25.
- 1948c. Growth per moult in the American lobster. Nfld. Govt. Lab. Res. Bull. 18: 26-48.
1959. Redfish distribution in the North Atlantic. Fish. Res. Board Can. Bull. 120: 173 p.
- TEMPLEMAN, W., AND E. J. SANDEMAN. 1961. Variations in caudal pigmentation in late-stage pre-extrusion larvae from *marinus*- and *mentella*-type female redfish from the Newfoundland area. J. Fish. Res. Bd. Canada 16(6): 763-789.
- TEMPLEMAN, W., AND S. N. TIBBO. 1945. Lobster investigations in Newfoundland 1938 to 1941. Nfld. Govt. Lab. Res. Bull. 16: 98 p.
- THOMPSON, H. 1943. A bibliographical and economic study of cod (*Gadus callarias* L.). Nfld. Govt. Lab. Bull. Res. 14: 160 p.
- THOMPSON, H. AND N. FROST. 1936a. The plankton in 1934. Rep. Nfld. Fish. Res. Comm. 2(3): 19-23
- 1936b. Plankton investigations. Rep. Nfld. Fish. Res. Comm. 2(5): 25-29.
- THOMPSON, H. 1948. Pelagic tunicates of Australia. Commonwealth Council for Scientific and Industrial Research, Australia. 196 p., 75 pl.
- TIBBO, S. N., AND T. R. GRAHAM. 1963. Biological changes in herring stocks following an epizootic. J. Fish. Res. Bd. Canada 20(2): 435-449.
- TIBBO, S. N., AND J. E. H. LEGARÉ. 1960. Further study of larval herring (*Clupea harengus* L.) in the Bay of Fundy and Gulf of Maine. J. Fish. Res. Bd. Canada 17(6): 933-942.

- TIBBO, S. N., J. E. H. LEGARÉ, L. Q. SCATTERGOOD, AND R. F. TEMPLE. 1958. On the occurrence and distribution of larval herring (*Clupea harengus* L.) in the Bay of Fundy and the Gulf of Maine. *J. Fish. Res. Bd. Canada* 15(6): 1451-1469.
- TOTTEN, A. K. 1965. A synopsis of the Siphonophora. British Museum (Natural History), London. vii + 230 p., 40 pl.
- TRAVIN, V. I. 1951. A new species of redfish in the Barent Sea, *Sebastes mentella* Travin, sp.nov. *Dokl. Akad. Nauk SSSR* 77(4): 741-744. (In Russian)
- TRAVIN, V. I., K. JANOULOV, A. POSTOLAKY, AND G. ZAHAROV. 1961. Redfish stock distribution in the ICNAF area. *Int. Comm. Northwest Atl. Fish. Ann. Proc.* 11(1960-1961): 87-89.
- TRAVIN, V. I. AND L. N. PECHENIK. 1962. Soviet fishery investigations and fishing in the northwest Atlantic. In: Soviet fisheries investigations in the northwest Atlantic. (Transl. from Russian by Israel Program for Sci. Transl., Jerusalem, 1963, p. 4-54).
- TREMBLAY, J. L. 1944. Rapport général sur les activités de la station biologique du Saint-Laurent pendant les années 1936-1942. *Univ. Laval, Sta. Biol. St-Laurent Rapp.* 4: 100 p.
1947. Rapport du directeur de la Station Biologique du St-Laurent, pour l'année 1946. *Rapp. Gén. Min. Chasse Pêcheries Prov. Qué., Dép. Pêcheries* (1946): p. 76-81.
- UDVARDY, M. D. F. 1954. Distribution of appendicularians in relation to the Strait of Belle Isle. *J. Fish. Res. Bd. Canada* 11(4): 431-453.
- VERRILL, A. E. 1879. Preliminary check-list of the marine Invertebrata of the Atlantic coast, from Cape Cod to the Gulf of St. Lawrence. Tuttle, Moorehouse & Taylor, Printers, New Haven, Connecticut. 32 p.
- VLADIMIRSKAYA, E. V. 1965a. Quantitative distribution and the seasonal dynamics of zooplankton in the Newfoundland area. *Int. Comm. Northwest Atl. Fish. Res. Bull.* 2: 53-58.
- 1965b. Distribution of plankton in the Newfoundland area. *Tr. VNIR* 57: 361-380.
1967. Seasonal population dynamics of *Calanus finmarchicus* (Gunner) in the northwestern Atlantic, 1958-61. *Int. Comm. Northwest Atl. Fish. Res. Bull.* 4: 41-52.
- VLADYKOV, V. K. 1966. Remarks on the American eel (*Anguilla rostrata* LeSueur). Sizes of elvers entering streams; the relative abundance of adult males and females; and present economic importance of eels in North America. *Verh. und Int. Ver. Limnol.* 16: 1007-1017.
- WALLACE, N. A. 1919. The Isopoda of the Bay of Fundy. *Univ. Toronto Stud. Biol. Ser.* 18: 42 p.
- WEINSTEIN, M. 1966. Parasites of the chaetognath *Sagitta elegans* Verrill in the Gulf of St. Lawrence. *Rapp. Annu.* 1965, Sta. Biol. Mar. Grande-Rivière: 55-59.
1967. Endoparasitism of the chaetognath *Sagitta elegans* Verrill in the Gulf of St. Lawrence. *Rapp. Annu.* 1966, Sta. Biol. Mar. Grande-Rivière: 47-53.
- WHITEAVES, J. F. 1901. Catalogue of the marine Invertebrata of eastern Canada. *Geol. Surv. Can.*, Ottawa 722: 272 p.
- WILDER, D. G. 1953. The growth rate of the American lobster (*Homarus americanus*). *J. Fish. Res. Bd. Canada* 10(7): 371-404.
1960. Possible effects of Passamaquoddy tidal power structures on the Canadian lobster industry. *J. Fish. Res. Bd. Canda* 17(4): 553-563.
1965. Lobster conservation in Canada. *Rapp. Proces-Verbaux Reunions Cons. Perma. Int. Explor. Mer.* 156: 21-29.
- WILLEY, A. 1913. Notes on plankton collected across the mouth of the St. Croix River opposite to the Biological Station at St. Andrews, New Brunswick, in July and August 1912. *Proc. Zool. Soc. London* 1913: 283-292.
1915. The plankton in St. Andrews Bay. *Contrib. Can. Biol.* 1911-1914, 1: 1-9.
1919. Report on the Copepoda obtained in the Gulf of St. Lawrence and adjacent waters, 1915. In: J. Hjort [ed.] Canadian fisheries expedition, 1914-1915. *Dep. Nav. Ser.*, Ottawa, p. 173-220.
1920. The economic history of copepods. *Trans. Amer. Fish. Soc.* 1920: 320-325.
1921. Arctic Copepoda in Passamaquoddy Bay. *Proc. Amer. Acad. Arts and Sci.* 56(5): 183-196.
1923. Notes on the distribution of free-living Copepoda in Canadian waters. *Contrib. Can. Biol.* N.S. 1(16): 303-334.
1931. Preliminary report on copepod plankton collection by the Station Biologique du St.-Laurent à Trois-Pistoles in July 1931. *Univ. Laval, Sta. Biol. St.-Laurent Rapp.* 1: 82-84.
- WILLEY A., AND A. G. HUNTSMAN. 1921. Faunal notes from the Atlantic Biological Station (1920). *Can. Field Natur.* 35: 1-7.
- WILSON C. B. 1936. Copepods from the far north collected by Capt. R. A. Bartlett. *J. Wash. Acad. Sci.* 26: 365-376.
1942. The copepods of the plankton gathered during the last cruise of the Carnegie. *Carnegie Inst. Wash. Publ.* 536: 237 p.
- WOOD, W. 1869. The *Clio borealis* on the coast of Maine. *Proc. Portland Soc. Natur. Hist.* 1: 185-188.
- WRIGHT, N.E., MS 1925-26. The Copepod food cycle. *Biol. Board Can. MS Rep. (Biol.)* 87: 33 p.
- WRIGHT, R. R. 1907. The plankton of eastern Nova Scotia waters. An account of floating organism upon which young food fishes mainly subsist. *Contrib. Can. Biol.* 1902-1905: p. 1-19, pl. 1-7.

Part II. Pacific Zooplankton

INTRODUCTION

The area covered in this section extends from 54°40'N latitude, to 48°25'N latitude, and is bounded on the west by a straight line drawn on a Mercator projection map from 54°40'N 135°W to 48°25'N 130°W. The Puget Sound region is also included.

Although remarks on the systematics of some species have been included, this part of the book is basically a regional bibliographical tool. For this reason, the entries have been mainly restricted to papers dealing specifically with the defined area.

Although the synonymies adopted in the present compilation are mainly based on the literature, information received from specialists has also been used quite often and is duly acknowledged; in several cases, however, the author used his own judgment. In general, Kramp (1961-8) was followed for the synonymies of the cnidarians (except siphonophores), Totton (1965) being used for the synonymies of the latter. The synonymies of polychaetes have been based on Hartman (1959-65) as well as several papers by C. and E. Berkeley. Van der Spoel (1967) proved invaluable for synonymies of the Euthecosomata. Brodskii (1950) and Barnard (1969) were widely used, as well as Clemens and Wilby (1961).

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Cnidaria (except Siphonophora): Dr. D. Calder, Virginia Institute of Marine Science, Gloucester Point, Va., U.S.A.; Dr. K. Petersen, Universitetets Zoologiske Museum, Copenhagen, Denmark.

Cnidaria (including Siphonophora): Dr. A. Alvariño, Scripps Institution of Oceanography, La Jolla, Calif., U.S.A.; Dr. G.O. Mackie, University of Victoria, B.C., Canada.

Cnidaria (Siphonophora only): Dr. A.K. Totton, Shortlands, Kent, United Kingdom.

Polychaeta: Dr. C. Berkeley, Fisheries Research Board of Canada, Biological Station, Nanaimo, B.C., Canada.

Mollusca: Dr. A.H. Clarke, National Museum of Natural Sciences, Ottawa, Canada; Dr. C. Lalli, Marine Sciences Centre, McGill University, Montreal, P.Q., Canada;

Dr. S. van der Spoel, Zoölogisch Museum, Universitat van Amsterdam, Holland.

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Copepoda: Dr. T.S. Park, Marine Laboratory, Texas A & M University, Galveston, Texas, U.S.A.; Dr. O. Tanaka, Tokyo, Japan.

Mysidacea: Dr. A.H. Banner, Department of Zoology, University of Hawaii, Honolulu, Hawaii, U.S.A.

Amphipoda (Gammaridea only): Dr. J.L. Barnard, Department of Biological Sciences, University of Arizona, Tucson, Arizona, U.S.A.; Dr. E.L. Bousfield, National Museum of Natural Sciences, Ottawa, Ont., Canada.

Amphipoda (Hyperiidea only): Dr. T.E. Bowman, National Museum of Natural History, Smithsonian Institution, Washington, D.C., U.S.A.

Euphausiacea: Dr. A.H. Banner, Department of Zoology, University of Hawaii, Honolulu, Hawaii, U.S.A.

Decapoda: Dr. J.F.L. Hart, Victoria, B.C., Canada.

Chaetognatha: Dr. A. Alvariño, Scripps Institution of Oceanography, La Jolla, Calif., U.S.A.; Dr. T. Tokioka, Seto Marine Biological Laboratory, Wakayama-Ken, Japan.

Urochordata: Dr. T. Tokioka, Seto Marine Biological Laboratory, Wakayama-Ken, Japan.

Fish larvae: Dr. J.L. Hart, St. Andrews, N.B., Canada.

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PHYLUM CNIDARIA

CLASS HYDROZOA

ORDER ANTHOMEDUSAE

FAMILY BOUGAINVILLIIDAE

Bougainvillia bougainvillei (Brandt, 1835)

- Agassiz, L., 1862: 344, as *B. Mertensii* (Str. of Georgia; refers to A. Agassiz's material)
Agassiz, A., 1865: 152, etc., as *B. Mertensii* (Str. of Georgia, May)
Murbach and Shearer 1903: 171, as *Hippocrene Mertensii* (Victoria Hbr., summer, 1 specimen²²)
Foerster 1923: 245 (Vancouver Is. region; no actual specimens seen)
Clemens 1933: 14 (Canadian Pac. waters)
Kramp 1961: 75 (list of records, including W coast)

Bougainvillia multotentaculata Foerster, 1923

- Foerster 1923: 245, pl. 2, fig. 7, pl. 3, fig. 1-2 (Banks Is., 32 specimens; original description)
Clemens 1933: 14 (Canadian Pac. waters)
Kramp 1961: 79 (refers to Foerster's 1923 record)
Kramp 1968: 32 (distribution)
Szollosi 1969: 586 (Friday Hbr., May-June; "armed egg")

Bougainvillia muscoides (M. Sars, 1846)

- Foerster 1923: 246, pl. 3, fig. 3-4, as *B. nordgaardi* (NE of Five Fingers Is., 100-0 fath, 1 specimen)
Clemens 1933: 14, as *B. nordgaardi* (Canadian Pac. waters)
Kramp 1961: 79, as *B. nordgaardi* (list of records, including W coast)

Kramp 1968: 33 (distribution, including W coast)

Bougainvillia principis (Steenstrup, 1850)

Mackie and Mackie 1964: 68 (Friday Hbr., late May and early June, abundant)

Bougainvillia superciliaris (L. Agassiz, 1849)

Foerster 1923: 246²³ (Vancouver Is. region, 2 specimens)
Clemens 1933: 14 (Canadian Pac. waters)
Kramp 1961: 82 (list of records, including W coast)

Bougainvillia spp.

Wailes 1929: 165 (Vancouver Is.)

Bougainvillia sp.

Fraser 1932: 52 (Nanaimo region and San Juan Archipelago; relative abundance)

FAMILY CLADONEMATIDAE

Cladonema californicum Hyman, 1947

Mackie and Mackie 1964: 67 (between Cadboro and Oak bays, July, 2 specimens swimming over the *Ulva* beds)

FAMILY CORYNIDAE

Dipurena dolichogaster Haeckel, 1864²⁴

Murbach and Shearer 1903: 169 (Victoria Hbr., summer, 1 specimen)

²³Doubtful identification, *fide* Kramp (1961: 83).

²⁴Doubtful species, *fide* Kramp (1961: 22).

²²Tentatively identified.

Dipurena halterata (Forbes, 1846)

- Foerster 1923: 238, as *Slabberia catenata* (Vancouver Is. region; no actual specimens seen)
Clemens 1933: 14, as *Slabberia catenata* (Canadian Pac. waters)
Kramp 1961: 22 (list of records, including W coast)
Kramp 1968: 9 (distribution, including W coast)

Sarsia angulata (Mayer, 1900)

- Murbach and Shearer 1903: 168, as *Syn-dictyon angulatum* (Victoria Hbr., summer, 1 immature specimen)

Sarsia princeps (Haeckel, 1879)

- Foerster 1923: 238 (Vancouver Is. region, 3 specimens)
Clemens 1933: 14 (Canadian Pac. waters)
Kramp 1961: 29 (list of records, including W coast)

Sarsia rosaria (L. Agassiz, 1862)

- Agassiz, L. 1862: 340, as *Coryne Rosaria* (G. of Georgia and Str. of Rosario; refers to A. Agassiz's material)
Agassiz, A., 1865: 176, etc., fig. 289, as *Coryne rosaria* (Str. of Rosario, May; G. of Georgia, as late as the beginning of July)
Mayer 1910: 59 (Victoria Hbr., July)
Bovard and Osterud 1918: 128 (Friday Hbr., summer; relative abundance)
Child 1918: 49, etc. (Friday Hbr., summer, in considerable numbers; physiological senescence)
Harvey 1921: 280 (Friday Hbr., very common)
Kramp 1961: 31 (list of records, including W coast)

Sarsia tubulosa (M. Sars, 1835)

- Murbach and Shearer 1902: 72, as *Codonium apiculum* sp.n.²⁵ (Victoria Hbr., summer, in great number)
Murbach and Shearer 1903: 165, pl. 17, fig. 1, pl. 22, fig. 4-5, as *Codonium apiculum* sp.n. (Victoria Hbr.)
Fraser 1915: 114, as *S. mirabilis* (Departure Bay)

Foerster 1923: 236, as *S. mirabilis* (several localities in B.C., numerous specimens)

Kramp 1928: 28 (Vancouver Is.)
Wailes 1929: 165, as *S. mirabilis* (Vancouver Is.)
Fraser 1932: 52, as *S. mirabilis* (Nanaimo and San Juan Archipelago)
Clemens 1933: 14, as *S. mirabilis* (Canadian Pac. waters)

Hyman 1940: 282, etc., fig. 5, as *S. mirabilis* (Friday Hbr., summer, very abundant; water content, behaviour, and course of food in the gastrovascular system).

Kramp 1961: 31 (list of records, including W coast)

Mackie and Mackie 1964: 64 (Puget Sd., one of the most common forms in the surface waters; phototropism)
Bishop et al. 1966: 155 (Str. of Georgia)
Fulton et al. 1967: 117 (Str. of Georgia)
Stephens et al. 1967: 68 (Saanich Inlet, June-July)
Fulton et al. 1968: 147 (Str. of Georgia)
Fulton et al. 1969: 80 (Saanich Inlet, May-July)

Sarsia sp.

- Williamson 1930: 154 (B.C.; relative abundance)
Shelford 1935: 262 (San Juan Is. area; relative abundance)

FAMILY PANDEIDAE

Catablema vesicarium (A. Agassiz, 1862)

- Foerster 1923: 242 (Vancouver Is., 3 specimens)
Clemens 1933: 14 (Canadian Pac. waters)
Kramp 1961: 96 (list of records, including W coast)
Kramp 1968: 50 (distribution, including W coast)

Endocrypta huntsmani (Fraser, 1911)

- Foerster 1923: 239 (B.C. and Puget Sd. area; no specimen seen?)
Kramp 1961: 99 (list of records)

²⁵fide Mackie and Mackie (1964: 64).

- Kramp 1968: 138, tab. 2 (distribution, including W coast)
- Halimedusa typus* Bigelow, 1916
- Bigelow 1916: 91, pl. 1 (off Amphitrite Pt., Sept., surface; original description)
- Foerster 1923: 239 (Vancouver Is.; no actual specimens seen)
- Clemens 1933: 14 (Canadian Pac. waters)
- Kramp 1961: 100 (list of records)
- Kramp 1968: 38 (distribution)
- Halitholus pauper* Hartlaub, 1913
- Foerster 1923: 240, pl. 1, fig. 2-3 (Vancouver Is., 5 specimens)
- Clemens 1933: 14 (Canadian Pac. waters)
- Kramp 1961: 101 (list of records, including W coast)
- Kramp 1968: 45 (distribution, including W coast)
- Leuckartiara breviconis* (Murbach and Shearer, 1902)
- Foerster 1923: 241, pl. 2, fig. 1-3 (B.C. coast N of Vancouver Is. and Vancouver Is. region, five specimens)
- Clemens 1933: 14 (Canadian Pac. waters)
- Kramp 1961: 103 (list of records, including W coast)
- Mackie and Mackie 1964: 68 (Friday Hbr., May, surface, not abundant)
- Kramp 1968: 48 (distribution, including W coast)
- Leuckartiara nobilis* (Hartlaub, 1913)
- Foerster 1923: 242, pl. 1, fig. 6 (B.C. coast N of Vancouver Is., 22 specimens)
- Clemens 1933: 14 (Canadian Pac. waters)
- Kramp 1961: 104 (list of records, including W coast)
- Kramp 1968: 47 (distribution, including W coast)
- Leuckartiara octona* (Fleming, 1823)
- Foerster 1923: 240, pl. 1, fig. 4-5 (Vancouver Is. region, several specimens)
- Clemens 1933: 14 (Canadian Pac. waters)
- Kramp 1961: 105 (list of records, including W coast)
- Mackie and Mackie 1964: 68 (Friday Hbr., May, surface, not abundant)
- Neoturris pelagica* (A. Agassiz and Mayer, 1902)
- Foerster 1923: 243, pl. 2, fig. 4 (Vancouver Is., 1 specimen²⁶)
- Clemens 1933: 14 (Canadian Pac. waters)
- Kramp 1961: 109 (list of records, including W coast)
- Kramp 1968: 49 (distribution, including W coast)
- ?*Neoturris pileata* (Forskal, 1775)
- Foerster 1923: 244, pl. 2, fig. 5-6 (Vancouver Is., 1 specimen)
- Kramp 1961: 109 (list of records, including W coast)
- Kramp 1968: 50 (distribution, including Foerster's 1923 doubtful record)
- Pandea rubra* Bigelow, 1913
- Clemens 1933: 14 (Canadian Pac. waters)
- Stomotoca atra* L. Agassiz, 1862
- Agassiz, L., 1862: 347 (G. of Georgia; refers to A. Agassiz's material)
- Agassiz, A., 1865: 168, fig. 271-273 (Str. of Rosario, beginning of June, quite common; G. of Georgia and neighborhood of Port Townsend, summer till Sept., several specimens)
- Mayer 1910: 111 (Port Townsend, June-Sept.; refers apparently to Agassiz's record).
- Bovard and Osterud 1918: 128 (Friday Hbr., summer, common)
- Child 1918: 49 (Friday Hbr., summer, considerable numbers)
- Harvey 1921: 280, etc. (Friday Hbr., very common; luminescence)
- Foerster 1923: 239 (B.C. coast N of Vancouver Is., Vancouver Is., and San Juan Archipelago)
- Strong 1925: 384 (Friday Hbr., July)
- Wailes 1929: 165 (Vancouver Is.)
- Fraser 1932: 52 (Nanaimo and San Juan Archipelago)
- Clemens 1933: 14 (Canadian Pac. waters)
- Hyman 1940: 286, etc., fig. 4 (Friday

²⁶ Tentatively identified.

Hbr., summer, very abundant; behaviour, course of food in the gastrovascular system)

Kramp 1961: 115 (list of records, including W coast)

Mackie and Mackie 1964: 69 (Friday Hbr., Apr.-June, abundant)

Kramp 1968: 44 (distribution, including W coast)

Stomotoca sp.

Shelford 1935: 262 (San Juan Is.; relative abundance)

FAMILY POLYORCHIDAE

Polyorchis penicillatus (Eschscholtz, 1829)

Agassiz, L., 1862: 349 (G. of Georgia; refers to A. Agassiz's material)

Agassiz, A., 1865: 119, etc., fig. 179-183 (G. of Georgia)

Murbach and Shearer 1902: 72, as *P. minuta* sp.n. (Puget Sd., summer)

Murbach and Shearer 1903: 174, Pl. 19, fig. 3, pl. 22, fig. 1, as *P. minuta* sp.n. (Puget Sd.)

Mayer 1910: 219, as *P. minuta* (Puget Sd.; apparently only a quotation of previous record)

Bovard and Osterud 1918: 129, as *P. minuta* (Friday Hbr., summer; relative abundance)

Foerster 1923: 250, as *P. penicillata* (Vancouver Is. region, 28 specimens)

Kramp 1928: 60 (Vancouver)

Wailes 1929: 165 (Vancouver Is.)

Fraser 1932: 52 (Nanaimo region and San Juan Archipelago)

Clemens 1933: 15 (Canadian Pac. waters)

Kramp 1961: 126 (list of records, including W coast)

Mackie and Mackie 1964: 69 (Friday Hbr., May, 1 immature specimen)

Kramp 1968: 59 (distribution, including W coast)

Polyorchis sp.

Shelford 1935: 262 (San Juan Is.; relative abundance)

FAMILY RATHKEIDAE

Rathkea octopunctata (M. Sars, 1835)

McMurrich 1916: 76, etc., as *R. blumenbachii* (Esperanza Inlet and Nootka Sd., Sept., patches of "brown water")

Foerster 1923: 247, as *R. blumenbachii* (Departure Bay, several specimens)

Wailes 1929: 165, as *R. blumenbachii* (Vancouver Is.)

Clemens 1933: 14, as *R. blumenbachii* (Canadian Pac. waters)

Kramp 1961: 72 (list of records, including W coast)

Fulton 1968: 11, text-fig. (Str. of Georgia, summer, surface, rare)

FAMILY TUBULARIIDAE

Euphysa flammea (Linko, 1905)

Foerster 1923: 236, pl. 1, fig. 1, as *Sarsia flammea* (B.C. coast N of Vancouver Is. and Vancouver Is., 30 specimens)

Wailes 1929: 165, as *Sarsia flammea* (Vancouver Is.)

Fraser 1932: 52, as *Sarsi* [sic] *flammea* (Nanaimo and San Juan Archipelago)

Clemens 1933: 14, as *Sarsia flammea* (Canadian Pac. waters)

Kramp 1961: 37 (list of records, including W coast)

Mackie and Mackie 1964: 64, fig. 1a-1d (Puget Sd.; physiology, luminescence, and colour).

Kramp 1968: 10 (distribution, including W coast)

Euphysa japonica (Maas, 1909)

Kramp 1928: 30, fig. 2-7 (Vancouver)

Clemens 1933: 14, as *Sarsia japonica* (Canadian Pac. waters)

Kramp 1961: 38 (list of records, including W coast)

Kramp 1968: 10 (distribution, including W coast)

Euphysa tentaculata Linko, 1905

Mackie and Mackie 1964: 66 (Friday Hbr., June, surface, 1 specimen; resistance to anaesthesia)

Hybocodon prolifer L. Agassiz, 1862

- Fraser 1915: 130, pl. 10, fig. 24b (Departure Bay, Feb.)
Foerster 1923: 235 (Vancouver Is.; no actual specimens seen)
Clemens 1933: 14 (Canadian Pac. waters)
Kramp 1961: 43 (list of records, including W coast)
Mackie and Mackie 1964: 67 (Friday Hbr., Apr., abundant)
Bishop et al. 1966: 155, as *Hydodon [sic] prolifera* (Str. of Georgia)
Fulton et al. 1967: 117, as *Hydodon [sic] prolifera* (Str. of Georgia)
Stephens et al. 1967: 68, as *Hydodon [sic] prolifera* (Saanich Inlet, June-July)
Fulton 1968: 11, etc., text-fig., as *H. prolifera* (Str. of Georgia, summer, surface, rare)
Fulton et al. 1968: 147, as *Hydodon [sic] prolifera* (Str. of Georgia)
Kramp 1968: 12, as *H. profiler* [sic].²⁷ (distribution, including W coast)
Fulton et al. 1969: 80 (Saanich Inlet, June-July)

ORDER LEPTOMEDUSAE

FAMILY AEQUOREIDAE

Aequorea aequorea (Forskal, 1775)

- Agassiz, L., 1862: 360, as *Crematostoma flava* (G. of Georgia; refers to A. Agassiz's material)
Agassiz A., 1865: 108, etc., fig. 159a, as *Crematostoma flava* (G. of Georgia, June)
Fraser 1916: 97, fig. 1-8, as *A. forskalea* (Departure Bay and neighbouring waters, Apr.-May, large number; development of the radial canals, tentacles, lithocysts, excretory pores, and lip folds)
Bovard and Osterud 1918: 129, as *A. forskalea* (Friday Hbr., June-Aug., abundant)
Harvey 1921: 280, etc., as *A. forskalea* (Friday Hbr., very common; bioluminescence).

²⁷In text, only.

- Weese and Townsend 1921: 117, as *Aequoria aequoria* [sic]. (Puget Sd., July, very abundant)
Foerster 1923: 263 (Str. of Georgia, in great number throughout the year)
Wailes 1929: 165 (Vancouver Is.)
Fraser 1932: 52 (Nanaimo and San Juan Archipelago)
Clemens 1933: 15 (Canadian Pac. waters)
Shelford 1935: 262, as *A. forskalea* (San Juan Is.; relative abundance)
Hyman 1940: 282, etc., fig. 7 (Friday Hbr., summer, very abundant; water-content, behaviour, and digestion)
Kramp 1961: 203 (list of records, including W coast)
Carl 1963: 100, text-fig., as *Aquorea aquorea* [sic] (B.C.; size)
Mackie and Mackie 1964: 74 (Friday Hbr., very abundant)
Bishop et al. 1966: 155 (Str. of Georgia)
Fulton et al. 1967: 117 (Str. of Georgia)
Stephen et al. 1967: 68 (Saanich Inlet, June-July)
Fulton 1968: 11, text-fig. (Str. of Georgia, summer-fall, surface, common)
Fulton et al. 1968: 147 (Str. of Georgia)
Fulton et al. 1969: 80 (Saanich Inlet, May-July)

Aequorea ciliata Eschscholtz, 1829²⁸

- Agassiz, L., 1862: 359 (NW coast of N America; refers to Eschscholtz's material)
Agassiz, A., 1865: 109, etc., (G. of Georgia and Juan de Fuca Str.)

Aequorea coerulescens (Brandt, 1838)

- Agassiz, A., 1865: 108, etc., as *Zygodactyla coerulescens* (G. of Georgia and Juan de Fuca Str.)
Child 1918: 49, etc., (Friday Hbr., summer; relative abundance and physiological senescence)
Foerster 1923: 263 (San Juan Archipelago; no actual specimens seen)
Kramp 1961: 205 (list of records, including W coast)

²⁸Mayer (1910: 325) considers this species too vaguely described for recognition.

Aequorea victoria (Murbach and Shearer, 1902)²⁹

Murbach and Shearer 1902: 72, as *Mesonema victoria* sp.n. (Victoria Hbr. and Puget Sd., summer; relative abundance)

Murbach and Shearer 1903: 180, pl. 19, fig. 1, lb, pl. 22, fig. 2, as *Mesonema victoria* sp.n. (Victoria and Esquimalt harbours, and Pleasant Beach; relative abundance and time of occurrence)

Mayer 1910: 330, as *A. "victoria"* (Victoria and Esquimalt harbours; apparently no actual specimens seen)

Strong 1925: 385, fig. 16 (Friday Hbr., July-Aug.)

Aequorea sp.

Fraser 1911: 43 (Vancouver Is., very abundant)

Fraser 1914: 157 (Dodd Narrows, abundant at almost all times of the year)

Fraser 1919: 142 (B.C., time of occurrence, relative abundance)

Williamson 1930a: 154 (B.C., abundant at times)

Fraser 1938: 92 (W coast of Queen Charlotte Is., June-July, surface)

FAMILY CAMPANULARIIDAE

Obelia spp.

Agassiz, A., 1865: 94, etc., as *Laomedea pacifica* (G. of Georgia, June)

Mayer 1910: 252, etc., as *O. surcularis* and *O. gracilis* (Puget Sd.)

Fraser 1914: 153, as *O. longissima* (Departure Bay)

Foerster 1923: 256, as *O. borealis* (no actual specimens seen)

Foerster 1923: 257, as *O. longissima* (Departure Bay; relative abundance)

Foerster 1923: 257, as *O. plicata* (no actual specimens seen)

Smith 1928: 289, as *Obelia* sp. (Sidney, summer, over the clam beds with the tide in, not very common)

Wailes 1929: 165 (Vancouver Is.)

²⁹Doubtful species, *fide* Kramp (1961: 209) and (1968: 100).

Fraser 1932: 52 (Nanaimo and San Juan Archipelago, common)

Clemens 1933: 15 (Canadian Pac. waters)

Smith 1933: 239 (Vancouver Is., summer,

small numbers)

Kramp 1961: 162 (list of records of several species, including W coast)

Obelia sp.?

Foerster 1923: 258 (Vancouver Is., one specimen)

Phialidium gregarium (L. Agassiz, 1862)

Agassiz, L., 1862: 353, as *Oceania gregaria* (G. of Georgia, May-Sept.; refers to A. Agassiz's material)

Agassiz, A., 1865: 74, etc., fig. 103, as *Oceania gregaria* (G. of Georgia, June-Oct.)

Anonymous 1898: 108, as *Oceania gregaria* (Str. of Georgia)

Murbach and Shearer 1903: 179, pl. 20, fig. 1-la (Victoria Hbr., summer, and Puget Sd.)

Mayer 1910: 272 (Victoria Hbr. and Puget Sd.; refers only to published records, apparently)

Bovard and Osterud 1918: 218 (Friday Hbr., summer, abundant)

Child 1918: 49, etc. (Friday Hbr., summer, considerable numbers; physiological senescence)

Harvey 1921: 280, etc. (Friday Hbr., very common; luminescence)

Foerster 1923: 259, as *P. languidum* var. *gregarium* (Vancouver Is., Friday Hbr., and Str. of Georgia; relative abundance)

Strong 1925: 384, fig. 1-2, (Friday Hbr., June-July)

Wailes 1929: 165, as *P. languidum* var. *gregarium* (Vancouver Is.)

Fraser 1932: 52, as *P. languidum* (var. *gregarium*) (Nanaimo region and San Juan Archipelago)

Clemens 1933: 15, as *P. languidum* var. *gregarium* (Canadian Pac. waters)

Shelford 1935: 262 (San Juan Islands; relative abundance)

Hyman 1940: 282, etc., fig. 1-3, 6 (Friday Hbr., summer, very abundant; water-content, behaviour, and course of food in the gastrovascular system)

- Bonner 1955: 18 (Puget Sd.; physiology)
 Kramp 1961: 167, etc. (list of records)
 Kramp 1962: 25 (Friday Hbr., June and Aug.; redefinition of the species and neotypes designated)
 Roosen-Runge 1962: 15, etc., fig. 1-5 (Friday Hbr.; abundance, time of occurrence, and biology of the sexual reproduction)
 Mackie and Mackie 1964: 74 (Friday Hbr., one of the most common medusae)
 Roosen-Runge and Szollosi 1965: 598, etc., text-fig. (Friday Hbr.; spermatogenesis)
 Bishop et al. 1966: 155, as *Philidium [sic] gregarium* (Str. of Georgia)
 Barracough 1967a: 10 (Str. of Georgia, June)
 Barracough and Fulton 1967: 6, etc., as *Philidium [sic] gregarium* (S part of Str. of Georgia, July)
 Fulton et al. 1967: 117, as *Philidium [sic] gregarium* (Str. of Georgia)
 Stephens et al. 1967: 68, as *Philidium [sic] gregarium* (Saanich Inlet, June-July)
 Fulton 1968: 11, etc., text-fig. (Str. of Georgia, summer, surface, abundant)
 Fulton et al. 1968: 147, as *Philidium [sic] gregarium* (Str. of Georgia)
 Kramp 1968: 138, tab. 2 (distribution, including W coast)
 Fulton et al. 1969: 80, as *Philidium [sic] gregarium* (Saanich Inlet, May-July)

- Phialidium hemisphaericum* (Linnaeus, 1767)
 Roosen-Runge 1962: 15, etc.³⁰ (Friday Hbr.; aspects of the biology of the sexual reproduction)
 Roosen-Runge and Szollosi 1965: 598, etc., text-fig. (Friday Hbr.; spermatogenesis)
Phialidium languidum (A. Agassiz, 1862)
 Murbach and Shearer 1903: 179 (Victoria Hbr., summer)
 Mayer 1910: 269 (Puget Sd.; refers to Murbach and Shearer's record)

- Foerster 1923: 259 (no actual specimens seen)
 Clemens 1933: 15 (Canadian Pac. waters)

Phialidium sp.

- Fraser 1938: 92 (Queen Charlotte Is., June-July, surface)
 Stephens et al. 1969, fig. 63-65, as *Philidium* [sic] sp. (Str. of Georgia)

Phialidium spp.

- Wailes 1929: 165, as *Clytia* spp. (Vancouver Is.)

FAMILY EIRENIDAE

Eirene mollis Torrey, 1909

- Kramp 1965: 77 (Str. of Georgia, June, surface, 1 specimen)
 Kramp 1968: 91 (distribution, including W coast)

FAMILY EUTIMIDAE

Eutonina indica (Romanes, 1876)

- Foerster 1923: 262 (Vancouver Is., numerous specimens)
 Clemens 1933: 15 (Canadian Pac. waters)
 Kramp 1961: 200 (list of records, including W coast)
 Kramp 1968: 94 (distribution, including W coast)

FAMILY LAODICEIDAE

Ptychogena lactea A. Agassiz, 1865

- Mackie and Mackie 1964: 70 (Friday Hbr., May-June, 2 specimens)

Staurophora purpurea Foerster, 1923³¹

- Foerster 1923: 250, pl. 4, fig. 2-5 (Entrance Is., 1 specimen; original description)
 Clemens 1933: 14 (Canadian Pac. waters)

³⁰On this record of *P. hemisphaericum* from Friday Hbr., see however Kramp (1962: 28) and (1965: 61).

³¹Systematic position doubtful, *fide* Kramp (1961: 149) and (1968: 68).

FAMILY MELICERTIDAE

Melicertum georgicum A. Agassiz, 1862

- Agassiz, L., 1862: 345 (G. of Georgia, July; refers to A. Agassiz's material)
Agassiz, A., 1865: 135, etc., fig. 215-216 (G. of Georgia, summer)
Mayer 1910: 209 (no actual specimens seen)
Clemens 1933: 14 (Canadian Pac. waters)
Kramp 1961: 136 (list of records)
Kramp 1968: 63 (distribution)

Melicertum octocostatum (M. Sars, 1835)

- Foerster 1923: 249, as *M. campanula* (Vancouver Is., May-Oct., and Banks Is.)
Clemens 1933: 14, as *M. campanula* (Canadian Pac. waters)
Kramp 1961: 136 (list of records, including W coast)
Mackie and Mackie 1964: 69, fig. 2a-b (Friday Hbr., May, surface, a few specimens)
Kramp 1968: 63 (distribution, including W coast)

FAMILY MITROCOMIDAE

Halistaura cellularia (A. Agassiz, 1862)

- Agassiz, L., 1862: 350, as *Laodicea cellularia* (G. of Georgia, July-Sept.; refers to A. Agassiz's material)
Agassiz, A., 1865: 127, etc., as *Laodicea cellularia* (G. of Georgia and Port Townsend, July-Sept.)
Murbach and Shearer 1903: 173, pl. 17, fig. 2, 2a-b, as *Thaumantias cellularia* (Victoria Hbr., July, and Friday Hbr.)
Mayer 1910: 199, as *Thaumantias cellularia* (Wash. State, abundant during summer and autumn)
Bovard and Osterud 1918: 129, as *Thaumantias cellularia* (Friday Hbr., June-Aug., abundant at almost any time)
Harvey 1921: 280, etc., as *Mitrocoma cellularia* (Friday Hbr., very common; bioluminescence)
Foerster 1923: 254, pl. 5, fig. 1-2 (Vancouver Is. and Friday Hbr., numerous specimens)
Wailes 1929: 165 (Vancouver Is.)

Fraser 1932: 52 (Nanaimo region and San Juan Archipelago)

Clemens 1933: 15 (Canadian Pac. waters)
Shelford 1935: 262, as *Thaumanthias cellularia* (San Juan Is., abundant during the summer)

Hyman 1940: 282, etc. (Friday Hbr., summer, in great abundance at practically any time; water content, behaviour, and course of food in the gastrovascular system)

Kramp 1961: 153 (list of records, including W coast)

Mackie and Mackie 1964: 70, fig. 3 (Friday Hbr., one of the most common medusae; marginal cirri)

Kramp 1968: 73 (distribution, including W coast)

Halistaura sp.

Fraser 1938: 92 (Queen Charlotte Is., June-July, surface)

Mitrocoma discoidea Torrey, 1909

Child 1918: 49, etc. (Friday Hbr., summer, in considerable numbers; physiological senescence)

Foerster 1923: 253 (Vancouver Is., 4 specimens)

Kramp 1932: 349, fig. 22, 33, 41 (near Vancouver)

Clemens 1933: 15 (Canadian Pac. waters)

Kramp 1961: 154 (list of records, including W coast)

Kramp 1968: 72 (distribution, including W coast)

Mitrocomella polydiademata (Romanes, 1876)

Mackie and Mackie 1964: 74 (Friday Hbr., May-June, fairly frequent)

Mitrocomella sinuosa (Foerster, 1923)

Foerster 1923: 253, pl. 4, fig. 6, as *Mitrocoma sinuosa* (Vancouver Is., 1 specimen; original description)

Kramp 1932: 343, fig. 38 [not original] (N of Five Fingers Is.)

Clemens 1933: 15, as *Mitrocoma sinuosa* (Canadian Pac. waters)

Kramp 1961: 157 (synonymy and list of records)

Kramp 1968: 72 (distribution)

Tiaropsisidium kelseyi Torrey 1909

- Foerster 1923: 255, pl. 5 (Vancouver Is., 1 specimen)
Clemens 1933: 15 (Canadian Pac. waters)
Kramp 1961: 158 (list of records, including W coast)
Kramp 1968: 74 (distribution, including W coast)

ORDER LIMNOMEDUSAE

FAMILY OLINDIIDAE

Eperetmus typus Bigelow, 1915

- Foerster 1923: 263 (Vancouver Is. region, several specimens)
Fraser 1932: 52 (Nanaimo region, and San Juan Archipelago; relative abundance)
Clemens 1933: 15 (Canadian Pac. waters)
Kramp 1961: 222 (list of records, including W coast)
Mackie and Mackie 1964: 74, fig. 1e-h, 4-5 (Friday Hbr., May, 1 specimen; colour)
Kramp 1968: 104 (distribution, including W coast)

Gonionemus vertens A. Agassiz, 1862

- Agassiz, L., 1862: 350 (G. of Georgia; refers to A. Agassiz's material)
Agassiz, A., 1865: 128, etc., fig. 197-200 (G. of Georgia)
Murbach and Shearer 1903: 183 (Victoria Hbr., G. of Georgia, Matsmets Bay, and Puget Sd.; swimming behaviour at Victoria Hbr.)
Mayer 1910: 343 (G. of Georgia, July, among the kelp near shore, and Puget Sd.; refers, apparently, to published records)
Fraser 1914: 15 (G. of Georgia; relative abundance)
Foerster 1923: 264 (Str. of Georgia and Vancouver Is. region)
Wailes 1929: 165 (Vancouver Is.)
Clemens 1933: 15 (Canadian Pac. waters)
Hyman 1940: 282, etc. (Friday Hbr., summer; tentacular bulbs)
Kramp 1961: 223 (list of records, including W coast)

Mackie and Mackie 1964: 77 (Victoria, Sechelt Inlet, and San Juan Is.; relative abundance)

Kramp 1968: 106 (distribution, including W coast)

Gonionemus sp.

- Fraser 1919: 142 (B.C.; time of occurrence, relative abundance)

FAMILY PROBOSCIDACTYLIDAE

Pochella polynema Hartlaub, 1917

- Foerster 1923: 248, pl. 3, fig. 5-7, pl. 4, fig. 1, as *Proboscidactyla polynema* (Vancouver Is., 25 specimens)
Clemens 1933: 14, as *Proboscidactyla polynema* (Canadian Pac. waters)
Kramp 1961: 233 (list of records, including W coast)
Kramp 1968: 109 (distribution, including W coast)

Proboscidactyla flavicirrata Brandt, 1835

- Agassiz, L., 1862: 346, as *P. flavicirrhata* [sic] (G. of Georgia; refers to A. Agassiz's material)
Agassiz, A., 1865: 173, etc., fig. 280-282 (G. of Georgia, July, 2 specimens)
Murbach and Shearer 1903: 178, as *P. brevicirrata* (Victoria Hbr., summer, and Pleasant Beach)
Mayer 1910: 189 (Puget Sd.; apparently no actual specimens seen)
Foerster 1923: 247 (Str. of Georgia, Apr.-Nov., very common, and Vancouver Is. region)
Kramp 1928: 62 (Vancouver; variation)
Fraser 1932: 52 (Nanaimo region and San Juan Archipelago)
Clemens 1933: 14 (Canadian Pac. waters)
Kramp 1961: 234 (list of records, including W coast)
Mackie and Mackie 1964: 78, fig 2c-f (Gulf Is., N of Vancouver, and Friday Hbr.; relative abundance in Puget Sd.)
Stephens et al. 1967: 68, as *Proboscidactyla* [sic] *flavicirrata* (Saanich Inlet, June-July)
Fulton 1968: 12, etc., text-fig. (Str. of Georgia, summer, surface, common)

- Kramp 1968: 108 (distribution, including W coast)
 Fulton et al. 1969: 80, as *Probosisdactyla* [sic] *flavicirrata* (Saanich Inlet, May-July)

ORDER TRACHYMEDUSAE

FAMILY RHOPALONEMATIDAE

Aglantha digitale (O. F. Müller, 1776)

- Agassiz, A., 1865: 55, etc., fig. 76-80, as *Thachynema camschaticum* (Galiano Is., a few specimens)
 Mayer 1910: 402 (not original, refers to Agassiz, 1865)
 Foerster 1923: 265 (Vancouver Is. region, about 150 specimens)
 Wailes 1929: 165 (Vancouver Is.)
 Fraser 1932: 52 (Nanaimo region and San Juan Archipelago; relative abundance)
 Clemens 1933: 15 (Canadian Pac. waters)
 Kramp 1961: 248 (list of records, including W coast)
 Mackie and Mackie 1964: 78 (Friday Hbr., surface, frequent)
 Bishop et al. 1966: 155 (Str. of Georgia)
 Barracough and Fulton 1967: 6 (S part of Str. of Georgia, July)
 Fulton et al. 1967: 117 (Str. of Georgia)
 LeBrasseur and Fulton 1967: 10, text-fig. (Str. of Georgia, deep water)
 Stephens et al. 1967: 68 (Saanich Inlet, June-July)
 Fulton 1968: 12, etc., text-fig. (Str. of Georgia, summer, deep, common)
 Fulton et al. 1968: 147 (Str. of Georgia)
 Kramp 1968: 121 (distribution, including W coast)
 Fulton et al. 1969: 80 (Saanich Inlet, May-July)

Aglantha sp.

- Agassiz, L., 1862: 349, as *Circe impatiens* (G. of Georgia; refers to A. Agassiz's material)

Aglantha sp.?

- Harvey 1921: 280, etc., as *Melicerta* sp.? (Friday Hbr.; bioluminescence)

Crossota norvegica Vanhöffen, 1902?

- Clemens 1933: 15, as *C. brunnea* var. *norvegica* [sic] (Canadian Pac. waters)

ORDER NARCOMEDUSAE

FAMILY AEGINIDAE

Aegina citrea Eschscholtz, 1829

- Foerster 1923: 268, as *A. rosea* (Five Finger Is., July, 1 specimen, and Nov., 19 specimens)
 Wailes 1929: 165, as *A. rosea* (Vancouver Is.)
 Fraser 1932: 52, as *A. rosea* (Nanaimo, rather common at depth, and San Juan Archipelago)
 Clemens 1933: 15, as *A. rosea* (Canadian Pac. waters)
 Kramp 1961: 266 (list of records, including W coast)
 Mackie and Mackie 1964: 79 (Friday Hbr., May-June, at night, surface)
 Bishop et al. 1966: 155 (Str. of Georgia)
 Fulton et al. 1967: 117 (Str. of Georgia)
 Stephens et al. 1967: 68 (Saanich Inlet, June-July)
 Fulton 1968: 12 etc., text-fig., as *A. citrea* [sic] (Str. of Georgia, all year, deep, common)
 Fulton et al. 1968: 147 (Str. of Georgia)
 Fulton et al. 1969: 80 (Saanich Inlet, May-July)

FAMILY CUNNINIDAE

Solmissus incisa (Fewkes, 1886)

- Clemens 1933: 15 (Canadian Pac. waters)

Solmissus marshalli Agassiz and Mayer, 1902

- Mackie and Mackie 1964: 79, fig. 6 (Friday Hbr., surface, not uncommon; occurrence of larvae and sexually mature specimens, colour, and swimming behaviour)

<i>Solmissus</i> sp.	ORDER SIPHONOPHORA Suborder Cystonectae
Fraser 1932: 52, as <i>Solmissus</i> sp. undescribed (Nanaimo, San Juan Archipelago, and Friday Hbr.)	
ORDER CHONDROPHORA	FAMILY PHYSALIIDAE
	<i>Physalia physalis</i> (Linnaeus, 1758) Agassiz, A., 1865: 217, etc., as <i>Physalia</i> sp. (G. of Georgia, Oct., in company with <i>Velella velella</i>)
FAMILY PORPITIDAE	Suborder Physonectae
<i>Porpita</i> sp.	
Agassiz, A., 1865: 222 (G. of Georgia)	
FAMILY VELELLIDAE	FAMILY AGALMIDAE
<i>Velella velella</i> (Linnaeus, 1758)	<i>Agalma elegans</i> (M. Sars, 1846)
Agassiz, A., 1865: 217, etc., as <i>V. septentrionalis</i> (Juan de Fuca Str., Oct., numerous specimens, and G. of Georgia)	Berkeley and Berkeley 1960: 795 (W of Graham Is., 150-0 m, 5 larvae, identified by G. O. Mackie)
Wailes 1929: 162, as <i>V. lata</i> and <i>V. pacifica</i> (Vancouver Is.; time of occurrence of different sizes)	<i>Nanomia cara</i> A. Agassiz, 1865
Clemens 1933: 15, as <i>V. lata</i> (Canadian Pac. waters)	Berkeley and Berkeley 1960: 796, as <i>Nanomia</i> sp. (? <i>N. cara</i>) (Oak Bay, surface, 2 specimens, between Sidney Is. and Forest Is., one specimen, identified by G. O. Mackie)
Carl 1948: 158 (Juan de Fuca Str., spring, large numbers; occurrence in Vancouver Is.)	Mackie 1962: 689 (Friday Hbr., June; chromatophore complexes and bioluminescence)
<i>Velella</i> sp.	Mackie and Boag 1963: 178 (Friday Hbr.)
Anonymous 1898: 108 (Vancouver Is. and Queen Charlotte Is.)	Mackie 1964: 366, etc., fig. 1-9 (Friday Hbr., May-July, surface, occurring with fair regularity, although never in abundance; analysis of locomotion)
Nichols 1926: 612 (W of Queen Charlotte Is., July-Aug., filling a band of water several miles wide)	Fulton 1968: 17 (Oak Bay, Sidney Is., and Friday Hbr.; no actual specimens seen)
Hubbs and Schultz 1929: 235 (W of Queen Charlotte Is.; not original, quoted from Nichols, above)	<i>Nanomia cara</i> A. Agassiz, 1865? ³²
Williamson 1930a: 155, fig. 5 (several localities in B.C.; relative abundance)	Berkeley and Berkeley 1960: 795, as <i>N. bijuga</i> (Oak Bay, surface, 2 specimens; Friday Hbr., night, surface, 12 specimens, identified by G. O. Mackie; bioluminescence)
Williamson 1930b: 204 (Vancouver Is., June, fish stomach)	Bishop et al. 1966: 155, as <i>N. bijuga</i> (Str. of Georgia)
Carter 1943: 7 (B.C.; stinging effect in humans)	
Pritchard and Tester 1944: 16 (B.C., fish stomach)	

³²In the Vancouver Is. area only *N. cara* seems to be present, *fide* Mackie (1964: 367).

- Fulton et al. 1967: 117, as *N. bijuga* (Str. of Georgia) *Diphyes* sp.
- Stephens et al. 1967: 68, as *N. bijuga* (Saanich Inlet, June-July)
- Fulton 1968: 18, as *N. bijuga* (Oak Bay and Friday Hbr.; no actual specimens seen)
- Fulton et al. 1968: 147, as *N. bijuga* (Str. of Georgia)
- Fulton et al. 1969: 80, as *N. bijuga* (Saanich Inlet, May-July)
- Bovard and Osterud 1918: 129 (Friday Hbr., summer; relative abundance)
- Fraser 1932: 53 (Nanaimo and San Juan Archipelago; relative abundance)
- Fraser 1938: 90, etc. (Queen Charlotte Is., July, surface; relative abundance)

FAMILY FORSKALIIDAE

Forskalia sp.

- Berkeley and Berkeley 1960: 795 (W of Graham Is., 100-0 m, 1 juvenile identified by G. O. Mackie)

Suborder Calycophorae

FAMILY DIPHYIDAE

Chelophyes appendiculata (Eschscholtz, 1829)

- McMurrich 1916: 76, etc., as *Diphyes appendiculata* (Vancouver Is., Sept., patches of "brown water"; relative abundance)
- Wailes 1929: 163, as *Diphyes appendiculata* (Vancouver Is., generally distributed and often numerous)
- Clemens 1933: 15, as *Diphyes appendiculata* (Canadian Pac. waters)
- Fulton 1968: 18 (Burke Channel; no actual specimens seen)

Dimophyes arctica (Chun, 1897)

- Clemens 1933: 15, as *Diphyes arctica* (Canadian Pac. waters)
- Bishop et al. 1966: 155 (Str. of Georgia)
- Fulton et al. 1967: 117 (Str. of Georgia)
- Stephens et al. 1967: 68 (Saanich Inlet, June-July)
- Fulton 1968: 17 (Str. of Georgia, all year, deep, common)
- Fulton et al. 1968: 147 (Str. of Georgia)
- Fulton et al. 1969: 80 (Saanich Inlet, May-July)

Lensia baryi Totton, 1965

- Totton 1965a: 73, text-fig. (Burke Inlet; original description)
- Bishop et al. 1966: 155 (Str. of Georgia)
- Fulton et al. 1967: 117 (Str. of Georgia)
- Fulton 1968: 17 (Str. of Georgia, spring-summer, deep, rare)
- Fulton et al. 1968: 147 (Str. of Georgia)

Lensia baryi Totton?

- Wailes 1929: 163, as *Galeolaria (Diphyes) truncata* (Vancouver Is., generally distributed and often numerous)
- Clemens 1933: 15, as *Galeolaria truncata* (Canadian Pac. waters)
- Mackie and Mackie, 1964: 70, as *L. conoidea* (Friday Hbr., May-June)

Muggiae atlantica Cunningham, 1892

- Berkeley and Berkeley 1960: 795 (Ladysmith Hbr., 10-0 m, 13 specimens, Friday Hbr., at night, surface, 6 specimens, identified by G. O. Mackie)
- Mackie and Boag 1963: 184 (Friday Hbr.)
- Bishop et al. 1966: 155, as *Muggia [sic] atlantica* (Str. of Georgia)
- Fulton et al. 1967: 117, as *Muggia [sic] atlantica* (Str. of Georgia)
- Stephens et al. 1967: 68, as *Muggia [sic] atlantica* (Saanich Inlet, June-July)
- Fulton 1968: 18, as *Muggia [sic] atlantica* (Str. of Georgia, all year, deep, rare)
- Fulton et al. 1968: 147, as *Muggia [sic] atlantica* (Str. of Georgia)
- Fulton et al. 1969: 80, as *Muggia [sic] atlantica* (Saanich Inlet, May-July)

Muggiae kochi (Will, 1844)?

Murbach and Shearer 1903: 189³³ (Puget Sd., summer)

FAMILY PRAYIDAE

Praya reticulata (Bigelow, 1911)

Bigelow 1931: 532 (distribution, including Puget Sd.)

Totton 1965b: 123 (distribution, including Puget Sd.)

CLASS SCYPHOZOA

ORDER CORONATAE

FAMILY ATTOLIDAE

Attola wyvillei Haeckel, 1880

Clemens 1933: 16 (Canadian Pac. waters)

FAMILY PERIPHILLIDAE

Periphylla periphylla (Péron and Lesueur, 1809)

Clemens 1933: 15, as *P. hyacinthina* (Canadian Pac. waters)

ORDER SEMAEOSTOMEAE

FAMILY CYANEIDAE

Cyanea capillata (Linnaeus, 1758)

Wailes 1929: 162 (Vancouver Is.; colour)

Fraser 1932: 53 (Nanaimo region and San Juan Archipelago)

Clemens 1933: 16 (Canadian Pac. waters)

Fraser 1938: 92, as *Cyanea* sp. (Queen Charlotte Is., June-July, surface)

Carter 1943: 7 (B.C., quite common; stinging, size and colour)

Herlinveaux 1962: 34 (Saanich Inlet, Oct.,

between the surface and the echo-scattering layer, 1 specimen)

Kramp 1961: 332 (list of records, including W coast)

Carl 1963: 102, text-fig. (B.C.; size and distribution)

Barraclough and Herlinveaux 1965: 14, etc. (Saanich Inlet, Jan., a few specimens)

Cyanea postelsi Brandt, 1838³⁴

Agassiz, L., 1862: 162 (Port Townsend; refers to A. Agassiz's material)

Agassiz, A., 1865: 47, etc. (G. of Georgia and Juan de Fuca Str.; abundance)

Anonymous 1898: 108 (Victoria)

Cyanea sp.

Williamson 1930: 154 (B.C., sometimes abundant)

Cyanea sp.?

Harvey 1921: 280 (Friday Hbr., occasional)

FAMILY PELAGIIDAE

Chrysaora melanaster Brandt, 1838

Wailes 1929: 162, as *C. gilberti* (Vancouver Is.; colour)

Clemens 1933: 16, as *C. melanaster* var. *gilberti* (Canadian Pac. waters)

FAMILY ULMARIDAE

Aurelia aurita (Linnaeus, 1758)

Wailes 1929: 162 (Vancouver Is.; abundance and colour)

Fraser 1932: 53 (Nanaimo and San Juan Archipelago, abundant)

Clemens 1933: 16 (Canadian Pac. waters)

Fraser 1938: 92, as *Aurelia* sp. (Queen Charlotte Is., June-July, surface)

Kramp 1961: 337 (list of records, including W coast)

³³Murbach and Shearer's *M. kochi* is possibly a synonym of *Diphyes chamissonis*, *fide* Totton (1965b: 180). However, as the latter species is a tropico-equatorial species, it is better to treat Murbach and Shearer's record as a misidentification.

³⁴Doubtful species, *fide* Kramp (1961: 335).

Aurelia labiata Chamisso and Eysenhardt, 1821 *Phacellophora camtschatica* Brandt, 1838

Carl 1963: 101, text-fig. (B.C.; size)

Aurelia sp.

Bovard and Osterud 1918: 129 (Friday Hbr., summer; relative abundance of larvae and adults)

Fraser 1919: 142 (Departure Bay; time of occurrence, relative abundance)

Agassiz, L., 1862, as *Heccaedecomma ambiguum* (Juan de Fuca Str. and Port Townsend; refers to A. Agassiz's material)

Agassiz, A., 1865: 43, etc., as *Heccaedecomma ambiguum* (G. of Georgia, Juan de Fuca Str., and Port Townsend)

Mayer 1910: 615, as *P. ambigua* (Juan de Fuca Str. and Port Townsend; apparently no actual specimens seen and referring only to Agassiz's record)

PHYLUM CTENOPHORA

CLASS TENTACULATA

ORDER CYDIPPIDA

FAMILY MERTENSIIDAE

Mertensia sp.

Mortensen 1927: 282 (Str. of Georgia, summer, deeper strata; general shape)
Fraser 1932: 54 (Nanaimo and San Juan Archipelago, occasional)

Tinere sp.?

Mortensen 1927: 282 (Str. of Georgia, July, 400-0 m, 3 specimens; colour)

FAMILY PLEUROBRACHIIDAE

Pleurobrachia pileus (Fabricius, 1780)

Agassiz, A., 1865: 34, etc., as *P. bachei*³⁵ (G. of Georgia and entrance of Admiralty Inlet, May-Sept.)
Bigelow 1912: 376, as *P. pileus* var. *bachei* (G. of Georgia, one specimen, Puget Sd., 3 specimens)
Fraser 1919: 142, as *P. bachii* [sic] (B.C.; time of occurrence, relative abundance)
Wailes 1929: 162, also as *P. bachei* (Vancouver Is.; colour and abundance)
Fraser 1932: 54, as *P. bachei* (Nanaimo and San Juan Archipelago; relative abundance)
Clemens 1933: 17, also as *P. bachei* (Canadian Pac. waters)
Fulton 1968: 20 (Str. of Georgia, summer and fall, surface, very abundant)

Pleurobrachia sp.

Bovard and Osterud 1918: 130 (Friday Hbr., summer; relative abundance)
Smith 1933: 239 (Vancouver Is. region, summer, relative abundance)
Shelford 1935: 263 (San Juan Is.; relative abundance)
Fraser 1938: 91 (Queen Charlotte Is., June-July, shallow water among eelgrass and seaweed, abundant)
Bishop et al. 1966: 155 (Str. of Georgia)
Barracough and Fulton 1967: 4, etc. (Str. of Georgia, July)
Fulton et al. 1967: 117 (Str. of Georgia)
LeBrasseur and Fulton 1967: 10, text-fig. (B.C.; relative abundance)
Stephens et al. 1967: 68 (Saanich Inlet, June-July)
Fulton et al. 1968: 147 (Str. of Georgia)
Fulton et al. 1969: 80 (Saanich Inlet, May-July)
Seki and Kennedy 1969: 3168 (Str. of Georgia, winter, occasional)
Stephens et al. 1969, fig. 63-65 (Str. of Georgia)

Pleurobrachia sp.?

Harvey 1921: 283 (Friday Hbr.)
Williamson 1930a: 154, etc., as *Cydiipe* sp. (B.C., sometimes abundant, and Amphitrite Point, May, great numbers)

ORDER LOBATA

Beroe abyssicola Mortensen, 1927

FAMILY BOLINOPSIDAE

Bolinopsis infundibulum (Müller, 1776)

Agassiz, A., 1865: 19, etc., as *Bolina microptera*³⁶ (Str. of Rosario, June, and G. of Georgia)

³⁵fide Moser (1909: 183); see, however, Mortensen (1912: 73).

³⁶fide Moser (1909: 185).

- Wailes 1929: 162, as *B. microptera* (Vancouver Is.)
- Fraser 1932: 54, as *B. microptera* (Nanaimo and San Juan Archipelago; vertical distribution)
- Clemens 1933: 17; as *B. microptera* (Canadian Pac. waters)
- Fulton 1968: 20 (Vancouver Is., spring, surface, abundant)
- Bolinopsis* sp.
- Mortensen 1927: 282 (Str. of Georgia, summer, deeper strata)
- Fraser 1938: 92 (Queen Charlotte Is., June-July, shallow water among eelgrass and seaweed)
- Bolinopsis* sp.?
- Harvey 1921: 283, as *Bolina* sp.? (Friday Hbr.; relative abundance, bioluminescence)
- Mnemiopsis* sp.
- Bovard and Osterud 1918: 129 (Friday Hbr., summer, common)
- Shelford 1935: 262 (San Juan Is.; relative abundance)
- Berkeley 1930: 15, etc. (Str. of Georgia, never in depths less than 150 fath., frequent; colour)
- Clemens 1933: 17 (Canadian Pac. waters)
- Fulton 1968: 20, as *B. cucumis* [part] (Str. of Georgia)
- Beroe cucumis* Fabricius, 1780
- Agassiz, A., 1865: 37, etc., as *Idya cyathina*³⁸ (G. of Georgia)
- Fulton 1968: 20 [part only] (Str. of Georgia, all year, deep, rare)
- Beroe* sp.
- Bovard and Osterud 1918: 130 (Friday Hbr., July-Aug.; relative abundance)
- Fraser 1932: 54 (Nanaimo and San Juan Archipelago, occasional)
- Fraser 1938: 91 (Queen Charlotte Is., June-July, shallow water among eelgrass and seaweed, abundant)
- Bishop et al. 1966: 155 (Str. of Georgia)
- Fulton et al. 1967: 117 (Str. of Georgia)
- Fulton et al. 1968: 147 (Str. of Georgia)
- Beroe* sp.?
- Harvey 1921: 283 (Friday Hbr.; bioluminescence)

CLASS NUDA

ORDER BEROIDA

FAMILY BEROIDAE

Beroe abyssicola Mortensen, 1927

- Mortensen 1927: 277, fig. 1-3, pl. 3, fig. 1-2 (outside Departure Bay, June-July, about 400 m, several specimens; original description)
- Wailes 1929: 162, as *B. abyssorum*³⁷ (Str. of Georgia; colour)

APPENDIX

Ctenophore incertae sedis

- Mortensen 1927: 282, as ctenophore aff. *Aulacocetna*? (Str. of Georgia, July, about 400-0 m, fragments only; morphological details)

³⁷*abyssorum* is certainly a *lapsus calami* for *abyssicola*.

³⁸*fide* Moscr (1909: 184).

PHYLUM NEMERTINI

CLASS ANOPLA

ORDER HETERONEMERTINI

FAMILY LINEIDAE

Cerebratulus montgomeryi Coe, 1901

Bovard and Osterud 1918: 135 (Friday
Hbr., late summer, many pilidii)

PHYLUM ROTIFERA

CLASS MONOGONONTA

ORDER PLOIMA

FAMILY BRACHIONIDAE

Keratella cruciformis (Thompson, 1892)

Wailes 1929: 163, as *K. (Anuraea) cruciformis* (Vancouver Is.)
Wailes 1934: 2 (B.C., neritic, not very common, identified by H. K. Herring)

Notholca striata (Müller, 1786)

Wailes 1929: 163 (Vancouver Is.)
Wailes 1934: 2 (B.C., neritic, not very common, identified by H. K. Herring)

FAMILY SYNCHAETIDAE

Synchaeta baltica Ehrenberg, 1834

Wailes 1929: 163 (Vancouver Is.)
Wailes 1934: 1 (Vancouver Is. and Str. of Georgia; not original)

Synchaeta johanseni Herring, 1921

Wailes 1934: 1, etc. (Howe Sd., April, 2-0 fath, identified by E. H. Ahlstrom; relative abundance)

Synchaeta sp.

Smith 1928: 289 (Sidney, summer, over the clam beds, very common)
Wailes 1929: 163 (Vancouver Is.)

FAMILY TRICHOCERCIDAE

Trichocerca marina (Daday, 1890)

Wailes 1929: 163, as *Trichocera* [sic] (*Rattulus*) *marina* (Vancouver Is.)
Wailes 1934: 1 (Howe Sound, April, 2-0 fath, a few identified by E. H. Ahlstrom)

Trichocerca sp.

Smith 1928: 289, as *Diurella* sp. (Sidney, summer, over the clam beds, very common)

PHYLUM MOLLUSCA
CLASS GASTROPODA
SUBCLASS PROSOBRANCHIA

SUPERFAMILY LITTORINACEA

FAMILY LITTORINIDAE

Littorina sp.
Legaré 1957: 528 (Str. of Georgia, June)

SUPERFAMILY SCALACEA

FAMILY JANTHINIDAE

Janthina prolongata Blainville, 1822
Dall 1921: 117, as *J. globosa* (Puget Sd.)
Oldroyd 1927: 365, as *J. globosa* (Puget Sd.)
LaRocque 1953: 138, as *Ianthina globosa* (Puget Sd.; not original)
Bernard 1967: 90, as *Ianthina globosa* (Canadian Pac. waters; not original)

SUPERFAMILY ATLANTACEA

FAMILY ATLANTIDAE³⁹

Atlanta gaudichaudii Souleyet, 1852?
Berkeley and Berkeley 1960: 796 (SW of Queen Charlotte Is., 150-0 m, 1 specimen, identified by J. E. Morton)

³⁹Several species of *Atlanta* are listed by LaRocque (1953: 152-3) as occurring off the Canadian Pacific coast. No data is given, however, as to exact localities, and some of the names listed are junior synonyms. Bernard (1967: 66) also lists a species of *Atlanta*, without exact locality, as occurring in the Canadian Pacific waters. For a world-wide revision of the genus *Atlanta*, see Tesch (1949); additional new species in Richter (1961), and in Frontier (1966).

FAMILY CARINARIIDAE⁴⁰

Carinaria cristata (Linnaeus, 1766)

Aron 1960: a-119 (W of Vancouver Is., 60 m, 1 specimen)

FAMILY PTEROTRACHEIDAE

Pterotrachea sp.

Harrington and Griffin 1898: 164 (Puget Sd.)

SUBCLASS OPISTHOBRANCHIA

ORDER THECOSOMATA

Suborder Euthecosomata

FAMILY CAVOLINIIDAE

Cavolinia tridentata (Niebuhr, 1775)

Anonymous 1898: 90 (Vancouver Is.)
LaRocque 1953: 245, as *Cavolina occidentalis* (Canadian Pac. waters; apparently not original)

Bernard 1967: 123, as *Cavolina occidentalis* (Canadian Pac. waters; apparently not original)

Clio cuspidata (Bosc, 1802)

Bernard 1967: 124 (Canadian Pac. waters)

⁴⁰*Carinaria punctata* d'Orbigny, 1836 (= *C. lamarckii* Péron & Lesueur, 1810) and *Cardiapoda placenta* (Lesson, 1830) are mentioned (exact locality not given) as occurring off the W coast of Canada by LaRocque (1953: 152), and by Bernard (1967: 77).

Clio polita Pelseneer, 1888

Bernard 1967: 124 (Canadian Pac. waters)

Clio pyramidata Linnaeus, 1767⁴¹

Anonymous 1898: 90 (N of Queen Charlotte Is.)

LaRocque 1953: 246, as *Clio exacuta* (Canadian Pac. waters)

Aron 1960: a-119, etc., as *Euclio pyramidata* (off Vancouver Is., July and Sept., several specimens)

Aron 1962: 271, etc., as *Euclio pyramidata* (W of Vancouver Is., summer and fall)

Bernard 1967: 124 (Canadian Pac. waters)

Clio pyramidata Linnaeus, 1767?

Taylor 1899: 241, as *Cleodora occidentalis* (N of Queen Charlotte Is.)

Clemens 1933: 33, as *C. occidentalis* (Canadian Pac. waters)

LaRocque 1953: 246, as *C. occidentalis* (Canadian Pac. waters)

Bernard 1967: 124, as *C. occidentalis* (Canadian Pac. waters)

Clio recurva (Childern, 1823)

Aron 1960: a-125, as *Euclio balantium* (off Vancouver Is., July, 60-225 m, several specimens)

Clio sp.

Aron 1960: a-125, as *Euclio* sp. (off Vancouver Is., July, 60 m, 1 specimen)

Creseis acicula (Rang, 1828)⁴²

Bernard 1967: 126 (Canadian Pac. waters, no exact locality given)

Creseis virgula (Rang, 1828)⁴³

LaRocque 1953: 245, as *Styliola falcata* (Canadian Pac. waters, no exact locality given)

Diacria trispinosa (Blainville, 1821)⁴⁴

Bernard 1967: 123, as *Cavolina trispinosa* (Canadian Pac. waters, no exact locality given)

FAMILY LIMACINIDAE

Limacina helicina (Phipps, 1774)⁴⁵

LaRocque 1953: 244, also as *Spiratella pacifica*, p. 245 (Canadian Pac. waters, no exact locality given)

Aron 1960: a-119, etc. (off Vancouver Island, July and Sept., 20-225 m, a number of specimens)

Aron 1962: 271, etc. (W of Vancouver Is., summer and fall)

McGowan 1963, fig. 7, as *L. helicina*, variety B (Distribution in the N Pac., including area under consideration)

Barraclough 1967b: 5 (Str. of Georgia, June)

Barraclough and Fulton 1967: 5 (Str. of Georgia, June)

Bernard 1967: 134, also as *Spiratella pacifica*, p. 141 (Canadian Pac. waters, no exact locality given)

LeBrasseur and Fulton 1967: 11, text-fig. (B.C., surface; relative abundance)

Stephens et al. 1967: 67 (Vancouver Is., June-July)

Fulton 1968: 137 (Str. of Georgia, deep, abundant)

Paranjape 1968: 322, fig. 1-2 (Saanich Inlet, summer; also laboratory observations on egg masses and veligers)

Fulton et al. 1969: 79 (Vancouver Is., May-July)

Limacina sp.

Fulton et al. 1969a: 6, etc. (Str. of Georgia)

⁴¹Probably *C. pyramidata lanceolata* (Lesueur, 1813) (van der Spoel, *in litt.*).

⁴²Probably *C. acicula acicula* (van der Spoel, *in litt.*).

⁴³Probably *C. virgula virgula*.

⁴⁴Possibly *D. trispinosa trispinosa*, which is the form recorded in the most northern part of the range of the species.

⁴⁵Almost certainly *L. helicina pacifica*; *L. helicina acuta*, however, also probably occurs in the area (van der Spoel, *in litt.*).

Suborder Pseudothecosomata

Fulton et al. 1969 a: 6, etc. (Str. of Georgia)

FAMILY CYMBULIIDAE

Corolla spectabilis Dall, 1871

- LaRocque 1953: 246 (Canadian Pac. waters, no exact locality given)
Bernard 1967: 125 (Canadian Pac. waters, no exact locality given)

ORDER GYMNOSOMATA

FAMILY CLIONIDAE

Clione limacina (Phipps, 1774)⁴⁶

- Agersborg 1923: 329, fig. 1-2, as *C. kincaidi* sp.n. (Friday Hbr., summer, relative abundance)
Fraser 1932: 67, as *C. kincaidi* (Vancouver Is. and San Juan Archipelago; distribution)
LaRocque 1953: 247, also as *C. elegansima* and *C. kincaidi* (Canadian Pac. waters, no exact locality given)
Bernard 1967: 124, also as *C. elegansima* (Canadian Pac. waters, no exact locality given)
Stephens et al. 1967: 67 (Vancouver Is., June-July)
Fulton 1968: 137 (Str. of Georgia, deep, common)
Fulton et al. 1969: 79 (Vancouver Is., May-July)

Clione limacina (Phipps, 1774)?

- Agersborg 1923: 395, fig. 3-5, as *Trychocyclus hansineensis* sp.n.⁴⁷ (Friday Hbr.; colour)

Clione sp.

⁴⁶Represented in the area, at least from time to time, by *C. limacina limacina* and by *C. limacina minuta* Pruvot-Fol, 1926; the form *elegantissima* Dall, 1870, seems to be a valid one (van der Spoel, *in litt.*).

⁴⁷*Trychocyclus hansineensis* is a larva which does not seem to clearly differ from the larva of *C. limacina* (van der Spoel, *in litt.*).

FAMILY THLIPTODONTIDAE

Thliptodon diaphanus (Meisenheimer, 1903)?

- Berkeley and Berkeley 1960: 797 (W of Queen Charlotte Is., 300-200 m, 1 specimen, identified by J. E. Morton)

ORDER NUDIBRANCHIA

SUPERFAMILY DENDRONOTACEA

FAMILY DENDRONOTIDAE

Dendronotus sp.

- Harrington and Griffin 1898: 164 (Puget Sd.)

FAMILY FIONIDAE

Fiona pinnata (Eschscholtz, 1831)

- LaRocque 1953: 251 (Canadian Pac. waters)
Bernard 1967: 130 (Canadian Pac. waters)

FAMILY GLAUCIDAE

Glaucus atlanticus Forster, 1777⁴⁸

- LaRocque 1953: 252, as *Scyllaea pelagica* (Canadian Pac. waters)
Bernard 1967: 141, as *Scyllaea pelagica* (Canadian Pac. waters)

⁴⁸All published records of *Glaucus* s.s. refer to only one species (*G. atlanticus*) *fide* Thompson and McFarlane (1967: 121), and Thompson and Bennett (1970: 195).

CLASS LAMELLIBRANCHIATA

FAMILY VENERIDAE

ORDER EULAMELLIBRANCHIATA

Paphia sp.

Fraser 1929: 197 (Vancouver Is., Feb.;
veligers, size)

FAMILY OSTREIDAE

Saxidomus giganteus (Deshayes, 1839)

Crassostrea gigas (Thurnberg, 1973)⁴⁹

Bovard and Osterud 1918: 132 (Friday
Hbr., July, pecten larvae)

Elsey 1934: 19, etc. (Ladysmith Hbr.,

Saxidomus sp.

Fraser 1929: 197 (Vancouver Is., Aug.-
Nov.; veligers, size and relative
abundance)

⁴⁹As "Japanese oyster".

PHYLUM ANELIDA
CLASS POLYCHAETA
Subclass Errantia

FAMILY ALCIOPIDAE

Plutohelmis tenuis (Apstein, 1900)

Berkeley and Berkeley 1957: 754, fig. 2
(Queen Charlotte Is., 150-0 m; distribution)

Berkeley, C., 1967: 1052 (B.C.; not original, bibliographic references)

Rhynchonerella angelini (Kinsberg, 1866)

Berkeley, E., 1931: 76, as *Callizona angelini* (Johnstone Str. and Qualicum, 100 and 50 fath, 2 specimens)

Clemens 1933: 22, as *Callizona angelini* (Canada. Pac. waters)

Berkeley and Berkeley 1948: 40, fig. 56, as *Callizona angelini* (Vancouver Is.; distribution)

Tebble 1962: 450, etc. (W of Vancouver Is., July, 1 specimen; distribution in the N Pac.)

Bishop et al. 1966: 154, as *Callizona angelini* (Str. of Georgia)

Barracough and Fulton 1967: 4, etc., as *Callizona angelini* (Str. of Georgia, June)

Berkeley, C. 1967: 1052, as *Callizona angelini* (B.C.; not original, bibliographic references)

Fulton et al. 1967: 116, as *Callizona angelini* (Str. of Georgia)

Fulton 1968: 23 (Str. of Georgia, spring, surface, rare)

Fulton et al. 1968: 146, as *Callizona angelini* (Str. of Georgia)

Rhynchonerella gracilis Costa, 1864

Berkeley and Berkeley 1960: 790, as *Callizona nasuta* (Vancouver Is.)

Berkeley, C., 1967: 1052, as *Callizona*

nasuta (B.C.; not original, bibliographic references)

FAMILY DORVILLEIDAE

Dorvillea kefersteini (McIntosh, 1869)

Berkeley and Berkeley 1960: 791 (NW of Vancouver Is., 50-0 m, 1 specimen)

FAMILY GLYCERIDAE

Glycera nana Johnson, 1901

Wailes 1929: 164 (Vancouver Is., pelagic when swarming)

Berkeley and Berkeley 1948: 37, fig. 50-51 (Vancouver Is., autumn, swarming in shallow water)

FAMILY HESIONIDAE

Podarke pugettensis Johnson, 1901

Wailes 1929: 164 (Vancouver Is., pelagic when swarming)

FAMILY NEPHTYIDAE

Nephthys caeca (Fabricius, 1780)

Fraser 1916: 49, as *Nephthys caeca* (Vancouver Is., Sept., surface, 1 male)

FAMILY NEREIDAE

Cheilonereis cylurus (Harrington, 1897)

Wailes 1929: 164, as *Nereis cylurus* (Vancouver Is.)

Micronereis nanaimoensis Berkeley and Berkeley, 1953

Berkeley and Berkeley 1953: 85 (Nanaimo, early in the year, swarming; original description)

Neanthes virens (M. Sars, 1835)

- Berkeley, E., 1924: 293, as *Nereis virens* (Nanaimo, surface; epitoke)
Wailes 1929: 164, as *Nereis virens* (Vancouver Is.)
Berkeley and Berkeley 1948: 62, as *Nereis (Neanthes) virens* (Vancouver Is.; epitokes)

Nereis pelagica Linnaeus, 1761

- Berkeley, E., 1924: 291 (Nanaimo, summer, surface, at night; epitokes)
Berkeley and Berkeley 1948: 66, fig. 96a-b (Vancouver Is., shallow water; epitokes)

Nereis procura Ehlers, 1868

- Wailes 1929: 164 (Vancouver Is., pelagic when swarming)
Guberlet 1934: 4215 (Friday Hbr.; swarming)

Nereis vexillosa Grube, 1851

- Berkeley, E., 1924: 290 (Nanaimo, Aug., surface, at night, common; heteronereids)
Wailes 1929: 164 (Vancouver Is., pelagic when swarming)
Berkeley and Berkeley 1948: 65, fig. 94 (Queen Charlotte Is., summer, swarming inshore; heteronereids)
Carl 1963: 129, text-fig. (B.C.; swarming)

Nereis sp.

- Harrington and Griffin 1898: 164 (Puget Sd., free-swimming; colour)
Fraser 1932: 60 (Nanaimo and San Juan Archipelago)

Platynereis dumerili agassizi Ehlers, 1868

- Bovard and Osterud 1918: 134, as *Nereis agassizi* (Friday Hbr., summer; larvae, swarming of adults)
Berkeley, E. 1924: 292, as *Nereis agassizi* (Nanaimo, summer, surface, at night; epitokes)
Wailes 1929: 164, as *Nereis agassizi* and *N. notomacula* (Vancouver Is., pelagic when swarming)
Johnson 1932: 19, as *Nereis agassizi* (Friday Hbr., summer, surface)

Guberlet 1934: 4214, as *Nereis agassizi* (Friday Hbr.; swarming)
Berkeley and Berkeley 1948: 61, fig. 90 (Vancouver Is.; epitokes)

FAMILY ONUPHIDAE

Epidiopatra huperiana Augener, 1918

- Berkeley, C. 1956: 748 (Hecate Str., 100-0 ft, June, 1 specimen)
Berkeley and Berkeley 1957: 578, fig. 1 (not original, refers to C. Berkeley, 1956)
Berkeley, C., 1967: 1057 (B.C.; not original, bibliographic references)

FAMILY PILARGIDAE

Otopsis longipes Ditlevsen, 1917

- Berkeley and Berkeley 1957: 574 (G. of Georgia, 200-0 fath, 1 specimen)

FAMILY SPHAERODORIDAE

Sphaerodorum minutum (Webster and Benedict, 1887)

- Berkeley and Berkeley 1945: 330 (Queen Charlotte Sd.)

FAMILY SYLLIDAE

Autolytus cornutus A. Agassiz, 1862

- Berkeley and Berkeley 1948: 68, fig. 97-99, as *A. prismaticus* (Vancouver Is.; stolons)
Berkeley, C. 1967: 1054 (B.C.; not original, synonymy)

Autolytus cornutus A. Agassiz, 1862?

- Wailes 1929: 164, as *A. prismaticus* (Vancouver Is., pelagic when swarming)
Berkeley and Berkeley 1938: 48, as *A. prismaticus* (Departure Bay and Burrard Inlet)

Autolytus magnus E. Berkeley, 1923

- Wailes 1929: 164 (Vancouver Is.)
Berkeley and Berkeley 1938: 47 (Vancouver Is.; polybostrichus)

- Berkeley and Berkeley 1945: 318 (Vancouver Is., surface; polybostrichus)
 Berkeley and Berkeley 1948: 70, fig. 101 (Vancouver Is.; epitokes)
 Berkeley and Berkeley 1954: 458 (G. of Georgia)
 Berkeley, C., 1967: 1055 (B.C.; not original, bibliographic reference)
- Autolytus prismaticus* (Müller, 1776)
 Berkeley and Berkeley 1948: 69, fig. 100, as *A. trilineatus* (Nanaimo; polybostrichus)
 Berkeley, C., 1967: 1054 (B.C.; not original, synonymy)
- Autolytus varius* Treadwell, 1914
 Treadwell 1922: 173, fig. 1-2 (Friday Hbr., winter, surface)
 Berkeley and Berkeley 1938: 47 (Vancouver Is. and Burrard Inlet; sacconereis)
 Berkeley and Berkeley 1948: 70, fig. 2 (Nanaimo and Burrard Inlet)
 Berkeley, C., 1967: 1055 (B.C.; not original, bibliographic references)
- Autolytus verrilli* Marenzeller, 1892
 Berkeley and Berkeley 1954: 458 (G. of Georgia)
 Berkeley, C., 1967: 1055 (B.C.; not original, bibliographic reference)
- Odontosyllis parva* E. Berkeley, 1923
 Wailes 1929: 164 (Vancouver Is., pelagic when swarming)
- Odontosyllis phosphorea* Moore, 1909
 Potts 1913: 193 (Departure Bay, Aug., swarming)
 Fraser, 1916: 43 etc. (Vancouver Is., summer and fall; swarming)
 Fraser 1919: 141 (B.C., swarming)
 Fraser 1932: 59 (Nanaimo and San Juan Archipelago; swarming)
- Odontosyllis phosphorea nanaimoensis* E. Berkeley, 1923
 Wailes 1929: 164 (Vancouver Is.; pelagic when swarming)
 Berkeley and Berkeley 1942: 191 (Queen Charlotte Is.; epitokes)
- Syllis alternata* Moore, 1908
 Wailes 1929: 164 (Vancouver Is., pelagic when swarming)
- Syllis armillaris* (Müller, 1771)
 Wailes 1929: 164 (Vancouver Is., pelagic when swarming)
- Syllis elongata* (Johnson, 1901)
 Wailes 1929: 164 (Vancouver Is., pelagic when swarming)
- Syllis* sp.?
 Wailes 1929: 164, as *Pionosyllis prolifera*⁵⁰ (Vancouver Is., pelagic when swarming)
- FAMILY TOMOPTERIDAE
- Tomopteris cavallii* Rosa, 1908
 Berkeley and Berkeley 1957: 575, fig. 2 (Vancouver Is. and Queen Charlotte Is.; distribution)
 Berkeley, C. 1967: 1051 (B.C.; not original, bibliographic references)
- Tomopteris renata* E. Berkeley, 1931⁵¹
 Berkeley, E., 1924: 289, pl. 1, fig. 1-2, as *T. elegans* sp.n. (Nanaimo, surface; relative abundance)
 Wailes 1929: 163, etc., as *T. elegans* (Vancouver Is., rare)
 Berkeley, E., 1931: 75 (B.C.; *T. renata* nom.nov. for *T. elegans* E. Berkeley, 1924)
 Clemens 1933: 18 (Canadian Pac. waters)
 Berkeley and Berkeley 1948: 26, fig. 31-32 (Vancouver Is.)
 Barracough and Herlinveaux 1965: 24 (Str. of Georgia, Feb.)
 Bishop et al. 1966: 154 (Str. of Georgia)
 Berkeley, C., 1967: 1051 (B.C.; not original, bibliographic references)
 Fulton et al. 1967: 116 (Str. of Georgia)
 Fulton 1968: 23 (Str. of Georgia, deep, rare)

⁵⁰Probably a misidentification.

⁵¹Possibly a synonym of *T. pacifica* Izuka, 1914.

Fulton et al. 1968: 146 (Str. of Georgia)

FAMILY TYPHLOSCOECIDAE

Tomopteris septentrionalis Steenstrup, 1849

- Berkeley, E., 1924: 289 (Nanaimo, summer, surface, common)
Wailes 1929: 163, etc. (Vancouver Is., abundant specially in deep water)
Fraser 1932: 60, as *Tomopteris* [sic] *septentrionalis* (Nanaimo and San Juan Archipelago; relative abundance)
Clemens 1933: 18 (Canadian Pac. waters)
Berkeley and Berkeley 1942: 190 (Queen Charlotte Is.)
Berkeley and Berkeley 1948: 26, fig. 33 (B.C.)
Tebble 1962: 430 (distribution in the N Pac., including B.C.)
Bishop et al. 1966: 154 (Str. of Georgia)
Barraclough 1967b: 4, as *Tomopterus* [sic] *septentrionalis* (Str. of Georgia, June)
Barraclough and Fulton 1967: 4 (Str. of Georgia, June)
Berkeley, C., 1967: 1051 (B.C.; not original, bibliographic reference)
Fulton et al. 1967: 116, as *T. septentiro-nalis* [sic] (Str. of Georgia)
Stephens et al. 1967: 67, as *T. septentiro-nalis* [sic] (Vancouver Is., June-July)
Fulton 1968: 23 (Str. of Georgia, mid-depth and deep, abundant)
Fulton et al. 1968: 146, as *T. septentiro-nalis* [sic] (Str. of Georgia)
Fulton et al. 1969: 79 (Vancouver Is., May-July)
Stephens et al. 1969: 67 (Str. of Georgia)

Tomopteris sp.

- Campbell 1929a: 16 (Str. of Georgia, 100-50 yards, a few adults)
Barraclough 1967b: 48 (Str. of Georgia, June)
Barraclough and Fulton 1967: 14, etc. (Str. of Georgia, July, includes larvae)
LeBrasseur and Fulton 1967: 11, text-fig. (Str. of Georgia; relative abundance)
Fulton et al. 1969a: 6, etc. (Str. of Georgia)

Tomopteris spp.

- Legaré 1957: 531 (Str. of Georgia, Nov.)

Sagittella kowalewskii Wagner, 1872

- Berkeley, E., 1931: 76 (Vancouver Is., 30-0 fath, 1 specimen)
Clemens 1933: 22 (Canad. Pac. waters)
Berkeley and Berkeley 1948: 31, fig. 40 (Vancouver Is.)
Dales 1957: 155, fig. 64 (SW of Vancouver Is.; not original)
Tebble 1962: 458 (distribution in the N Pac., including B.C.)
Berkeley, C., 1967: 1052 (B.C.; not original, bibliographic references)

Travisiopsis lobifera Levinsen, 1885

- Berkeley and Berkeley 1960: 789 (NW of Vancouver Is., 20 m, 3 specimens)
Tebble 1962: 489 (W of Vancouver Is., Sept., 1 specimen)
Berkeley, C., 1967: 1052 (B.C.; not original, bibliographic references)

Typhloscolex muelleri Busch, 1851

- Berkeley, E., 1931: 76⁵² (Vancouver Is., 50-0 fath and surface)
Clemens 1933: 22, as *Typhloscolex* [sic] *mulleri* (Canad. Pac. waters)
Berkeley and Berkeley 1948: 30, fig. 39 (Vancouver Is.)
Dales 1957: 155, fig. 64 (SW of Vancouver Is.; not original)
Berkeley and Berkeley 1960: 789 (NW of Vancouver Is., 50-0 m, 1 specimen)
Berkeley, C., 1967: 1052 (B.C.; not original, bibliographic references)
Fulton 1968: 24 (Str. of Georgia, deep, rare)

SUBCLASS SEDENTARIA

FAMILY FLABELLIGERIDAE

Flabelligera affinis M. Sars, 1829

- Pettibone 1954: 289 (Puget Sd., surface)
Berkeley and Berkeley 1960: 792 (Friday Hbr., swarming at night, 5 specimens)

⁵²Part of the material tentatively identified.

FAMILY MAGELONIDAE

Magelona longicornis Johnson, 1901

Wailes 1929: 165 (Vancouver Is.; late larvae)

FAMILY OPHELIIDAE

Ammotrypane aulogaster Rathke, 1843

Wailes 1929: 164 (Vancouver Is., pelagic when swarming)

Armandia brevis (Moore, 1906)

Wailes 1929: 164 (Vancouver Is., pelagic when swarming)

Berkeley and Berkeley 1952: 91, fig. 184-185 (Vancouver Is., swarming in shallow water)

FAMILY SPIONIDAE

Polydora caeca (Oersted, 1843)

Wailes 1929: 165 (Vancouver Is.; late larvae)

Polydora cardalia E. Berkeley, 1927

Wailes 1929: 165 (Vancouver Is.; late larvae)

Prionospio cirrifera Wirén, 1883

Wailes 1929: 165, as *P. multibranchiata* (Vancouver Is.; late larvae)

Prionospio malmgreni Claparède, 1870

Wailes 1929: 165 (Vancouver Is.; late larvae)

Spio filicornis pacifica E. Berkeley, 1927?

Wailes 1929: 165, as *S. martinensis* (Vancouver Is.; late larvae)

Spiophanes cirrata G. O. Sars, 1872

Wailes 1929: 164 (Vancouver Is.; late larvae)

Berkeley and Berkeley 1960: 791 (Vancouver Is., surface; larvae)

PHYLUM ARTHROPODA

CLASS CRUSTACEA

SUBCLASS BRANCHIOPODA

ORDER DIPLOSTRACA

Suborder Cladocera

FAMILY POLYPHEMIDAE

Evadne nordmanni Lovén, 1836

- Herdman 1898: 87 (Port Townsend, Sept.)
McMurrich 1916: 77, etc. (Vancouver Is., Sept., patches of "brown water"; relative abundance)
Clemens 1933: 42 (Canadian Pac. waters)
Fulton 1968: 27 (Str. of Georgia; no actual specimens seen)

Evadne tergestina Claus, 1877

- Wailes 1929: 160, as *E. turgestina* [sic] (Vancouver Is., generally distributed and at times abundant)
Clemens 1933: 42 (Canadian Pac. waters)
Fulton 1968: 27 (Str. of Georgia; no actual specimens seen)

Evadne sp.

- Harrington and Griffin 1898: 164 (Puget Sd.)
McMurrich 1916: 88 (Hudson Bay Passage, Aug., surface, occasional)
Wailes 1929: 160 (Vancouver Is., generally distributed and at times abundant)

Podon intermedius Lilljeborg, 1853

- Smith 1933: 239 (Vancouver Is. region, summer; relative abundance)

Podon leuckarti G. O. Sars, 1862

- McMurrich 1916: 82 (Vancouver Is., Sept., patch of "brown water")
Wailes 1929: 160, as *P. leucharti* [sic] (Vancouver Is., often abundant)
Clemens 1933: 42 (Canadian Pac. waters)
Fulton 1968: 27 (Str. of Georgia; no actual specimens seen)

Podon polyphaemoides Leuckart, 1859

- McMurrich 1916: 77 (Vancouver Is., Sept., patch of "brown water"; relative abundance)
Wailes 1929: 160 (Vancouver Is.)
Clemens 1933: 42 (Canadian Pac. waters)
Fulton 1968: 27 (Str. of Georgia; no actual specimens seen)

Podon sp.

- McMurrich 1916: 86, etc. (Queen Charlotte Is. and Hudson Bay Passage, Aug., surface, and Vancouver Is., Sept., patch of "brown water"; relative abundance)
Bishop et al. 1966: 154 (Str. of Georgia)
Fulton et al. 1967: 116 (Str. of Georgia)

SUBCLASS OSTRACODA

ORDER MYODOCOPA

Suborder Halocypriformes

FAMILY HALOCYPRIDAE

Conchoecia alata minor McHardy, 1964

- McHardy 1964: 563, fig. 8-22 (B.C. mainland and Vancouver Is.; original description)
McHardy and Bary 1965: 823 (B.C.; relative abundance in relation to depth, salinity, oxygen concentration, and temperature)
Bishop et al. 1966: 154 (Str. of Georgia)
Fulton et al. 1967: 116 (Str. of Georgia)

Stephens et al. 1967: 67 (Vancouver Is., June-July)

Fulton 1968: 31 (Str. of Georgia, mid-depth and deep, common)

Fulton et al. 1968: 146 (Str. of Georgia)

Fulton et al. 1969: 79 (Vancouver Is., May-July)

Conchoecia elegans G. O. Sars, 1865

Wailes 1929: 160 (Vancouver Is.; relative abundance)

Smith 1952: 20 (B.C., 180-360 m)

McHardy 1964: 561 (B.C. mainland and Vancouver Is.)

McHardy and Bary 1965: 823 (B.C.; relative abundance in relation to depth, salinity, oxygen concentration, and temperature)

Bishop et al. 1966: 154 (Str. of Georgia)

Fulton et al. 1967: 116 (Str. of Georgia)

Stephens et al. 1967: 67 (Vancouver Is., June-July)

Fulton 1968: 31 (Str. of Georgia mid-depth and deep, abundant)

Fulton et al. 1968: 146 (Str. of Georgia)

Fulton et al. 1969: 79 (Vancouver Is., May-July)

Stephens et al. 1969, fig. 67 (Str. of Georgia)

Conchoecia spinirostris Claus, 1874

Smith 1952: 20 (B.C., 30 m)

Fulton 1968: 31 (B.C.; no actual specimens seen)

Suborder Cypridiniformes

FAMILY PHILOMEDIDAE

Philomedes sp.

McHardy 1964: 557, fig. 3-7 (B.C. mainland, Apr., at night, 50-55 m, 1 specimen)

ORDER PODOCOPA

Suborder Cypriformes

FAMILY CYTHERIDAE

Loxoconcha fragilis G. O. Sars, 1928

Lucas 1931: 408 (Vancouver Is., surface)

Paradoxostoma striungulum Smith, 1952

Smith 1952: 40, pl. 11, fig. 1-8 (Vancouver Is., near the surface; original description)

McHardy 1964: 556, fig. 1-2 (mainland B.C., 0, 20, and 25 m)

SUBCLASS COPEPODA

ORDER CALANOIDA

FAMILY ACARTHIIDAE

Acartia clausi Giesbrecht, 1889

Herdman et al. 1898: 87 (Port Townsend, Sept., scarce)

Wailes 1929: 164 (Vancouver Is.)

Campbell 1929b: 319 (B.C. mainland)

Clemens 1933: 44 (Canadian Pac. waters)

Wailes 1933: 7 (Vancouver Is.; relative abundance)

Wailes 1936: 482 (B.C., fish stomach)

Davis 1949: 64 (Juan de Fuca Str., July)

Legaré 1957: 528, etc. (Str. of Georgia, June and Nov.; relative abundance)

Cameron 1957: 170, etc., fig. 4, 5a (Queen Charlotte Is., summer; relative abundance and vertical distribution)

Bishop et al. 1966: 153 (Str. of Georgia)

Fulton et al. 1967: 115 (Str. of Georgia)

Stephens et al. 1967: 67 (Vancouver Is., June-July)

Fulton 1968: 42, etc., text-fig. (Str. of Georgia, spring-summer, surface, common)

Fulton et al. 1968: 145 (Str. of Georgia)

Fulton et al. 1969: 79 (Saanich Inlet)

Acartia danae Giesbrecht, 1889

Frolander 1962: 670, etc., fig. 1 (Vancouver Is.; potential value as hydrological indicator)

Acartia longiremis (Lilljeborg, 1853)

- McMurrich 1916: 77, etc. (Queen Charlotte Is. and Hudson Bay Passage, Aug., surface, and Vancouver Is., Sept., patches of "brown water"; relative abundance)
- Wailes 1929: 164 (Vancouver Is., abundant)
- Campbell 1929b: 319 (Vancouver Is., Str. of Georgia, and mainland B.C.)
- Hart and Wailes 1932: 252 (Vancouver Is., fish stomach)
- Johnson 1932: 21 (Friday Hbr.; time of occurrence and relative abundance)
- Clemens 1933: 44 (Canadian Pac. waters)
- Smith 1933: 239, as *A. longiramus* [sic] (Kuper Is., well represented)
- Wailes 1933: 7, etc. (Vancouver Is.; relative abundance)
- Lowe 1936: 14 (Vancouver Is., fish stomach)
- Wailes 1936: 482 (B.C., fish stomach)
- Davis 1949: 65 (Seattle, Nov., surface, Friday Hbr., July, 75-0 m, Juan de Fuca Str., July)
- Wilson 1950: 155, etc. (Beaver Hbr., Sept.)
- Cameron 1957: 170 (Queen Charlotte Is., summer)
- Legaré 1957: 528, etc. (Str. of Georgia, June and Nov.; vertical distribution and abundance)
- Frolander 1962: 664, etc. (Vancouver Is. and Juan de Fuca Str.; relative abundance)
- Omori 1965, fig. 4-5 (distribution, including area under consideration)
- Bishop et al. 1966: 153 (Str. of Georgia)
- Barracough and Fulton 1967: 6, etc. (Str. of Georgia, July)
- Fulton et al. 1967: 115 (Str. of Georgia)
- Stephens et al. 1967: 67 (Vancouver Is., June-July)
- Fulton 1968: 43, etc., text-fig. (Str. of Georgia, spring-summer, surface, abundant; size of nauplii in formalin)
- Fulton et al. 1968: 145 (Str. of Georgia)
- Fulton et al. 1969: 79 (Saanich Inlet, May-July)
- Seki and Kennedy 1969: 3168 (Str. of Georgia; relative abundance)

Acartia sp.

- Barracough 1967b: 4 (Str. of Georgia, June)
- Barracough and Fulton 1967: 4 (S part of Str. of Georgia, July, fish stomach)
- LeBrasseur et al. 1969: 55, fig. 1 (Str. of Georgia, Feb.)

FAMILY AETIDEIDAE

Aetideus armatus (Boeck, 1872)

- Campbell 1929b: 311 (Vancouver Is., Str. of Georgia, and mainland B.C.)
- Wailes 1929: 164 (Vancouver Is.)
- Clemens 1933: 43 (Canadian Pac. waters)
- Wailes 1933: 9 (Vancouver Is.)
- Davis 1949: 25, pl. 2, fig. 27-29 (Juan de Fuca Str., Nov., 80-0 m, Port Orchard, Nov., surface, Friday Hbr., July, 75-0 m)
- Cameron 1957: 170, fig. 2 (Queen Charlotte Is., summer; vertical distribution and abundance)
- Legaré 1957: 531, etc. (Str. of Georgia, Nov., 250-150 m, a few)
- Bishop et al. 1966: 153 (Str. of Georgia)
- Barracough 1967b: 10 (Str. of Georgia, June)
- Barracough and Fulton 1967: 4, etc. (S part of Str. of Georgia, July, fish stomach)
- Fulton et al. 1967: 115 (Str. of Georgia)
- Stephens et al. 1967: 67 (Vancouver Is., June-July)
- Fulton 1968: 36, etc., text-fig., as *Aetidius* [sic] *armatus* (Str. of Georgia, mid-depth and deep, common)
- Fulton et al. 1968: 145 (Str. of Georgia)
- Fulton et al. 1969: 79 (Saanich Inlet, May-July)

Aetideus pacificus Brodskii, 1950

- Fulton 1968: 36, etc., text-fig., as *Aetidius* [sic] *pacificus* (B.C., deep, rare)

Bradyidius saanichi Park, 1966

- Bishop et al. 1966: 153 (Str. of Georgia)
- Park 1966: 805, fig. 1-3 (Vancouver Is., Sept., original description)
- Fulton et al. 1967: 115 (Str. of Georgia)
- Stephens et al. 1967: 67 (Vancouver Is., June-July)

- Fulton 1968: 36, etc., text-fig. (Vancouver Is. and Str. of Georgia; relative abundance and vertical distribution)
- Fulton et al. 1968: 145 (Str. of Georgia)
- Fulton et al. 1969: 79 (Saanich Inlet, May–July)
- Bradyidius similis* G. O. Sars, 1902?
- Cameron 1957: 170, fig. 2 (Queen Charlotte Is., summer, deeper than 45 m)
- Chiridius gracilis* Farran, 1908
- Bishop et al. 1966: 153 (Str. of Georgia)
- Fulton et al. 1967: 115 (Str. of Georgia)
- Stephens et al. 1967: 67 (Vancouver Is., June–July)
- Fulton 1968: 36, etc. (Str. of Georgia, deep, common)
- Fulton et al. 1968: 145 (Str. of Georgia)
- Fulton et al. 1969: 79 (Saanich Inlet, May–July)
- Chiridius gracilis* Farran, 1908?
- Cameron 1957: 170 (Queen Charlotte Is., summer)
- Euchirella pulchra* (Lubbock, 1856)
- Davis 1949: 31, pl. 3, fig. 42–43, pl. 4, fig. 44–48 (Juan de Fuca Str., Dec., 100 m)
- Fulton 1968: 37, etc., text-fig. (Str. of Georgia, deep, rare)
- Euchirella rostrata* (Claus, 1866)
- Campbell 1929b: 312 (Vancouver Is.)
- Wailes 1929: 164 (Vancouver Is.)
- Clemens 1933: 43 (Canadian Pac. waters)
- Fulton 1968: 37, etc., text-fig. (Str. of Georgia, deep, rare)
- Gaetanus armiger* Giesbrecht, 1888
- Davis 1949: 28, pl. 3, fig. 30–32 (Port Townsend, Dec., 50 m, Portland Canal, Sept., 500 m)
- Gaetanus intermedius* Campbell, 1930
- Campbell 1930: 178 (B.C.; original description)
- Clemens 1933: 43 (Canadian Pac. waters)
- Bishop et al. 1966: 153 (Str. of Georgia)
- Barracough and Fulton 1967: 4 (S part of Str. of Georgia, July, fish stomach)
- Fulton et al. 1967: 115 (Str. of Georgia)
- Fulton 1968: 37, etc., text-fig. (Str. of Georgia, deep, rare; size of copepodites in formalin)
- Fulton et al. 1968: 145 (Str. of Georgia)
- Gaetanus* sp.
- Cameron 1957: 170, fig. 2 (Queen Charlotte Is., summer, deeper than 80 m)
- Gaidius brevispinus* (G. O. Sars, 1900)⁵³
- Wilson 1950: 234, etc. (midway between Moresby Is. and Vancouver Is., Aug., surface)
- Gaidius columbiae* Park, 1967
- Legaré 1957: 528, etc., as *Chiridius tenuispinus* (Str. of Georgia, June and Nov.; vertical distribution and relative abundance)
- Park 1967: 231, fig. 1–3 (Str. of Georgia, numerous specimens; original description)
- Fulton 1968: 37, etc., text-fig. (Str. of Georgia, deep, abundant)
- Gaidius columbiae* Park, 1967?
- Campbell 1929b: 311, as *Chiridius tenuispinus* (B.C.)
- Wailes 1929: 164, as *Chiridius armatus*⁵⁴ (Vancouver Is.)
- Clemens 1933: 43, as *Chiridius tenuispinus* (Canadian Pac. waters)
- Gaidius pungens* Giesbrecht, 1895
- Campbell 1929b: 312 (Vancouver Is. and Str. of Georgia)
- Wailes 1929: 164 (Vancouver Is.)
- Clemens 1933: 43 (Canadian Pac. waters)
- Legaré 1957: 528, etc. (Str. of Georgia, June and Nov.; vertical distribution and relative abundance)
- Bishop et al. 1966: 153 (Str. of Georgia)
- Fulton et al. 1967: 115 (Str. of Georgia)

⁵³Possibly a misidentification. Two female specimens from Albatross st. 4758 (just outside our area) identified also by Wilson (1950) as *G. brevispinus* and preserved at the Smithsonian Institution are actually *G. pungens*, (Bowman in litt.).

⁵⁴See Fulton (1968: 36).

- Stephens et al. 1967: 67 (Vancouver Is., June-July)
- Fulton 1968: 37, etc., text-fig. (Str. of Georgia, deep, rare)
- Fulton et al. 1968: 145 (Str. of Georgia)
- Fulton et al. 1969: 79 (Saanich Inlet, May-July)
- Gaidius variabilis* Brodskii, 1950
- Fulton 1968: 37, etc., text-fig. (Str. of Georgia, deep, common)
- FAMILY AUGAPTILIDAE
- Centraugaptitus porcellus* Johnson, 1936
- Legaré 1957: 528, etc., as *Centrogaptitus [sic] porcellus* (Str. of Georgia, June, 100-50 m, a few)
- Fulton 1968: 41, as *Centrogaptitus [sic] porcellus* (B.C.; no actual specimens seen)
- FAMILY CALANIDAE
- Calanus cristatus* Krøyer, 1848
- Wailes 1929: 164 (Vancouver Is.)
- Campbell 1929b: 306 (Str. of Georgia)
- Johnson 1932: 23 (Orcas Is., 80-0 m, rare)
- Clemens 1933: 43 (Canadian Pac. waters)
- Wailes 1933: 9 (Vancouver Is.)
- Davis 1949: 14, pl. 1, fig. 6-9 (Portland Canal, Sept., 500 m, Cape Flattery, Oct., Seattle, Nov., surface)
- Wilson 1950: 177, etc. (midway between Moresby Is. and Vancouver Is., Aug., surface)
- Cameron 1957: 170, fig. 2 (Queen Charlotte Is., summer, deeper than 80 m)
- Legaré 1957; 528, etc., as *Celanus [sic] cristatus* (Str. of Georgia, June, 4 specimens)
- Bishop et al. 1966: 153 (Str. of Georgia)
- Fulton et al. 1967: 115 (Str. of Georgia)
- Stephens et al. 1967: 67 (Vancouver Is., June-July)
- Fulton 1968: 34, etc., text-fig. (Str. of Georgia, summer, deep, rare; size of copepodites in formalin)
- Fulton et al. 1968: 145 (Str. of Georgia)
- Fulton et al. 1969: 79 (Saanich Inlet, May-July)
- Calanus glacialis* Jaschnov, 1955
- Fulton et al. 1969: 4, etc. (Saanich Inlet, May-July; wet weight, number in relation to volume of water filtered, relative number of eggs)
- Calanus pacificus* Brodskii, 1948
- Beklemishev 1961, fig. 4 (distribution in the northeast Pac., including area under consideration)
- Bishop et al. 1966: 153 (Str. of Georgia)
- Barraclough 1967b: 4 (Str. of Georgia)
- Barraclough and Fulton 1967: 4, etc. (Str. of Georgia, July)
- Fulton et al. 1967: 115 (Str. of Georgia)
- LeBrasseur and Fulton 1967: 17 (Str. of Georgia; as food for fish)
- Parsons et al. 1967: 14 (Saanich Inlet)
- Stephens et al. 1967: 67 (Vancouver Is., June-July)
- Fulton 1968: 33, etc., text-fig. (Str. of Georgia, year round, surface and mid-depth, abundant; size of nauplii and copepodites in formalin)
- Fulton et al. 1968: 145 (Str. of Georgia)
- Fulton et al. 1969: 4, etc. (Saanich Inlet, May-July; wet weight, number in relation to volume of water filtered, relative number of eggs)
- LeBrasseur et al. 1969: 53, etc. (Str. of Georgia, Feb.-May; relative abundance and as food for juvenile fish)
- Parsons et al. 1969: 42, etc. (Str. of Georgia, Feb.-May; grazing on phytoplankton on incubated samples)
- Stephens et al. 1969: fig. 60, etc. (Str. of Georgia and Vancouver Is.; eggs)
- Calanus plumchrus* Marukawa, 1921
- Campbell 1929b: 308, as *C. tonsus* (Str. of Georgia and mainland B.C.)
- Wailes 1929: 159, etc., as *C. tonsus* (Vancouver Is., abundant; occurrence)
- Campbell 1930: 178, as *C. tonsus* (Str. of Georgia)
- Johnson 1932: 23, as *C. tonsus* (Friday Hbr., May; relative abundance)
- Clemens 1933: 43, as *C. tonsus* (Canadian Pac. waters)
- Wailes 1933: 7, as *C. tonsus* (Vancouver Is.; relative abundance)
- Campbell 1934: 5, fig. 1-9, as *C. tonsus*

- (Str. of Georgia, deep, abundant; life cycle and postembryonic development)
 Campbell 1934b: 2003, etc., as *C. tonsus* (Str. of Georgia; relative abundance, vertical distribution, and life cycle)
 Lowe 1936: 12, etc., as *C. tonsus* (Vancouver Is., fish stomach; qualitative observations on food)
 Wailes 1936: 482, as *C. tonsus* (B.C., fish stomach)
 Davis 1949: 14, pl. 1, fig. 5, as *C. tonsus* (Friday Hbr., June, surface, Cape Flattery, Oct.)
 Cameron 1957: 170, fig. 2, as *C. tonsus* (Queen Charlotte Is., summer, deeper than 80 m)
 Legaré 1957: 528, etc., as *C. tonsus* (Str. of Georgia, June; relative abundance)
 Barraclough and Herlinveaux 1965: 24, as *C. tonsus* (Str. of Georgia)
 Bishop et al. 1966: 153 (Str. of Georgia)
 Herlinveaux et al. 1966: 33, etc. (Vancouver Is., May-June)
 Barraclough 1967b: 4, etc. (Str. of Georgia, June)
 Barraclough and Fulton 1967: 4, etc. (S part of Str. of Georgia, July, fish stomach)
 Fulton et al. 1967: 115 (Str. of Georgia)
 Stephens et al. 1967: 67 (Vancouver Is., June-July)
 LeBrasseur and Fulton 1967: 17 (Str. of Georgia; as food for fish)
 Fulton 1968: 34, etc., text-fig. (Str. of Georgia, year round, very abundant; vertical distribution and size of nauplii and copepodites in formalin)
 Fulton et al. 1968: 145 (Str. of Georgia)
 Fulton et al. 1969: 4, etc. (Saanich Inlet, May-July; wet weight and number in relation to volume of water filtered)
 LeBrasseur et al. 1969: 53, etc. (Str. of Georgia, Feb.-May; occurrence, relative abundance of nauplii and copepodites)
 Parsons et al. 1969: 39, etc. (Str. of Georgia, Feb.-May; relative abundance, wintering, relative numbers of nauplii and copepodites, growth rate, and grazing on phytoplankton as incubated samples)
 Stephens et al. 1969, fig. 60, etc. (Str. of Georgia)

Calanus spp.

- Bary et al. 1962: 37 (Vancouver Is., "scattering layer")
 Barraclough and Herlinveaux 1965: 6 (Vancouver Is., beginning of the year, upper layers of the "echo scattering layer")

Calanus sp.⁵⁵

Herdman 1898: 87, as *C. finmarchicus* (Port Townsend, Sept., abundant)
 McMurrich 1916: 82, etc., as *C. finmarchicus* (Vancouver Is., Sept., patches of "brown water")
 Campbell 1929b: 306, etc., as *C. finmarchicus* (Vancouver Is., Str. of Georgia, and mainland B.C.)
 Wailes 1929: 164, as *C. finmarchicus* (Vancouver Is., abundant)
 Campbell 1930: 177, as *C. finmarchicus* (Vancouver Is.)
 Hart and Wailes 1932: 252, as *C. finmarchicus* (Nootka, fish stomach)
 Johnson 1932: 22, as *C. finmarchicus* (Friday Hbr., time of occurrence)
 Clemens 1933: 43, as *C. finmarchius* [sic] (Canadian Pac. waters)
 Wailes 1933: 8, as *C. finmarchicus* (Vancouver Is.; relative abundance)
 Wailes 1936: 485, as *C. finmarchicus* (B.C., fish stomach)
 Davis 1949: 13, pl. 1, fig. 1-3, 10, as *C. finmarchicus* (several localities ranging from Queen Charlotte Channel to Puget Sd.; time of occurrence and vertical distribution)
 Wilson 1950: 177, etc., as *C. finmarchicus* (midway between Moresby Is. and Vancouver Is., Aug., surface)
 Cameron 1957: 170, etc., fig. 2, 13, as *C. finmarchicus* (Queen Charlotte Is., summer)
 Legaré 1957; 528, etc., as *C. finmarchicus* (Str. of Georgia, June and Nov.; relative abundance and biology)

⁵⁵All past records of *C. finmarchicus* from the N Pac. appear to be questionable (see distributions in Jaschnov (1970); each may refer to one of several forms in the *C. pacificus-helgolandicus-glacialis* complex that have been observed in the eastern half of the N Pac. (Fleminger, *in litt.*).

Herlinveaux et al. 1966: 33, etc. (Vancouver Is., May-June)
Barracough 1967b: 5, etc. (S part of Str. of Georgia, Apr., fish stomach)

FAMILY CANDACIIDAE

Candacia bipinnata Giesbrecht, 1892

Bishop et al. 1966: 153 (Str. of Georgia)
Fulton et al. 1967: 115 (Str. of Georgia)
Fulton 1968: 41, etc., text-fig. (Str. of Georgia, deep, rare)
Fulton et al. 1968: 145 (Str. of Georgia)

Candacia columbiae Campbell, 1929

Campbell 1929b: 317, pl. 1, fig. 2-4, pl. 2, fig. 1 (Str. of Georgia, Vancouver Is., and mainland B.C.; original description)
Wailes 1929: 164 (Vancouver Is.)
Clemens 1933: 43 (Canadian Pac. waters)
Wailes 1933: 7 (Vancouver Is.)
Davis 1949: 63, pl. 13, fig. 162-169 (Portland Canal, Sept., 500 m, and Port Townsend, Dec., 50 m)
Cameron 1957: 170, fig. 2 (Queen Charlotte Is., summer, deeper than 80m)
Legaré 1957: 528, etc. (Str. of Georgia, June-Nov., 250-150 m, a few specimens)
Bishop et al. 1966: 153 (Str. of Georgia)
Fulton et al. 1967: 115 (Str. of Georgia)
Fulton 1968: 41, etc., text-fig. (Str. of Georgia, deep, rare)
Fulton et al. 1968: 145 (Str. of Georgia)

FAMILY CENTROPAGIDAE

Centropages abdominalis Sato, 1913

McMurrich 1916: 77, etc., text-fig., as *C. hamatus* (Hudson Bay Passage and Queen Charlotte Is., Aug., surface, and Vancouver Is., Sept., patches of "brown water")
Campbell 1929b: 314, as *C. mcmurrichi* (Vancouver Is., Swiftsure Bank, and Juan de Fuca Str.)
Wailes 1929: 160, etc., as *C. mcmurrichi* (Vancouver Is., abundant)
Hart and Wailes 1932: 252, as *C. mcmurrichi* (Vancouver Is., digestive tracts of fish)

Clemens 1933: 43, as *C. mcmurrichi* (Canadian Pac. waters)
Wailes 1933: 7, etc., as *C. mcmurrichi* (Vancouver Is.; relative abundance)
Wailes 1936: 482, as *C. mcmurrichi* (B.C., fish stomach)
Davis 1949: 54, as *C. mcmurrichi* (Friday Hbr., July, 75-0 m)
Cameron 1957: 170, etc., fig. 6, 7a, as *C. mcmurrichi* (Queen Charlotte Is., summer; relative abundance and vertical distribution)
Legaré 1957: 528, etc., as *C. mcmurrichi* (Str. of Georgia, June, 250-0 m; relative abundance and salinity tolerance)
Bishop et al. 1966: 153 (Str. of Georgia)
Barracough 1967b: 15 (Str. of Georgia, June)
Barracough and Fulton 1967: 4, etc. (Str. of Georgia, July)
Fulton et al. 1967: 67 (Str. of Georgia, July)
Stephens et al. 1967: 67 (Vancouver Is., June-July)
Fulton 1968: 40, etc., text-fig. (Str. of Georgia, surface, abundant)
Fulton et al. 1968: 145 (Str. of Georgia)
Fulton et al. 1969: 79 (Saanich Inlet, May-July)

Centropages sp.

Barracough 1967b: 4 (Str. of Georgia, June)

FAMILY DIAPATOMIDAE

Diaptomus sp.

Legaré 1957: 528, etc. (Str. of Georgia, June, 10-0 m, a few)
Fulton 1968: 40 (Str. of Georgia; no actual specimens seen)

FAMILY EUCLANIDAE

Eucalanus bungii bungii Johnson, 1938

Campbell 1929b: 308, as *E. elongatus* (several localities in B.C.)
Johnson 1938: 175, fig. 28 (NW of Queen Charlotte Is., Str. of Juan de Fuca; relative abundance)
Johnson 1940: 565, etc., map (distribution in the N Pac., including B.C.)

Davis 1949: 16, pl. 1, fig. 13–16, pl. 2, fig. 17, as *E. bungii*⁵⁶ (Cape Flattery, Oct., Juan de Fuca Str., Nov.–Dec., 80–0 m and 100 m, Port Townsend, Dec., 50 m, Friday Hbr., July, 75–0 m)

Cameron 1957: 170, etc., fig. 2, 15, as *E. bungii* (Queen Charlotte Is., summer, deeper than about 45 m)

Legaré 1957: 528, etc., as *E. bungii* (Str. of Georgia, June; relative abundance and vertical distribution)

Beklemishev 1961, fig. 7 (distribution, including area under consideration)

Barraclough 1967a: 29 (Str. of Georgia, July, fish stomach)

Barraclough and Fulton 1967: 4, etc. (Str. of Georgia, July)

Fulton 1968: 34, etc., text-fig. (Str. of Georgia, mid-depth and deep, abundant; size of nauplii and copepodites in formalin)

Eucalanus bungii bungii Johnson, 1938?

Wailes 1929: 164, as *E. elongatus* (Vancouver Is., abundant)

Clemens 1933: 43, as *E. elongatus* (Canadian Pac. waters)

Eucalanus bungii californicus Johnson, 1938

Johnson 1938: 76 (Str. of Juan de Fuca, a few)

Davis 1946: 16 (Malcolm Is., July, 20 m)

Eucalanus elongatus (Dana, 1849)

Davis 1949: 16, pl. 1, fig. 4, 11–12⁵⁷ (Port Townsend, Dec., 50 m)

Wilson 1950: 208, etc. (B.C., June, 15–0 fath)

Rhincalanus nasutus Giesbrecht, 1888?

Cameron 1957: 170, fig. 2 (Queen Charlotte Is., summer, deeper than 80 m, 1 specimen)

Fulton 1968: 34 (B.C.; no actual specimens seen)

FAMILY EUCHAETIDAE

Euchaeta spinosa Giesbrecht, 1892

Wilson 1950: 217, etc. (midway between Moresby Is. and Vancouver Is., Aug., surface)

Euchaeta sp.

Wilson 1950: 316, etc., as *Pseudeuchaeta brevicauda*⁵⁸ (midway between Moresby Is. and Vancouver Is., Aug., surface)

Pareuchaeta erebi Farran, 1929⁵⁹

Wilson 1950: 279, etc. (midway between Moresby Is. and Vancouver Is., Aug., surface)

Pareuchaeta japonica (Marukawa, 1921)

Campbell 1929b: 313, pl. 1, fig. 1, as *Euchaeta japonica* (several localities in B.C.)

Wailes 1929: 160, etc., as *Euchaeta japonica* (Vancouver Is.; relative abundance)

Johnson 1932: 23, as *Euchaeta japonica* (Orcas Is., 80–0 m, rare)

Clemens 1933: 43, as *Euchaeta japonica* (Canadian Pac. waters)

Wailes 1933: 7, as *Euchaeta japonica* (Vancouver Is.)

Campbell 1934: 32, fig. 10–18, as *Euchaeta japonica* (Str. of Georgia, deep; life history and postembryonic development)

Lowe 1936: 12, etc., as *Euchaeta japonica* (Departure Bay; qualitative observation on food)

Davis 1949: 34, pl. 5, fig. 56–65, as *Euchaeta japonica* (Portland Canal, Sept., 500 m)

Cameron 1957: 170, fig. 2, as *Euchaeta japonica* (Queen Charlotte Is., summer, deeper than 80 m)

Legaré 1957: 528, etc., as *Euchaeta japonica* (Str. of Georgia, June and Nov.; relative abundance and vertical distribution)

⁵⁶Davis's material actually contained both *E. bungii bungii* and *E. bungii californicus*.

⁵⁷Davis's record refers to *E. elongatus hyalinus* (Fleminger, *in litt.*).

⁵⁸Bowman, *in litt.*

⁵⁹Possibly a misidentification.

- Bary et al. 1962: 37, as *Euchaeta japonica* (Vancouver Is., "scattering layer")
 Barracough and Herlinveaux 1965: 6, as *Euchaeta japonica* (Vancouver Is., beginning of the year, upper layers of the "echo scattering layer")
 Bishop et al. 1966: 153, as *Euchaeta japonica* (Str. of Georgia)
 Fulton et al. 1967: 115, as *Euchaeta japonica* (Str. of Georgia)
 Stephens et al. 1967: 67, as *Euchaeta japonica* (Vancouver Is., June-July)
 Fulton 1968: 38, etc., text-fig., as *Euchaeta japonica* (Str. of Georgia, deep, abundant; size of nauplii and copepodites in formalin)
 Fulton et al. 1968: 145, as *Euchaeta japonica* (Str. of Georgia)
 Lewis and Ramnarine 1969: 1347, fig. 1-3, as *Euchaeta japonica* (between Vancouver Is. and mainland B.C.; eggs, nauplii)
 Fulton et al. 1969a: 79, as *Euchaeta japonica* (Saanich Inlet, May-July)
 Fulton et al. 1969b: 6, etc., as *Euchaeta japonica* (Str. of Georgia)

FAMILY HETERORHABDIDAE

Heterorhabdus proximus Davis, 1949

- Davis 1949: 57, pl. 10, fig. 119-125 (Joe's Bay, Nov.; original description)
 Cameron 1957: 170, fig. 2⁶⁰ (Queen Charlotte Is., summer, deeper than 80 m)
 Fulton 1968: 41 (B.C.; no actual specimens seen)

Heterorhabdus tanneri Giesbrecht, 1895

- Fulton 1968: 41, etc., text-fig. (Str. of Georgia, deep, rare)

FAMILY METRIDIIDAE

Metridia okhotensis Brodskii, 1950

- Campbell 1929a: 315, etc., as *M. longa* (Str. of Georgia and mainland B.C.)
 Davis 1949: 49, pl. 8, fig. 104, as *M. longa* (Portland Canal, Sept., 500 m)

⁶⁰Doubtful identification.

- Wilson 1950: 264, etc., as *M. longa* (midway between Moresby Is. and Vancouver Is., Aug., surface)
 Cameron 1957: 170, fig. 2, as *M. longa* (Queen Charlotte Is., summer, deeper than 80 m)
 Legaré 1957: 528, etc., as *M. longa* (Str. of Georgia, June and Nov.; relative abundance)
 Bishop et al. 1966, as *M. longa* (Str. of Georgia)
 Barracough and Fulton 1967: 4, etc. (Str. of Georgia, July)
 Fulton et al. 1967: 115, as *M. longa* (Str. of Georgia)
 Stephens et al. 1967: 67 (Vancouver Is., June-July)
 Fulton 1968: 40, etc., text-fig. (Str. of Georgia, deep, common)
 Fulton et al. 1968: 145, as *M. longa* (Str. of Georgia)
 Fulton et al. 1969: 79 (Saanich Inlet, May-July)

Metridia okhotensis Brodskii, 1950?

- Wailes 1929: 164, as *M. longa* (Vancouver Is.)
 Clemens 1933: 43, as *M. longa* (Canadian Pac. waters)
 Wailes 1933: 9, as *M. longa* (Vancouver Is.)
 Wailes 1936: 482, as *M. longa* (B.C., stomach)

Metridia pacifica Brodskii, 1950⁶¹

- Campbell 1929b: 315, as *M. lucens* (Str. of Georgia and Vancouver Is.)
 Wailes 1929: 164, as *M. lucens* (Vancouver Is., abundant)
 Clemens 1933: 43, as *M. lucens* (Canadian Pac. waters)
 Wailes 1933: 9, as *M. lucens* (Vancouver Is.)
 Lowe 1936: 12, etc., as *M. lucens* (Vancouver Is.; qualitative observations on food)

⁶¹I am following Brodskii (1950) in considering the N Pacific records of *M. lucens* as probably belonging to *M. pacifica*. It must be pointed out, however, that the latter species is not accepted by some authorities.

Wailes 1936: 482, as *M. lucens* (B.C., fish stomach)
Davis 1949: 48, pl. 8, fig. 101–103, as *M. lucens* (Portland Canal, Sept., 500 m, Juan de Fuca Str., Dec., 175–0 m, Friday Hbr. and Malcolm Is., July, 75–0 m and 20 m)
Cameron 1957: 170, etc., as *M. lucens* (Queen Charlotte Is., summer, deeper than about 20 m)
Legaré 1957: 528, etc., as *M. lucens* (Str. of Georgia, June and Nov.; relative abundance and vertical distribution, breeding seasons, and relative numbers of males, females and juveniles)
Beklemishev 1961, fig. 8 (distribution, including area under consideration)
Frolander 1962: 662, as *M. lucens* (Vancouver Is.)
Bishop et al. 1966: 153, as *M. lucens* (Str. of Georgia)
Fulton et al. 1967: 115, as *M. lucens* (Str. of Georgia)
Stephens et al. 1967: 67 (Vancouver Is., June–July)
Fulton 1968: 40, etc., as *M. lucens* (Str. of Georgia, abundant; vertical migration, size of nauplii and copepodites in formalin)
Fulton et al. 1968: 145, as *M. lucens* (Str. of Georgia)
Stephens et al. 1969: 67, etc., fig. 73, as *M. lucens* (Str. of Georgia and Vancouver Is.; eggs)
Fulton et al. 1969: 4, etc., as *M. lucens* (Saanich Inlet, May–July; wet weight, number in relation to volume of water filtered, relative number of eggs)

Metridia sp.

Barracough 1967b: 10 (Str. of Georgia, June)
Barracough 1967c: 5, etc. (S part of Str. of Georgia, Apr., fish stomach)
Barracough 1967d: 41 (S part of Str. of Georgia, Apr., fish stomach, numerous)
LeBrasseur et al. 1969: 55, fig. 1 (Str. of Georgia, Feb.–May)
Stephens et al. 1969, fig. 63–65 (Str. of Georgia)

Pleuroamma quadrungulata (Dahl, 1893)

Fulton 1968: 40, etc., (Str. of Georgia, deep, rare)

Pleuroamma sp.

Cameron 1957: 170, fig. 2 (Queen Charlotte Is., summer, below 80 m)

FAMILY PARACALANIDAE

Paracalanus parvus (Claus, 1863)

McMurrich 1916: 82, etc., (Vancouver Is., Sept., patches of "brown water")

Campbell 1929b: 309 (Vancouver Is. region)

Wailes 1929: 164 (Vancouver Is.)

Hart and Wailes 1932: 252 (Vancouver Is., fish stomach)

Clemens 1933: 43 (Canadian Pac. waters)

Wailes 1933: 8 (Vancouver Is.; relative abundance)

Lowe 1936: 14 (Vancouver Is., fish stomach)

Wailes 1936: 482 (B.C., fish stomach)

Legaré 1957: 528, etc. (Str. of Georgia, June and Nov.; vertical and seasonal distribution, relative numbers of males and females)

Cameron 1957: 170, etc., fig. 3 (Queen Charlotte Is., summer; vertical distribution, relative abundance)

Bishop et al. 1966: 153 (Str. of Georgia)

Barracough 1967b: 4 (Str. of Georgia, June, fish stomach)

Barracough and Fulton 1967: 4 (Str. of Georgia, fish stomach)

Fulton et al. 1967: 115 (Str. of Georgia)

Stephens et al. 1967: 67 (Vancouver Is., June–July)

Fulton 1968: 35, etc., text-fig. (Str. of Georgia, surface and mid-depth, abundant)

Fulton et al. 1968: 145 (Str. of Georgia)

Fulton et al. 1969: 79 (Saanich Inlet, May–July)

FAMILY PONTELLIDAE

Epilabidocera longipedata (Sato, 1913)

- McMurrich 1916: 83, etc., text-fig., as *Paralabidocera amphitrites* sp.n. (Hudson Bay Passage, Aug., surface, and Vancouver Is., Sept., patch of "brown water")
- Campbell 1929b: 318, as *Paralabidocera amphitrites* (Str. of Georgia and Vancouver Is. region)
- Wailes 1929: 164, as *Paralabidocera amphitrites* (Vancouver Is., abundant)
- Hart and Wailes 1932: 252, as *Paralabidocera amphitrites* (Nootka, fish stomach)
- Johnson 1932: 23, as *Paralabidocera amphitrites* (Friday Hbr., surface)
- Clemens 1933: 44, as *Paralabidocera amphitrites* (Canadian Pac. waters)
- Davis 1949: 64, pl. 14, fig. 169–173, as *E. amphitrites* (Puget Sd., Mar., Friday Hbr., June–July, surface and 75–0 m, Queen Charlotte Channel, July, 20 m)
- Cameron 1957: 170, as *E. amphitrites* (Queen Charlotte Is., summer, very scarce)
- Legaré 1957: 528, etc., as *E. amphitrites* (Str. of Georgia, June and Nov., 250–0 m; vertical distribution and relative abundance)
- Bishop et al. 1966: 153, as *E. amphitrites* (Str. of Georgia)
- Park 1966: 129, etc., fig. 1–18, pl. 1–10, as *E. amphitrites* (Friday Hbr.; biology)
- Barracough 1967b: 4, as *E. amphitrites* (Str. of Georgia, June, fish stomach)
- Barracough and Fulton 1967: 4, etc., as *E. amphitrites* (Str. of Georgia, July)
- Fulton et al. 1967: 115, as *E. amphitrites* (Str. of Georgia)
- Stephens et al. 1967: 67, as *E. amphitrites* (Vancouver Is., June–July)
- Fulton 1968: 42, etc., text-fig., as *E. amphitrites* (Str. of Georgia, surface, common)
- Fulton et al. 1968: 145, as *E. amphitrites* (Str. of Georgia)
- Fulton et al. 1969: 79, as *E. amphitrites* (Saanich Inlet, May–July)
- Heinrich 1969, fig. 1 (distribution, including area under consideration)

Epilabidocera longipedata (Sato, 1913)?

- Herdman 1898: 87, as *Anomalocera patersonii*⁶² and *Pontella securifer* (Port Townsend, Sept.)
- Wailes 1929: 164, as *Anomalocera* [sic] *pattersoni* [sic] (Vancouver Is., abundant)
- Wilson 1950: 300, etc., as *Pontella tenuiremis*⁶² (Vancouver Is.)
- Fulton 1968: 42 (remarks on Herdman's, Wailes's, and Wilson's records, only)

FAMILY PSEUDOCALANIDAE

Clausocalanus sp.⁶³

- Cameron 1957: 170, fig. 2, as *C. acuicornis* [sic] (Queen Charlotte Is.; vertical distribution)
- Fulton 1968: 35, as *C. acuicornis* [sic] (B.C.; no actual specimens seen)

Microcalanus pusillus G. O. Sars, 1903

- Campbell 1929b: 310 (Str. of Georgia and Vancouver Is. region)
- Wailes 1929: 164 (Vancouver Is., abundant)
- Hart and Wailes 1932: 252 (Vancouver Is., fish stomach)
- Clemens 1933: 43 (Canadian Pac. waters)
- Wailes 1936: 482 (B.C., fish stomach)
- Legaré 1957: 528, etc. (Str. of Georgia, June and Nov.; vertical distribution and relative abundance of males, females and juveniles)
- Fulton 1968: 35, etc. text-fig. (Str. of Georgia, surface, abundant)

Microcalanus pygmaeus G. O. Sars, 1900

- Barracough and Fulton 1967: 4, etc. (Str. of Georgia, July)

⁶²Fleminger, *in litt.*

⁶³Cameron's record is listed here as *Clausocalanus* sp., because of the confusion that existed in the past regarding the taxonomy of the genus; for a worldwide revision of *Clausocalanus*, see Frost and Fleminger (1968).

Microcalanus sp.

- Smith 1933: 239 (Vancouver Is., summer, very abundant)
Barracough and Fulton 1967: 25 (S part of Str. of Georgia, July, fish stomach)
LeBrasseur 1969: 53, etc. (Str. of Georgia, Feb.-May; relative abundance, and as food for young fish)

Pseudocalanus minutus (Krøyer, 1849)

- McMurrich 1916: 88, as *P. elongatus* (Queen Charlotte Is. and Hudson Bay Passage, Aug., surface)
Campbell 1929b: 310, as *P. elongatus* (Str. of Georgia and Vancouver Is. region; relative abundance)
Davis 1949: 19, pl. 2, fig. 18-22 (Juan de Fuca Str. and Puget Sd. area, Mar., June, July, Nov., Dec., surface and 175-0 m)
Cameron 1957: 170, etc. (Queen Charlotte Is., summer, surface)
Legaré 1957: 528, etc. (Str. of Georgia, June and Nov.; relative abundance, vertical distribution, and relative numbers of males, females, and juveniles)
Frolander 1962: 662, etc. (Vancouver Is. and Juan de Fuca Str.; relative abundance)
Omori 1965, fig. 4-5 (distribution, including area under consideration)
Bishop et al. 1966: 153 (Str. of Georgia)
Barracough 1967b: 4, etc. (Str. of Georgia, June)
Barracough and Fulton 1967: 4, etc. (Str. of Georgia, July)
Fulton et al. 1967: 115 (Str. of Georgia)
Parsons et al. 1967: 14 (Saanich Inlet)
Stephens et al. 1967: 67 (Vancouver Is., June-July)
Fulton 1968: 35, etc., text-fig. (Str. of Georgia, surface and mid-depth, abundant; size of nauplii and copepodites in formalin)
Fulton et al. 1968: 145 (Str. of Georgia)
LeBrasseur et al. 1969: 53 (Str. of Georgia, Feb.-May; relative abundance, and as food for young fish)
Parsons et al. 1969: 42, etc. (Str. of Georgia, Feb.-May; grazing on phytoplankton on incubated samples)
Seki and Kennedy 1969: 3168 (Str. of Georgia, Dec.; relative abundance)

Stephens et al. 1969, fig. 67 (Str. of Georgia)

Fulton et al. 1969: 79 (Saanich Inlet, May-July)

Pseudocalanus minutus (Kroyer, 1849)?

- Herdman 1898: 87, as *P. elongatus* (Port Townsend, Sept., common)
Wailes 1929: 164, as *P. elongatus* (Vancouver Is., abundant)
Hart and Wailes 1932: 252, as *P. elongatus* (Vancouver Is., digestive tract of fish)
Johnson 1932: 23, as *P. elongatus* (Friday Hbr.; relative abundance and time of occurrence of ovigerous females)
Clemens 1933: 43, as *P. elongatus* (Canadian Pac. waters)
Wailes 1933: 8, as *P. elongatus* (W coast of Vancouver Is.; relative abundance)
Wailes 1936: 482, as *P. elongatus* (B.C., fish stomach)

Pseudocalanus sp.

- LeBrasseur and Fulton 1967: 17 (Str. of Georgia; as food for fish)
Seki and Kennedy 1969: 3168 (Str. of Georgia, Dec.; copepodites and nauplii, relative abundance)
Stephens et al. 1969, fig. 63-66, 72 (Str. of Georgia)
Fulton et al. 1969: 4, etc. (Saanich Inlet, May-July; wet weight, number in relation to volume of water filtered, relative number of eggs)

Pseudocalanus sp.?

- Lowe 1936: 14 (Vancouver Is., fish stomach)

Spinocalanus brevicaudatus Brodskii, 1950

- Fulton 1968: 35, etc., text-fig. (Pendrell Sd., deep, common)

Spinocalanus sp.

- Bishop et al. 1966: 153 (Str. of Georgia)
Fulton et al. 1967: 115 (Str. of Georgia)
Fulton et al. 1968: 145 (Str. of Georgia)

FAMILY SCOLOCITHRICIDAE

Scaphocalanus brevicornis G. O. Sars, 1900

Fulton 1968: 38, etc., text-fig. (Str. of Georgia, deep, rare)

Scaphocalanus echinatus Farran, 1905

Bishop et al. 1966: 153 (Str. of Georgia)
 Fulton et al. 1967: 115 (Str. of Georgia)
 Fulton 1968: 38, etc. text-fig. (Str. of Georgia, deep, common)
 Fulton et al. 1968: 145 (Str. of Georgia)

Scolecithricella minor (Brady, 1883)

Wailes 1929: 164 (Vancouver Is., abundant)
 Hart and Wailes 1932: 252 (Nootka, fish stomach)
 Cameron 1957: 170, fig. 2 (Queen Charlotte Is., summer, deeper than 80 m)
 Legaré 1957: 528, etc. (Str. of Georgia, June and Nov.; relative abundance and vertical distribution)
 Bishop et al. 1966: 153 (Str. of Georgia)
 Fulton et al. 1967: 115 (Str. of Georgia)
 Stephens et al. 1967: 67 (Vancouver Is., June-July)
 Fulton 1968: 38, etc. text-fig. (Str. of Georgia, mid-depth, common)
 Fulton et al. 1968: 145 (Str. of Georgia)
 Fulton et al. 1969: 79 (Saanich Inlet, May-July)

Scolecithricella subdentata (Esterly, 1905)⁶⁴

Cameron 1957: 170 (Queen Charlotte Is., summer)
 Bishop et al. 1966: 153, as *S. ovata* (Str. of Georgia)
 Fulton et al. 1967: 115, as *S. ovata* (Str. of Georgia)
 Stephens et al. 1967: 67, as *S. ovata* (Vancouver Is., June-July)
 Fulton 1968: 38, etc., text-fig., also as *S. ovata* (Str. of Georgia, deep, rare)

⁶⁴The Pacific material referred in the past to *Scolecithricella ovata* (Farran 1905) is conspecific with *S. subdentata*; however, the question of whether *subdentata* is conspecific with *ovata*, originally described from the N Atlantic, is still open (Fleminger, *in litt.*).

Fulton et al. 1969: 79, as *S. ovata* (Saanich Inlet, May-July)

Scolecithricella sp.

Barraclough 1967b: 4 (Str. of Georgia, June, fish stomach)
 Barraclough and Fulton 1967: 4 (S part of Str. of Georgia, July, fish stomach)

Racovitzanus antarcticus Giesbrecht, 1902

Fulton 1968: 38, etc., text-fig. (Str. of Georgia, deep, rare)

FAMILY TEMORIDAE

Epischura nevadensis Lilljeborg, 1889

Barraclough and Fulton 1967: 6 (Str. of Georgia, July)
 Fulton 1968: 39 (Str. of Georgia, surface, rare)

Eurytemora americana Williams, 1906

Campbell 1930: 179, as *E. transversalis* sp.n. (Vancouver Is.)
 Clemens 1933: 43, as *E. transversalis* (Canadian Pac. waters)
 Wailes 1933: 7, as *E. transversalis* (Vancouver Is.)
 Heron 1964: 206, fig. 19-26 (San Juan Is., July-Aug., numerous)
 Fulton 1968: 39, etc., text-fig. (Str. of Georgia, surface, common)

Eurytemora hirundoides Nordquist, 1888

Campbell 1929b: 315 (Vancouver Is.)
 Wailes 1929: 160, etc., as *Temora hirundoides* (Vancouver Is., never abundant)
 Clemens 1933: 43 (Canadian Pac. waters)
 Wailes 1933: 7 (Vancouver Is.)
 Cameron 1957: 170 (Queen Charlotte Is., summer)
 Legaré 1957: 528, etc. (Str. of Georgia, 10-0 m, June, a few)
 Bishop et al. 1966: 153 (Str. of Georgia)
 Fulton et al. 1967: 115 (Str. of Georgia)
 Fulton 1968: 39, etc., text-fig. (Str. of Georgia, surface, common)
 Fulton et al. 1968: 145 (Str. of Georgia)

Eurytemora pacifica Sato, 1913

Legaré 1957: 528, etc., as *E. johanseni* (Str. of Georgia, June, 50–10 m, a few)
Fulton 1968: 39 (B.C.; no actual specimens seen)

FAMILY THARYBIDAE

Tharybis fultoni Park, 1967

Park 1967: 237, fig. 4–5 (Str. of Georgia, Jan. and Mar.; original description)
Fulton 1968: 39, etc., text-fig. (Str. of Georgia, deep, rare)
Fulton et al. 1969: 79 (Saanich Inlet, May–July)

Tharybis sp.

Stephens et al. 1967: 67 (Vancouver Is., June–July)

FAMILY TORTANIDAE

Tortanus discaudatus (Thompson and Scott, 1898)

Herdman 1898: 87, as *Corynura discaudata* (Port Townsend, Sept.)
Thompson and Scott 1898 (in Herdman et al. 1898): 77, etc., pl. 6, fig. 1–11, pl. 7, fig. 1–2, as *Corynura discaudata* (Puget Sd., Sept., plentiful; original description)
McMurrich 1916: 88 (Queen Charlotte Is. and Hudson Bay Passage, Aug., surface)
Campbell 1929b: 320 (Vancouver Is. region and mainland B.C.)
Wailes 1929: 164 (Vancouver Is., abundant)
Johnson 1932: 23 (Friday Hbr., rather common)
Clemens 1933: 44 (Canadian Pac. waters)
Wailes 1933: 7 (Vancouver Is.)
Wailes 1936: 482 (B.C., fish stomach)
Davis 1949: 66, pl. 12, fig. 145–8 (several localities in the Puget Sd. area, various dates and depths)
Cameron 1957: 170, etc., fig. 8 and 9a (Queen Charlotte Is., summer, very widespread; vertical distribution of animals and eggs)
Legaré 1957: 528, etc. (Str. of Georgia,

June and Nov.; relative abundance and vertical distribution)

Bishop et al. 1966: 153 (Str. of Georgia)
Barraclough and Fulton 1967: 4, etc. (Str. of Georgia, July)

Fulton et al. 1967: 115 (Str. of Georgia)
Stephens et al. 1967: 67 (Vancouver Is., June–July)

Fulton 1968: 43, etc., text-fig. (Str. of Georgia, spring and summer, surface, common)

Fulton et al. 1968: 145 (Str. of Georgia)
Fulton et al. 1969: 79 (Saanich Inlet, May–July)

ORDER HARPACTICOIDA

FAMILY DIOSACCIDAE

Amonardia phyllopus (G. O. Sars, 1900)

Campbell 1929b: 327, as *Amphiascus phyllopus* (Vancouver and Galiano Is.)
Wailes 1929: 164, as *Amphiascus phyllopus* (Vancouver Is.)
Wailes 1936: 482, as *Amphiascus phyllopus* (B.C., fish stomach)
Fulton 1968: 47, as *Amphiascus phyllopus* (B.C.; no actual specimens seen)

Diosaccus spinatus Campbell, 1929

Campbell 1929b: 326, pl. 3, fig. 3–5 (Vancouver Is. and mainland B.C.; original description)
Wailes 1929: 164 (Vancouver Is.)
Wailes 1933: 7 (Vancouver Is.)
Lowe 1936: 12, etc. (Vancouver Is., abundant; qualitative observations on food)
Wailes 1936: 482 (B.C., fish stomach)
Legaré 1952: 528, etc. (Str. of Georgia, June, surface, a few)
Fulton 1968: 47 (Vancouver Is.; no actual specimens seen)

Diosaccus tenuicornis (Claus, 1893)

Herdman 1898: 87 (Port Townsend, Sept., scarce)

FAMILY ECTINOSOMIDAE

Microsetella norvegica (Boeck, 1864)

- Davis 1949: 70, pl. 12, fig. 152–153 (Port Townsend and Juan de Fuca Str., Dec., 75–0 m and surface, and Friday Hbr., June, surface)
- Cameron 1957: 170 (Queen Charlotte Is., summer)
- Fulton 1968: 48 (B.C.; no actual specimens seen)

Microsetella rosea (Dana, 1848)

- Campbell 1929b: 323 (Vancouver Is. and Str. of Georgia)
- Wailes 1929: 164 (Vancouver Is., abundant)
- Hart and Wailes 1932: 252 (Nootka, digestive tract of fish)
- Johnson 1932: 23 (Friday Hbr., scattering specimens; most commonly in winter)
- Wailes 1933: 7 (Vancouver Is.)
- Wailes 1936: 482 (B.C., fish stomach)
- Cameron 1957: 170 (Queen Charlotte Is., summer)
- Legaré 1957: 528, etc. (Str. of Georgia, 10–0 m, a few)
- Fulton 1968: 48 (Str. of Georgia, mid-depth, common)

Microsetella spp.

- Bary et al. 1962: 37 (Vancouver Is., “scattering layer”)
- Barraclough and Herlinveaux 1965: 6 (Vancouver Is., beginning of the year, upper layers of the “echo scattering layer”)

Microsetella sp.

- Bishop et al. 1966: 153 (Str. of Georgia)
- Fulton et al. 1967: 115 (Str. of Georgia)
- Stephens et al. 1967: 67 (Vancouver Is., June–July)
- Fulton et al. 1968: 145 (Str. of Georgia)
- Fulton et al. 1969: 79 (Saanich Inlet, May–July)

FAMILY HARPACTICIDAE

Harpacticus chelifer (O. F. Müller, 1776)

- Wilson 1950: 237, etc. (Beaver Hbr., Sept.)
- Fulton 1968: 48 (Vancouver Is.; no actual specimens seen)

Harpacticus uniremis Krøyer, 1842

- Campbell 1929b: 324 (Vancouver Is.)
- Wailes 1929: 164 (Vancouver Is.)
- Wailes 1933: 9 (Vancouver Is.)
- Lowe 1936: 12, etc. (Vancouver Is., abundant; qualitative observation on food)
- Legaré 1957: 528, etc. (Str. of Georgia, June, 250–200 m, a few)
- Fulton 1968: 48 (Vancouver Is.; no actual specimens seen)

Zaus aurelii Poppe, 1884

- Campbell 1929b: 325, pl. 2, fig. 4, pl. 3, fig. 1–2, as *Z. caeruleus* n.sp.⁶⁵ (Vancouver Is.)
- Fulton 1968: 47 (Vancouver Is.; no actual specimens seen)

FAMILY LAOPHONTIDAE

Heterolaophonte stroemi (Baird, 1834)?

- Herdman 1898: 87, as *Laophonte curticauda* (Port Townsend, Sept., few)

FAMILY TISBIDAE

Tisbe furcata (Baird, 1837)

- Campbell 1929b: 325, as *Idya furcata* (Vancouver Is. region)
- Wailes 1929: 164, as *Idya (Tisbe) furcata* (Vancouver Is.)
- Legaré 1957: 528, etc., as *Idya furcata* (Str. of Georgia, June, 150–50 m, a few)
- Fulton 1968: 47 (Vancouver Is.; no actual specimens seen)

⁶⁵fide Lang (1948: 342).

Tisbe furcata (Baird, 1837)?

McMurrich 1916: 80, as *Idya* sp. (Vancouver Is., Sept., patch of "brown water")

Tisbe sp.

Bishop et al. 1966: 153 (Str. of Georgia)
Fulton et al. 1967: 115 (Str. of Georgia)
Fulton et al. 1968: 145 (Str. of Georgia)

ORDER CYCLOPOIDA

FAMILY ASCOMYZONTIDAE

Ascomyzon rubrum Campbell, 1929

Campbell 1929b: 323, pl. 2, fig. 2-3 (Vancouver Is.; original description)
Clemens 1933: 44 (Canadian Pac. waters)
Legaré 1957: 528, etc. (Str. of Georgia, June, 250-0 m, a few)
Fulton 1968: 46 (Vancouver Is.; no actual specimens seen)

FAMILY CORYCAEIDAE

Corycaeus affinis McMurrich, 1916

McMurrich 1916: 78, etc., text-fig. (Vancouver Is., Sept., patches of "brown water"; original description)
Campbell 1929b: 327 (Vancouver Is. region and Str. of Georgia)
Wailes 1929: 164 (Vancouver Is., abundant)
Hart and Wailes 1932: 252 (Nootka, fish stomach)
Johnson 1932: 23 (Friday Hbr.; time of occurrence and relative abundance)
Clemens 1933: 44 (Canadian Pac. waters)
Wailes 1933: 7, etc. (Vancouver Is., abundant in the deeper hauls)
Wailes 1936: 482 (B.C., fish stomach)
Davis 1949: 75, pl. 15, fig. 179-183 (a number of localities in Juan de Fuca Str. and Puget Sd. area, several dates)
Cameron 1957: 170, etc. fig. 2 and 12 (Queen Charlotte Is., summer; distribution)
Legaré 1957: 528, etc. (Str. of Georgia, June and Nov.; vertical distribution and relative abundance)

Bishop et al. 1966: (Str. of Georgia)
Barraclough and Fulton 1967: 6 (Str. of Georgia, July)

Fulton et al. 1967: 115 (Str. of Georgia)
Stephens et al. 1967: 67 (Vancouver Is., June-July)
Fulton 1968: 46, etc., as *C. anglicus* [part] (Str. of Georgia)
Fulton et al. 1968: 145 (Str. of Georgia)
Fulton et al. 1969: 79 (Saanich Inlet, May-July)

Corycaeus anglicus Lubbock, 1857

Wailes 1929: 164 (Vancouver Is.)
Clemens 1933: 44 (Canadian Pac. waters)
Wailes 1933: 8 (Vancouver Is.)
Fulton 1968: 46, etc., text-fig. [part] (Str. of Georgia)

Corycaeus catus Dahl, 1894?

Herdman 1898: 87, as *C. obtusus* and *C. pellucidus* (Port Townsend, Sept., common)
Fulton 1968: 46 (B.C.; no actual specimens seen)

Corycaeus sp.

Frolander 1962: 662 (Vancouver Island)
Barraclough 1967b: 39, etc. (S part of Str. of Georgia, Apr., fish stomach)
Barraclough 1967c: 19, etc. (S part of Str. of Georgia, Apr., fish stomach)

FAMILY LICHOMOLGIDAE

Macrocheiron sargassi G. O. Sars, 1916

Campbell 1930: 181 (Vancouver Is.)
Clemens 1933: 44 (Canadian Pac. waters)
Fulton 1968: 46 (B.C.; no actual specimens seen)

FAMILY OITHONIDAE

Oithona helgolandica Claus, 1863

McMurrich 1916: 88, as *O. similis* (Queen Charlotte Is. and Hudson Bay Passage, Aug., surface; relative abundance)
Campbell 1929b: 321, etc. (Vancouver Is. and Str. of Georgia)
Wailes 1929: 164 (Vancouver Is., abundant)

- Hart and Wailes 1932: 252 (Nootka, digestive tract of fish)
 Clemens 1933: 44 (Canadian Pac. waters)
 Wailes 1933: 8 (Vancouver Is., generally abundant in shallow hauls)
 Davis 1949: 73, pl. 15, fig. 177 (Port Madison, Port Orchard, Joe's Bay and Camano Is., Nov., surface, Juan de Fuca Str., July and Dec., surface and 175-0 m)
 Cameron 1957: 170, etc. (Queen Charlotte Is., summer, surface)
 Legaré 1957: 528, etc. (Str. of Georgia, June and Nov.; relative abundance)
 Frolander 1962: 662, etc., as *O. similis* (Vancouver Is. and Juan de Fuca Str.; relative abundance)
 Bishop et al. 1966: 153 (Str. of Georgia)
 Fulton et al. 1967: 115 (Str. of Georgia)
 Fulton 1968: 45, etc. (Str. of Georgia, all depths, common)
 Fulton et al. 1968: 145 (Str. of Georgia)

Oithona plumifera Baird, 1843

- Cameron 1957: 170, fig. 2 (Queen Charlotte Is., summer, deeper than about 20 m)
 Legaré 1957: 528, etc. (Str. of Georgia, June, a few)
 Fulton 1968: 45 (Str. of Georgia, deep, rare)

Oithona spinirostris Claus, 1863

- Herdman et al. 1898: 87, as *O. spinifrons* (Port Townsend, Sept., common)
 Campbell 1929b: 321, etc. (Vancouver Is. and Str. of Georgia)
 Wailes 1929: 164 (Vancouver Is.)
 Johnson 1932: 23 (Friday Hbr., present at all times; relative abundance)
 Clemens 1933: 44 (Canadian Pac. waters)
 Wailes 1933: 9 (Vancouver Is.)
 Frolander 1962: 662, etc. (Vancouver Is. and Juan de Fuca Str.; relative abundance)
 Bishop et al. 1966: 153 (Str. of Georgia)
 Fulton et al. 1967: 115 (Str. of Georgia)
 Fulton 1968: 45, etc., text-fig. (Str. of Georgia, all depths, abundant)
 Fulton et al. 1968: 145 (Str. of Georgia)
 Seki and Kennedy 1969: 3168 (Str. of Georgia; relative abundance)

Oithona spp.

- Legaré 1957: 531, etc. (Str. of Georgia, Nov., 250-0 m, abundant)⁶⁶
 Bary et al. 1962: 37 (Vancouver Is., "scattering layer")
 Barracough and Herlinveaux 1965: 6 (Vancouver Is., beginning of the year, upper layers of the "echo scattering layer")

Oithona sp.

- Bishop et al. 1966: 125, etc. (Str. of Georgia)
 Stephens et al. 1967: 67 (Vancouver Is., June-July)
 Fulton et al. 1968: 151, etc. (Str. of Georgia)
 Parsons et al. 1969: 42, etc. (Str. of Georgia, Feb.-May; grazing on phytoplankton on incubated samples)
 Seki and Kennedy 1969: 3168 (Str. of Georgia; nauplii, relative abundance)
 Stephens et al. 1969, fig. 68-69 (Str. of Georgia, and Vancouver Is.)
 Fulton et al. 1969: 4, etc. (Saanich Inlet, May-July; number in relation to volume of water filtered)
 Fulton et al. 1969a: 6, etc. (Str. of Georgia)

FAMILY ONCAEIDAE

Oncaeaa borealis G. O. Sars, 1918

- Campbell 1929b: 329 (Vancouver Is. and Str. of Georgia)
 Wailes 1929: 164 (Vancouver Is.)
 Clemens 1933: 44 (Canadian Pac. waters)
 Wailes 1933: 8 (Vancouver Is., seldom collected)
 Fulton 1968: 45, etc., text-fig. (Str. of Georgia, mid-depth and deep, common)
 Wailes 1936: 482 (B.C., fish stomach)

Oncaeaa conifera Giesbrecht, 1891

- Davis 1949: 76 (Friday Hbr., June, surface)
 Cameron 1957: 170, etc., fig. 10-11

⁶⁶Refers, apparently, to *O. helgolandica* and *O. plumifera*.

(Queen Charlotte Is., summer; distribution and egg-laying)

Legaré 1957: 528, etc. (Str. of Georgia, June and Nov. 250-0 m; vertical distribution, relative abundance, and occurrence of males and females)

Fulton 1968: 45 (B.C.; no actual specimens seen)

Oncaeaa subtilis (Giesbrecht, 1892)

Campbell 1929b: 328 (Vancouver Is. and Str. of Georgia)

Wailes 1929: 164 (Vancouver Is., abundant)

Clemens 1933: 44 (Canadian Pac. waters)

Wailes 1933: 8 (Vancouver Is., seldom collected)

Fulton 1968: 46 (B.C.; no actual specimens seen)

ORDER MONSTRILLLOIDA

FAMILY MONSTRILLIDAE

Monstrilla helgolandica (Claus, 1863)

Park 1967b: 146, fig. 3 (Str. of Georgia)

Fulton 1968: 49 (Str. of Georgia, rare)

Monstrilla longiremis Giesbrecht, 1892

Wailes 1929: 164 (Vancouver Is.)

Fulton 1968: 49 (Str. of Georgia, rare)

Monstrilla spinosa Park, 1967

Park 1967b: 150, fig. 4-5 (Str. of Georgia; original description)

Fulton 1968: 49 (Str. of Georgia, rare)

Monstrilla waeldeii Stephensen, 1913

Park 1967b: 144, fig. 1-2 (Str. of Georgia)

Fulton 1968: 49 (Str. of Georgia, rare)

Monstrilla sp.

Bishop et al. 1966: 153 (Str. of Georgia)

Fulton et al. 1967: 115 (Str. of Georgia)

Stephens et al. 1967: 67 (Vancouver Is., June-July)

Fulton et al. 1968: 145 (Str. of Georgia)

Fulton et al. 1969: 79 (Saanich Inlet, May-July)

ORDER CALIGOVIDA

FAMILY CALIGIDAE

Caligus sp.

Fraser 1920: 49, as *C. gurnardi* (Northumberland Channel, plankton haul, May, one specimen)

Parker 1965: 93 (B.C., plankton haul)

SUBCLASS MALACOSTRACA

ORDER MYSIDACEA

Suborder Lophogastrida

FAMILY EUCOPIIDAE

Eucopia sp.

Banner 1948a: 359, pl. 1, fig. 2a-c, as *E. unguiculata*⁶⁷ (Off B.C., 34 tows 100-1500 m [IFC]⁶⁸, 272 specimens)

Bishop et al. 1966: 154 (Str. of Georgia)

Fulton et al. 1967: 116 (Str. of Georgia)

Fulton 1968: 93, as *E. unguiculata* (B.C.; no actual specimens seen, refers apparently to Banner, above)

Fulton et al. 1968: 146 (Str. of Georgia)

FAMILY LOPHOGASTRIDAE

Gnathophausia gigas Willemoes-Suhm, 1873

Tattersall 1933: 185 (B.C.; no actual specimens seen)

Banner 1948a: 357 (Off B.C., 9 tows 400-1200 m [IFC], 9 specimens)

Pequegnat 1965, fig. 9 (distribution, including area under consideration)

Fulton 1968: 93 (B.C.; no actual specimens seen)

⁶⁷The material figured by Banner resembles *E. unguiculata* in some characters, and *E. grimaldii* in others; although it was placed in the synonymy of the latter species by Birstein and Tchindanova (1958: 266), I decided that it should be listed here as *Eucopia* sp. because the 3rd segment of the antennular peduncle (as figured by Banner) differs considerably from that of *E. grimaldii*.

⁶⁸[IFC] indicates length of cable out (Banner 1948a: 355).

Suborder Mysida

FAMILY MYSIDAE

Acanthomysis davisi Banner, 1948

Banner 1948b: 95, pl. 4, fig. 15a-j (Friday Hbr., summer, shallow water, about 100 specimens; original description)

Banner 1954c: 138 (designation of type-specimens)

Acanthomysis macropsis (W. Tattersall, 1933)

Wailes 1929: 164, as *Neomysis macropsis*⁶⁹ (Vancouver Is.)

Banner 1948b: 91 (Several localities in the Puget Sd. region, surface and 75–30 m, 12 specimens)

Fulton 1968: 97 (B.C.; no actual specimens seen)

Acanthomysis nephrophthalma Banner, 1948

Banner 1948b: 93, pl. 3, fig. 14a-g (Johnstone and Hecate straits, three stations 300–0 m [IFC, part], 3 specimens, off Steilacoom, 25–0 m, 1 specimen, off B.C., 5 tows 900–50 m [IFC], 7 specimens; original description)

Banner 1954c: 138 (designation of type-specimens)

Fulton 1968: 97 (B.C.; no actual specimens seen)

Acanthomysis pseudomacropsis (W. Tattersall, 1933)

Banner 1948b: 89 (SW of Vancouver Is., 75–0 m, 20 specimens, Juan de Fuca Str., 40 m and surface, 6 specimens, Camano Is., 175–0 m, 1 specimen, Puget Sd., 11 stations 100–0 m, 100 specimens, San Juan Archipelago, 3 stations 120–0 m, numerous specimens)

Fulton 1968: 96 (B.C.; no actual specimens seen)

Acanthomysis sculpta (W. Tattersall, 1933)

Banner 1948b: 97 (Crescent and Clallum bays, large swarms)

Acanthomysis sp.

Wailes 1929: 164, as *Orientomysis* sp. (Vancouver Is.)

Amblyops abbreviata (M. Sars, 1868)

Banner 1948a: 382 (off Mallard Bay, 300–0 m, 2 females, Portland Canal, 500–0 m, 2 females, SW of Moresby Is., 600–500 m, [IFC], 1 specimen)

Birstein and Tchindanova 1958, fig. 52 (distribution, including area under consideration)

Fulton 1968: 95 (B.C.; no actual specimens seen)

Boreomysis californica Ortmann, 1894

Banner 1948a: 362, pl. 2, fig. 3a-j, as *B. kincaidi* sp.n.⁷⁰ (off B.C., 18 tows 1500–100 m, [IFC], 24 specimens)

Banner 1954c: 138, as *B. kincaidi* (designation of type-specimen)

Birstein and Tchindanova 1958, fig. 49 (distribution, including area under consideration)

Fulton 1968: 95 (B.C.; no actual specimens seen)

Boreomysis inermis (Willemoes-Suhm, 1874)

Birstein and Tchindanova 1958, fig. 54 (distribution, including area under consideration)

Boreomysis microps G. O. Sars, 1883

Banner 1948a: 365, pl. 3, fig. 4a-g (off B.C., 26 tows 1200–400 m [IFC], 49 specimens)

⁶⁹Although the description of *N. macropsis* (= *Acanthomysis macropsis*) was only published in 1932, Wailes was already using Tattersall's manuscript name in 1929.

⁷⁰Although *B. kincaidi* has been placed in the synonymy of *B. plebeja* by Birstein and Tchindanova (1958), I am following Banner (1954), O. Tattersall (1955), and Li (1964) in considering it to be a synonym of *B. californica*.

Caesaromyssis vanclevei Banner, 1948

- Banner 1948a: 389, pl. 7, fig. 9a-e, pl. 8, fig. 9f-l, pl. 9, fig. 9m-v (off B.C., 94 tows 1200-60 m [IFC], 105 specimens; original description)
Banner 1954c: 138 (designation of type-specimens)
Birstein and Tchindanova 1958, fig. 50 (distribution, including area under consideration)
Fulton 1968: 95 (B.C.; no actual specimens seen)

Euchaetomera tenuis G. O. Sars, 1883

- Banner 1948a: 383 (off Queen Charlotte Is. and S Hecate Str., 9 tows 900-50 m [IFC], 9 specimens)
Fulton 1968: 95 (B.C.; no actual specimens seen)

Euchaetomeropsis pacifica Banner, 1948

- Banner 1948a: 386, pl. 6, fig. 8a-h, pl. 7, fig. 8i-l (SW of Queen Charlotte Is., Jan. 900-700 m [IFC], 1 female, midway between Queen Charlotte Is. and Vancouver Is., Dec., 300-100 m [IFC], 1 male; original description)
Banner 1954c: 138 (designation of type-specimen)
Fulton 1968: 65 (B.C.; no actual specimens seen)

Heteromyssis odontops Walker, 1898⁷¹

- Fulton 1968: 97 (B.C.; no actual specimens seen)

Holmesiella anomala Ortmann, 1908

- Wailes 1929: 164 (Vancouver Is.)
Banner 1948a: 395 (S Hecate Str., Jan.-Mar. and June, several depths, 18 specimens, SW of Moresby Is., Dec.-Jan., 260-135 and 600-500 m [IFC], 18 specimens, W of Graham Is., Oct., 900-700 m [IFC], 1 specimen, mouth of Hood Canal, 75-0 m, 1 specimen,

⁷¹The "schizopods" collected in the tow net off Port Townsend and mentioned by Herdman (1898: 87) are probably this species, *fide* Banner (1948b: 107).

Jefferson Pt., May, 100-50 m, 2 specimens)

- Bishop et al. 1966: 154 (Str. of Georgia)
Fulton et al. 1967: 116 (Str. of Georgia)
Stephens et al. 1967: 68 (Saanich Inlet, June-July)
Fulton 1968: 96 (Str. of Georgia, deep; relative abundance)
Fulton et al. 1968: 146 (Str. of Georgia)
Fulton et al. 1969: 80 (Saanich Inlet, May-July)

Inusitatomysis insolita Li, 1940?

- Banner 1948b: 67, pl. 1, fig. 10a-n, as *Inusitatomysis* sp.⁷² (S entrance of Hecate Str., 2 tows 150-10 m [IFC])
Fulton 1968: 95, as *I. serrata* (refers to Banner, above)

Meterythrops robusta S. I. Smith, 1879

- Wailes 1929: 164, as *Metherythrops?* [sic] *robusta* (Vancouver Is.)
Wailes 1933: 9, as *Metherythrops* [sic] *robusta* (W coast of Vancouver Is.)
Banner 1948a: 377 (Hecate Str. and Nootka Sd., 2 tows 200-50 m [IFC, part], 27 specimens, off B.C., 11 tows 600-60 m [IFC], 47 specimens, Puget Sd., 4 tows up to 200 m, 4 specimens)
Birstein and Tchindanova 1958, fig. 53 (distribution, including area under consideration)
Fulton 1968: 96 (B.C.; no actual specimens seen)

Mysidella americana Banner, 1948

- Banner 1948b: 109, pl. 16, fig. 19a-m (Queen Charlotte Sd., 600-500 m [IFC], 1 specimen; original description)
Banner 1954c: 138 (designation of type-specimen)
Fulton 1968: 97 (B.C.; no actual specimens seen)

⁷²Considered to be quite probably a synonym of *I. serrata* (= *I. insolita*) by Banner himself (1954b: 581). Additional material, however, is needed to settle the question whether the major characteristic by which Banner's specimens seem to differ from *I. insolita* (namely, the considerably larger size of the apical cleft of the telson) is an ontogenetic one, or due to environmental factors, or not.

- Mysis* sp.
- Legaré 1957: 528 (Str. of Georgia, June)
- Neomysis kadiakensis* Ortmann, 1908
- Banner 1948b: 82, pl. 3, fig. 13a–b (Juan de Fuca Str. and Puget St., 100–0 m, a few)
- Fulton 1968: 96 (B.C.; no actual specimens seen)
- Neomysis mercedis* Holmes, 1897⁷³
- Wailes 1933: 9, as *N. mercedes* [sic] (Vancouver Is.)
- Neomysis rayi* Murdoch 1884
- Wailes 1929: 161, etc., also as *N. franciscorum* (Vancouver Is., abundant but local)
- Banner 1948b: 78, pl. 2, fig. 12a–e (Juan de Fuca Str., 150–0 m, Puget Sd., 100–0 m, San Juan Archipelago; relative abundance)
- Bishop et al. 1966: (Str. of Georgia)
- Fulton et al. 1967: 116 (Str. of Georgia)
- Fulton 1968: 96 (Str. of Georgia, deep, rare)
- Fulton et al. 1968: 146 (Str. of Georgia)
- Neomysis* sp.
- Barracough and Fulton 1967: 4, etc. (S part of the Str. of Georgia, July)
- Parerythrops* sp.
- Bishop et al. 1966: 154 (Str. of Georgia)
- Fulton et al. 1967: 116 (Str. of Georgia)
- Fulton et al. 1968: 146 (Str. of Georgia)
- Proneomysis wailesi* W. Tattersall, 1933
- Fulton 1968: 97 (B.C.; no actual specimens seen)
- Pseudomma berkeleyi* W. Tattersall, 1933
- Fulton 1968: 94 (B.C.; no actual specimens seen)
- Pseudomma truncatum* S. I. Smith 1879
- Wailes 1929: 164 (Vancouver Is.)
- Wailes 1933: 9 (W coast of Vancouver Is.)
- Banner 1948a: 380, pl. 6, fig. 7a (N of Pender Is., near bottom, 5 specimens)
- Birstein and Tchindonova 1958, fig. 52 (distribution, including area under consideration)
- Bishop et al. 1966: 154 (Str. of Georgia)
- Fulton et al. 1967: 116 (Str. of Georgia)
- Fulton 1968: 94 (Str. of Georgia, deep, rare, Haro Str., deep, common)
- Fulton et al. 1968: (Str. of Georgia)
- Stilomysis grandis* (Goës, 1863)
- Bishop et al. 1966: 154 (Str. of Georgia)
- Fulton et al. 1967: 116 (Str. of Georgia)
- Fulton 1968: 95 (B.C.; no actual specimens seen)
- Fulton et al. 1968: 146 (Str. of Georgia)
- ORDER CUMACEA
- FAMILY DIASTYLIIDAE
- Diastylis bidentata* Calman, 1912
- Fulton 1968 (B.C.; no actual specimens seen)
- Diastylis koreana* Calman, 1912
- Fulton 1968 (B.C.; no actual specimens seen)
- Diastylis paraspinulosa* Zimmer, 1926
- Fulton 1968: 100 (B.C.; no actual specimens seen)
- Diastylis pellucida* Hart, 1930
- Bishop et al. 1966: 155 (Str. of Georgia)
- Fulton et al. 1967: 117 (Str. of Georgia)
- Fulton 1968: 100 (Str. of Georgia, spring surface, rare)
- Fulton et al. 1968: 147 (Str. of Georgia)
- Diastylis* sp.
- Wailes 1929: 161 (Princess Louise Inlet, and off Mittelnacht Is., 100 fath)
- Bishop et al. 1966: 155 (Str. of Georgia)
- Fulton et al. 1967: 117 (Str. of Georgia)

⁷³Almost certainly a junior synonym of *N. intermedia* (Czerniavsky, 1882).

- Fulton et al. 1968: 147 (Str. of Georgia)
- Leptostylis villosa* G. O. Sars, 1869
- Fulton 1968: 100 (B.C.; no actual specimens seen)
- FAMILY LAMPROPIDAE**
- Hemilamprops gracilis* Hart, 1930
- Fulton 1968: 99, as *Hemilaprops* [sic] *gracilis* (B.C.; no actual specimens seen)
- Hemilamprops* sp.
- Wailes 1929: 161 (off Mittelnacht Is., 100 fath)
- Lamprops carinata* Hart, 1930
- Bishop et al. 1966: 155 (Str. of Georgia)
- Fulton et al. 1967: 117 (Str. of Georgia)
- Fulton 1968: 100 (Str. of Georgia, spring, surface, rare)
- Fulton et al. 1968: 147 (Str. of Georgia)
- Lamprops fuscata* G. O. Sars, 1865
- Hart 1930: 36 (Departure Bay, surface, 2 females)
- Fulton 1968: 101 (B.C.; no actual specimens seen)
- Lamprops quadriplicata* S. I. Smith, 1879
- Fulton 1968: 101, as *L. quadruplicata* [sic] (B.C.; no actual specimens seen)
- Lamprops serrata* Hart, 1930
- Fulton 1968: 101 (B.C.; no actual specimens seen)
- FAMILY LEUCONIDAE**
- Eudorella emarginata* (Krøyer, 1846)
- Wailes 1929: 161 (off Mittelnacht Is., 100 fath)
- Fulton 1968: 99 (B.C.; no actual specimens seen)
- Eudorella pacifica* Hart, 1930
- Fulton 1968: 99 (B.C.; no actual specimens seen)
- Eudorella tridentata* Hart, 1930
- Fulton 1968: 99 (B.C.; no actual specimens seen)
- Eudorellopsis biplicata* Calman, 1912
- Fulton 1968: 100 (B.C.; no actual specimens seen)
- Leucon fulvus* G. O. Sars, 1865
- Fulton 1968: 99 (B.C.; no actual specimens seen)
- Leucon nasica* (Krøyer, 1841)
- Wailes 1929: 161 (near Kyuquot)
- FAMILY NANNASTACIDAE**
- Campylaspis rubicunda* (Lilljeborg, 1855)
- Wailes 1929: 161 (off Mittelnacht Is., 100 fath)
- Campylaspis rufa* Hart, 1930
- Fulton 1968: 101 (B.C.; no actual specimens seen)
- Campylaspis* sp.
- Wailes 1929: 161 (off Mittelnacht Is., 100 fath)
- Cumella vulgaris* Hart, 1930
- Hart 1930: 37, fig. 5a-d (Vancouver Is. region; original description)
- Bishop et al. 1966: 155 (Str. of Georgia)
- Fulton et al. 1967: 117 (Str. of Georgia)
- Fulton 1968: 101 (Str. of Georgia, spring, surface, rare)
- Fulton et al. 1968: 147 (Str. of Georgia)
- Cumella* sp.?
- Wailes 1929: 161 (Quatsino Sd. and Vancouver Hbr.)

ORDER ISOPODA

Suborder Flabellifera

FAMILY AEGIDAE

Rocinela angustata Richardson, 1904

Wailes 1929: 160 (Vancouver Is.)

Aega sp.

Barracough and Herlinveaux 1965: 24
(off Ballenas Is., Feb.)

FAMILY LIMNORIIDAE

Limnoria lignorum (Rathke, 1799)

Fee 1927: 27⁷⁴ (Departure Bay and vicinity, 60-0 fath)

Suborder Valvifera

FAMILY IDOTEIDAE

Idotea resecata Stimpson, 1857

Wailes 1929: 160, as *Penditotea* [sic] *resecata* (Vancouver Is.)

Suborder Oniscoidea

FAMILY LIGIIDAE

Ligia pallasi Brandt, 1833

Wailes 1929: 160, as *Ligyda pallasi* (Vancouver Is.)

ORDER AMPHIPODA

Suborder Gammaridea

FAMILY AMPELISCIDAE

Ampelisca macrocephala Lilljeborg, 1852

Wailes 1931: 41 (B.C.; identified by C. R. Shoemaker)

Wailes 1933: 10 (W coast of Vancouver Is.)

Fulton 1968: 107 (B.C.; no actual specimens seen)

FAMILY CALLIOPIIIDAE

Calliopius laeviusculus (Krøyer, 1838)

Wailes 1929: 161 (Vancouver Is., frequent)

Wailes 1930: 30, text-fig. ⁷⁵ (Str. of Georgia, moderate depth, abundant)

Wailes 1931: 41 (B.C.; identified by C. R. Shoemaker)

Wailes 1933: 8 (W coast of Vancouver Is.)

Barracough and Herlinveaux 1965: 24
(off Ballenas Is., Feb.)

Bishop et al. 1966: 154 (Str. of Georgia)

Stephen et al. 1967: 67 (Saanich Inlet, June-July)

Fulton et al. 1967: 116 (Str. of Georgia)

Fulton 1968: 106 (Str. of Georgia, spring, surface, common)

Fulton et al. 1968: 146 (Str. of Georgia)

FAMILY EUSIRIDAE

Eusirus leptocarpus G. O. Sars, 1893

Wailes 1933: 10 (W coast of Vancouver Is.)

Eusirus leptocarpus G. O. Sars, 1893?

Wailes 1931: 41 (B.C.; identified by C. R. Shoemaker)

Fulton 1968: 107 (B.C.; no actual specimens seen)

Pontogeneia inermis (Krøyer, 1838)

Wailes 1931: 41 (B.C.; identified by C. R. Shoemaker)

Wailes 1933: 10 (W coast of Vancouver Is.)

Fulton 1968: 107, as *Pontogenia* [sic] *inermis* (B.C.; no actual specimens seen)

⁷⁴ Not clear from Fee's remarks if this is actually a planktonic record.

⁷⁵ Not clear from Wailes' remarks if this is a planktonic record.

Rhachotropis inflata (G. O. Sars, 1882)

Wailes 1931: 41, text-fig. (B.C.; identified by C. R. Shoemaker)

Wailes 1933: 10, text-fig. (W coast of Vancouver Is.)

Fulton 1968: 107 (B.C.; no actual specimens seen)

Rhachotropis helleri (Boeck, 1871)

Wailes 1931: 41, text-fig. (B.C.; identified by C. R. Shoemaker)

Wailes 1933: 10, text-fig. (W coast of Vancouver Is.)

Fulton 1968: 107 (B.C.; no actual specimens seen)

FAMILY GAMMARIDAE

Maera danae (Stimpson, 1853)

Wailes 1931: 41, as *M. dubia*⁷⁶ (B.C.; identified by C. R. Shoemaker)

Wailes 1933: 10, as *M. dubia*⁷⁶ (W coast of Vancouver Is.)

Fulton 1968: 107, as *M. dubio* [sic]⁷⁶ (B.C.; no actual specimens seen)

Melita palmata (Montagu, 1804)

Wailes 1931: 41, text-fig. (B.C.; identified by C. R. Shoemaker)

Wailes 1933: 10, text-fig. (W coast of Vancouver Is.)

Fulton 1968: 107 (B.C.; no actual specimens seen)

FAMILY ISAEIDAE

Gammaropsis thompsoni (Walker, 1898)

Wailes 1931: 41, as *Eurystheus tenuicornis* (B.C.; identified by C. R. Shoemaker)

Wailes 1933: 10, as *Eurystheus tenuicornis* (W coast of Vancouver Is.)

Fulton 1968: 107, as *Eurystheus tenuicornis* (B.C.; no actual specimens seen)

FAMILY LYSIANASSIDAE

Cyphocaris challengerii Stebbing, 1888⁷⁷

Wailes 1929: 161 (Vancouver Is. and off Nanaimo; relative abundance)

Wailes 1931: 41 (B.C.; identified by C. R. Shoemaker)

Clemens 1933: 48 (Canadian Pac. waters)

Wailes 1933: 9 (W coast of Vancouver Is.; relative abundance)

Wailes 1936: 483 (B.C.; fish stomach)

Thorsteinson 1941: 57, pl. 2, fig. 21-24 (Nanaimo, 250 m, 47 specimens)

Barracough and Herlinveaux 1965: 6, etc. (Saanich Inlet, beginning of the year, 50-60 fath, common, off Ballenas Is., Feb.)

Bishop et al. 1966: 154 (Str. of Georgia)

Barracough 1967b: 4 (Str. of Georgia, fish stomach, June)

Barracough and Fulton 1967: 4, etc. (S part of the Str. of Georgia, July)

Bowman and McCain 1967: 1, etc., fig. 1-9 (SW of Queen Charlotte Is., W of Vancouver Is., Hecate Str., and Puget Sd. region)

Fulton et al. 1967: 116 (Str. of Georgia)

Stephens et al. 1967: 67 (Saanich Inlet, June-July)

Fulton 1968: 106 (Str. of Georgia, mid-depth and deep, abundant)

Fulton et al. 1968: 146 (Str. of Georgia)

Stephens 1969, fig. 67 (Str. of Georgia)

Opisa eschrichtii (Krøyer, 1842)

Wailes 1931: 41, (B.C., identified by C. R. Shoemaker)

Fulton 1968: 107 (B.C.; no actual specimens seen)

Orchomene obtusa (G. O. Sars, 1891)

Stephens et al. 1967: 67 as *Orchomenella obtusa* (Saanich Inlet, June-July)

Fulton 1968: 106, as *Orchomenella obtusa* (Str. of Georgia, mid-depth and deep, common)

⁷⁶Barnard, *in litt.*

⁷⁷This species contains some distinct forms in the NE Pacific; for a discussion of the nomenclatural problems involved, see Bowman and McCain (1967).

Orchomene sp.

- Bary et al. 1962: 37, as *Orchomenella* sp.
(Saanich Inlet, "scattering layer"; relative abundance)
- Boden and Kampa 1965: 166, as *Orchomenella* sp. (Saanich Inlet, "scattering layer"; relative abundance)
- Bishop et al. 1966: 154, as *Orchomenella* sp. (Str. of Georgia)
- Fulton et al. 1967: 116, as *Orchomenella* sp. (Str. of Georgia)
- Fulton et al. 1968: 146, as *Orchomenella* sp. (Str. of Georgia)

Lysianassidae, gen.? sp.?

- Barracough and Herlinveaux 1965: 6, etc., as *Lysianassidae* (near *Onisimus*) (Saanich Inlet, beginning of the year, 50–60 fath, common, and off Ballenas Is., Feb.)

FAMILY MELPHIDIIPPIDAE

Melphidippa goesi Stebbing, 1899

- Wailes 1931: 41, as *Melphidippa?* *goesi* (B.C.; identified by C. R. Shoemaker)

Melphidippa sp.

- Fulton 1968: 106 (Str. of Georgia, deep, rare)

FAMILY OEDICEROTIDAE

Monoculodes carinatus (Bate, 1856)

- Wailes 1931: 41 (B.C.; identified by C. R. Shoemaker)
- Wailes 1933: 10 (W coast of Vancouver Is.)
- Fulton 1968: 107 (B.C.; no actual specimens seen)

Westwoodilla caecula Bate, 1856

- Wailes 1931: 41, text-fig. (B.C.; identified by C. R. Shoemaker)
- Wailes 1933: 10, text-fig. (W coast of Vancouver Is.)
- Fulton 1968: 107 (B.C.; no actual specimens seen)

FAMILY PARDALISCIDAE

Nicippe tumida Bruzelius, 1859

- Wailes 1931: 41 (B.C.; identified by C. R. Shoemaker)
- Wailes 1933: 10 (W coast of Vancouver Is.)
- Fulton 1968: 107 (B.C.; no actual specimens seen)

FAMILY PHOXOCEPHALIDAE

Heterophoxus oculatus (Holmes, 1908)

- Wailes 1931: 41, as *Harpinia oculata* and *Harpinia affinis*⁷⁸ (B.C.; identified by C. R. Shoemaker)
- Wailes 1933: 10, as *Harpinia oculata* and *Harpinia affinis*⁷⁸ (W coast of Vancouver Is.)
- Fulton 1968: 107, as *Harpinia oculata* and *Harpinia affinis*⁷⁸ (B.C.; no actual specimens seen)

FAMILY STILIPEDIDAE

Stilipes distincta Holmes, 1908?

- Fulton 1968: 106 (Str. of Georgia, deep, rare)

Suborder Hyperiidea

FAMILY CYSTISOMIDAE

Cystisoma fabricii Stebbing, 1888

- Hart 1962: 18 (Foul Bay, Aug., 1 specimen)
- Fulton 1968: 105 (B.C.; no actual specimens seen)

Cystisoma pellucidum (Willemoes-Suhm, 1875)

- Hart 1962: 18, text-fig. (beach adjacent to Oak Bay Golf Links, Dec., 1 specimen; laboratory observations on behaviour)
- Fulton 1968: 105 (B.C.; no actual specimens seen)

⁷⁸Barnard, *in litt.*

FAMILY HYPERIIDAE

Hyperia galba (Montagu, 1813)⁷⁹

- Calman 1898: 265 (Puget Sd., summer, 2 specimens)
- Wailes 1929: 161 (Vancouver Is., frequent)
- Wailes 1930: 30, text-fig. (Vancouver Is., never abundant)
- Wailes 1931: 41 (B.C.; identified by C. R. Shoemaker)
- Clemens 1933: 47 (Canadian Pac. waters)
- Wailes 1933: 8 (W coast of Vancouver Is.)
- Barracough and Herlinveaux 1965: 24 (off Ballenas Is., Feb.)

Hyperia latreillei H. Milne-Edwards, 1830

- Stephens et al. 1967: 67 (Saanich Inlet, June-July)
- Fulton 1968: 104 (Str. of Georgia, deep, rare)
- Fulton et al. 1969: 79 (Saanich Inlet, May-July)

Hyperia medusarum (O. F. Müller, 1776)

- Wailes 1931: 41 (B.C.; identified by C. R. Shoemaker)
- Clemens 1933: 47 (Canadian Pac. waters)
- Fulton 1968: 103 (B.C.; no actual specimens seen)

Hyperia sp.

- Thorsteinson 1941: 87, pl. 8, fig. 79-82, as *H. spinigera*⁸⁰ (Friday Hbr., 1 specimen from a medusa)
- Bishop et al. 1966: 154 (Str. of Georgia)
- Fulton et al. 1967: 116 (Str. of Georgia)
- Fulton 1968: 103, as *H. spinigera* (B.C.; no actual specimens seen)
- Fulton et al. 1968: 146 (Str. of Georgia)

⁷⁹Most of the records of *H. galba* for the area are probably misidentifications of *H. medusarum* (Bowman, *in litt.*).

⁸⁰Thorsteinson's *H. spinigera* may be either *H. medusarum* or the actual *H. spinigera*; it is definitely not *H. galba* (Bowman, *in litt.*).

⁸¹Bowman, *in litt.*

Hyperoche mediterranea Senna, 1906

- Thorsteinson 1941: 88, as *H. leutkeni* [part, small specimen only]⁸¹ (Nanaimo)
- Stephens et al. 1967: 67, as *H. mediterranean* [sic] (Saanich Inlet, June-July)
- Fulton 1968: 104 (B.C.; no actual specimens seen)

Hyperoche medusarum (Krøyer, 1837)

- Thorsteinson 1941: 88, as *H. leutkeni* [part, large specimen only]⁸¹ (Nanaimo)
- Barracough 1967b: 48 (Str. of Georgia, June)
- Fulton 1968: 104 (Str. of Georgia, summer, surface, common)
- Fulton et al. 1969: 79 (Saanich Inlet, May-July)

Hyperoche sp.

- McMurrich 1916: 81 (Esperanza Inlet, Sept., patch of "brown water", 2 young specimens)
- Bishop et al. 1966: 154 (Str. of Georgia)
- Fulton et al. 1967: 116 (Str. of Georgia)
- Fulton et al. 1968: 146 (Str. of Georgia)

Parathemisto gracilipes (Norman, 1869)

- Bary 1963: 304 (Saanich Inlet)

Parathemisto pacifica Stebbing, 1888

- McMurrich 1916: 81, as *P. japonica* (Esperanza Inlet, Sept., patch of "brown water", 1 young female)
- Wailes 1929: 161, as *Themisto abyssorum* (Vancouver Is., frequent)
- Wailes 1930: 30, text-fig., as *P. oblivia* (off Nanaimo, throughout the year, 225-100 fath; relative abundance and vertical distribution)
- Shoemaker 1930: 133, as *Themisto abyssorum* (Nanaimo)
- Wailes 1931: 41, as *Themisto abyssorum* (B.C.; identified by C. R. Shoemaker)
- Clemens, 1933: 47, as *Themisto abyssorum* (Canadian Pac. waters)
- Wailes 1933: 8, as *Themisto abyssorum* (W coast of Vancouver Is.)
- Thorsteinson 1941: 90, pl. 9, fig. 93-97, as *P. abyssorum* (Nanaimo, 250 m)
- Bowman 1960: 345, fig. 9 (general distribution of the species in the N Pac.)

- Barracough and Herlinveaux 1965: 24
(off Ballenas Is., Feb.)
- Bishop et al. 1966: 154 (Str. of Georgia)
- Barracough 1967b: 4 (Str. of Georgia, June)
- Barracough 1967d: 73 (S part of the Str. of Georgia, Apr., fish stomach, 2 specimens)
- Barracough and Fulton 1967: 4, etc. (S part of the Str. of Georgia, July, fish stomach)
- Fulton et al. 1967: 116 (Str. of Georgia)
- Stephens et al. 1967: 67 (Saanich Inlet, June-July)
- Fulton 1968: 104 (Str. of Georgia, surface and mid-depth, abundant)
- Fulton et al. 1968: 146 (Str. of Georgia)
- Fulton et al. 1969: 4, etc. (Saanich Inlet, May-July; wet weight, number in relation to volume of water filtered)

Parathemisto sp.

- Fulton et al. 1969b: 6, etc. (Str. of Georgia)

FAMILY OXYCEPHALIDAE

Oxycephalus clausi Bovallius, 1887?

- Wailes 1931: 41 (B.C.; identified by C. R. Shoemaker)
- Clemens 1933: 47 (Canadian Pac. waters)
- Wailes 1933: 9 (N of Vancouver Is., 2 specimens)
- Fulton 1968: 107 (B.C.; no actual specimens seen)

FAMILY PHRONIMIDAE

Phronima sedentaria (Forskal, 1775)

- Hart 1962: 18 (Oak Bay, Jan., 1 specimen, Harling Pt., June, on a kelp frond at low tide)
- Bishop et al. 1966: 154 (Str. of Georgia)
- Fulton et al. 1967: 116 (Str. of Georgia)
- Fulton 1968: 105 (off Victoria, 64 m, 1 specimen)
- Fulton et al. 1968: 146 (Str. of Georgia)

FAMILY PHROSINIDAE

Primno macropa Guérin, 1836

- Wailes 1929: 161, as *Euprimno macropus* (Vancouver Is., frequent)
- Wailes 1931: 41, as *E. macropus* (B.C., identified by C. R. Shoemaker)
- Clemens 1933: 47, as *E. macropus* (Canadian Pac. waters)
- Wailes 1933: 9, as *E. macropus* (W coast of Vancouver Is.)
- Thorsteinson 1941: 90, pl. 9, fig. 98-102, (Nanaimo, 250-0 m)
- Barracough and Herlinveaux 1965: 24 (off Ballenas Is., Feb.)
- Barracough and Fulton 1967: 6, *E. macropa* (S part of the Str. of Georgia, July)
- Fulton 1968: 105, as *E. macropa* (Str. of Georgia, mid-depth, rare)

Primno sp.

- Bishop et al. 1966: 154, as *Euprimo* [sic] *abyssorum*⁸² (Str. of Georgia)
- Barracough 1967b: 4, as *Euprimno abyssorum* (Str. of Georgia, June, fish stomach)
- Barracough and Fulton 1967: 4, etc., as *E. abyssalis* (S part of Str. of Georgia, July, fish stomach)
- Fulton et al. 1967: 116, as *E. abyssorum* (Str. of Georgia)
- Stephens et al. 1967: 67, as *E. abyssalis* (Saanich Inlet, June-July)
- Fulton 1968: 104, as *E. abyssalis* (Str. of Georgia, mid-depth and deep, common)
- Fulton et al. 1968: 146 as *E. abyssorum* (Str. of Georgia)
- Fulton et al. 1969, as *E. abyssalis* (Saanich Inlet, May-July)

FAMILY SCINIDAE

Scina borealis (G. O. Sars, 1882)

⁸²*Euprimno abyssalis* sp.n., described by Bowman in 1953 in an unpublished thesis, is a *nomen nudum*; *abyssorum* is probably a *lapsus calami* for *abyssalis*.

Thorsteinson 1941: 86, pl. 8, fig. 78 (Nanaimo)
Barraclough and Herlinveaux 1965: 24
(off Ballenas Is., Feb.)
Bishop et al. 1966: 154 (Str. of Georgia)
Barraclough and Fulton 1967: 4 (Str. of Georgia, June, fish stomach)
Fulton et al. 1967: 116 (Str. of Georgia)
Stephens et al. 1967: 67 (Saanich Inlet, June-July)
Fulton 1968: 105 (Str. of Georgia, deep, common)
Fulton et al. 1968: 146 (Str. of Georgia)
Fulton et al. 1969: 79 (Saanich Inlet, May-July)

Suborder Caprellidea

FAMILY CAPRELLIDAE

Caprella sp.

Bishop et al. 1966: 154 (Str. of Georgia)
Fulton et al. 1967: 116 (Str. of Georgia)
Fulton et al. 1968: 146 (Str. of Georgia)

ORDER EUPHAUSIACEA

FAMILY EUPHAUSIIDAE

Euphausia pacifica Hansen, 1911

Hansen 1915: 81, pl. 1, fig. 2a-g (several localities in the area, Apr.-May, Aug., and Nov., various depths)
Wailes 1929: 161, etc. (Vancouver Is.)
Williamson 1930b: 203, fig. 2 (W coast of Vancouver Is., Apr.-May, fish stomach)
Hart and Wailes 1932: 252 (Vancouver Is., fish stomach)
Clemens 1933: 49 (Canadian Pac. waters)
Tattersall 1933: 184 (Round Is., 55 m, and Burrard Inlet; relative abundance and horizontal distribution in B.C.)
Wailes 1933: 8 (W coast of Vancouver Is.; relative abundance)
Wailes 1936: 483 (B.C., fish stomach)
Banner 1950: 33, pl. 3, fig. 26a-d (B.C., 11 tows, 135 specimens, off B.C., 90 tows, 1200-70 m [IFC, part]⁸³, 3323 specimens, Puget Sd. area, 55 tows,

1026 specimens; relative abundance and vertical distribution)

Barraclough and Herlinveaux 1961: 2 (Saanich Inlet, echo scattering layer, Mar., many)

Bary et al. 1962: 37 (Saanich Inlet, scattering layer; relative abundance)

Brinton 1962: 108, fig. 28 (general distribution)

Bary 1963: 304 (Saanich Inlet)

Ponomareva 1963: 22 (range, including area under consideration)

Regan 1963: 10, pl. 1 (Indian Arm, Sept., 215 m)

Barraclough and Herlinveaux 1965: 5, etc. (off Ballenas Is., Feb., very abundant, Saanich Inlet, Jan., scattering layer, and May)

Boden and Kampa 1965: 155, etc., text-fig. (Saanich Inlet, scattering layer; vertical migration)

Bishop et al. 1966: 153 (Str. of Georgia)

Kennedy et al. 1966: 6 (Str. of Georgia)

Barraclough and Fulton 1967: 4, etc. (S part of Str. of Georgia, July)

Fulton et al. 1967: 115 (Str. of Georgia)

LeBrasseur and Fulton 1967: 15 (B.C.; relative abundance, vertical migration)

Paranjape 1967: 1229, etc. (Saanich Inlet; laboratory observations on moulting and respiration)

Parsons et al. 1967: 12 (Saanich Inlet)

Stephens et al. 1967: 67 (Saanich Inlet, June-July)

Fulton 1968: 117 (Str. of Georgia, mid-depth to surface, very abundant)

Fulton et al. 1968: 145 (Str. of Georgia, 1967)

Fulton et al. 1969: 4, etc., as *E. pacifica* [sic] (Saanich Inlet, May-July; wet weight, number in relation to volume of water filtered)

Mauchline and Fisher 1969, fig. 21 (distribution, including area under consideration)

—
⁸³[IFC] indicates length of cable out (Banner 1948a: 355).

Euphausia sp.

Campbell 1929a: 16 (Str. of Georgia; vertical distribution)

Euphausia sp.?

Lowe 1936: 14 (S part of Str. of Georgia, fish stomach)

Brinton 1962: 169, fig. 81 (general distribution in the Pac.)

Mauchline and Fisher 1969, fig. 36 (distribution, including area under consideration)

Nematobrachion flexipes (Ortmann, 1893)

Banner 1950: 15 (midway between Queen Charlotte Is. and Vancouver Is., 600–400 m [IFC], 1 specimen)

Brinton 1962: 160, fig. 72 (distribution in the Pac.)

Mauchline and Fisher 1969, fig. 31 (distribution, including area under consideration)

Tessarabrachion oculatum Hansen, 1911

Clemens 1933: 49 (Canadian Pac. waters)
Tattersall 1933: 185 (B.C.; no actual specimens seen)

Banner 1950: 32 (B.C., 275–100 m, 1 specimen, off B.C., 900–40 m [IFC, part], 202 specimens in 36 tows, Puget Sd. area, 2 specimens)

Brinton 1962: 151, fig. 60, as *T. oculatus* (general distribution of the species)

Bishop et al. 1966: 153, as *T. oculatus* (Str. of Georgia)

Fulton et al. 1967: 115, as *T. oculatus* (Str. of Georgia)

Paranjape 1967: 1229, etc., as *T. oculatus* (San Juan Channel; laboratory observations on moulting)

Fulton 1968: 118, as *T. oculatus* (Str. of Georgia, deep, rare)

Fulton et al. 1968: 145, as *T. oculatus* (Str. of Georgia)

Mauchline and Fisher 1969, fig. 25 (distribution, including area under consideration)

Nematoscelis difficilis Hansen, 1911

Banner 1950: 29 (off Queen Charlotte Is., 600–100 m [IFC], 2 specimens in 2 tows, Pillar Pt. and Jefferson Head, 150 m, 23 specimens in 2 tows)

Boden et al. 1955: 364, fig. 40a–d (range of the species in the NE Pac., including B.C.)

Boden 1962: 152, fig. 62 (general distribution of the species)

Fulton 1968: 118 (Str. of Georgia, deep, rare)

Mauchline and Fisher 1969, fig. 28 (distribution, including area under consideration)

Thysanoessa inermis (Krøyer, 1846)

Clemens 1933: 49 (Canadian Pac. waters)
Tattersall 1933: 185 (B.C.; no actual specimens seen)

Banner 1950: 24, pl. 3, fig. 23a–b (off B.C., 270–100 m [IFC], 7 specimens in 4 tows)

Boden et al. 1955: 354, fig. 35a–d (range in the NE Pac., including B.C.)

Brinton 1962: 139, fig. 50 (general distribution in the N Pac.)

Bishop et al. 1966: 153 (Str. of Georgia)

Fulton et al. 1967: 115 (Str. of Georgia)

Fulton 1968: 117 (Str. of Georgia, deep, rare)

Fulton et al. 1968: 145 (Str. of Georgia)

Mauchline and Fisher 1969, fig. 26 (distribution, including area under consideration)

Stylocheiron longicornis G. O. Sars, 1883

Banner 1950: 37, pl. 4, fig. 25a (W coast of Moresby Is., 600–400 m [IFC], 1 specimen)

Brinton 1962: 190, fig. 98a–b, 99 (distribution in the Pac.; discussion of the 2 known forms)

Mauchline and Fisher 1969, fig. 35 (distribution, including area under consideration; "long form")

Stylocheiron maximum Hansen, 1908

Banner 1950: 39, pl. 4, fig. 26a–j (off B.C., 900–100 m, 40 specimens in 25 tows)

Thysanoessa longipes Brandt, 1851⁸⁴

- Hansen 1915: 87, pl. 1, fig. 3a-d, pl. 2, fig. 1a-e, (Puget Sd., Apr., fish stomach, 1 specimen)
- Wailes 1929: 161, etc. (Vancouver Is.)
- Tattersall 1933: 184 (Vancouver, Baynes Sd. and Kyuquot Sd.)
- Clemens 1933: 49 (Canadian Pac. waters)
- Wailes 1933: 8 (Barkley, Nootka, and Kyuquot sounds, scarce)
- Banner 1950: 21⁸⁵ (N B.C., 42 specimens in 5 tows, off B.C., 1200-40 m, [IFC, part], 1902 specimens in 71 tows, Puget Sd., 14 specimens in 7 tows)
- Brinton 1962: 144, fig. 55 (distribution in the Pac.)
- Bishop et al. 1966: 153 (Str. of Georgia)
- Barracough 1967b: 4 (Str. of Georgia, June, fish stomach)
- Barracough and Fulton 1967: 11 (S part of the Str. of Georgia, July, fish stomach)
- Fulton et al. 1967: 115 (Str. of Georgia)
- Paranjape 1967: 1229, etc. (San Juan Channel; laboratory observations on moulting)
- Stephens et al. 1967: 67 (Saanich Inlet, June-July)
- Fulton 1968: 117 (Str. of Georgia, mid-depth to surface, abundant)
- Fulton et al. 1968: 145 (Str. of Georgia)
- Fulton et al. 1969: 79 (Saanich Inlet, May-July)
- Mauchline and Fisher 1969, fig., 26 (distribution, including area under consideration)

Thysanoessa raschii (M. Sars, 1864)

- Hansen 1915: 96 (E entrance of Juan de Fuca Str., Aug., 1 specimen, Puget Sd. area, Apr., fish stomach, many)
- Wailes 1929: 164 (Vancouver Is.)
- Clemens 1933: 49 (Canadian Pac. waters)
- Tattersall 1933: 185 (Active Pass and

⁸⁴sensu lato, some of the records in the region possibly including the related species *T. inspinata* Nemoto, 1963.

⁸⁵Part, only; judging from his statement concerning the position of the denticle on the lateral margin of the carapace, Banner's material includes *T. inspinata*.

Cape Flattery areas; identified by W. L. Schmitt)

Wailes 1933: 9 (W coast of Vancouver Is.)

Banner 1950: 27, pl. 3, fig. 22a-b (Portland Canal, 10 specimens in 3 tows, off B.C., 1200-35 m [IFC], 21 specimens in 2 tows, Puget Sd. area, 175-0 m, 681 specimens in 43 tows)

Boden et al. 1955: 356, fig. 36a-e (range in NE Pac., including area under consideration)

Brinton 1962: 140, fig. 52 (distribution in the N. Pac.)

Bishop et al. 1966: 153 (Str. of Georgia)

Barracough 1967a: 4 (Str. of Georgia, June)

Barracough and Fulton 1967: 4, etc. (Str. of Georgia, June, fish stomachs)

Fulton et al. 1967: 115 (Str. of Georgia)

Paranjape 1967: 1229, etc. (San Juan Channel; laboratory observations on moulting)

Stephens et al. 1967: 67 (Saanich Inlet, June-July)

Fulton 1968: 117 (Str. of Georgia, mid-depth to surface, rare)

Fulton et al. 1968: 145 (Str. of Georgia)

Fulton et al. 1969: 79 (Saanich Inlet, May-July)

Mauchline and Fisher 1969, fig. 27 (distribution, including area under consideration)

Thysanoessa spinifera Holmes, 1900

Hansen 1915: 90, pl. 3, fig. 1a-k (Barclay Sd., surface, 5 specimens, E entrance of Juan de Fuca Str., Aug., 15 specimens, Puget Sd., Apr., fish stomach)

Wailes 1929: 161, etc. (Vancouver Is.)

Williamson 1930b: 203 (W coast of Vancouver Is., May, fish stomach)

Hart and Wailes 1932: 252 (Nootka, fish stomach)

Clemens 1933: 49 (Canadian Pac. waters)

Tattersall 1933: 185 (Barkley Sd; relative abundance)

Wailes 1933: 8 (W coast of Vancouver Is.; relative abundance)

Banner 1950: 18, pl. 2, fig. 21a-d, (B.C., including Portland Canal, 100-35 m, 59 specimens in 12 tows, off B.C., 900-35 m, 751 specimens in 43 tows, Puget

- Sd. area, 175–0 m, 46 specimens in 14 tows)
- Brinton 1962: 142, fig. 53 (distribution in the N Pac.)
- Bishop et al. 1966: 153 (Str. of Georgia)
- Barraclough and Fulton 1967: 4, etc. (S part of Str. of Georgia, July, fish stomach)
- Fulton et al. 1967: 115 (Str. of Georgia)
- Paranjape 1967: 1229, etc. (San Juan Channel; laboratory observations on moulting)
- Fulton 1968: 118 (Str. of Georgia, mid-depth to surface, rare)
- Fulton et al. 1968: 145 (Str. of Georgia)
- Mauchline and Fisher 1969, fig. 26 (distribution, including area under consideration)

Thysanoessa sp.

- Barraclough and Herlinveaux 1965: 24 (off Ballenas Is., Feb.)

Thysanopoda acutifrons Holt and Tattersall, 1905

- Boden et al. 1955: 311, fig. 13a-d (range in the NE Pac. extending to B.C.)
- Brinton 1962: 89, fig. 14 (distribution in the Pac. Ocean)
- Ponomareva 1963: 19 (range in the NE Pac. extending to area under consideration)
- Mauchline and Fisher 1969, fig. 14 (distribution, including area under consideration)

Thysanopoda acutifrons Holt and Tattersall, 1905?

- Banner 1950: 9, pl. 1, fig. 20a-e, pl. 2, fig. 20d-h, as *T. dubia* sp.nov. (off B.C., 700–100 m [IFC], 17 specimens in 16 tows; relative abundance)
- Banner 1954c: 138, as *T. dubia* (designation of type-specimen)

ORDER DECAPODA

- Suborder Natantia
Section Penaeidea

FAMILY SERGESTIDAE

Sergestes similis Hansen, 1903

- Butler 1964: 419 (Dixon Entrance, 21 specimens, off W coast of Vancouver Is., Juan de Fuca Str., Str. of Georgia, 110–60 fath, 16 specimens)
- Barraclough and Herlinveaux 1965: 6, etc. (Saanich Inlet, beginning of the year, apparently in the lower layers of the echo scattering layer, off Ballenas Is., Feb.)
- Bishop et al. 1966: 154 (Str. of Georgia)
- Fulton et al. 1967: 116 (Str. of Georgia)
- Fulton 1968: 125 (Str. of Georgia, mid-depth, rare)
- Fulton et al. 1968: 146 (Str. of Georgia)
- Milne 1968: 26 (off W coast of Vancouver Is., abundant)

Section Caridea

FAMILY CRANGONIDAE

Crangon communis Rathbun, 1899

- Bishop et al. 1966: 154 (Str. of Georgia)
- Fulton et al. 1967: 116 (Str. of Georgia)
- Fulton 1968: 126 (Str. of Georgia, deep, rare; juveniles)

Crangon sp.

- Barraclough and Fulton 1967: 5, etc. (Str. of Georgia, July, fish stomach; larvae)

FAMILY HIPPOLYTIDAE

Spirontocaris sica (Rathbun, 1902)

- Butler 1964: 420 (Saanich Inlet, echo scattering layer, 2 specimens)
- Barraclough and Herlinveaux 1965: 6, etc. (Saanich Inlet, Jan., apparently in the lower layers of the echo scattering layer)
- Fulton 1968: 125 (Str. of Georgia; no actual specimens seen)

FAMILY PANDALIDAE

Pandalopsis dispar Rathbun, 1902

Berkeley 1931: 109, fig. 11, 13a-f (Nanaimo; late larval stages, and hatching time)

Pandalus borealis Krøyer, 1838

Berkeley 1931: 98, fig. 7-8 (Nanaimo; late larval stages, and hatching time)

Pandalus danae Stimpson, 1857

Berkeley 1931: 89, fig. 3-5 (Nanaimo; late larval stages, and hatching time)

Pandalus hypsinotus Brandt, 1851

Berkeley 1931: 96, fig. 6 (Nanaimo; larvae, and hatching time)

Pandalus platyceros Brandt, 1851

Berkeley 1931: 104, fig. 9-10 (Nanaimo; late larval stages, and hatching time)

FAMILY PASIPHAEIDAE

Pasiphaea pacifica Rathbun, 1902

Wailes 1929: 161 (Vancouver Is.)
Barraclough and Herlinveaux 1965: 8, etc., as *Pasaphia* [sic] *pacifica* (off Ballenas Is., beginning of the year, intermediate layer of the echo scattering layer, also Feb. and May)

Bishop et al. 1966: 154 (Str. of Georgia)

Kennedy et al. 1966: 1, etc., fig. 2 (Str. of Georgia, echo scattering layer, abundant)

Fulton et al. 1967: 116 (Str. of Georgia)

Stephens et al. 1967: 68 (Saanich Inlet, June-July)

Fulton 1968: 125 (Str. of Georgia, deep, rare)

Fulton et al. 1968: 146 (Str. of Georgia)

Fulton et al. 1969: 80 (Saanich Inlet, May-July)

Suborder Reptantia

Section Macrura

FAMILY CALLIANASSIDAE

Upogebia pugettensis (Dana, 1852)

Hart 1937: 197, fig. 5-6 (Departure Bay, Feb.-May; larvae)

Section Anomura

FAMILY GALATHEIDAE

Munida quadrispina Benedict, 1902⁸⁶

Barraclough and Herlinveaux 1965: 17, etc. (Saanich Inlet, Jan., off Ballenas Is., Feb.)

Bishop et al. 1966: 154 (Str. of Georgia)

Fulton et al. 1967: 116 (Str. of Georgia)

Fulton 1968: 126 (Saanich Inlet and Str. of Georgia, mid-depth, common in autumn)

Fulton et al. 1968: 146 (Str. of Georgia)

FAMILY LITHODIDAE

Cryptolithodes typicus Brandt, 1849

Hart 1965: 265 (B.C.; larvae)

FAMILY PAGURIDAE

Orthopagurus schmitti (Stevens, 1925)

Hart 1937: 214, fig. 11c-d (off Horswell Pt., Apr.; larvae)

Pagurus sp.?

Barraclough and Fulton 1967: 5 (Str. of Georgia, fish stomach; larvae)

⁸⁶The identification below must be considered tentative.

Section Brachyura

FAMILY CANCRIDAE

Cancer magister Dana, 1852

Weymouth *in* Anon. 1915: 13 (Victoria
and Nanaimo; time of hatching and of
occurrence of the larvae and of moulting
into megalops)

MacKay and Weymouth 1935: 208

(Boundary Bay; time of occurrence of
megalops)

MacKay 1942: 9, etc., fig. 7 (B.C.; larvae,
time of hatching and of occurrence of
megalops)

Cancer sp.

Pritchard and Tester 1944: 7, fig. 7c
(B.C., fish stomach; larvae)

Barracough 1967b: 4 (Str. of Georgia,
June, fish stomach; larvae)

PHYLUM BRYOZOA

CLASS GYMNOLAEMATA

ORDER CHEILOSTOMATA

Suborder Anasca

FAMILY MEMBRANIPORIDAE

Membranipora villosa Hincks, 1880

O'Donoghue 1927: 249, etc., pl. 1, fig. 1
(off Jesse Is. and Black Rocks; cypho-
nautes, curve of abundance during the
day)

Membranipora spp.

Wailes 1936: 481 (B.C., fish stomach; lar-
vae)

PHYLUM PHORONIDA

FAMILY PHORONIDAE

Phoronis vancouverensis Pixell, 1912?

Fraser 1932: 58 (Nanaimo region and
San Juan Archipelago; actinotrochs)

Phoronis sp.

Campbell 1929a: 17 (Str. of Georgia, 50–
30 yards, small number; actinotrochs)

Phoronopsis harmeri Pixell, 1912?

Fraser 1932: 58 (Nanaimo region and
San Juan Archipelago; actinotrochs)

PHYLUM CHAETOGNATHA

Eukrohnia hamata (Möbius, 1875)

- Lea 1955: 593, etc. (off B.C., also in many of the inland passages and inlets; relative abundance, sexual maturity, and salinity and temperature as distribution barriers)
- Legaré 1957: 544, etc. (Str. of Georgia, June and Nov., a few)
- Sund 1959: 351, etc., fig. 1-2 (S and SW of Queen Charlotte Is., Aug., 200-0 m, about midway between Queen Charlotte Is. and Vancouver Is., May, 150-0 m, off Cape Flattery, June 150-0 m)
- Alvariño 1962, fig. 24 (distribution, including B.C.)
- Alvariño 1965: 157, tab. 10 (B.C.; not original, refers to Lea 1955)
- Bishop et al. 1966: 154, as *Eukronia* [sic] *hamata* (Str. of Georgia)
- Fulton et al. 1967: 116 (Str. of Georgia)
- Fulton 1968: 130, etc. (Str. of Georgia, spring-summer, deep, rare)
- Fulton et al. 1968: 146, as *Eukronia* [sic] *hamata* (Str. of Georgia)

Sagitta decipiens Fowler, 1905

- Lea 1955: 593, etc., fig. 4 (Queen Charlotte Sd. and outer end of Dixon Entrance, 249 and 366 m, 7 specimens⁸⁷; sexual maturity)
- LeBrasseur 1959: 796 (off B.C., summer, sporadic and infrequent)
- Alvariño 1965, fig. 9, tab. 10 (distribution, including area under consideration)
- Fulton 1968: 129 (B.C.; no actual specimens seen)

Sagitta elegans Verrill, 1873

- Wailes 1929: 163 (Vancouver Is.; distribution and relative abundance)
- Clemens 1933: 17 (Canadian Pac. waters)
- Lea 1955: 593, etc., fig. 4 (whole coast of B.C.; relative abundance, sexual maturity, and temperature and salinity as distribution barriers)
- Legaré 1957: 544, etc. (Str. of Georgia, June and Nov.; relative abundance)
- Sund 1959: 351, etc., fig. 1-2 (S of Queen Charlotte Is., Aug., 200-0 m, midway between Queen Charlotte Is. and Vancouver Is., May, 150-0 m, off Cape Flattery, June, 150-0 m)
- Alvariño 1964a, fig. 1 (distribution, including area under consideration)
- Alvariño 1964b, fig. 2 (distribution, including area under consideration)
- Alvariño 1965, fig. 10, tab. 10 (distribution, including area under consideration)
- Barraclough and Herlinveaux 1965: 24 (off Ballenas Is., Feb.)
- Bishop et al. 1966: 154 (Str. of Georgia)
- Barraclough 1967b: 5, etc. (Str. of Georgia, June)
- Barraclough and Fulton 1967: 5, etc. (S part of Str. of Georgia, July, fish stomach)
- Fulton et al. 1967: 116 (Str. of Georgia)
- LeBrasseur and Fulton 1967: 11 (B.C.; relative abundance)
- Stephens et al. 1967: 67 (Saanich Inlet, June-July)
- Fulton 1968: 129 (Str. of Georgia, year round, surface and mid-depth, abundant)
- Fulton et al. 1968: 146 (Str. of Georgia)
- Fulton et al. 1969: 4, etc. (Saanich Inlet, May-July; wet weight, number in relation to volume of water filtered)

⁸⁷Three of which tentatively identified.

Sagitta scriptae Alvariño, 1962

- Wailes 1929: 163, as *S. myra*⁸⁸ (W coast of Vancouver Is. and Str. of Georgia, scarce; size)
- Clemens 1933: 17, as *S. lyra* (Canadian Pac. waters)
- Lea 1955: 593, etc., fig. 4, as *S. lyra* (open waters along the W coast of Queen Charlotte Is., Aug., 6 specimens; size and sexual maturity)
- Legaré 1957: 544, etc., as *S. lyra* (Str. of Georgia, June, deep, 2 specimens)
- Sund 1959: 351, etc., fig. 2, as *S. lyra* (San Juan Archipelago, summer, surface under a night light in waters less than 200 m deep, 1 specimen, off Cape Flattery, June, 150-0 m)
- LeBrasseur 1959: 796, fig. 1-3, tab. 1, as *S. lyra* (B.C.; occurrence in relation to salinity and temperature)
- Alvariño 1962, fig. 10 (distribution, including area under consideration)
- Alvariño 1964a, fig. 4 (distribution, including area under consideration)
- Alvariño 1965, fig. 13, tab. 10 (distribution, including area under consideration)
- Bishop et al. 1966: 154 (Str. of Georgia)

⁸⁸Probably a *lapsus calami* for *lyra*.

- Fulton et al. 1967: 116, as *S. scriptae* [sic] (Str. of Georgia)
- Stephens et al. 1967: 67, as *S. scriptae* [sic] (Saanich Inlet, June-July)
- Fulton 1968: 129 (Str. of Georgia, spring, mid-depth and deep, rare)
- Fulton et al. 1968: 146, as *S. scriptae* [sic] (Str. of Georgia)
- Fulton et al. 1969: 79, as *S. scriptae* [sic] (Saanich Inlet, May-July)

Sagitta zeteyios Fowler, 1905

- Lea 1955: 596, as *S. planctonis* (B.C.; refers to LeBrasseur's material)
- LeBrasseur 1959: 796, as *S. planctonis* (off B.C., summer, sporadic and infrequent)
- Alvariño 1965, fig. 15 (distribution, including area under consideration)
- Fulton 1968: 130, etc., as *S. zeteyios* [sic] and *S. planktonis* [in key] (B.C.; no actual specimens seen)

Sagitta sp.

- Harrington and Griffin 1898: 164 (Puget Sd.)
- Campbell 1929a: 16 (Str. of Georgia, 100-50 yards, odd specimens)
- Seki and Kennedy 1969: 3168 (Str. of Georgia, winter, occasional)

PHYLUM ECHINODERMATA	CLASS HOLOTHUROIDEA
CLASS ECHINOIDEA	ORDER DENDROCHIROTA
ORDER CLYPEASTROIDEA	FAMILY CUCUMARIIDAE
FAMILY SCUTELLIDAE	<i>Cucumaria miniata</i> Brandt, 1835 Johnson and Johnson 1950: 80 ⁸⁹ (Friday Hbr.; larvae, colour)
<i>Dendraster excentricus</i> (Eschscholtz, 1831) Johnson and Johnson 1950: 80 (Friday Hbr.; larvae)	<i>Cucumaria piperata</i> (Stimpson, 1864)? Johnson and Johnson 1950: 80 ⁸⁹ (Friday Hbr.; colour)
ORDER DIADEMATOIDEA	<i>Cucumaria populifera</i> (Stimpson, 1864)? Johnson and Johnson 1950: 80 (Friday Hbr.; colour)
FAMILY STRONGYLOCENTRIDAE	<i>Cucumaria</i> spp. Johnson 1932: 18 (Friday Hbr., Mar.- May)
<i>Strongylocentrotus franciscanus</i> (Agassiz, 1863) Mortensen 1921: 17, etc. (Nanaimo, 1 specimen)	<i>Eupentacta quinquesemita</i> (Selenka, 1867) Johnson and Johnson 1950: 77 (Friday Hbr.; colour and size)

⁸⁹Tentative identification.

PHYLUM CHORDATA	<i>Thalia democratica</i> (Forskal, 1775)
SUBPHYLUM UROCHORDATA	Wailes 1929: 162, as <i>Salpa mucronata</i> (Vancouver Is.; size and relative abundance)
CLASS THALIACEA	Clemens 1933: 54, as <i>Salpa mucronata</i> (Canadian Pac. waters)
ORDER DESMOMYARIA	Fulton 1968: 140 (B.C.; no actual specimens seen)
FAMILY SALPIDAE	
<i>Cyclosalpa affinis</i> (Chamisso, 1819)	<i>Thetys vagina</i> Tilesius, 1802
Clemens 1933: 54 (Canadian Pac. waters)	Clemens 1933: 54 (Canadian Pac. waters)
<i>Cyclosalpa pinnata</i> (Forskal, 1775)	
Clemens, 1933: 54 (Canadian Pac. waters)	CLASS COPELATA
<i>Iasis zonaria</i> (Pallas, 1774)	FAMILY FRITILLARIIDAE
Clemens 1933: 54 (Canadian Pac. waters)	<i>Fritillaria borealis</i> Lohmann, 1896
<i>Salpa aspera</i> Chamisso, 1819	Fulton 1968: 139 (Str. of Georgia, spring, surface, common)
Fulton 1968: 140 (B.C.; no actual specimens seen)	<i>Fritillaria</i> sp.
<i>Salpa aspera</i> Chamisso, 1819?	Wailes 1929: 162 (Vancouver Is.; relative abundance)
Wailes 1929: 162 (Vancouver Is.)	
Williamson 1930a: 153, fig. 3, as <i>S. fusiformis</i> var. <i>aspera</i> ? (off Barkley Sd., June, large specimens, Hippa Is., July)	FAMILY OIKOPLEURIDAE
<i>Salpa fusiformis</i> Cuvier, 1804	<i>Oikopleura dioica</i> Fol, 1872
Clemens 1933: 54 (Canadian Pac. waters)	McMurrich 1916: 88 (off Rose Spit and off Hudson Bay Passage, Aug., surface, a few)
Berkeley and Berkeley 1960: 797 (Dixon Entrance, 100-0 m; identified by L. Berner)	Wailes 1929: 162 (Vancouver Is.; relative abundance)
<i>Salpa maxima</i> Forskal, 1775	Fulton 1968: 139 (Str. of Georgia, spring, surface, common)
Wailes 1929: 162 (Vancouver Is.; size)	<i>Oikopleura labradoriensis</i> Lohmann, 1892
Clemens 1933: 54 (Canadian Pac. waters)	Fulton 1968: 139 (B.C.; no actual specimens seen)
Fulton 1968: 140 (B.C.; no actual specimens seen)	

Oikopleura vanhoeffeni Lohmann, 1896⁹⁰

Fulton 1968: 139 (B.C.; no actual specimens seen)

Oikopleura sp.

Herdman 1898: 87 (Port Townsend, Sept., many; identified by I. C. Thompson)

Frolander 1962: 664 (SW of Vancouver Is. and Juan de Fuca Str.; relative abundance)

Bishop et al. 1966: 154 (Str. of Georgia)

Barracough 1967b: 5 (Str. of Georgia, June)

Barracough 1967c: (S part of the Str. of Georgia, Apr., fish stomach)

Barracough 1967d: 65 (S part of the Str. of Georgia, Apr., fish stomach, 2 specimens)

Barracough and Fulton 1967: 4, etc. (S part of the Str. of Georgia, July)

Fulton et al. 1967: 116 (Str. of Georgia)

Stephens et al. 1967: 5 (Saanich Inlet, June-July)

Fulton et al. 1968: 146, etc. (Str. of Georgia)

Fulton et al. 1969: 4, etc. (Saanich Inlet, May-July; wet weight, number in relation to volume of water filtered)

Oikopleura spp.

Hart and Wailes 1932: 252 (Vancouver Is., fish stomach)

Legaré 1957: 528 (Str. of Georgia, June and Nov.; relative abundance)

Oikopleura sp.^{?1}

Harrington and Griffin 1898: 164, as *Appendicularia* sp. (Puget Sd., a large specimen)

Wailes 1929: 162, as *Appendicularia* sp. (Vancouver Is.; relative abundance)

Wailes 1936: 483, as *Appendicularia* sp. (B.C., fish stomach)

⁹⁰Probably a misidentification; it is unlikely that *O. vanhoeffeni* occurs in the area (Tokioka, *in litt.*).

⁹¹Tokioka, *in litt.*

Fulton et al. 1969a: 6, etc. (Str. of Georgia)

SUBPHYLUM VERTEBRATA

SUPERCLASS GNATHOSTOMATA

CLASS PISCES

SUBCLASS NEOPTERYGII

ORDER ISOSPONDYLI

Suborder Clupoidea

FAMILY CLUPEIDAE

Clupea pallasi Valenciennes, 1847

Gwyn 1940: 11, etc., fig. 1-5 (SE Vancouver Is.; development of the vertebral column in larvae and postlarvae)

Stevenson 1962: 735, etc. (W coast of Vancouver Is.; biology of the larvae)

Taylor 1964: 3, etc., fig. 2 (B.C.; biology of the larvae)

Barracough 1967: 2455 (S end of Str. of Georgia, surface, July; relative abundance of larvae and spawning period)

Barracough 1967b: 3 (Str. of Georgia, June; larvae)

Barracough 1967c: 9, etc. (S part of Str. of Georgia, Apr., surface; larvae)

Barracough 1967d: 2, etc. (S part of Str. of Georgia, Apr., surface; larvae)

Barracough and Fulton 1967: 5, etc. (S part of Str. of Georgia, July; larvae and postlarvae)

Suborder Salmonoidea

FAMILY OSMERIDAE

Hypomesus pretiosus (Girard, 1854)

Schaefer 1936: 23 (Puget Sd.; larvae)

Hart and McHugh 1944: 18, etc. (B.C.; development and hatching of the eggs, life history)

Mallotus villosus (Müller, 1777)

Hart and McHugh 1944: 24, etc., as *M. catervarius* (B.C.; spawning and early development, life history)

Thaleichthys pacificus (Richardson, 1836)

- Hart and McHugh 1944: 8, etc. (B.C.; early development)
Barraclough 1964: 133, fig. 2 (B.C.; larval ecology)
Barraclough 1967b: 5 (Str. of Georgia, June; larvae and postlarvae)
Barraclough and Fulton 1967: 5, etc. (S part of Str. of Georgia, July; larvae and postlarvae)

ORDER HETEROSOMATA

FAMILY PLEURONECTIDAE

Hippoglossus stenolepis Schmidt, 1904

- Thompson and Van Cleve 1936: 16, text-fig. (B.C.; eggs, life history)
Van Cleve and Seymour 1953: 1, etc.⁹² (Cape St. James halibut spawning grounds; spawning season, distribution and relative abundance of eggs)

ORDER PERCOMORPHI

Suborder Scorpaenoidea

FAMILY SCORPAENIDAE

Sebastodes sp.

- Barraclough 1967b: 46 (Str. of Georgia, June; larva)

⁹²as "Halibut."

Barraclough and Fulton 1967: 5, etc. (S part of Str. of Georgia, July; larvae)

Suborder Gobioidea

FAMILY GOBIIDAE

Coryphopterus nicholsii (Bean, 1881)

- Barraclough and Fulton 1967: 6, etc. (S part of Str. of Georgia, July; larvae)

Suborder Ammodytioidea

FAMILY AMMODYTIDAE

Ammodytes hexapterus Pallas, 1811

- Barraclough 1967b: 3 (Str. of Georgia, June; larvae and postlarvae)

- Barraclough 1967c: 5, etc. (S part of Str. of Georgia, Apr., surface; larvae and postlarvae)

- Barraclough 1967d: 2, etc. (S part of Str. of Georgia, Apr., surface; larvae and postlarvae)

- Barraclough and Fulton 1967: 10, etc. (S part of Str. of Georgia, July; postlarvae)

- LeBrasseur et al. 1969: 57, etc. (Str. of Georgia, vicinity of the Fraser R. estuary, Feb.-May; larvae)

- Fulton et al. 1969: 79 (Saanich Inlet, May-July)

BIBLIOGRAPHY

- ANONYMOUS. 1898. A preliminary catalogue of the collection of natural history and ethnology in the Provincial Museum, Victoria, British Columbia. The Queen's Printer, Victoria, B.C.
- AGASSIZ, A. 1865. North American Acalypheae. Illus. Cat. Mus. Comp. Zool. Harvard College 2: xiv + 234 p.
- AGASSIZ, L. 1862. Contributions to the natural history of the United States of America. Second monograph. In five parts: I. Acalypheae in general. II. Ctenophorae. III. Discophorae. IV. Hydriidae. V. Homologies of the Radiata; with forty-six plates. Vol. 4 (Pt. 3-5). Little, Brown and Company, Boston, Massachusetts. viii + 380 + 12 p., pl. 20-35.
- AGERSBORG, H. P. K. 1923. Gymnosomatous Pteropoda from Friday Harbor, Washington. Ann. Sci. Natur. Zool. Ser. 10, 6: 391-402.
- ALVARÍN, A. 1962. Two new Pacific chaetognaths. Bull. Scripps Inst. Oceanogr. Univ. Calif. Tech. Ser. 8: 1-50.
- 1964a. Zoogeografía de los quetognatos, especialmente de la región de California. Ciencia (Méjico) 23: 51-74.
- 1964b. Bathymetric distribution of chaetognaths. Pac. Sci. 18: 64-82.
1965. Chaetognaths. Oceanogr. Mar. Biol. Annu. Rev. 3: 115-194, 10 tables, 17 fig.
- ARON, W. 1960. The distribution of animals in the eastern North Pacific and its relationship to physical and chemical conditions. Univ. Wash. Dep. Oceanogr. Tech. Rep. 63: 65 + 154 + 4 p.
1962. The distribution of animals in the eastern North Pacific and its relationship to physical and chemical conditions. J. Fish. Res. Bd. Canada 19: 271-314.
- BANNER, A. H. 1948a. A taxonomic study of the Mysidacea and Euphausiacea (Crustacea) of the northeastern Pacific. I. Mysidacea, from family Lophogastridae through tribe Erythropini. Trans. Roy. Can. Inst. 26: 345-399.
- 1948b. A taxonomic study of the Mysidacea and Euphausiacea (Crustacea) of the northeastern Pacific. II. Mysidacea, from tribe Mysini through subfamily Mysidellinae. Trans. Roy. Can. Inst. 27: 65-125.
1950. A taxonomic study of the Mysidacea and the Euphausiacea (Crustacea) of the Northeastern Pacific. III. Euphausiacea. Trans. Roy. Can. Inst. 28: 1-63.
- 1954a. Some "schizopod" crustaceans from deep water off California. Occas. Pap. Allan Hancock Found. Publ. 13: 1-48, pl. 1.
- 1954b. Supplement to: W. M. Tattersall Review of the Mysidacea of the United States National Museum. Proc. U.S. Nat. Mus. 103(3334): 575-583.
- 1954c. New records of Mysidacea and Euphausiacea from the northeastern Pacific and adjacent areas. Pacific Sci. 8: 125-139.
- BARRACLOUGH, W. E. 1964. Contribution to the marine life history of the eulachon, *Thaleichthys pacificus*. J. Fish. Res. Bd. Canada 21: 1333-1337.
1967. Occurrence of larval herring (*Clupea pallasi*) in the Strait of Georgia during July 1966. J. Fish. Res. Bd. Canada 24: 2455-2460.
- MS 1967a. Data record. Number, size composition and food of larval and juvenile fish caught with a two-boat surface trawl in the Strait of Georgia June 6-8, 1966. Fish. Res. Board Can. MS Rep. 928: 58 p.
- MS 1967b. Data record. Number, size and food of larval and juvenile fish caught with a two-boat surface trawl in the Strait of Georgia April 25-29, 1966. Fish. Res. Board Can. MS Rep. 922: 54 p.
- MS 1967c. Data record. Number, size and food of larval and juvenile fish caught with an Isaacs-Kidd trawl in the surface waters of the Strait of Georgia, April 25-29, 1966. Fish. Res. Board Can. MS Rep. 926: 1-79, 1 map.
- BARRACLOUGH, W. E. AND J. D. FULTON, MS

1967. Data record. Number, size composition and food of larval and juvenile fish caught with a two-boat surface trawl in the Strait of Georgia July 4-8, 1966. Fish. Res. Board Can. MS Rep. 940: 82 p.
- BARRACLOUGH, W. E. AND R. H. HERLINVEAUX, MS 1965. Exploratory studies of the echo scattering layers in Saanich Inlet and the Strait of Georgia, British Columbia. Fish. Res. Board Can. MS Rep. (Oceanogr. Limnol.) 199: 4-56.
- BARY, B. M. 1963. Scattering in an oxygen stratified coastal waterway. Proc. XVI Int. Congr. Zool. 4: 302-306.
- BARY, B. M., W. E. BARRACLOUGH, AND R. H. HERLINVEAUX 1962. Scattering of underwater sound in Saanich Inlet, British Columbia. Nature 194(4823): 36-37.
- BEKLEMISHEV, C. W. 1961. Zooplankton in the eastern North Pacific in winter 1958/59. Tr. Inst. Okeanol. Akad. Nauk SSSR 45: 142-171. (In Russian; English summary)
- BERKELEY, A. A. 1929. A study of the shrimps of British Columbia. Fish. Res. Board Can. Pac. Progr. Rep. 4: 9-10.
1930. The post-embryonic development of the common pandalids of British Columbia. Contrib. Can. Biol. Fish. (NS) 6: 79-163.
- BERKELEY, C. 1930. Symbiosis of *Beroe* and a flagellate. Contrib. Can. Biol. Fish. (NS) 6: 13-21.
1956. *Epidiopatra huperiana* Augener from the northeast Pacific. Nature 178(4536): 748.
1967. A checklist of Polychaeta recorded from British Columbia since 1923, with references to name changes, descriptions, and synonymies. I. Errantia. Can. J. Zool. 45: 1049-1059.
- BERKELEY, E. 1924. Polychaetous annelids from the Nanaimo district (Pt. 2). Phyllodocidae to Nereidae. Contrib. Can. Biol. Fish. (NS) 2: 285-294.
1930. Polychaetous annelids from the Nanaimo district (Pt. 5). Ammocharidae to Myzostomidae, with an appendix on some pelagic forms from the Straits of Georgia and the west coast of Vancouver Island. Contrib. Can. Biol. Fish. (NS) 6: 65-77.
- BERKELEY, E., AND C. BERKELEY. 1942. North Pacific Polychaeta, chiefly from the west coast of Vancouver Island, Alaska, and Bering Sea. Can. J. Res. 20 (Sect. D): 183-208.
1945. Notes on Polychaeta from the coast of western Canada. III. Further notes on Syllidae and some observations on other Polychaeta Errantia. Ann. Mag. Natur. Hist. Ser. 11, 12 (89): 316-335.
1948. Polychaeta Errantia. Fish. Res. Board Can. Can. Pac. Fauna 9b(1): 100 p., 160 fig.
1952. Polychaeta Sedentaria. Fish. Res. Board Can. Can. Pac. Fauna 9b(2): 139 p., 292 fig.
1953. *Micronereis nanaimoensis* sp.n.; with notes on its life-history. J. Fish. Res. Bd. Canada 10: 85-95.
1954. Additions to the polychaete fauna of Canada with comments on some older records. J. Fish. Res. Bd. Canada 11: 454-471, fig. 1-16.
1957. On some pelagic Polychaeta from the northeast Pacific north of latitude 40°N and east of longitude 175°W. Can. J. Zool. 35: 573-578.
1960. Some further records of pelagic Polychaeta from the northeast Pacific north of latitude 40°N and east of longitude 175°W, together with records of Siphonophora, Mollusca, and Tunicata from the same region. Can. J. Zool. 38: 787-799.
- BERNARD, F. MS 1967. Prodrome for a distributional check-list and bibliography of the recent marine Mollusca of the west coast of Canada. Fish. Res. Board Can. Tech. Rep. 2: I-XXIV + 1-261.
- BIGELOW, H. B. 1912. Reports on the scientific results... "Albatross"...XXVI. The ctenophores. Bull. Mus. Comp. Zool. Harvard College 54: 369-404, 2 pl.
1917. *Halimedusa*, a new genus of Anthomedusae. Trans. Roy. Soc. Can. Ser. 3, 10 (Sect. 4): 91-96, 1 pl.
1931. Siphonophorae from the Arcturus Oceanographic Expedition. Zoologica 8: 525-592.
- BIRSTEIN, J. A., AND J. G. TCHINDONOV. 1958. The deep-sea mysids of the northwest part of the Pacific Ocean. Tr. Inst. Okeanol. Akad. Nauk USSR 27: 258-355. (In Russian)
- BISHOP, S. O., J. D. FULTON, O. D. KENNEDY, AND K. STEPHENS. MS 1966. Data record. Physical, chemical and biological data, Strait of Georgia, March to October 1965. Fish. Res. Board Can. MS Rep. (Oceanogr. Limnol.) 211: 4 + 171 p.

- BODEN, B. P., M. W. JOHNSON, AND E. BRINTON. 1955. The Euphausiacea (Crustacea) of the North Pacific. Bull. Scripps Inst. Oceanogr. 6: 283-399.
- BODEN, B. P., AND E. M. KAMPA. 1965. An aspect of euphausiid ecology revealed by echo-sounding in a fjord. Crustaceana 9: 155-173.
- BONNER, J. T. 1955. A note concerning the distribution of polysaccharides in the early development of the hydromedusan *Phialidium gregarium*. Biol. Bull. 108: 18-20.
- BOVARD, J. F., AND H. L. OSTERUD 1918. Partial list of the animals yielding embryological material at the Puget Sound Biological Station. Publ. Puget Sound Biol. Sta 2(39/43): 127-137.
- BOWMAN, T. E. 1960. The pelagic amphipod genus *Parathemisto* (Hyperiidea: Hyperidae) in the North Pacific and adjacent Arctic Ocean. Proc. U.S. Nat. Mus. 112(3439): 343-392.
- BOWMAN, T. E., AND J. C. MCCAIN. 1967. Variation and distribution of the pelagic amphipod *Cyphocaris challengerii* in the northeast Pacific (Gammaridea: Lysianassidae). Proc. U.S. Nat. Mus. 122(3588): 1-14.
- BRINTON, E. 1962. The distribution of Pacific euphausiids. Bull. Scripps Inst. Oceanogr. 8: 51-270.
- BRODSKII, K. A. 1950. Calanoida of the far eastern seas and polar basin of the USSR. Keys Fauna USSR 35: 1-442. (In Russian)
- BUTLER, T. H. 1964. Records of shrimps (order Decapoda) from British Columbia. J. Fish. Res. Bd. Canada 21: 419-421.
- CALMAN, W. T. 1898. On a collection of Crustacea from Puget Sound. Ann. N.Y. Acad. Sci. 11(13): 259-262, pl. 31-34.
- CAMERON, F. E. 1957. Some factors influencing the distribution of pelagic copepods in the Queen Charlotte Islands area. J. Fish. Res. Bd. Canada 14: 165-202.
- CAMPBELL, M. H. 1929a. A preliminary quantitative study of the zooplankton in the Strait of Georgia. Trans. Roy. Soc. Can. Ser. 3, 23(5): 1-28.
- 1929b. Some free-swimming copepods of the Vancouver Island region. Trans. Roy. Soc. Can. Ser. 3, 23(5): 303-331.
1930. Some free-swimming copepods of the Vancouver Island region. II. Trans. Roy. Soc. Can. Ser. 3, 24(5): 177-182.
- 1934a. The life-history and post-embryonic development of the copepods, *Calanus tonsus* Brady and *Euchaeta japonica* Marukawa. J. Biol. Board Can. 1: 1-65.
- 1934b. *Calanus tonsus* Brady as an economic factor in the Strait of Georgia. Proc. 5th Pac. Sci. Congr. Can. 1933, 3: 2003-2008.
- CARL, G. C. 1948. An unusual abundance of *Velella velella* Linné (Coelenterata: Siphonophorae) in inshore waters. Can. Field Natur. 62(5): 158-159.
1963. Guide to marine life of British Columbia. B.C. Prov. Mus. Dep. Recreation and Conserv. Handb. 21: 1-135.
- CARTER, N. M. 1943. The stinging action of jellyfishes. Fish. Res. Board Can. Pac. Progr. Rep. 55: 7-9.
- CHILD, C. M. 1918. Physiological senescence in Hydromedusae. Biol. Bull. 34: 49-63.
- CLEMENS, M. A. 1933. A check-list of the marine fauna and flora of the Canadian Pacific coast. Nat. Res. Coun. Can., Ottawa, Ont. (Mimeo.)
- CLEVE, R. VAN, AND A. H. SEYMOUR. 1953. The production of halibut eggs on the Cape St. James spawning bank off the coast of British Columbia 1935-1946. Rep. Int. Fish. Comm. 19: 1-44.
- DALES, R. P. 1957. Pelagic polychaetes of the Pacific Ocean. Bull. Scripps Inst. Oceanogr. 7: 99-168.
- DALL, W. H. 1921. Summary of the marine shell-bearing mollusks of the northwest coast of America, from San Diego, California, to the Polar Sea, mostly contained in the collection of the United States National Museum, with illustrations of hitherto unfigured species. U.S. Nat. Mus. Bull. 112: 1-217, pl. 1-22.
- DAVIS, C. C. 1949. The pelagic Copepoda of the northeastern Pacific Ocean. Univ. Wash. Publ. Biol. 14: 1-117.
- ELSEY, C. R. 1934. Distribution of oyster larvae. Biol. Board Can. Pac. Progr. Rep. 22: 19-20.
- FEE, A. R. 1927. The Isopoda of Departure Bay and vicinity with descriptions of new species, variations and colour notes. Contrib. Can. Biol. Fish. (NS) 3: 13-46, 1 pl.
- FOERSTER, R. E. 1923. The Hydromedusae of the west coast of North America, with special reference to those of the Vancouver

- Island region. Contrib. Can. Biol. (NS) 1: 219-277, 5 pl.
- FRASER, C. M. 1911. The hydroids of the west coast of North America. Bull. Lab. Natur. Hist. State Univ. Iowa 6: 1-91, pl. 1-8.
1914. Marine biology in British Columbia. Pap. B.C. Acad. Sci. 1910-1913: 49-60.
- 1915a. Some hydroids of the Vancouver Island region. Proc. Trans. Roy. Soc. Can. Ser. 3, 8(Sect. 4): 99-216, pl. 1-36.
- 1915b. On *Clupea pallasi* Cuvier and Valenciennes. Trans. Roy. Can. Inst. 11: 97-108, pl. 8-9.
1916. The swarming of *Odontosyllis*. Proc. Trans. Roy. Soc. Can. Ser. 3, 9(Sect. 4): 43-49.
1917. On the development of *Aequorea forskalea*. Trans. Roy. Soc. Can. Ser. 3, 10(Sect. 4): 97-104.
1919. *Monobrachium parasitum* and other west coast hydroids. Proc. Trans. Roy. Soc. Can. Ser. 3, 12(4): 131-138, pl. 1-2.
1919. Migrations of marine animals. Proc. Trans. Roy. Soc. Can. Ser. 3, 12(4): 139-143.
1929. The spawning and free swimming larval periods of *Saxidomus* and *Paphia*. Proc. Trans. Roy. Soc. Can. Ser. 3, 23(Sect. 5): 195-198.
1932. A comparison of the marine fauna of the Nanaimo region with that of the San Juan Archipelago. Proc. Trans. Roy. Soc. Can. Ser. 3, 26(Sect. 5): 49-70.
1938. The relations of the marine fauna to the physiography of the west coast of the Queen Charlotte Islands. Can. Field Natur. 52(6): 88-93.
- FROLANDER, H. F. 1962. Quantitative estimations of temporal variations of zooplankton off the coast of Washington and British Columbia. J. Fish. Res. Bd. Canada 19: 657-675.
- FRONTIER, S. 1966. Notes morphologiques sur les *Atlanta* récoltées dans le plancton de Nosy Bé (Madagascar). Cah. ORSTOM Office Rech. Sci. Tech. Outre-Mer Sér. Océanogr. 4(2): 131-139.
- FULTON, J. MS 1968. A laboratory manual for the identification of British Columbia marine zooplankton. Fish. Res. Board Can. Tech. Rep. 55: iii + 141 p.
- FULTON, J. D., O.D. KENNEDY, H. SEKI AND K. STEPHENS. MS 1969. Biological, chemical and physical observations in Saanich Inlet, Vancouver Island, British Columbia, 1968. Fish. Res. Board Can. MS Rep. 1018: 109 p.
- FULTON, J. D., O. D. KENNEDY, J. SKELDINGS, AND K. STEPHENS. MS 1969. Data Record. Physical, chemical and biological data. Strait of Georgia. 1968. Fish. Res. Board Can. MS Rep. Ser. 1049: 1-34.
- FULTON, J. D., O. D., KENNEDY, K. STEPHENS, AND J. SKELDING. MS 1967. Data record. Physical, chemical and biological data, Strait of Georgia, 1966. Fish. Res. Board Can. MS Rep. 915: 145 p.
- MS 1968. Data record. Physical, chemical and biological data. Strait of Georgia, 1967. Fish. Res. Board Can. MS Rep. 968: 197 p.
- GUBERLET, J. E. 1934. Observations on the spawning and development of some Pacific annelids. Proc. 5th Pac. Sci. Congr. Can. 1933, 5: 4213-4220.
- Gwyn, A. M. 1940. The development of the vertebral column of the Pacific herring (*Clupea pallasi*). J. Fish. Res. Bd. Canada 5: 11-22.
- HANSEN, H. J. 1915. The Crustacea Euphausiacea of the United States National Museum. Proc. U.S. Nat. Mus. 48: 59-114, pl. 1-4.
- HARRINGTON, N.R., AND B. B. GRIFFIN. 1898. Notes upon the distribution and habits of some Puget Sound invertebrates. Trans. N.Y. Acad. Sci. 16: 152-165.
- HART, J. F. L. 1931. Some Cumacea of the Vancouver Island region. Contrib. Can. Biol. Fish. (NS) 6(3): 23-40.
1962. Records of distribution of some Crustacea in British Columbia. Rep. Prov. Mus. Nat. Hist. Anthropol. B.C. 1961: 17-19.
1965. Life history and larval development of *Cryptolithodes typicus* Brandt (Decapoda, Anomura) from British Columbia. Crustaceana 8: 255-276, 1 pl.
- HART, J. L., AND J. L. MCHUGH. 1944. The smelts (Osmeridae) of British Columbia. Fish. Res. Board Can. Bull 64: 1-27.
- HART, J. L., AND G. H. WAILES. 1932. The food of the pilchard, *Sardinops caerulea* (Girard) off the coast of British Columbia. Contrib. Can. Biol. Fish. (NS) 7(16): 245-254.
- HARVEY, E. N. 1921. Studies on bioluminescence. XIII. Luminescence in the coelenterates. Biol. Bull. 41(5): 280-287.
- HEINRICH, A. K. 1969. The ranges of neuston

- copepods in the Pacific Ocean. Zool. Zh. 48: 1456-1466. (In Russian; English summary)
- HERDMAN, W. A., I. C. THOMPSON, AND A. SCOTT. 1898. On the plankton collected continuously during two traverses of the North Atlantic in the summer of 1897; with descriptions of new species of Copepoda; and an appendix on dredging in Puget Sound. Proc. Trans. Liverpool Biol. Soc. 12: 33-90, pl. 5-8.
- HERLINVAUX, R. H. 1962. Oceanography of Saanich Inlet in Vancouver Island, British Columbia. J. Fish. Res. Bd. Canada 19: 1-37.
- HERLINVAUX, R. H., S. O. BISHOP, J. D. FULTON, A. K. PEASE, K. STEPHENS, AND T. R. PARSONS. MS 1966. A study of the physical, chemical and biological oceanographic conditions at Nanoose Bay, Vancouver Island. Fish. Res. Board Can. MS Rep. Ser. (Oceanogr. Limnol.) 208: 1-61, 21 pl.
- HERON, G. A. 1964. Seven species of *Eurytemora* (Copepoda) from northwestern North America. Crustaceana 7(3): 199-211.
- HUBBS, C. L., AND L. P. SCHULTZ. 1929. The northward occurrence of southern forms of marine life along the Pacific coast in 1926. Calif. Fish Game 15(3): 234-241.
- HYMAN, L. H. 1940. Observations and experiments on the physiology of medusae. Biol. Bull. 79(2): 282-296.
- II, N. 1964. Fauna Japonica. Mysidae (Crustacea). Biogeograph. Soc. Jap., Tokyo, Jap.
- JOHNSON, M. W. 1932. Seasonal distribution of plankton at Friday Harbour, Washington. Univ. Wash. Publ. Oceanogr. 1(1): 1-38.
1940. The study of species formation in certain *Eucalanus* copepods in the North Pacific. Proc. 6th Pac. Sci. Congr. Pac. Sci. Ass. 3: 565-568.
- JASCHNOV, W. A. 1970. Distribution of *Calanus* species in the seas of the northern hemisphere. Int. Rev. gesamten Hydrobiol. 55: 197-212.
- JOHNSON, M. W. 1938. Concerning the copepod *Eucalanus elongatus* Dana and its varieties in the northeast Pacific. Bull. Scripps Inst. Oceanogr. Univ. Calif. 4: 165-180.
- JOHNSON, M. W., AND L. T. JOHNSON. 1950. Early life history and larval development of some Puget Sound echinoderms. With special reference to *Cucumaria* spp. and *Dendraster excentricus*, p. 74-84, pl. 1-4. In M. H. Hatch, [ed.] Studies honoring Trevor Kincaid. Seattle, Washington.
- JOHNSON, M. W., AND R. C. MILLER. 1935. The seasonal settlement of shipworms, barnacles, and other wharf-pile organisms at Friday Harbor, Washington. Univ. Wash. Publ. Oceanogr. 2(1): 1-18.
- KENNEDY, O. D., W. E. BARRACLOUGH, AND T. H. BUTLER. MS 1966. Distribution and parasitism of the shrimp *Pasiphaea pacifica* Rathbun in the Strait of Georgia. Fish. Res. Board Can. MS Rep. Ser. (Oceanogr. Limnol.) 213: 1-8, 13 pl.
- KRAMP, P. L. 1928. Papers from Dr. Th. Mortensen's Pacific Expedition 1914-1916. XLIII. Hydromedusae I. Anthomedusae. Vidensk. Medd. Naturhist. Foren. Kjobenhavn. 85: 27-64.
1932. A revision of the medusae belonging to the family Mitrocomidae. Vidensk. Medd. Naturhist. Foren. Kjobenhavn 32: 305-384, pl. 10.
1961. Synopsis of the medusae of the world. J. Mar. Biol. Ass. U.K., 40: 1-469.
1962. Notes on some eastern Pacific species of *Phialidium* (Leptomedusae). Pac. Sci. 16(1): 25-29.
1965. The Hydromedusae of the Pacific and Indian Oceans. Dana Rep. 63: 1-162.
1968. The Hydromedusae of the Pacific and Indian oceans. Sections II and III. Dana Rep. 72: 1-200.
- LANG, K. 1948. Monographie der Harpacticiden, I-II. A-B. Nordiska Bokhandeln, Stockholm, Sweden.
- LAROCQUE, A. 1953. Catalogue of the recent Mollusca of Canada. Nat. Mus. Can. Bull. 129: ix + 406 p.
- LEA, H. 1955. The chaetognaths of western Canadian coastal waters. J. Fish. Res. Bd. Canada 12: 593-617.
- LEBRASSEUR, R. J. 1959. *Sagitta lyra*, a biological indicator species in the subarctic waters of the eastern Pacific Ocean. J. Fish. Res. Bd. Canada 16: 795-805.
- LEBRASSEUR, R. J., W. E. BARRACLOUGH, O. D. KENNEDY, AND T. R. PARSONS. 1969. Production studies in the Strait of Georgia. Part III. Observations on the food of larval and juvenile fish in the Fraser River plume, February to May, 1967. J. Exp. Mar. Biol. Ecol. 3(1): 51-61.
- LEBRASSEUR, R., AND J. FULTON. 1967. A guide to zooplankton of the northeastern

- Pacific Ocean. Fish. Res. Board Can. Pac. Oceanogr. Group, Nanaimo, B.C., Circ. 84: 1-34.
- LEGARE, J. E. H. 1957. The qualitative and quantitative distribution of plankton in the Strait of Georgia in relation to certain oceanographic factors. J. Fish. Res. Bd. Canada 14: 521-552.
- LEWIS, A. G., AND A. RAMNARINE, 1969. Some chemical factors affecting the early developmental stages of *Euchaeta japonica* (Crustacea: Copepoda: Calanoida) in the laboratory. J. Fish. Res. Bd. Canada 26: 1347-1362.
- LOWE, C. W. 1936. Observations on some Pacific diatoms as the food of copepods and fishes. J. Biol. Board Can. 3: 12-19.
- LUCAS, V. Z. 1931. Some Ostracoda of the Vancouver Island region. Contrib. Can. Biol. Fish. (NS) 6: 397-416.
- MACKAY, D. C. G. 1942. The Pacific edible crab, *Cancer magister*. Fish. Res. Board. Can. Bull. 62: 1-32, 19 fig.
- MACKAY, D. C. G. AND F. W. WEYMOUTH. 1935. The growth of the Pacific edible crab, *Cancer magister* Dana. J. Biol. Board Can. 1: 191-212.
- MACKIE, G. O. 1962. Pigment effector cells in a cnidarian. Science 137(3531): 689-690.
1964. Analysis of locomotion in a siphonophore colony. Proc. Roy. Soc. Ser. B Biol. Sci. 159: 366-391.
- MACKIE, G. O., AND D. A. BOAG. 1963. Fishing, feeding and digestion in siphonophores. Pubbl. Sta. Zool. Napoli 33: 178-196.
- MACKIE, G. O., AND G. V. MACKIE. 1964. Systematic and biological notes on living Hydromedusae from Puget Sound. Nat. Mus. Can. Bull. 199: 63-84.
- MAUCHLINE, J., AND L. R. FISHER. 1969. The biology of euphausiids. Advan. Mar. Biol. 7: 1-454.
- MAYER, A. G. 1910. Medusae of the world. Publ. Carnegie Inst. Wash. 109, 1-3: 735 + XV + IV p., 76 pl.
- McGOWAN, J. A. 1963. Geographical variation in *Limacina helicina* in the North Pacific. Syst. Ass. Publ. 5: 109-128.
- MCHARDY, R. A. 1964. Marine ostracods from the plankton of Indian Arm, British Columbia, including a diminutive subspecies resembling *Conchoecia alata major* Rudjakov. J. Fish. Res. Bd. Canada 21: 555-576.
- MCHARDY, R. A., AND B. M. BARY. 1965. Diurnal and seasonal changes in distribution of two planktonic ostracods, *Conchoecia elegans* and *Conchoecia alata minor*. J. Fish. Res. Bd. Canada 22: 823-840.
- MCMURRICH, J. P. 1916. Notes on the plankton of the British Columbia coast. Trans. Roy. Soc. Can. Ser. 3, 10(Sect. 4): 75-89.
- MILNE, D. S. 1968. *Sergestes similis* Hansen and *S. consobrinus* n.sp. (Decapoda) from the northeastern Pacific. Crustaceana 14: 21-34.
- MORTENSEN, T. H. 1912. Ctenophora. Danish Ingolf-Exped. 5(2): 1-95, 10 pl.
1921. Studies of the development and larval forms of echinoderms. G.E.C. Gadd, Copenhagen, Denmark.
1927. Two new ctenophores. Papers from Dr. Th. Mortensen's Pacific Expedition 1914-16, XXXIX. Vidensk. Medd. Naturhist. Foren. Kjobenhavn. 83: 277-288, pl. 3.
- MOSER, F. 1909. Die Ctenophoren der deutschen Sudpolar-Expedition 1901-1903. Deut. Sudpolar-Exped., XI, Zool. III, Heft 2: 115-192, pl. 20-22, 1 table.
- MURBACH, L., AND C. SHEARER. 1902. Preliminary report on a collection of medusae from the coast of British Columbia and Alaska. Ann. Mag. Natur. Hist. Ser. 7(9): 71-73.
1903. On medusae from the coast of British Columbia and Alaska. Proc. Zool. Soc. (London) 2: 164-192, pl. 17-22.
- NEEDLER, A. B. 1933. Larvae of some British Columbia Hippolytidae. Contrib. Can. Biol. (NS) 8: 237-242.
- NICHOLS, J. T. 1926. Impressions of Alaska, where East and West approximate. Natur. Hist. 26(6): 605-613.
- O'DONOGHUE, C. H. 1927. Observations on the early development of *Membranipora villosa* Hincks. Contrib. Can. Biol. Fish (NS) 3: 247-263, 1 pl.
- OLDROYD, I. S. 1927. The marine shells of the west coast of North America. Stanford Univ. Publ., Univ. Ser., Geol. Sci. 2: 299-602, pl. 30-72.
- OMORI, M. 1965. The distribution of zooplankton in the Bering Sea and northern North Pacific, as observed by high-speed sampling of the surface waters, with special reference to copepods. J. Oceanogr. Soc. Jap. 21: 18-27.

- PARANJAPE, M. P. 1967. Molting and respiration of euphausiids. Fish. Res. Bd. Canada 24: 1229-1240.
- PARK, T. S. 1966. A new species of *Bradyidius* (Copepoda: Calanoida) from the Pacific coast of North America. J. Fish. Res. Bd. Canada 23: 805-811.
- 1966a. The biology of a calanoid copepod *Epilabidocera amphitrites* McMurrich. La Cellule 66: 127-252, 10 pl.
- 1967a. Two new species of copepods from the Strait of Georgia, British Columbia, Canada. J. Fish. Res. Bd. Canada 24: 231-241.
- 1967b. Two unreported species and one new species of *Monstrilla* (Copepoda: Monstrilloida) from the Strait of Georgia. Trans. Amer. Microsc. Soc. 86(2): 144-152.
1968. Calanoid copepods from the central North Pacific Ocean. U.S. Fish Wildlife Serv., Fish. Bull. 66: 527-572.
- PARKER, R. R. 1965. A review and redescription of *Caligus gurnardi* Krøyer, 1863 (Copepoda, Caligidae). Crustaceana 9: 93-103.
- PARSONS, T. R., R. J. LEBRASSEUR, AND J. D. FULTON. 1967. Some observations on the dependence of zooplankton grazing on the cell size and concentration of phytoplankton blooms. J. Oceanogr. Soc. Jap. 23: 10-17.
- PARSONS, T. R., R. J. LEBRASSEUR, J. D. FULTON AND O. D. KENNEDY. 1969. Production studies in the Strait of Georgia. Part II. Secondary production under the Fraser River plume, February to May 1967. J. Exp. Mar. Biol. Ecol. 3(1): 39-50.
- PEQUEGNAT, L. H. 1965. The bathypelagic mysid *Gnathophausia* (Crustacea) and its distribution in the eastern Pacific Ocean. Pac. Sci. 19: 399-421.
- PETTIBONE, M. H. 1954. Marine polychaete worms from Point Barrow, Alaska, with additional records from the North Atlantic and North Pacific. Proc. U.S. Nat. Mus. 103(3324): 203-356.
- PIERROT-BULTS, A. C. 1969. The synonymy of *Sagitta planctonis* and *Sagitta zetesios* (Chaetognatha). Bull. Zool. Mus. Univ. Amsterdam 1(10): 125-132.
- PONOMAREVA, L. A. 1963. Euphausiids of the North Pacific. Their distribution and ecology. Moscow. (In Russian)
- POTTS, F. A. 1913. The swarming of *Odontosyllis*. Proc. Cambridge Phil. Soc. 17: 193-200.
- PRITCHARD, A. L., AND A. L. TESTER. 1944. Food of spring and coho salmon in British Columbia. Fish. Res. Board Can. Bull. 65: 1-23.
- REGAN, L. MS 1963. Field trials with the Clarke-Bumpus plankton sampler. Inst. Oceanogr., Univ. British Columbia, MS Rep. 16: 28 p., 7 pl.
- RICHTER, G. 1961. Die Radula der Atlantiden und ihre Bedeutung für die Systematik und Evolution der Familie. Z. Morphol. Tiere 50: 163-238.
- ROOSE-RUNGE, E. C. 1962. On the biology of sexual reproduction of Hydromedusae, genus *Phialidium* Leuckhart. Pac. Sci. 16(1): 15-24.
- ROOSE-RUNGE, E. C., AND D. SZOLLOSI. 1965. On biology and structure of the testis of *Phialidium* Leuckhart (Leptomedusae). Z. Zellforsch. 68: 579-610.
- SEKI, H., AND O. D. KENNEDY. 1969. Marine bacteria and other heterotrophs as food for zooplankton in the Strait of Georgia during the winter. J. Fish. Res. Bd. Canada 26: 3165-3173.
- SHELFORD, V. E. 1935. The major communities. In Some marine biotic communities of the Pacific coast of North America. Part I. General survey of the communities — their extent and dynamics. Ecol. Monogr. 5: 251-292.
- SHOEMAKER, C. R. 1930. The Amphipoda of the Cheticamp Expedition of 1917. Contrib. Can. Biol. Fish. (NS) 5: 219-360.
- SMITH, G. M. 1928. Food material as a factor in growth rate of some Pacific clams. Proc. Trans. Roy. Soc. Can. Ser. 3, 22(Sect. 5): 287-291.
1933. Further observations on the ecology, rate of growth and food supply of some Pacific clams. Trans. Roy. Soc. Can. Ser. 3, 27(Sect. 5): 229-245.
- SMITH, S.I. 1880. Notes on Crustacea collected by Dr. G. M. Dawson at Vancouver and the Queen Charlotte Islands. Geol. Surv. Can. Rep. Progr. 1878-79: 206B-218B.
- SMITH, V. Z. 1952. Further Ostracoda of the Vancouver Island region. J. Fish. Res. Bd. Canada 9: 16-41.
- SPOEL, S. VAN DER. 1967. Euthecosomata, a group with remarkable developmental stages (Gastropoda, Pteropoda). J. Noorduijn en Zoon N.V. Gorinchem Holland.

- STEPHENS, K., J. D. FULTON AND O. D. KENNEDY. MS 1969. Summary of biological oceanographic observations in the Strait of Georgia, 1965-1968. Fish. Res. Board Can. Tech. Rep. 110: 11 p. + 82 fig.
- STEPHENS, K., J. D., FULTON, O. D. KENNEDY AND A. K. PEASE MS 1967. Biological, chemical and physical observations in Saanich Inlet, Vancouver Island, British Columbia. Fish. Res. Board Can. MS Rep. 912: 1-119 p., 1 map.
- STEVENSON, J. C. 1962. Distribution and survival of herring larvae (*Clupea pallasi* Valenciennes) in British Columbia waters. J. Fish. Res. Bd. Canada 19: 735-810.
- STRONG, L. H. 1925. Development of certain Puget Sound hydroids and medusae. Publ. Puget Sound Biol. Sta. 3(71/75): 383-399.
- SUND, P. N. 1959. The distribution of Chaetognatha in the Gulf of Alaska in 1954 and 1956. J. Fish. Res. Bd. Canada 16: 351-361.
- SZOLLOSI, D. 1969. Unique envelope of a jellyfish ovum: the armed egg. Science 163: 586-587.
- TATTERSALL, O. S. 1955. Mysidacea. Discovery Rep. 28: 1-190.
- TATTERSALL, W. M. 1933. Euphausiacea and Mysidacea from Western Canada. Contrib. Can. Biol. 8: 183-205.
- TAYLOR, F. H. C. 1964. Life history and present status of British Columbia herring stocks. Fish. Res. Board Can. Bull. 143: viii + 81 p.
- TAYLOR, G. W. 1899. Notes on the marine Mollusca of the Pacific coast of Canada. Trans. Roy. Soc. Can. Ser. 2, 5(Sect. 4): 233-250.
- TEBBLE, N. 1962. The distribution of pelagic polychaetes across the north Pacific Ocean. Bull. Brit. Mus. (Natur. Hist.) Zool. 7: 371-500.
- TESCH, J. J. 1949. Heteropoda. Dana Rep. 34: 1-53, 5 pl.
- THOMPSON, T. E., AND J. BENNETT. 1970. Observations on Australian Glaucidae (Mollusca: Opisthobranchia). Zool. J. Linn. Soc. London 49(3): 187-197.
- THOMPSON, T. E., AND I. D. McFARLANE. 1967. Observations on a collection of *Glaucus* from the Gulf of Aden with a critical review of published records of Glaucidae (Gastropoda, Opisthobranchia). Proc. Linn. Soc. London 178(2): 107-123.
- THOMPSON, W. F., AND R. VAN CLEVE. 1936. Life history of the Pacific halibut. 2. Distribution and early life history. Int. Fish. Comm. Rep. 9: 1-184.
- TOTTEN, A. K. 1965a. A new species of *Lensia* (Siphonophora Diphyidae) from the coastal waters of Vancouver, B.C.; and its comparison with *Lensia achilles* Totten and another new species *Lensia cordata*. Ann. Mag. Natur. Hist. 13(8): 71-76.
- 1965b. A synopsis of the Siphonophora. Brit. Mus. (Nat. Hist.)
- TREADWELL, A. L. 1922. Polychaetous annelids collected at Friday Harbor, State of Washington, in February and March 1920. Carnegie Inst. Wash. Publ. 312 (Pap. Dep. Mar. Biol. Carnegie Inst. Wash. 18): 171-181.
- WAILES, G. H. 1929. The marine zooplankton of British Columbia. Vancouver Mus. Art Notes 4: 159-165.
1930. Amphipoda from British Columbia. Vancouver Mus. Art Notes, 5: 30-32.
1931. Amphipoda from British Columbia, Part II. Vancouver Mus. Art Notes 6: 40-41.
1933. The plankton of the west coast of Vancouver Island, British Columbia. Vancouver Mus. Art Notes 7(Suppl. 9): 1-11.
1934. Marine Rotatoria from British Columbia. Vancouver Mus. Art Notes 7(Suppl. 10) 1-2.
1936. Food of *Clupea pallasii* in southern British Columbia waters. J. Biol. Board Can. 1: 477-486.
- WEENE, A. O., AND M. T. TOWNSEND. 1921. Some reactions of the jellyfish, *Aequoria*. Publ. Puget Sound Biol. Sta. 3(59/63): 117-128.
- WILLIAMSON, H. C. 1930a. Notes on the occurrence of various animals on the fishing grounds of the coast of British Columbia. Can. Field Natur. 54: 153-156.
- 1930b. Notes on the food of spring salmon. Can. Field Natur. 54: 203-204.
- WILSON, C. B. 1950. Contributions to the biology of the Philippine archipelago and adjacent regions. Copepods gathered by the United States Fisheries Steamer "Albatross" from 1887 to 1909, chiefly in the Pacific Ocean. Bull. U.S. Nat. Mus. 100, 14(4): i-ix + 141-441, 36 pls.

Part III. Arctic Zooplankton

INTRODUCTION

This section of the Bulletin is concerned with the plankton of the north, including the region from Hudson Strait westward to Bering Strait. Generally the 200-metre contour line forms the seaward boundary of the waters considered; exceptions are the deeper waters which extend westward into Hudson Strait and Hudson Bay, Parry Channel and Jones Sound, and southeastward between the northern islands of the Queen Elizabeth group, into M'Clure Strait and Viscount Melville Sound, and into Amundsen Gulf, all of which regions are included in their entirety here. Only the eastern half of the Chukchi Sea is considered.

Available records from such "near marine" localities as brackish ponds, mainly from Alaska, are included. In this way certain species which might also be found in a list of freshwater plankton are mentioned here on the basis of their occurrence in at least a dilute extension of the sea. Many of the rotifers and mysids and some of the copepods are the principal constituents of the brackish-water group. Fish eggs and larvae are not included in the present part. As nearly all the arctic references so far refer to collections taken only during the summer, open-water period, times of collection are not listed except when material was taken at other times of the year.

I would like to thank Dr C.-T. Shih for many constructive comments, especially on harpacticoid copepods; Dr E. L. Bousfield for reviewing the section on amphipods; and Miss Barbara Barry for reviewing the section on Cnidaria. — **E.H. Grainger**

PHYLUM CNIDARIA

CLASS HYDROZOA

ORDER ANTHOMEDUSAE

FAMILY BOUGAINVILLIIDAE

Bougainvillia superciliaris (L. Agassiz, 1849)

- Willey 1931: 490 (W Hudson Bay)
Dunbar 1942b: 73 (Lake Hbr.; Gabriel Str.; Frobisher Bay)
MacGinitie 1955: 41, 118 (Pt. Barrow; breeding data)
Hand and Kan 1961: 7, fig. 3 (S Chukchi and Beaufort seas)
Grainger 1962: 382 (Foxe Basin)

Bougainvillia sp.

- Hand and Kan 1961: 7, fig. 3 (S Chukchi Sea)

FAMILY CALYCOPSISIDAE

Eumedusa birulai (Linko, 1913)

- Bigelow 1920: 7–9, pl. 1(4–5), pl. 2(1–2), as *E. similis* n.sp. (Collinson Pt. and Barrow, Alaska; description)
Grainger 1965: 548, fig. 5–6 (S Beaufort Sea)

FAMILY CORYNIDAE

Sarsia princeps (Haeckel, 1879)

- Bigelow 1920: 4, pl. 1(1) (Collinson Pt. and Barrow, Alaska)
Willey 1931: 489–491 (N and W Hudson Bay)
Dunbar 1942b: 72 (Lake Hbr.; Gabriel Str.; Frobisher Bay; Fort Ross)
Kramp 1942d: 12–16, fig. 2 (Jones Sd.; Cape Walsingham, E Baffin Is.)
MacGinitie 1955: 118 (Pt. Barrow)
Grainger 1962: 382 (Foxe Basin)

Grainger 1965: 5–6, 548, fig. 5–6 (S Beaufort Sea)

Sarsia rosaria (L. Agassiz, 1862)

- Murdoch 1885a: 164 (Pt. Barrow)
Murdoch 1885b: 194–196, 199 (Pt. Barrow)

Sarsia tubulosa (M. Sars, 1835)

- Dunbar 1942b: 71 (Lake Hbr.; Gabriel Str.; Clyde R.; Arctic Bay)
MacGinitie 1955: 118 (Pt. Barrow)
Grainger 1962: 382 (Foxe Basin)

FAMILY PANDEIDAE

Catablema vesicarium (A. Agassiz, 1862)

- Dunbar 1942b: 74, as *C. vesicaria* (Lake Hbr.; Pond Inlet)
Kramp 1942d: 42–47, fig. 13 (Jones Sd.; Cape Walsingham, E Baffin Is.)

Halitholus cirratus Hartlaub, 1913

- Fewkes 1886: 404, as *Tiara conifera* (Discovery Hbr., NE Ellesmere Is.)
Fewkes 1888a: 43, as *T. conifera* (Discovery Hbr.)
Bigelow 1920: 6–7, pl. 1(2–3) (Collinson Pt. and Pt. Barrow, Alaska)
Dunbar 1942b: 74 (Lake Hbr.; Gabriel Str.; Frobisher Bay; Arctic Bay; Fort Ross)
Kramp 1942d: 40–41, fig. 12 (Jones Sd.)
MacGinitie 1955: 118 (Pt. Barrow)
Grainger 1959: 466, 470 (year-round collections, Igloolik, N Foxe Basin; size data)
Grainger 1962: 382 (Foxe Basin)
Grainger 1965: 548, fig. 5–6 (S Beaufort Sea)

- Halitholus pauper* Hartlaub, 1913
 Dunbar 1942b: 74 (Lake Hbr.; Frobisher Bay)
- Leuckartiara brevicornis* (Murbach and Shearer, 1902)
 Dunbar 1942b: 74 (immature specimen as *L. brevicornis* (?); Lake Hbr.)
 Hand and Kan 1961: 9, fig. 4 (S Chukchi Sea)
- Leuckartiara nobilis* Hartlaub, 1913
 Hand and Kan 1961: 7, fig. 3 (S Chukchi and Beaufort seas)
- FAMILY RATHKEIDAE
Rathkea octopunctata (M. Sars, 1835)
 Bigelow 1920: 6, as *R. blumenbachii* (Pt. Barrow)
 Dunbar 1942b: 73 (Lake Hbr.)
 MacGinitie 1955: 41, 107, 118 (Pt. Barrow; breeding data)
 Hand and Kan 1961: 9, fig. 4 (S Chukchi and Beaufort seas)
- FAMILY TUBULARIIDAE
Eucodonium arctica Hand and Kan, 1961
 Hand and Kan 1961: 9–11, fig. 5 (S Chukchi Sea; description)
- Euphypha flammea* (Linko, 1905)
 Bigelow 1920: 4–5, pl. 2(5), as *Sarsia flammea* (Collinson Pt. and Barrow, Alaska)
 Kramp 1942d: 20, fig. 3–4 (Cape Walsingham, E Baffin Is.)
 MacGinitie 1955: 117, as *Sarsia flammea* (Pt. Barrow)
 Grainger 1959: 466, 470 (year-round collections, Igloolik, N Foxe Basin)
 Hand and Kan 1961: 11, fig. 4 (S Beaufort Sea)
 Grainger 1965: 548, fig. 5–6 (S Beaufort Sea)
- Hybocodon prolifer* L. Agassiz, 1862
 Dunbar 1942b: 72–73, fig. 1 (Lake Hbr.; species identity uncertain)
 Grainger 1962: 382 (Foxe Basin)
- ORDER LEPTOMEDUSAE
- FAMILY CAMPANULARIIDAE
Obelia sp.
 Verrill 1879: 152 (Cumberland Sd.)
 MacGinitie 1955: 42, 107, 119 (Pt. Barrow; breeding data)
 Hand and Kan 1961: 11, fig. 3 (S Chukchi Sea)
 Grainger 1965: 548, fig. 5 (S Beaufort Sea)
- FAMILY LAODICEIDAE
Ptychogena lactea A. Agassiz, 1865
 Kramp 1942d: 52–55, fig. 16 (Jones Sd.)
 Grainger 1965: 548, fig. 5–6 (S Beaufort Sea)
- Staurophora mertensi* Brandt, 1838
 Murdoch 1885a: 164 (Pt. Barrow)
 Murdoch 1885b: 198 (Pt. Barrow; S Chukchi Sea)
 Uchida 1969: 286 (Alaska: 68°37'N, 165°5'W [sic])
- FAMILY MELICERTIDAE
Melicertum octocostatum (M. Sars, 1835)
 McLaren 1969: 1535 (Ogac L., SE Baffin Is.; size data)
- FAMILY MITROCOMIDAE
Halistaura cellularia (A. Agassiz, 1865)
 MacGinitie 1955: 119 (Pt. Barrow)
- Tiaropsis multicirrata* (M. Sars, 1835)
 Dunbar 1942b: 74 (Clyde R.)
 Grainger 1959: 466, 471 (year-round collections, Igloolik, N Foxe Basin)
 Grainger 1962: 383 (Foxe Basin)

ORDER TRACHYMEDUSAE

Hand and Kan 1961: 11–13, fig. 6–7 (S Beaufort and Chukchi seas)

FAMILY PTYCHOGASTRIIDAE

Ptychogastria polaris Allman, 1878

- Broch 1907: 8 (Discovery Bay, E Ellesmere Is.)
 Dunbar 1942b: 74 (Lake Hbr.)
 Kramp 1942d: 69–70, fig. 21 (Jones Sd.; Cape Walsingham, E Baffin Is.)
 Vibe 1950: 92 (Bay Fjord, W Ellesmere Is.)

Aglantha sp.

- Johnson 1956: 12, tables 8, 9 (S Chukchi and Beaufort seas)

Pantachogon haackeli Maas, 1893

- Kramp 1942d: 78–79, fig. 22 (off E end of Hudson Str.)

FAMILY RHOPALONEMATIDAE

Aglantha digitale (O.F. Müller, 1776)

- Bigelow 1920: 10–11, 17 (Pt. Barrow; Dolphin and Union Str.; Port Burwell)
 Willey 1931: 490–491 (N and W Hudson Bay)
 Dunbar 1942b: 74 (Port Burwell; Fort Ross; Arctic Bay; Pond Inlet; Clyde R.; Cape Walsingham, E Baffin Is.; Pangnirtung; Frobisher Bay; Gabriel Str.; Lake Hbr.; Hantzsch R., E Foxe Basin)
 Kramp 1942d: 81–97, fig. 23 (Jones Sd.; Cape Walsingham, E Baffin Is.; off E end of Hudson Str.; data on size, colour, development)
 Vibe 1950: 92 (Bay Fjord, West Ellesmere Is.)
 MacGinitie 1955: 42, 107, 119 (Pt. Barrow; breeding data)
 Grainger 1959: 466, 471–472 (year-round collections, Igloolik, N Foxe Basin; size data)
 Grainger 1962: 383 (Foxe Basin)
 Grainger 1965: 548, fig. 5 (S and E Beaufort Sea; Amundsen G.; M'Clure Str.)
 Cairns 1967: 559 (Tanquary Fjord, Ellesmere Is.; size data)
 McLaren 1969: 1527–1533, fig. 1, 22–26 (Ogac L., Baffin Is.; life cycle; population dynamics; vertical distribution; growth; development; production)

Aglantha digitale camtschatica (Brandt, 1838)

- Murdoch 1885a: 164, as *Aglantha camtschatica* (Pt. Barrow)
 Murdoch 1885b: 198–199, as *A. camtschatica* (Pt. Barrow)

ORDER NARCOMEDUSAE

FAMILY AEGINIDAE

Aegina citrea Eschscholtz, 1829

- Murdoch 1885a: 164 (Pt. Barrow)
 Murdoch 1885b: 193–196 (Pt. Barrow)

Aeginopsis laurenti Brandt, 1838

- Broch 1907: 8–9 as *Solmundus glacialis* (Rice Str., E Ellesmere Is.)
 Bigelow 1920: 11–12, pl. 2(3) (Collinson Pt., Alaska)
 Willey 1931: 490–491 (N, W and E Hudson Bay)
 Dunbar 1942b: 74 (Lake Hbr.; Gabriel Str.; Frobisher Bay; Clyde R.; Arctic Bay; Fort Ross)
 Kramp 1942d: 97–100, fig. 24 (Jones Sd.; Cape Walsingham, E Baffin Is.; off the E end of Hudson Str.)
 Grainger 1959: 466, 472 (year-round collections, Igloolik, N Foxe Basin)
 Hand and Kan 1961: 13–14, fig. 8 (S Beaufort and Chukchi seas)
 Grainger 1962: 383 (Foxe Basin)
 Grainger 1965: 548, fig. 5 (S and E Beaufort Sea; Amundsen G.; M'Clure Str.; N edge of Queen Elizabeth Is.)
 Cairns 1967: 559 (Tanquary Fjord, Ellesmere Is.; size data)
 Grainger 1968: 352 (Hudson Bay)

ORDER SIPHONOPHORA

FAMILY DIPHYIDAE

Dimophyes arctica (Chun, 1897)

- Dunbar 1942b: 75, as *Diphyes arctica* (Clyde R.)
Kramp 1942b: 9–12, fig. 2 (Jones Sd.; off E end of Hudson Str.)
Grainger 1965: 548 (Amundsen G.; M'Clure Str.)

CLASS SCYPHOZOA

ORDER STAUROMEDUSAE

FAMILY CLEISTOCARPIDAE

Brochiella hexaradiata (Broch, 1907)

- Broch 1907: 9–10, pl. 2 (3–6), as *Stenoscyphus ?hexaradiatus* (Fosheim Peninsula, W Ellesmere Is.; description)

ORDER CORONATAE

FAMILY NAUSITHOIDAE

Nausithoë punctata Kölliker, 1853

- Fewkes 1886: 400–403, pl. 1(1–2), as *Nauphanta polaris* (synonymy doubtful; Discovery Hbr., E Ellesmere Is.)
Fewkes 1888a: 40–42, pl. 1(1–2), as *Nauphanta polaris* (synonymy doubtful; Discovery Hbr.)

ORDER SEMAEOSTOMEAE

FAMILY CYANEIDAE

Cyanea capillata (Linné, 1758)

- Sabine 1824: 221–222, as *C. arctica* (Barrow Str.)
Murdoch 1885a: 163, as *C. postelsii* (synonymy doubtful; Pt. Barrow)

Murdoch 1885b: 197–198, as *C. postelsii* (synonymy doubtful; Pt. Barrow; S Chukchi Sea)

Broch 1907: 10, as *C. arctica* (Cape Sabine, E Ellesmere Is.)

Bigelow 1920: 13–14 (Pt. Barrow)

Kramp 1942d: 128–135, fig. 34–37 (Jones Sd.; description)

MacGinitie 1955: 42, 107, 120 (Pt. Barrow; breeding data)

Grainger 1959: 466, 473 (year-round collections, Igloolik, N Foxe Basin; size data)

Grainger 1962: 383 (Foxe Basin)

McLaren 1969: 1535 (Ogac Lake, Baffin Is.; production)

Uchida 1969: 287 (N of Alaska: 70°07.5'N, 164°40.5'W)

Cyanea sp.

Bigelow 1920: 17 (NW Hudson Bay)

FAMILY PELAGIIDAE

Chrysaora melanaster Brandt, 1838

Murdoch 1885a: 163 (Pt. Barrow)

Murdoch 1885b: 198–199 (Pt. Barrow)

Chrysaora sp.

Bigelow 1920: 13 (Dolphin and Union Str.)

MacGinitie 1955: 40, 42, 120 (Pt. Barrow; breeding data)

FAMILY ULMARIDAE

Aurelia aurita (Linné, 1758)

MacGinitie 1955: 120 (Pt. Barrow; specific identification doubtful)

Hand and Kan 1961: 14, fig. 4 (S Chukchi Sea)

Aurelia labiata Chamisso and Eysenhardt, 1821

Murdoch 1885a: 163 (Pt. Barrow)

Murdoch 1885b: 198 (Pt. Barrow; S Chukchi Sea)

PHYLUM CTENOPHORA

ORDER LOBATA

CLASS TENTACULATA

ORDER CYDIPPIDA

FAMILY PLEUROBRACHIIDAE

Mertensia ovum (Fabricius, 1780)

Murdoch 1885a: 163 (Pt. Barrow)

Murdoch 1885b: 198 (S Chukchi Sea)

Fewkes 1886: 406 (Discovery Hbr., E Ellesmere Is.; species identification doubtful)

Fewkes 1888a: 44 (Discovery Hbr.; species identification doubtful)

Dunbar 1942b: 75 (Lake Hbr.; Gabriel Str.; Frobisher Bay; Pangnirtung; Arctic Bay; Fort Ross)

MacGinitie 1955: 108, 123 (Pt. Barrow)

Grainger 1962: 383 (Foxe Basin)

Grainger 1965: 548, fig. 5 (S Beaufort Sea; Amundsen G.)

Mertensia sp.

Willey 1931: 491 (S Hudson Bay)

Johnson 1958: 278 (Pt. Barrow)

Pleurobrachia pileus (O. F. Müller, 1776)

Murdoch 1885a: 163, as *P. rhododactyla* (Pt. Barrow)

Murdoch 1885b: 198, as *P. rhododactyla* (Pt. Barrow; S Chukchi Sea)

FAMILY BOLINOPSIDAE

Bolinopsis infundibulum (O. F. Müller, 1776)

Kramp 1942c: 13–14, fig. 4 (Cape Walsingham, E Baffin Is.; off the E end of Hudson Str.)

MacGinitie 1955: 123 (Pt. Barrow)

CLASS NUDA

ORDER BEROIDA

FAMILY BEROIDAE

Beroe cucumis Fabricius, 1780

Murdoch 1885a: 163, as *B. roseola* (Pt. Barrow)

Murdoch 1885b: 193–196, 198–199, *B. roseola* (Pt. Barrow; S Chukchi Sea)

Bigelow 1920: 15 (Pt. Barrow)

Dunbar 1942b: 75 (Arctic Bay; Pond Inlet; Fort Ross; Clyde R.; Cape Walsingham, E Baffin Is.; Pangnirtung; Frobisher Bay; Lake Hbr.; Port Burwell; Gabriel Str.; Hantzsch R., E Foxe Basin)

Kramp 1942c: 5–8, fig. 1 (Jones Sd.; Cape Walsingham, E Baffin Is.; off the E end of Hudson Str.)

Vibe 1950: 92 (Bay Fjord, Ellesmere Is.)

MacGinitie 1955: 108, 123 (Pt. Barrow)

Grainger 1962: 383 (Foxe Basin)

Grainger 1965: 548 (Amundsen G.)

Beroe sp.

McLaren 1969: 1535–1536 (Ogac L., Baffin Is.; production)

PHYLUM ROTIFERA

CLASS BDELLOIODEA

ORDER BDELLOOIDA

FAMILY PHILODINIDAE

Rotaria rotatoria (Pallas, 1776)

Harring 1921: 14 (brackish lagoon, N Alaska)

CLASS MONOGONONTA

ORDER PLOIMA

FAMILY BRACHIONIDAE

Keratella quadrata (Müller, 1786)

Harring 1921: 5 (brackish lagoon, N Alaska)

Notholca longispina (Kellicot, 1879)

Harring 1921: 6 (brackish lagoon, N Alaska)

Notholca striata (Müller, 1786)

Harring 1921: 5-6 (brackish lagoon, N Alaska)

FAMILY EUCHLANIDAE

Colurella colurus (Ehrenberg, 1830)

Harring 1921: 11 (brackish lagoon, N Alaska)

FAMILY NOTOMMATIDAE

Encentrum algente Herring, 1921

Harring 1921: 4-5, pl. 1(1-2) (brackish lagoon, N Alaska; description)

FAMILY SYNCHAETIDAE

Filinia longiseta (Ehrenberg, 1834)

Harring 1921: 13 (brackish lagoon, N Alaska)

Synchaeta johanseni Herring, 1921

Harring 1921: 13, pl. 1(3) (Amundsen G.; description)

Synchaeta tamara Smirnov, 1932

McLaren 1969: 1536, fig. 27 (Ogac L., Baffin Is.; production)

PHYLUM MOLLUSCA

CLASS GASTROPODA

SUBCLASS OPISTHOBRANCHIATA

ORDER THECOSOMATA

FAMILY SPIRATELLIDAE

Spiratella helicina (Phipps, 1773)

Murdoch 1885b: 198–199, as *Limacina pacifica* (Pt. Barrow)

Grieg 1909: 34, as *Limacina helicina* (Jones Sd.)

Dall 1925: 11 as *S. ?pacifica* (Wakeham Bay, Hudson Str.)

Kerswill 1940: 28, fig. 4 as *Limacina helicina* (Hudson Str.; Hudson Bay; Pond Inlet; Lancaster Sd.; Jones Sd.; Fort Ross)

Dunbar 1942b: 75, as *Limacina helicina* (Port Burwell; Lake Hbr.; Fort Ross; Pond Inlet; Arctic Bay; Gabriel Str.; Frobisher Bay; Clyde R.)

MacGinitie 1955: 111, 175 (Pt. Barrow, larvae mentioned)

Johnson 1956: tab. 8–10, 12–14, as *Limacina helicina* (S Chukchi and Beaufort seas)

Johnson 1958: 276, 278, as *Limacina helicina* (Pt. Barrow)

McLaren 1958: 90, 95, as *Limacina helicina* (Frobisher Bay and Hudson Str., from ringed seal stomachs)

Grainger 1959: 466, 494, as *Limacina helicina* (year-round collections, Igloolik, N Foxe Basin)

Kramp 1961: 5–10, fig. 1, as *Limacina helicina* (Jones Sd.; Cape Walsingham, E Baffin Is.; off the E end of Hudson Str.)

Grainger 1962: 383, as *Limacina helicina* (Foxe Basin)

Grainger 1965: 548, fig. 5, as *Limacina helicina* (S and E Beaufort seas; Amundsen G.; M'Clure Str.)

Pavshiks 1968: 387, as *Limacina helicina* (off Cumberland Sd.)

Spiratella retroversa (Fleming, 1822)

Kramp 1961: 10–12, fig. 1, as *Limacina retroversa* (off the E end of Hudson Str.)

Spiratella sp.

Rodger 1894: 159, as *Limacina* (off Pond Inlet)

Willey 1931: 489–491, as *Limacina* (N, W, and S Hudson Bay)

ORDER GYMNOSONATA

FAMILY CLIONIDAE

Clione limacina (Phipps, 1773)

Ross 1835: 99, as *Clio borealis* (Prince Regent Inlet; Gulf of Boothia)

Murdoch 1885b: 194, 196, as *Clio borealis* (Pt. Barrow)

Fewkes 1888b: 50, 52, as *Clio papillionacea* (Lady Franklin Bay)

Rodger 1894: 159, as *Clio borealis* (off Pond Inlet)

Dall 1925: 9–11 (Pt. Barrow; Collinson Pt., N Alaska; Bernard Hbr.; Dolphin and Union Str.; Port Burwell; Wakeham Bay, Hudson Str.)

Kerswill 1940: 28, fig. 4 (Hudson Str.; Hudson Bay; Pond Inlet; Jones Sd.; Arctic Bay; Fort Ross)

Dunbar 1942b: 75 (Lake Hbr.; Fort Ross; Pond Inlet; Arctic Bay; Pangnirtung; Gabriel Str.; Clyde R.)

MacGinitie 1955: 110, 175 (Pt. Barrow; larvae mentioned).

Johnson 1958: 276, 278 (Pt. Barrow)

Grainger 1959: 466, 494 (year-round collections, Igloolik, Foxe Basin)

Kramp 1961: 4 (Jones Sd.; Cape Walsingham, E Baffin Is.; off the E end of Hudson Str.)

Grainger 1962: 383 (Foxe Basin)

Grainger 1965: 548, fig. 5 (S and E Beaufort Sea; Amundsen G.)

CLASS PELECYPODA

ORDER TELEODESMACEA

FAMILY MYACIDAE

Mya truncata Linneé, 1758

McLaren 1969: 1540, fig. 29 (larvae in Ogac L., Baffin Is.; species identification doubtful)

PHYLUM ANELIDA

Class Polychaeta

FAMILY SYLLIDAE

Autolytus alexandri Malmgren, 1867

- Grainger 1954: 513–514 as *A. verrilli* (Ungava Bay; Frobisher Bay; sacconereis and polybostrichus forms)
Pettibone 1954: 246–247 (Pt. Barrow)
MacGinitie 1955: 37, 40, 43 (Pt. Barrow; breeding data)
Grainger 1959: 466, 474 (year-round collections, Igloolik, N Foxe Basin)
Grainger 1962: 383 (Foxy Basin)

Autolytus cornutus Agassiz, 1863

- Pettibone 1954: 247–249, fig. 29(c–f), as *A. fallax* (Elson Lagoon, Pt. Barrow, and Cape Smyth, N Alaska)
MacGinitie 1955: 37, 43, 109 as *A. fallax* (Pt. Barrow; breeding data)

Autolytus prismaticus Müller, 1776

- Chamberlin 1920: 12 (Pt. Barrow; Dolphin and Union Str.)
Grainger 1954: 513 (Ungava Bay; Frobisher Bay; sacconereis and polybostrichus forms)
Pettibone 1954: 249–252, fig. 29(a–b) (Elson Lagoon and Pt. Barrow, N Alaska)
MacGinitie 1955: 40, 43 (Pt. Barrow; breeding data)
Grainger 1959: 466, 474 (year-round collections, Igloolik, N Foxe Basin)
Grainger 1962: 383 (Foxy Basin)

Autolytus sp.

- Murdoch 1885b: 194–195 (Pt. Barrow)
Grainger 1954: 512, as *A. prolifer* (Ungava Bay; Button Is., E Hudson Str.)

Grainger 1962: 383 as *A. prolifer* (Foxy Basin)

Sphaerosyllis erinaceus Claparède, 1863

- MacGinitie 1955: 43, 139 (Pt. Barrow; breeding data)

Syllis cornuta Rathke, 1843

- Pettibone 1954: 253–254, fig. 28(f) (Pt. Barrow)
MacGinitie 1955: 43, 139 (Pt. Barrow; breeding data)

Syllis fasciata Malmgren, 1867

- Pettibone 1954: 254–255, fig. 28(c–e) (Pt. Barrow; Foxe Basin)
MacGinitie 1955: 43, 109, 139 (Pt. Barrow; breeding data)

FAMILY TOMOPTERIDAE

Tomopteris planktonis Apstein, 1900

- Grainger 1954: 511 (NE Ungava Bay)

Tomopteris septentrionalis Quatrefages, 1865

- Wesenberg-Lund 1936: 4–7, fig. 6 (off the E end of Hudson Str.)

FAMILY PECTINARIIDAE

Pectinaria granulata (Linné, 1767)

- McLaren 1969: 1543, fig. 30, 32 (Ogac L., Baffin Is.; specific identification doubtful)

FAMILY SPIONIDAE

Polydora sp.

- MacGinitie 1955: 108 (Pt. Barrow; larval occurrence)

PHYLUM ARTHROPODA

CLASS CRUSTACEA

SUBCLASS BRANCHIOPODA

ORDER DIPLOSTRACA

Suborder Cladocera

FAMILY DAPHNIDAE

Daphnia sp.

Johnson 1961: 314 (coastal lagoons, Cape Thompson region, NW Alaska)
Johnson 1966: 682 (coastal lagoons, Cape Thompson region, NW Alaska)

FAMILY POLYPHEMIDAE

Evdadne nordmanni Lovén, 1836

Juday 1920: 8 (near Pt. Hope, Alaska)
English, 1966: 814 (near coast, Cape Thompson region, Alaska)

Evdadne sp.

Johnson 1953: 497 (S Chukchi Sea)
Johnson 1956: 11, tab. 8, 9 (S Chukchi and Beaufort seas)
Johnson 1958: 276 (Pt. Barrow)
Johnson 1961: 314–315 (coastal lagoons, Cape Thompson region, NW Alaska)
Johnson 1966: 682 (coastal lagoons, Cape Thompson region, NW Alaska)

Podon leuckarti G. O. Sars, 1862

Juday 1920: 8 (near Pt. Hope, Alaska)

Podon sp.

Johnson 1953: 497 (S Chukchi Sea)
Johnson 1956: 11, tab. 8, 9 (S Chukchi and Beaufort seas)
Johnson 1958: 276 (Pt. Barrow)
Johnson 1961: 314–315 (coastal lagoons, Cape Thompson region, NW Alaska)

Grainger 1965: 548 (S Beaufort Sea)
Johnson 1966: 682 (coastal lagoons, Cape Thompson region, NW Alaska)

SUBCLASS OSTRACODA

ORDER MYODOCOPA

FAMILY CYPRIDINIDAE

Philomedes globosus (Lilljeborg, 1853)

Sutherland 1852: 203, as *Cypridina globosa* (Assistance Bay, S Cornwallis Is.)
Sars 1909: 40, as *P. brenda* (Jones Sd.)

FAMILY HALOCYPRIDAE

Conchoecia borealis Sars, 1865 *maxima* Brady and Norman, 1896

Stephensen 1936: 18–20 (Jones Sd.; off the E end of Hudson Str.)
Johnson 1956: 11, tab. 8–10, 12, 14 (S Chukchi and Beaufort seas)
Grainger 1965: 548 (S Beaufort Sea; M'Clure Str.)

ORDER CLADOCOPA

FAMILY POLYCOPIDAE

Polycope orbicularis G. O. Sars, 1865

Sars 1909: 40 (Jones Sd.)

ORDER PODOCOPA

FAMILY CYTHERIDAE

Cytheridea punctillata Brady, 1865

Mohr et al. 1961: 221 (Nuwuk L., N Alaska)

- Cytheropteron subcircinatum* G. O. Sars, 1865 *Acartia clausi* Giesbrecht, 1889
- Sars 1909: 41 (Jones Sd.) Willey 1920: 4, 20 (near Pt. Hope and Pt. Barrow, Alaska)
- Cytherura atra* G. O. Sars, 1865 Willey 1923: 324 (James Bay)
- Sars 1909: 41 (Jones Sd.) Willey 1931: 485–489 (James Bay)
- Hemicythere angulata* (G. O. Sars, 1865) Wilson 1936: 367 (Bay of God's Mercy, N Hudson Bay; Frozen Str.; Foxe Channel; Fury and Hecla Str.)
- Sars 1909: 40, as *Cythereis angulata* (Jones Sd.) Brodsky 1950: 420–421, fig. 296 (Chukchi Sea; description; distribution)
- Hemicythere concinna* (Jones, 1856) Johnson 1956: 8, tab. 1, 5, fig. 5–6 (S Chukchi Sea)
- Sars 1909: 40, as *Cythereis concinna* (Jones Sd.) Brodsky 1957: 101 (E side of Chukchi Sea, near shore)
- Hemicythere emarginata* (G. O. Sars, 1865) Johnson 1958: 273, 276 (Pt. Barrow; Nuwuk L., N Alaska)
- Sars 1909: 40, as *Cythereis emarginata* (Jones Sd.) Johnson 1961: 313–315, 321 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
- Paradoxostoma obliquum* G. O. Sars, 1865 Mohr et al. 1961: 221 (Nuwuk L., N Alaska)
- Sars 1909: 41 (Jones Sd.) Grainger 1965: 549, fig. 5–6 (S Beaufort Sea; vertical distribution; temperature and salinity data)
- Paradoxostoma variabile* (Baird, 1850) English 1966: 814 (near coast, Cape Thompson region, NW Alaska)
- Sars 1909: 41 (Jones Sd.) Johnson 1966: 682, 691–692 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
- Sclerochilus contortus* (Norman, 1862) Wilson and Tash 1966: 572 (coastal lagoons, N Alaska)
- Sars 1909: 41 (Jones Sd.) Grainger 1968: 354 (Hudson Bay)
- Xestoleberis depressa* G. O. Sars, 1865 *Acartia longiremus* (Lilljeborg, 1853)
- Sars 1909: 41 (Jones Sd.) Willey 1920: 4, 6, 8, 20–21 (near Pt. Hope, Alaska; Pt. Barrow; Bernard Hbr.; Dolphin and Union Str.; Darnley Bay)
- SUBCLASS COPEPODA
- ORDER CALANOIDA
- FAMILY ACARTIIDAE**
- Acartia bifilosa* (Giesbrecht, 1881)
- Fontaine 1955: 883–884 (Ungava Bay)
- Johnson 1961: 313–315, 321 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
- Mohr et al. 1961: 221 (Nuwuk L., N Alaska)
- Johnson 1966: 682–683, 691–692 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
- Wilson and Tash 1966: 572 (coastal lagoons, Alaska)
- Willey 1931: 485–491 (James Bay and all parts of Hudson Bay)
- Jespersen 1934: 120–122, fig. 30–31 (Jones Sd.; Cape Walsingham, E Baffin Is.; off E end of Hudson Str.)
- Wilson 1936: 367–368 (Bay of God's Mercy, N Hudson Bay; Frozen Str.; Foxe Channel; Fury and Hecla Str.)
- Brodsky 1950: 421–422, fig. 297 (Chukchi Sea; description; distribution)
- Johnson 1953: 485 (SE Chukchi Sea)
- Fontaine 1955: 882–883, pl. 7 (Ungava Bay; life history)
- Johnson 1956: 8, tab. 1–2, 5–7, fig. 7 (S Chukchi and Beaufort seas)

- Brodsky 1957: 101–102 (E side Chukchi Sea, near shore)
- Johnson 1958: 273, 276 (Pt. Barrow)
- Grainger 1959: 466, 489 (year-round collections, Igloolik, N Foxe Basin)
- Johnson 1961: 313–314 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
- Grainger 1962: 384–385, 390–392, fig. 6, 8 (Foxe Basin, quantitative occurrence; description)
- Grice 1962: 101 (Chukchi Sea)
- Grainger 1965: 549, fig. 5–6 (S Beaufort Sea; temperature and salinity data)
- Johnson 1966: 682–683, 692 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
- Wilson and Tash 1966: 572 (coastal lagoons, N Alaska)
- Acartia tumida* Willey, 1920
- Brodsky 1950: 427–428, fig. 303 (Chukchi Sea; description; distribution)
- Brodsky 1957: 101 (E side Chukchi Sea, near shore)
- ?*Acartia* sp.
- Norman 1878: 252, as *Dias mossi* (E Ellesmere Is.)
- FAMILY AETIDEIDAE
- Aetidiopsis rostrata* G. O. Sars, 1903
- Fontaine 1955: 879 (Ungava Bay)
- Chiridius obtusifrons* G. O. Sars, 1903
- Jespersen 1934: 56–57, fig. 13 (Jones Sd.; off the E end of Hudson Str.)
- MacGinitie 1955: 148 (Pt. Barrow)
- Johnson 1956: 11, tab. 1–2, 6 (S Chukchi and Beaufort seas)
- Derjuginia tolli* (Linko, 1913)
- Brodsky 1950: 156–157, fig. 71 (Chukchi Sea; distribution; description)
- Brodsky 1957: 101 (E side Chukchi Sea, near shore)
- Grainger 1965: 553, fig. 6 (S Beaufort Sea)
- Gaidius tenuispinus* (G. O. Sars, 1900)
- Jespersen 1934: 58–59, fig. 14 (Jones Sd.; off the E end of Hudson Str.)
- Fontaine 1955: 879 (Ungava Bay)
- Johnson 1956: 11, tab. 1, 2, 7 (S Chukchi and Beaufort seas)
- Grainger 1965: 549, fig. 4, 5 (S Beaufort Sea; Amundsen G.; M'Clure Str.; temperature and salinity data)
- Gaidius* sp.
- Willey 1920: 5 (S Beaufort Sea)
- FAMILY CALANIDAE
- Calanus cristatus* Krøyer, 1848
- Brodsky 1950: 93–95, fig. 23 (Chukchi Sea; distribution; description)
- MacGinitie 1955: 148 (Pt. Barrow)
- Johnson 1956: 6, tab. 3, 5 (S Chukchi and Beaufort seas)
- Brodsky 1957: 101 (E side Chukchi Sea, near shore)
- Calanus finmarchicus* (Gunnerus, 1765)
- Jespersen 1934: 10–34, fig. 3–7 (off E end of Hudson Str.)
- Fontaine 1955: 870–872, pl. 1–3 (Ungava Bay; life history)
- Grainger 1961: 665–676, fig. 1, 3–6 (Smith Sd.; Jones Sd.; Lancaster Sd.; Baffin Bay; Davis Str.; NE Hudson Bay; Hudson Str.; Ungava Bay; distribution northern North America; description; length data)
- Grainger 1962: 384, 386, fig. 4 (S Foxe Basin)
- Grainger 1963: 70, 76–83, fig. 2, 5–8 (distribution NE North America; length data)
- Grainger 1968: 354 (N Hudson Bay)
- Pavshiks 1968: 387 (off Cumberland Sd.)
- Calanus glacialis* Yaschnov, 1955
- Grainger 1953: 366, as *C. finmarchicus* (head of Frobisher Bay, from stomachs of arctic char, *Salvelinus alpinus*)
- Grainger 1959: 475–481, fig. 6–7, as *C. finmarchicus* (year-round collections, Igloolik, N Foxe Basin; annual biology, size data)

- Grainger 1961: 664–676, fig. 1, 3–6 (Beaufort Sea; Canadian arctic archipelago; Foxe Basin; Hudson Bay and Strait; James Bay; Ungava Bay; Smith Sd.; Baffin Bay; Davis Str.; distribution northern North America; description; length data)
- Grainger 1962: 384–386 (Foxe Basin)
- Grice 1962: 101–102 (Chukchi Sea)
- Grainger 1963: 74, 83–85, fig. 3, 5–7, 9 (distribution NE North America; length data)
- Grainger 1965: 549, fig. 5 (S and E Beaufort Sea; Amundsen G.; M'Clure Str.; N edge of Queen Elizabeth Is.; copepodite stage development; temperature and salinity data)
- McLaren 1966a: 457ff, fig. 1–4 (Frobisher Bay; egg size and development)
- McLaren et al. 1966: 1642 (Frobisher Bay; chromosome number)
- Cairns 1967: 559, 563, fig. 8 (Tanquary Fjord, Ellesmere Is.; copepodite stage frequency)
- Grainger 1968: 352 (Hudson Bay)
- Pavshiks 1968: 387 (off Cumberland Sd.)
- McLaren 1969: 1539–1540, 1548–1550 (Ogac L., SE Baffin Is.; production)
- McLaren et al. 1969: 487–488, fig. 1 (Frobisher Bay; temperature and egg development rate)
- Bay; Frozen Str.; Foxe Channcl; Fury and Hecla Str.)
- Brodsky 1950: 86–88, fig. 19, as *C. finmarchicus* (Chukchi Sea)
- Vibe 1950: 92, as *C. finmarchicus* (Bay Fjord, Ellesmere Is.)
- Johnson 1953: 487, as *C. finmarchicus* (SE Chukchi Sea)
- Fontaine 1955: 870–872, pl. 1–3, as *C. finmarchicus* (Ungava Bay)
- MacGinitie 1955: 148, as *C. finmarchicus* (Pt. Barrow)
- Johnson 1956: 9–10 tab. 1–3, 5–7, as *C. finmarchicus* (S Chukchi and Beaufort seas)
- Brodsky 1957: 101, as *C. finmarchicus* (E side Chukchi Sea, near shore)
- Johnson 1958: 274, 276, as *C. finmarchicus* (Pt. Barrow)
- McLaren 1958: 95, as *C. finmarchicus* (Frobisher Bay, from ringed seal stomach)
- Johnson 1961: 313–314, as *C. finmarchicus* (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
- Johnson 1966: 682–683, 692, as *C. finmarchicus* (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
- Wilson and Tash 1966: 572, as *C. finmarchicus* (coastal lagoons, N Alaska)

Calanus glacialis?

- Norman 1878: 252, as *C. finmarchicus* (NE Baffin Is.)
- Rodger 1894: 159, as *C. finmarchicus* (off Pond Inlet)
- Sars, 1909: 16 as *C. finmarchicus* (Jones Sd. region)
- Willey 1920: 4–6, as *C. finmarchicus* (near Pt. Hope and at Pt. Barrow, Alaska; S Beaufort Sea; Bernard Hbr.; Dolphin and Union Str.)
- Størmer 1929: 5–27, 45, as *C. finmarchicus* (near Cape Dyer, E Baffin Is.; length data)
- Willey 1931: 485–491, as *C. finmarchicus* (James Bay; all parts of Hudson Bay)
- Jespersen 1934: 10–34, fig. 3–7, as *C. finmarchicus* (Jones Sd.; Cape Walsingham, E Baffin Is.; length data)
- Wilson 1936: 367–369, as *C. finmarchicus* (Bay of God's Mercy, north Hudson

Calanus helgolandicus (Claus, 1863)

- Fontaine 1955: 872 (NE Ungava Bay; one stage IV copepodite)

Calanus hyperboreus Krøyer, 1838

- Sars 1909: 16 (Jones Sd. region)
- Willey 1920: 5–7 (S Beaufort Sea; Bernard Hbr.)
- Størmer 1929: 28–29, 51 (near Cape Dyer, E Baffin Is.; length data; copepodite stage frequency)
- Jespersen 1934: 34–45, fig. 9 (Jones Sd.; Cape Walsingham, E Baffin Is.; off the E end of Hudson Str.; length data)
- Wilson 1936: 368 (Foxe Channel; Fury and Hecla Str.)
- Brodsky 1950: 85–86, fig. 18 (Chukchi Sea; distribution; description)
- Vibe 1950: 92 (Bay Fjord, Ellesmere Is.)

- Grainger 1953: 366–367 (head of Frobisher Bay and George River, S Ungava Bay, from stomachs of Arctic char, *Salvelinus alpinus*)
 Fontaine 1955: 872–873 (Ungava Bay)
 MacGinitie 1955: 148 (Pt. Barrow)
 Johnson 1956: 10, tab. 1–3, 5–7 (S Chukchi and Beaufort seas)
 Brodsky 1957: 103, 105 (Chukchi Sea)
 Johnson 1958: 274 (Pt. Barrow)
 McLaren 1958: 90, 94 (Ungava Bay and Foxe Basin, from stomachs of ringed seal)
 Grainger 1959: 481–483, fig. 8–9 (year-round collections, Igloolik, N Foxe Basin; length data; annual biology)
 Grainger 1962: 384–385, 387, fig. 3 (Foxe Basin; quantitative distribution)
 Grice 1962: 101–102 (Chukchi Sea)
 Grainger 1963: 74, 86–90, fig. 4, 10–12 (distribution NE North America; length data)
 Grainger 1965: 549, fig. 4–5 (S and E Beaufort Sea; Amundsen G.; M'Clure Str.; N edge of Queen Elizabeth Is.; temperature and salinity data)
 Cairns 1967: 559, 563, fig. 8 (Tanquary Fjord, Ellesmere Is.; copepodite stage frequency)
 Grainger 1968: 352 (Hudson Bay)
 Pavshitsk 1968: 387 (off Cumberland Sd.)

Calanus plumchrus Marukawa, 1921

- Wilson 1936: 367–368, as *C. tonsus* (Bay of God's Mercy, N Hudson Bay; Foxe Channel; Fury and Hecla Str.)
 Brodsky 1950: 91–92, fig. 22, as *C. tonsus* (Chukchi Sea)
 Johnson 1953: 487, as *C. tonsus* (SE Chukchi Sea)
 MacGinitie 1955: 148, as *C. tonsus* (Pt. Barrow)
 Johnson 1956: 6, tab. 1, 5, as *C. tonsus* (S Chukchi Sea)
 Brodsky 1957: 101, as *C. tonsus* (E side Chukchi Sea, near shore)
 English 1966: 814 (off shore Cape Thompson region, NW Alaska)

Undinula darwini (Lubbock, 1860)

- Wilson 1936: 367 (Bay of God's Mercy, N Hudson Bay)

FAMILY CENTROPAGIDAE

Centropages abdominalis Sato, 1913

- Willey 1920: 4, 10–11, as *C. mcmurrichi* n.sp. (near Pt. Hope, Alaska; description)
 Willey 1923: 325, as *C. mcmurrichi* (James Bay; description)
 Willey 1931: 491, as *C. mcmurrichi* (S Hudson Bay; James Bay)
 Brodsky 1950: 316–317, fig. 219, as *C. mcmurrichi* (Chukchi Sea; distribution; description)
 Johnson 1953: 487, as *C. mcmurrichi* (SE Chukchi Sea)
 Johnson 1956: 9, tab. 5–6, fig. 6, as *C. mcmurrichi* (S Chukchi and Beaufort seas)
 Brodsky 1957: 101, as *C. mcmurrichi* (E side Chukchi Sea, near shore)
 Johnson 1958: 274, 276, as *C. mcmurrichi* (Pt. Barrow)
 Johnson 1961: 314, 317 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
 Johnson 1966: 682, 686, 692 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
 Wilson and Tash 1966: 572 (coastal lagoons, N Alaska)

Limnocalanus johanseni Marsh, 1920

- Johnson 1961: 314–315, 317, 321, fig. 2 (coastal lagoons, Cape Thompson region, NW Alaska; length data)
 Holmquist 1963: 120–121 (Sinclair L. and Nuuk Pond, N Alaska)
 Johnson 1966: 682–684, 686, 691–692, fig. 2 (coastal lagoons, Cape Thompson region, NW Alaska; length data; description; salinity data)
 Wilson and Tash 1966: 570 (coastal lagoons, N Alaska)

Limnocalanus macrurus grimaldi (Guerne, 1886)

- Willey 1920: 5, 11, as *L. grimaldi* (S Beaufort Sea)
 Brodsky 1950: 321, fig. 223, as *L. grimaldi* (Chukchi Sea; distribution; description)

- Johnson 1956: 11, fig. 7, tab. 2, as *L. grimaldi* (S Beaufort Sea)
- Johnson 1961: 314–317, 321, as *L. grimaldi* (coastal lagoons, Cape Thompson region, NW Alaska; description; salinity data)
- Segerstråle 1962: 17, as *L. grimaldi* (Adelaide Peninsula)
- Grainger 1965: 549, fig. 4, 6, as *L. grimaldi* (S Beaufort Sea; temperature and salinity data)
- Johnson 1966: 682–683, 685, 692, as *L. grimaldi* (coastal lagoons, Cape Thompson region, NW Alaska; salinity data; description)
- Wilson and Tash 1966: 572, as *L. grimaldi* (coastal lagoons, N Alaska)
- Bowman and Long 1968: 173–178 (Tuborg L., 81°N, 76°W, Ellesmere Is.; “relict” form)
- Limnocalanus macrurus macrurus* G. O. Sars, 1862
- Grainger 1962: 385, 388, as *L. macrurus* (N Foxe Basin, at sea surface (salinity less than 2 parts per thousand) adjacent to river-lake system inhabited by the species)

FAMILY EUCLANIDAE

Eucalanus bungii bungii Johnson, 1938

- Brodsky 1950: 101, fig. 26 (Chukchi Sea; description; distribution)
- Johnson 1953: 487 (SE Chukchi Sea)
- Johnson 1956: 5–6, tab. 1, 6, fig. 5–6 (S Chukchi and Beaufort seas)
- Brodsky 1957: 101, as *E. bungii* (E side Chukchi Sea, near shore)
- English 1966: 814, as *E. bungii* (off shore Cape Thompson region, NW Alaska)

FAMILY EUCHAETIDAE

Euchaeta glacialis Hansen, 1886

- Jespersen 1934: 75–78, fig. 19–20, as *Pareuchaeta glacialis* (Jones Sd.; off the E end of Hudson Str.)
- Grainger 1953: 366, as *Pareuchaeta glacialis* (head of Frobisher Bay, from stomachs of Arctic char, *Salvelinus alpinus*)

- Fontaine 1955: 880, as *Pareuchaeta glacialis* (Ungava Bay)
- Johnson 1956: 10, tab. 1–3, 5–7, as *Pareuchaeta norvegica* (S Chukchi and Beaufort seas)
- Grainger 1965: 549, fig. 5, as *Pareuchaeta glacialis* (S and E Beaufort Sea; Amundsen G.; M'Clure Str.; N edge of Queen Elizabeth Is.; temperature and salinity data)
- Cairns 1967: 559, as *Pareuchaeta glacialis* (Tanquary Fjord, Ellesmere Is.)

Euchaeta norvegica Boeck, 1872

Willey 1920: 5, 10 (S Beaufort Sea)

Jespersen 1934: 71–74, fig. 18, as *Pareuchaeta norvegica* (Jones Sd.; off the E end of Hudson Str.)

Grainger 1953: 366, as *Pareuchaeta norvegica* (head of Frobisher Bay, from stomachs of Arctic char, *Salvelinus alpinus*)

Fontaine 1955: 879–880, as *Pareuchaeta norvegica* (Ungava Bay)

McLaren 1958: 90, as *P. norvegica* (Ungava Bay, from stomachs of ringed seal)

Euchaeta wilsoni Jespersen, 1934

Jespersen 1934: 69–70, fig. 17 (Jones Sd.; description)

FAMILY HETERORHABDIDAE

Heterorhabdus norvegicus (Boeck, 1872)

Jespersen 1934: 106–107 (Jones Sd.; off the E end of Hudson Str.)

Fontaine 1955: 882 (Ungava Bay)

MacGinitie 1955: 148–149 (Pt. Barrow)

Johnson 1956: 11, tab. 1, 6 (S Chukchi and Beaufort seas)

Grainger 1965: 549, fig. 5 (S Beaufort Sea; temperature and salinity data)

Heterostylites major (Dahl, 1894)

Jespersen 1934: 108–110, fig. 27 (off the E end of Hudson Str.)

FAMILY METRIDIIDAE

Metridia longa (Lubbock, 1854)

- Norman 1878: 251, as *M. armata* (off NE Baffin Is.)
Willey 1920: 5, 8, 15 (S Beaufort Sea; Dolphin and Union Str.)
Størmer 1929: 36–37, 51 (near Cape Dyer, E Baffin Is.)
Jespersen 1934: 93–98, fig. 25–26 (Jones Sd.; Cape Walsingham, E Baffin Is.; off the E end of Hudson Str.)
Willey 1936: 368 (Foxe Channel)
Brodsky 1950: 291–293, fig. 198 (Chukchi Sea; distribution; description)
Fontaine 1955: 881 (Ungava Bay)
MacGinitie 1955: 148–149 (Pt. Barrow)
Johnson 1956: 10, tab. 1–3, 5–7 (S Chukchi and Beaufort seas)
Brodsky 1957: 103 (Chukchi Sea)
Grainger 1959: 466, 486–488 (year-round collections, Igloolik, N Foxe Basin; annual biology)
Grainger 1962: 384–385, 390, fig. 7 (Foxe Basin; quantitative distribution)
Grainger 1965: 549, fig. 5 (S and E Beaufort Sea; Amundsen G.; M'Clure Str.; N edge of Queen Elizabeth Is.; temperature and salinity data)
Geiger 1966: 336–339, fig. 2 (M'Clure Str.; length data)
Cairns 1967: 559 (Tanquary Fjord, Ellesmere Is.)

Metridia lucens Boeck, 1864

- Johnson 1953: 489 (SE Chukchi Sea)
Johnson 1956: 5, tab. 1, 5, fig. 5, 6 (S Chukchi Sea)
English 1966: 814 (off shore, Cape Thompson region, NW Alaska)

Metridia pacifica Brodsky, 1950

- Brodsky 1950: 295–296, fig. 201 (Chukchi Sea; description; distribution)
Brodsky 1957: 101 (E side Chukchi Sea, near shore)

Pleuromamma robusta (Dahl, 1893)

- Jespersen 1934: 102–103 (off the E end of Hudson Str.)
Fontaine 1955: 882 (Ungava Bay)

FAMILY PARACALANIDAE

Paracalanus parvus (Claus, 1863)

- Wilson 1936: 367–369 (Bay of God's Mercy, N Hudson Bay; Frozen Str.; Fury and Hecla Str.; Cobourg Is., Jones Sd.; Smith Sd.)

FAMILY PHAENNIDAE

Amallophora typica Scott, 1894

- Wilson 1936: 368 (Fury and Hecla Str.)

Xanthocalanus borealis G. O. Sars, 1900

- Jespersen 1934: 83 (Jones Sd.; identity doubtful)

Xanthocalanus greeni Farran, 1905

- MacGinitie 1955: 148 (Pt. Barrow)

Xanthocalanus sp.

- Cairns 1967: 559 (Tanquary Fjord, Ellesmere Is.)

FAMILY PONTELLIDAE

Epilabidocera amphitrites (McMurrich, 1916)

- Willey 1920: 4, 16–20, fig. 14–24, as *Paralabidocera amphitrites* (Near Pt. Hope, Alaska; description)
Brodsky 1950: 413–414, fig. 293 (Chukchi Sea; distribution; description)
Johnson 1953: 487 (SE Chukchi Sea)
Johnson 1956: 9, tab. 1, fig. 5 (S Chukchi Sea)
Brodsky 1957: 101 (E side Chukchi Sea, near shore)
Johnson 1958: 274, 276 (Pt. Barrow)

FAMILY PSEUDOCALANIDAE

Clausocalanus arcuicornis (Dana, 1849)

- Wilson 1936: 367–368 (Bay of God's Mercy, N Hudson Bay; Foxe Channel; Fury and Hecla Str.)

Drepanopus bungei G. O. Sars, 1898

Bowman and Long 1968: 173–178 (Tuborg L., 81°N, 76°W, Ellesmere Is., “relict” form; Tanquary Fjord; Disraeli Fjord, N Ellesmere Is.)

Microcalanus pygmaeus (G. O. Sars, 1900)

Størmer 1929: 36, 51 (near Cape Dyer, E Baffin Is.)
Jespersen 1934: 50–51 (off Cape Walsingham, E Baffin Is.)
Brodsky 1950: 115, fig. 37 (Chukchi Sea; distribution; description)
Fontaine 1955: 878–879 (Ungava Bay)
Johnson 1956: 10, tab. 1–3, 5–7 (S Chukchi and Beaufort seas)
Brodsky 1957: 101 (E side Chukchi Sea, near shore)
Grainger 1962: 384, 390, fig. 6 (Foxe Basin; quantitative distribution)
Grainger 1965: 549, fig. 4–5, 7 (S and E Beaufort Sea; Amundsen G.; M’Clure Str.; N edge of Queen Elizabeth Is.; copepodite stage development; temperature and salinity data)
Cairns 1967: 559, 562, fig. 7 (Tanquary Fjord, Ellesmere Is.; copepodite stage frequencies)

Microcalanus sp.

Pavshiks 1968: 387 (off Cumberland Sd.)

Pseudocalanus minutus (Krøyer, 1849)

Willey 1920: 4–6, 8–9, fig. 1, as *Pseudocalanus elongatus* (near Pt. Hope, Alaska; Pt. Barrow; S Chukchi Sea; Bernard Hbr.; Dolphin and Union Str.)
Willey 1923: 325, as *P. elongatus* (James Bay)
Størmer 1929: 29–32, 51 (Cape Dyer region, E Baffin Is.; vertical distribution; copepodite stage frequency)
Willey 1931: 485–491, as *P. elongatus* (James Bay; all regions of Hudson Bay)
Jespersen 1934: 49–50 (Jones Sd.; off Cape Walsingham, E Baffin Is.)
Wilson 1936: 367–369, as *P. elongatus* (Bay of God’s Mercy, N Hudson Bay; Frozen Str.; Foxe Channel; Fury and Hecla Str.; Cobourg Is.; Smith Sd.)
Brodsky 1950: 111–114, fig. 34–36, as *P.*

elongatus, *P. gracilis*, and *P. major* (Chukchi Sea; distribution; description)

Johnson 1953: 491 (SE Chukchi Sea)
Fontaine 1955: 873–878, pl. 4–6, fig. 1–2 (Ungava Bay; life history)
Johnson 1956: 10, tab. 1–3, 5–7 (S Chukchi and Beaufort seas)
Brodsky 1957: 101, as *P. elongatus* (E side Chukchi Sea, near shore)
Johnson 1958: 275–276 (Pt. Barrow)
Grainger 1959: 466, 483–486, fig. 10–11 (year-round collections, Igloolik, N Foxe Basin; length data; annual biology)
Johnson 1961: 313–314 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
Grainger 1962: 384, 388–390, fig. 4–5 (Foxe Basin; quantitative distribution; copepodite stage development)
Grice 1962: 101–102 (Chukchi Sea)
Grainger 1965: 549, fig. 5 (S and E Beaufort Sea; Amundsen G.; M’Clure Str.; N edge of Queen Elizabeth Is.; temperature and salinity data)
Johnson 1966: 692 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
McLaren 1966a: 457ff, fig. 1–4 (Frobisher Bay; Ogac L., SE Baffin Is.; egg development; egg size)
McLaren et al. 1966: 1641–1642 (Ogac L., SE Baffin Is.; Winton Bay, SE Baffin Is.; chromosome number; DNA content)
Wilson and Tash 1966: 572 (coastal lagoons, N Alaska)
McLaren 1969: 1492–1509, 1550–1551, fig. 1–9, 33 (Ogac L., SE Baffin Is.; life cycle; population dynamics; vertical distribution; growth; development; production)

Pseudocalanus sp.

Norman 1878: 252, as *P. fieldeni* (E Ellesmere Is.)
McLaren 1965: 528–538, fig. 1–3, as *Pseudocalanus* sp. (Ogac L. E Baffin Is.; egg size; body size; development rate; fecundity)

Cairns 1967: 559–562, fig. 3–6, as *Pseudocalanus* sp. (Tanquary Fjord, Ellesmere Is.; depth; stage frequency; size variation)

Pavshiks 1968: 387, as *Pseudocalanus* sp. (off Cumberland Sd.)

Woods 1969: 543ff, fig. 1–8, as *Pseudocalanus* sp. (Ogac L., and Winton Bay, SE Baffin Is.; “large” and “small” forms; morphology; chromosomes; size distribution; DNA content; development rate; life cycle)

Spinocalanus sp.

Størmer 1929: 51 (off Cape Dyer, E Baffin Is.)

FAMILY PSEUDOCYCLOPIDAE

Pseudocyclops obtusatus (Brady and Robertson, 1873)

Wilson 1936: 367 (Bay of God’s Mercy, N Hudson Bay)

FAMILY SCOLOCITHRICIDAE

Scaphocalanus magnus (Scott, 1893)

Jespersen 1934: 87–89, fig. 23 (Jones Sd.)

MacGinitie 1955: 148 (Pt. Barrow)

Johnson 1956: 11, tab. 1 (S Chukchi Sea)

Scolecithricella minor (Brady, 1883)

Brodsky 1950: 268–269, fig. 178 (Chukchi Sea; description; distribution)

Johnson 1956: 11, tab. 7 (S Beaufort Sea)

Brodsky 1957: 101 (E side Chukchi Sea, near shore)

Cairns 1967: 559 (Tanquary Fjord, Ellesmere Is.)

FAMILY STEPHIDAE

Stephos arcticus Sars, 1909

Sars 1909: 16–17, pl. 1 (Jones Sd.; description)

Stephos sinuatus Willey, 1923

Willey 1923: 325–326, fig. 19 (James Bay; description)

FAMILY TEMORIDAE

Eurytemora americana Williams, 1906

Fontaine 1955: 880–881 (Ungava Bay)

Heron 1964: 200, 206–209, fig. 19–26 (Kivalina Lagoon, NW Alaska; description)

McLaren 1969: 1537–1539, fig. 28 (Ogac L., SE Baffin Is.; production)

Eurytemora arctica Wilson and Tash, 1966

Wilson and Tash 1966: 554–562, 567, 570, fig. 1–3 (coastal pools, N Alaska; description)

Eurytemora canadensis Marsh, 1920

Marsh 1920: 4–5, pl. 1 (9–12), 2 (1–2, 4, 7) (Bernard Hbr., brackish pond; description)

Johnson 1958: 275 (Nuwuk L., N Alaska)

Johnson 1961: 314, 321 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)

Mohr et al. 1961: 221 (Nuwuk L., N Alaska)

Johnson 1966: 682, 691–692 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)

Wilson and Tash 1966: 567 (coastal lagoons, N Alaska)

Eurytemora composita Keiser, 1929

Heron 1964: 200 (Krusenstern and Kivalina lagoons and Marryat Inlet, NW Alaska)

Wilson and Tash 1966: 570 (coastal lagoons, N Alaska)

Eurytemora foveola Johnson, 1961

Johnson 1961: 314–315, 317–321, fig. 3–18 (coastal lagoons, Cape Thompson region, NW Alaska; description; salinity data)

Heron 1964: 200, 210, fig. 11 (Krusenstern Lagoon, NW Alaska; description)

Johnson 1966: 684, 686–692, fig. 4–6 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data; description)

Wilson and Tash 1966: 571 (coastal lagoons, N Alaska)

- Eurytemora gracilicauda* Akatova, 1949
- Heron 1964: 200, 209, fig. 10 (Krusenstern Lagoon, NW Alaska; description)
- Wilson and Tash 1966: 564, 567 (coastal lagoons, N Alaska)
- Eurytemora gracilis* (G. O. Sars, 1898)
- Willey 1920: 11–12, fig. 3 (near Pt. Hope, N Alaska)
- Brodsky 1957: 101: (E side Chukchi Sea, near shore)
- Eurytemora herdmani* Thompson and Scott, 1897
- Willey 1920: 4–6, 8, 12–13 (near Pt. Hope, N Alaska; Bernard Hbr.; Dolphin and Union Str.; Darnley Bay, Amundsen G.)
- Willey 1923: 325 (James Bay)
- Willey 1931: 485–489 (James Bay)
- Brodsky 1950: 282–284, fig. 191 (Chukchi Sea; distribution; description)
- Johnson 1956: 9, tab. 1, 5–7, fig. 5, 6 (S Chukchi and Beaufort seas)
- Brodsky 1957: 101 (E side Chukchi Sea, near shore)
- Johnson 1958: 275–276 (Pt. Barrow and Nuwuk L., N Alaska)
- Johnson 1961: 314 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
- Mohr et al. 1961: 221 (Nuwuk L., N Alaska)
- Heron 1964: 200, 204–206, fig. 12–18 (Kivalina Lagoon and Marryat Inlet, NW Alaska; SE Chukchi Sea; description)
- Grainger 1965: 549, fig. 4–6 (S Beaufort Sea; Amundsen G.; temperature and salinity data)
- Johnson 1966: 682, 692 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
- Wilson and Tash 1966: 570 (coastal lagoons, N Alaska)
- Grainger 1968: 354 (Hudson Bay)
- Eurytemora pacifica* Sato, 1913
- Willey 1920: 4, 13–15, fig. 5–13, as *E. johanseni* (near Pt. Hope, Alaska; description)
- Brodsky 1950: 281–282, fig. 190 (Chukchi Sea; distribution; description)
- Brodsky 1957: 101 (E side Chukchi Sea near shore)
- Johnson 1961: 313–314, 317 (coastal lagoons, Cape Thompson region, NW Alaska)
- Heron 1964: 200, 209, fig. 9 (Kivalina Lagoon and Marryat Inlet, N Alaska; SE Chukchi Sea; description)
- English 1966: 814 (NW Alaska, Cape Thompson region, near coast)
- Johnson 1966: 682–683, 686, 692, fig. 3 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data; description)
- Wilson and Tash 1966: 570 (coastal lagoons, N Alaska)
- Eurytemora raboti* Richard, 1897
- Mohr et al. 1961: 221 (Nuwuk L., N Alaska)
- Holmquist 1963: 120–121 (Sinclair L. and Nuwuk Pond, N Alaska)
- Heron 1964: 199–204, fig. 2–8 (Krusenstern and Kivalina lagoons, NW Alaska; description)
- Wilson and Tash 1966: 570 (coastal lagoons, N Alaska)
- Eurytemora transversalis* Campbell, 1930
- Johnson 1956: 9, tab. 5, fig. 6 (S Chukchi Sea)
- Temora longicornis* (Müller, 1785)
- Wilson 1936: 368 (Frozen Str.)
- FAMILY THARYBIDAE
- Undinella oblonga* G. O. Sars, 1900
- Brodsky 1950: 276–277, fig. 186 (Chukchi Sea; distribution; description)
- FAMILY TORTANIDAE
- Tortanus discaudatus* (Thompson and Scott, 1897)
- Willey 1923: 325 (James Bay)
- Willey 1931: 486–488 (James Bay)
- Brodsky 1950: 430–431, fig. 304 (Chukchi Sea; distribution; description)

- Johnson 1953: 491 (SE Chukchi Sea)
 Johnson 1956: 9, tab. 1, 6, fig. 5-6 (S Chukchi and Beaufort seas)
 Brodsky 1957: 101 (E side Chukchi Sea near shore)
 Johnson 1958: 276-277 (Pt. Barrow)
 Johnson 1961: 314 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
 Grainger 1965: 553, fig. 6 (S Beaufort Sea)
 Johnson 1966: 682, 692 (coastal lagoons, Cape Thompson region, NW Alaska; salinity data)
 Wilson and Tash 1966: 572 (coastal lagoons, N Alaska)
 Grainger 1968: 354 (Hudson Bay)

ORDER HARPACTICOIDA

FAMILY AMEIRIDAE

Ameira longipes Boeck, 1864

- Sars 1909: 34 (Jones Sd. region)
 Willey 1923: 330 (James Bay)
 Wilson 1936: 368 (Frozen Str.; Fury and Hecla Str.)

Ameira parvula (Claus, 1866)

- Sars 1909: 34, as *A. tau* (Jones Sd. region)
 Wilson 1936: 368, as *A. tau* (Frozen Str.; Fury and Hecla Str.)

Nitocra spinipes Boeck, 1864

- Willey 1931: 486 (James Bay)

Proameira hiddenseensis (Schäfer, 1936)

- Mohr et al. 1961: 221 (Nuwuk L., N Alaska)

Sarsameira elongata (G. O. Sars, 1909)

- Sars 1909: 34-35, as *Parameira* (Jones Sd. region)

FAMILY CANTHOCAMPTIDAE

Mesochra pygmaea (Claus, 1862)

- Sars 1909: 35 (Jones Sd. region)
 Wilson 1936: 368 (Frozen Str.; Fury and Hecla Str.)

FAMILY CLETODIDAE

Cletodes tenuipes Scott, 1896

- Wilson 1936: 368 (Fury and Hecla Str.)

Eurycketodes similis (Scott, 1895)

- Sars 1909: 38, as *Cletodes* (Jones Sd. region)

FAMILY DIOSACCIDAE

Amonardia arctica (Scott, 1898)

- Sars 1909: 28, as *Amphiascus nasutus* (Jones Sd. region)
 Willey 1920: 6, 37-38, fig. 53-58, as *Amphiascus nasutus* (Dolphin and Union Str.)

Amphiascus brevis G. O. Sars, 1909

- Sars 1909: 31-32, pl. 8(11-15) (Jones Sd. region; description)

Amphiascus congener G. O. Sars 1909

- Sars 1909: 29-30, pl. 8(1-4) (Jones Sd. region; description)

Amphiascus minutus (Claus, 1863)

- Sars 1909: 29 (Jones Sd. region)
 Wilson 1936: 368 (Fury and Hecla Str.)

Amphiascus polaris G. O. Sars, 1909

- Sars 1909: 30-31, pl. 8(5-10) (Jones Sd. region; description)

Dactylopodiamphiascopsis latifolius (G. O. Sars, 1909)

- Sars 1909: 28-29, as *Amphiascus* (Jones Sd. region)

Paramphiascella vararensis (Scott, 1903)

- Sars 1909: 32, as *Amphiascus affinis* (Jones Sd. region)

Paramphiascella hispidus (Brady, 1880)

- Sars 1909: 32 as *Amphiascus* (Jones Sd. region)

- Paramphiascella intermedius* (Scott, 1896)
Sars 1909: 32, as *Amphiascus* (Jones Sd. region)

Robertsonia tenuis Brady, 1880
Wilson 1936: 367–368 (Bay of God's Mercy, N Hudson Bay; Frozen Str.; Foxe Channel; Fury and Hecla Str.)

Stenhelia gibba Boeck, 1864
Sars 1909: 32 (Jones Sd. region)
Willey 1923: 329, fig. 23 (James Bay; description)

Stenhelia nuwukensis Wilson, 1965
Wilson 1965: 179–186, fig. A–M (Nuwuk L., Alaska; description)

Stenhelia palustris (Brady, 1880)
Sars 1909: 32 (Jones Sd. region)

Stenhelia sp.
Mohr et al. 1961: 221 (Nuwuk L., N Alaska)

Typhlampionscetus typhlops (G. O. Sars, 1911)
Sars 1909: 32, as *Amphiascus* (Jones Sd. region; species named but not described)

FAMILY ECTINOSOMIDAE

Bradya typica Boeck, 1872
Sars 1909: 18 (Jones Sd. region)

Ectinosoma curticorne Boeck, 1872
Wilson 1936: 368 (Frozen Str.; Fury and Hecla Str.)

Ectinosoma finmarchicum (Scott, 1903)
Willey 1920: 26, fig. 33 (S Beaufort Sea)
Grice 1962: 101 (Chukchi Sea)

Ectinosoma melaniceps Boeck, 1864
Sars 1909: 18 (Jones Sd. region)
Willey 1923: 327–328 (James Bay)

Ectinosoma neglectum G. O. Sars, 1904
Sars 1909: 18 (Jones Sd. region)
Willey 1920: 23–26, fig. 29–32 (Bernard Hbr.; description)
Wilson 1936: 368 (Frozen Str.; Fury and Hecla Str.)

Ectinosoma sp.
Willey 1920: 5 (S Beaufort Sea)

Microsetella norvegica (Boeck, 1864)
Sars 1909: 18 (Jones Sd.)
Wilson 1936: 368 (Fury and Hecla Str.)

Pseudobradya minor (T. and A. Scott, 1896)
Willey 1920: 27–29, fig. 34–38 (Bernard Hbr.; description)
Wilson 1936: 367–368 (Bay of God's Mercy, N Hudson Bay; Foxe Channel; Fury and Hecla Str.)

Pseudobradya similis (T. and A. Scott, 1894)
Wilson 1936: 368 (Frozen Str.; Fury and Hecla Str.)

Pseudobradya sp.
Willey 1920: 5 (S Beaufort Sea)

FAMILY HARPACTICIDAE

Harpacticus superflexus Willey, 1920
Willey 1920: 7, 13, 29–32, fig. 39–46 (S Beaufort Sea; Bernard Hbr.; description)
Grainger 1959: 466, 489–490 (year-round collections, Igloolik, N Foxe Basin)

Harpacticus uniremus Krøyer, 1842
Sars 1909: 18 (Jones Sd. region)
Willey 1920: 8, 13, 32–34, fig. 47–49 (Bernard Hbr.; description)
Willey 1923: 328 (James Bay)
Willey 1931: 485–489 (James Bay)
Wilson 1936: 367 (Bay of God's Mercy, N Hudson Bay)

Harpacticus sp.
Willey 1920: 4 (Pt. Barrow; immature specimens)

- Zaus abbreviatus* G. O. Sars, 1911
 Sars 1909: 20 (Jones Sd. region; species named but not described)
 Wilson 1936: 367–368 (Bay of God's Mercy, N Hudson Bay; Frozen Str.; Fury and Hecla Str.)
- Zaus goodsiri* Brady, 1880
 Sars 1909: 20 (Jones Sd. region)
- Zaus spinatus* Goodsir, 1845
 Sars 1909: 19, pl. 2(1–6), as *Z. spinatus* and *Z. Aurelii* (Jones Sd. region)
 Willey 1923: 328, fig. 20, as *Z. aurelii* (James Bay; description)
 Willey 1931: 487, as *Z. aurelii* (James Bay)
 Wilson 1936: 367–368 (Bay of God's Mercy, N Hudson Bay; Frozen Str.; Fury and Hecla Str.)
- FAMILY LAOPHONTIDAE
- Heterolaophonte discophora* (Willey, 1929)
 Willey 1931: 487, as *Laophonte* (James Bay)
- Laophonte appanata* G. O. Sars, 1909
 Sars 1909: 36–37, pl. 11 (Jones Sd. region)
- Laophonte depressa* Scott, 1894
 Sars 1909: 35 (Jones Sd. region)
- Laophonte elongata* Boeck, 1872
 Wilson 1936: 367–368 (Bay of God's Mercy, N Hudson Bay; Frozen Str.; Foxe Channel)
- Laophonte setosa* Boeck, 1864
 Wilson 1936: 368, as *L. similis* (Fury and Hecla Str.)
- Onychocamptus horrida* (Norman, 1876)
 Sars 1909: 37, as *Laophonte* (Jones Sd. region)
 Willey 1923: 330, as *Laophonte* (James Bay)
 Wilson 1936: 368, as *Laophonte* (Foxe Channel)
- Paralaophonte hyperborea* (G. O. Sars, 1909)
 Sars 1909: 37–38, pl. 12, as *Laophonte* (Jones Sd. region)
- Paralaophonte macera* (G. O. Sars, 1911)
 Sars 1909: 37, as *Laophonte* (Jones Sd. region; species named but not described)
- Paralaophonte perplexa* (Scott, 1898)
 Sars 1909: 37, as *Laophonte* (Jones Sd. region)
 Wilson 1936: 367, as *Laophonte* (Bay of God's Mercy, N Hudson Bay; Fury and Hecla Str.)
- Platychelipus littoralis* Brady, 1880
 Willey 1931: 488 (James Bay)
- FAMILY MISOPHRIDIIDAE
- Misophria pallida* Boeck, 1864
 Sars 1909: 18 (Jones Sd. region)
- FAMILY PARASTENHELIDAE
- Parastenhelia spinosa* (Fischer, 1860)
 Sars 1909: 25, as *Microthalestris forficula* (Jones Sd. region)
- FAMILY PELTIIDIIDAE
- Alteutha depressa* (Baird, 1837)
 Wilson 1936: 368 (Foxe Channel)
- FAMILY PORCELLIDIIDAE
- Porcellidium viride* (Philippi, 1840)
 Sars 1909: 20, as *P. fimbriatum* (Jones Sd. region)
- FAMILY TACHIDIIDAE
- Danielssenia fusiformis* (Brady, 1880)
 Willey 1920: 4, 39 (Pt. Barrow)

- Danielssenia stefanssoni* Willey, 1920
- Willey 1920: 5, 8, 39–42, fig. 60–67 (Bernard Hbr.; description)
- Mohr et al. 1961: 221 (Nuwuk L., N Alaska)
- Wilson 1966: 435–443, fig. 1–3 (Nuwuk L., N Alaska, Cape Thompson region, NW Alaskan coast; description)
- Danielssenia typica* Boeck, 1872
- Sars 1909: 38 (Jones Sd. region)
- Wilson 1936: 368 (Frozen Str.)
- Microarthridion littorale* (Poppe, 1881)
- Mohr et al. 1961: 221 (Nuwuk L., N Alaska)
- Tachidius discipes* Giesbrecht, 1881
- Willey 1920: 38–39, fig. 59, as *T. brevicornis* (Bernard Hbr.)
- Willey 1931: 486, as *T. brevicornis* (James Bay)
- FAMILY TEGASTIDAE
- Tegastes falcatus* (Norman, 1868)
- Willey 1923: 328 (James Bay)
- Tegastes nanus* G. O. Sars, 1911
- Willey 1923: 328 (James Bay)
- FAMILY THALESTRIDAE
- Amenophia peltata* Boeck, 1864
- Sars 1909: 27 (Jones Sd. region)
- Dactylopodia glacialis* (G. O. Sars, 1909)
- Sars 1909: 25–26, pl. 5, as *Dactylopodia* (Jones Sd. region; description)
- Dactylopodia signata* (Willey, 1920)
- Willey 1920: 22, 35–37, fig. 50–52, as *Dactylopodia* (Bernard Hbr.; description)
- Wilson 1936: 368, as *Dactylopodia* (Frozen Str.; Foxe Channel; Fury and Hecla Str.)
- Dactylopodia tisboides* (Claus, 1862)
- Wilson 1936: 367, as *Dactylopodia thisboides* (Bay of God's Mercy, N Hudson Bay)
- Dactylopodia vulgaris* (G. O. Sars, 1911)
- Sars 1909: 25, as *Dactylopodia* (Jones Sd. region; species named but not described)
- Willey 1923: 329, as *Dactylopodia* (James Bay)
- Willey 1931: 487, as *Dactylopodia* (James Bay)
- Wilson 1936: 367, as *Dactylopodia* (Bay of God's Mercy, N Hudson Bay)
- Diarthrodes assimilis* (G. O. Sars, 1911)
- Sars 1909: 27, as *Westwoodia* (Jones Sd. region; species named but not described)
- Diarthrodes nobilis* (Baird, 1845)
- Wilson 1936: 368, as *Pseudothalestris* (Fury and Hecla Str.)
- Diarthrodes pygmaeus* (T. and A. Scott, 1895)
- Wilson 1936: 368, as *Pseudothalestris* (Frozen Str.; Fury and Hecla Str.)
- Idomene coronata* (Scott, 1894)
- Sars 1909: 26–27, pl. 4 (Jones Sd. region; description)
- Paradactylopodia brevicornis* (Claus, 1866)
- Sars 1909: 26, as *Dactylopodia* (Jones Sd. region)
- Parathalestris croni* (Krøyer, 1845)
- Wilson 1936: 369, as *Halithalestris* (Cobourg Is., Jones Sd.)
- Parathalestris jacksoni* (Scott, 1898)
- Wilson 1936: 368 (Foxe Channel; Fury and Hecla Str.)
- Rhynchothalestris helgolandica* (Claus, 1863)
- Sars 1909: 25 (Jones Sd. region)
- Willey 1923: 329 (James Bay)
- Wilson 1936: 368 (Frozen Str.)

- Thalestris brunnea* G. O. Sars, 1911
 Willey 1923: 328, fig. 21–22 (James Bay; description)
- Thalestris frigida* (Scott, 1898)
 Sars 1909: 23–25, pl. 4, as *Phyllothalistris* (Jones Sd. region; description)
- Thalestris gibba* (Krøyer, 1842)
 Sars 1909: 23 (Jones Sd.)
 Wilson 1936: 368 (Frozen Str.; Foxe Channel; Fury and Hecla Str.)
- FAMILY TISBIDAE
- Idyanthe dilatata* (G. O. Sars, 1911)
 Sars 1909: 23 (Jones Sd. region; species named but not described)
- Scutellidium hippolytes* (Krøyer, 1863)
 Sars 1909: 21, as *Machairopus minutus* (Jones Sd. region)
- Scutellidium longicaudata* (Philippi, 1840)
 Sars 1909: 20–21, pl. 2(7–11), as *Psamathae arthuri* (Jones Sd. region; description)
- Tisbe ensifer* Fischer, 1860
 Sars 1909: 21, as *Idyaea* (Jones Sd. region)
- Tisbe finmarchica* (G. O. Sars, 1911)
 Sars 1909: 21, as *Idyaea* (Jones Sd. region)
 Wilson 1936: 368 (Fury and Hecla Str.)
- Tisbe furcata* (Baird, 1837)
 Norman 1878: 252, as *Idya palaeocystica* (E Ellesmere Is.)
 Sars 1909: 21, as *Idyaea* (Jones Sd. region)
 Willey 1920: 5, 8, 34–35, as *Idyaea* (Bernard Hbr., Dolphin and Union Str.)
 Willey 1923: 325, as *Idyaea* (James Bay)
 Willey 1931: 486–489, as *Idyaea* (James Bay)
 Wilson 1936: 367–368 (Bay of God's Mercy, N Hudson Bay; Frozen Str.; Foxe Channel; Fury and Hecla Str.)
- Tisbe gracilis* (Scott, 1895)
 Sars 1909: 21, as *Idyaea* (Jones Sd. Region)
 Wilson 1936: 367 (Bay of God's Mercy, N Hudson Bay)
- Tisbe inflata* G. O. Sars, 1909
 Sars 1909: 21–23, pl. 3, as *Idyaea* (Jones Sd. region; description)
- Tisbe minor* (T. and A. Scott, 1896)
 Wilson 1936: 368 (Frozen Str.)
- Zosime typica Boeck, 1872
 Wilson 1936: 367 (Bay of God's Mercy, N Hudson Bay)
- ORDER CYCLOPOIDA
- FAMILY ARTOTROGIDAE
- Artotrogus orbicularis* Boeck, 1864
 Wilson 1936: 368 (Foxe Channel)
- FAMILY ASCOMYZONTIDAE
- Ascomyzon intermedium* Hansen, 1923
 Wilson 1936: 368 (Foxe Channel)
- Dermatomyzon nigripes* (Brady, 1880)
 Sars 1909: 39 (Jones Sd. region)
 Wilson 1936: 368 (Foxe Channel)
- FAMILY CANCERILLIDAE
- Parartotrogus arcticus* Scott, 1901
 Wilson 1936: 368 (Foxe Channel)
- FAMILY CLAUSIDIIDAE
- Hemicyclops purpureus* Boeck, 1872
 Wilson 1936: 368 (Foxe Channel)

FAMILY CORYCAEIDAE

Corycaeus anglicus Lubbock, 1857Wilson 1936: 367 (Bay of God's Mercy,
N Hudson Bay)

FAMILY CYCLOPIDAE

Cyclops sp.Johnson 1961: 314 (coastal lagoons, Cape
Thompson region, NW Alaska; salinity
data)Johnson 1966: 682, 692 (coastal lagoons,
Cape Thompson region, NW Alaska;
salinity data)*Euryte longicaudata* Philippi, 1843

Sars 1909: 39 (Jones Sd. region)

Willey 1923: 326–327 (James Bay)

FAMILY CYCLOPINIDAE

Cyclopina elegans Scott, 1894

Wilson 1936: 368 (Fury and Hecla Str.)

Cyclopina gracilis Claus, 1863

Sars 1909: 39 (Jones Sd. region)

Willey 1923: 327 (James Bay)

Fontaine 1955: 885–886, fig. 3 (Ungava
Bay)*Cyclopina longicornis* Boeck, 1872Sars 1909: 39, as *C. littoralis* (Jones Sd.
region)*Cyclopina schneideri* Scott, 1903Willey 1920: 13, 23, fig. 28 (Bernard
Hbr.; Fury and Hecla Str.)Wilson 1936: 368 (Frozen Str.; Foxe
Channel)Fontaine 1955: 886–889, fig. 4–15 (Un-
gava Bay; first description of adult
male)

FAMILY DYSPONTIIDAE

Arctopontius expansus G. O. Sars, 1918Wilson 1936: 368 (Frozen Str.; Foxe
Channel)*Bradyponlius caudatus* G. O. Sars, 1918Wilson 1936: 368 (Foxe Channel; Fury
and Hecla Str.)*Bradyponlius groenlandicus* Hansen, 1923

Wilson 1936: 368 (Foxe Channel)

Bradyponlius magniceps (Brady, 1880)

Sars 1909: 39 (Jones Sd. region)

Wilson 1936: 367–368 (Bay of God's
Mercy, N Hudson Bay; Foxe Channel)*Dyspontius striatus* Thorell, 1860

Wilson 1936: 368 (Foxe Channel)

FAMILY LICHOMOLGIDAE

Lichomolgus agilis (Leydig, 1853)

Wilson 1936: 368 (Foxe Channel)

Pseudomolgus groenlandicus Hansen, 1923Wilson 1936: 368 (Foxe Channel; Fury
and Hecla Str.)*Pseudomolgus leptostylis* G. O. Sars, 1916

Wilson 1936: 368 (Foxe Channel)

FAMILY MYZOPONTIIDAE

Myzopontius pungens Giesbrecht, 1892

Wilson 1936: 368 (Foxe Channel)

FAMILY OITHONIDAE

Oithona similis Claus, 1866Willey 1920: 4–6, 8, 22–23 (near Pt.
Hope, N Alaska; Pt. Barrow; S Beau-
fort Sea; Bernard Hbr.; Dolphin and
Union Str.)Størmer 1929: 38–39, 51, as *O. helgolan-
dica* (Cape Dyer, E Baffin Is.)

- Willey 1931: 485–491 (James Bay; all regions of Hudson Bay)
- Jespersen 1934: 125–127, fig. 33 (Jones Sd.; off Cape Walsingham, E Baffin Is.; off the E end of Hudson Str.)
- Wilson 1936: 367–369 (Bay of God's Mercy, N Hudson Bay; Frozen Str.; Foxe Channel; Fury and Hecla Str.; Cobourg Is., Jones Sd.; Smith Sd.)
- Johnson 1953: 489 (SE Chukchi Sea)
- Fontaine 1955: 884–885, pl. 8 (Ungava Bay; life history)
- Johnson 1958: 273, 276 (Pt. Barrow)
- Grainger, 1959: 466, 490 (year-round collections, Igloolik, N Foxe Basin; annual biology)
- Grainger 1962: 384, 392, fig. 3 (Foxy Basin; quantitative distribution)
- Grice 1962: 101 (Chukchi Sea)
- Grainger 1965: 549, fig. 5 (S and E Beaufort Sea; Amundsen G.; M'Clure Str.; N edge of Queen Elizabeth Is.; temperature and salinity data)
- Pavshiks 1968: 387 (off Cumberland Sd.)
- McLaren 1969: 1509–1518, fig. 10–14 (Ogac L., SE Baffin Is.; life cycle, population dynamics; vertical distribution; growth; development; production)

Oithona spinirostris Claus, 1863

- Jespersen 1934: 124–125, as *O. atlantica* (off the E end of Hudson Str.)
- Wilson 1936: 367 (Bay of God's Mercy, N Hudson Bay)

Oithona sp.

- Johnson 1956: 10, tab. 1–3, 5–7 (S Chukchi and Beaufort seas)

FAMILY ONCAEIDAE

Oncaea borealis G. O. Sars, 1918

- Størmer 1929: 40, 51 (Cape Dyer region, E Baffin Is.)
- Willey 1931: 485–489 (James Bay)
- Wilson 1936: 367–368 (Bay of God's Mercy, N Hudson Bay; Frozen Str.; Fury and Hecla Str.)
- Johnson 1953: 489 (SE Chukchi Sea)
- Fontaine 1955: 885 (Ungava Bay)

- Grainger 1959: 466, 491, fig. 12 (year-round collections, Igloolik, N Foxe Basin; annual biology)
- Grainger 1962: 384, 392, fig. 3 (Foxy Basin; quantitative distribution)
- Grainger 1965: 549, fig. 5 (S and E Beaufort Sea; M'Clure Str.; N edge of Queen Elizabeth Is.; temperature and salinity data)
- Cairns 1967: 559 (Tanquary Fjord, Ellesmere Is.)

Oncaea conifera Giesbrecht, 1892

- Willey 1920: 5, 8, 24 (S Beaufort Sea; Bernard Hbr.; Dolphin and Union Str.)

Oncaea venusta Philippi, 1843

- Wilson 1936: 367 (Bay of God's Mercy, N Hudson Bay)

Oncaea sp.

- Johnson 1956: 10, tab. 1–3, 5–7 (S Chukchi and Beaufort seas)

- Pavshiks 1968: 387 (off Cumberland Sd.)

ORDER MONSTRILLOIDA

FAMILY MONSTRILLIDAE

Monstrilla canadensis McMurrich, 1917

- Fontaine 1955: 890 (Ungava Bay)

Monstrilla dubia Scott, 1904

- Fontaine 1955: 890 (Ungava Bay)

Monstrilla helgolandica Claus, 1863

- Fontaine 1955: 890 (Ungava Bay)

Thaumaleus bernardensis Willey, 1920

- Willey 1920: 43–46, fig. 68–70 (Bernard Hbr.; description)

SUBCLASS MALACOSTRACA

ORDER MYSIDACEA

FAMILY MYSIDAE

Boreomysis nobilis G. O. Sars, 1879

- Stephensen 1933b: 9–11, fig. 4 (Jones Sd.)
Banner 1954: 125 (Pt. Barrow)
MacGinitie 1955: 152 (Pt. Barrow)

Meterythrops robusta (S. I. Smith, 1879)

- Stephensen 1933b: 12 (Jones Sd.)

Mysis litoralis (Banner, 1948)

- Holmquist 1959: 248 (Cape Lisburne, NW Alaska; Bernard Hbr.; Elson Lagoon, N Alaska; Isachsen; Exeter Sd., E Baffin Is.; Cape Adair, NE Baffin Is.)
Holmquist 1963: 117, 120, fig. 7 (Elson Lagoon and Sinclair L., N Alaska; Pt. Barrow)

Mysis mixta Lilljeborg, 1852

- Rodger 1894: 162 (Eglinton Fjord, NE Baffin Is.)
Stephensen 1933b: 14 (Exeter Sd., E Baffin Is.)
Dunbar 1942a: 42 (Lake Hbr.; Clyde R.; Frobisher Bay)
McLaren 1958: 90, 92 (Ungava Bay; Hudson Str.; from stomachs of ringed seal)

Mysis oculata (Fabricius, 1780)

- Sutherland 1852: 205, as *M. flexuosus* (SW Devon Is.)
Walker 1862: as *M. flexuosus* (Bellot Str.)
Miers 1877: 63 (E Ellesmere Is.)
Miers et al. 1878: 243 (E Ellesmere Is.)
Smith 1885: 57DD (Port Burwell)
Fewkes 1886b: 49 (Lady Franklin Bay, E Ellesmere Is.)
Rodger 1894: 162 (Eglinton Fjord, NE Baffin Is.)
Sars 1909: 7 (Jones Sd. region)
Schmitt 1919: 4–5 (S Beaufort Sea; Bernard Hbr.; Dolphin and Union Str.)
Stephensen 1933b: 13–14, fig. 5 (Exeter Sd., E Baffin Is.)

Vladykov 1933: 26–27 (Hudson Bay; from stomachs of Arctic cod)

Dunbar 1942a: 42 (Fort Ross; Gabriel Str.; Pangnirtung)

Banner 1954: 126–127 (Pt. Barrow)

MacGinitie 1955: 151 (Pt. Barrow)

McLaren 1958: 16, 18, 90, 92, 94–97 (Hudson Bay; Frobisher Bay; Ungava Bay; Hudson Str.; Parr Inlet, NE Ellesmere Is.; Slidre Fjord, W Ellesmere Is.; Mould Bay; from stomachs of ringed seal)

Holmquist 1959: 238–239 (Cape Lisburne, NW Alaska; Bernard Hbr.; E Ellesmere Is.; Exeter Sd., E Baffin Is.)

Holmquist 1963: 117 (Elson Lagoon, N Alaska; Pt. Barrow)

Mysis relicta Lovén, 1861

Schmitt 1919: 6 (Bernard Hbr.)

Mohr 1953: 14 (Nuwuk Pond, N Alaska)

Banner 1954: 127–128 (Pt. Barrow, Elson Lagoon and Nuwuk Pond, N Alaska)

MacGinitie 1955: 152 (Elson Lagoon, N Alaska)

Holmquist 1959: 454 (Pt. Barrow, Elson Lagoon and Nuwuk Pond, N Alaska)

Mohr et al. 1961: 221 (Nuwuk L., N Alaska)

Holmquist 1963: 113, 117, 119–120, fig. 7 (Pt. Barrow, Nuwuk Pond and Elson Lagoon, N Alaska)

Neomysis rayi (Murdoch, 1885)

Banner 1954: 128 (Pt. Barrow)

MacGinitie 1955: 152 (Pt. Barrow)

Neomysis sp.

Johnson 1961: 314 (coastal lagoons, Cape Thompson region, NW Alaska; juvenile specimens)

Johnson 1966: 682 (coastal lagoons, Cape Thompson region, NW Alaska; juvenile specimens)

ORDER AMPHIPODA

Suborder Gammaridea

FAMILY ACANTHONOTOZOMIDAE

Acanthonotozoma inflatum (Krøyer, 1842)

Shoemaker 1920: 10 (S Beaufort Sea)
Dunbar 1942a: 39 (Lake Hbr.)

Grainger 1959: 466, 492 (year-round collections, Igloolik, N Foxe Basin; size data)

Grainger 1962: 394 (Foxe Basin)

FAMILY AMPELISCIDAE

Ampelisca eschrichtii Krøyer, 1842

Dunbar 1954: 720 (Ungava Bay)

Calliopius laeviusculus (Krøyer, 1838)

Shoemaker 1926: 6 (James Bay; SE Hudson Bay)
Dunbar 1942a: 39 (Lake Hbr.)
Dunbar 1954: 749–750 (Ungava Bay)

FAMILY AMPILOCHIDAE

Gitanopsis arctica G. O. Sars, 1892

Dunbar 1954: 724 (Ungava Bay)

Calliopius rathkii (Zaddach, 1844)

Shoemaker 1920: 13 (Bernard Hbr.)

Halirages megalops (Bucholtz, 1874)

Shoemaker 1920: 13 as *Apherusa megalops* (Bernard Hbr.)
Dunbar 1942a: 40, as *Apherusa megalops* (Lake Hbr.; Gabriel Str.; Fort Ross)
Dunbar 1954: 748–749 (Ungava Bay)

Halirages mixtus Stephensen, 1931

Dunbar 1954: 748 (Ungava Bay)

FAMILY ATYLIDAE

Atylus carinatus (Fabricius, 1793)

Shoemaker 1920: 14 (S Beaufort Sea)
Dunbar 1954: 762 (Ungava Bay)

FAMILY DEXAMINIDAE

Guernia nordenskiöldi (Hansen, 1887)

Dunbar 1954: 771 (Ungava Bay)

FAMILY CALLIOPIIDAE

Apherusa glacialis (Hansen, 1887)

Shoemaker 1920: 12–13 (Pt. Barrow; Bernard Hbr.)
Stephensen 1933a: 32 (Jones Sd.; off the E end of Hudson Str.)
Dunbar 1942a: 41 (Lake Hbr.; Gabriel Str.; Clyde R.; Fort Ross)
Grainger 1953: 366–367 (head of Frobisher Bay and Adlorilik, Ungava Bay, from stomachs of Arctic char, *Salvelinus alpinus*)
Dunbar 1954: 749 (Ungava Bay)
MacGinitie 1955: 155, 161 (Pt. Barrow)
Shoemaker 1955: 39–40 (Pt. Barrow; from under surface of winter ice)
McLaren 1958: 16, 94, 96 (Foxe Basin; Parr Inlet, NE Ellesmere Is.; from stomachs of ringed seal)

FAMILY EUSIRIDAE

Eusirus cuspidatus Krøyer, 1845

Dunbar 1954: 762 (Ungava Bay)

Eusirus holmi Hansen, 1887

Stephensen 1933a: 36–37, fig. 16–17 (off the E end of Hudson Str.)

Rozinante fragilis (Goës, 1866)

Shoemaker 1920: 14, fig. 3 (S Beaufort Sea)

FAMILY GAMMARIDAE

Gammaracanthus loricatus (Sabine, 1821 and 1824)

Shoemaker 1920: 15–16 (Bernard Hbr.)
Shoemaker 1926: 8 (Richmond G.; James Bay)

- Stephensen 1937: 19, as *Gammarus loricatus* (Vansittart Is., SW Foxe Basin)
 Dunbar 1942a: 41 (Lake Hbr.)
- Gammarellus homari* (Fabricius, 1779)
 Dunbar 1954: 764 (Ungava Bay)
- Gammarus setosus* Dementieva, 1931
 Dunbar 1954: 769, fig. 32 (Ungava Bay)
- Gammarus zaddachi* Sexton *oceanicus* Segerstråle, 1947
 Dunbar 1954: 765 (Ungava Bay)
- Gammarus wilkitzki* (Birula, 1897)
 Stephensen 1937: 19 (Vansittart Is., SW Foxe Basin)
 Dunbar 1954: 770–771 (Ungava Bay)
 Tuck and Squires 1955: 786 (Ungava Bay; from stomachs of Brünnich's murre)
 McLaren 1958: 90, 92, 94, 96 (Ungava Bay; Hudson Str.; Foxe Basin; Parr Inlet, NE Ellesmere Is.; Slidre Fjord; from stomachs of ringed seal)
 Grainger 1959: 466, 492 (year-round collections, Igloolik, N Foxe Basin)
 Grainger 1962: 394 (Foxe Basin)
 Dunbar 1964: plate 8 (northeastern North American distribution)
 Grainger 1965: 549 (Amundsen G.)
 Grainger 1968: 352 (Hudson Bay)
- Weyprechtia pinguis* (Krøyer, 1838)
 Stephensen 1933a: 43 (Jones Sd.)
 Dunbar 1954: 763–764 (Ungava Bay)
- FAMILY HAUSTORIIDAE
- Pontoporeia affinis* Lindström, 1855
 Shoemaker 1920: 10 (S Beaufort Sea)
 Grainger 1953: 366 (head of Frobisher Bay, from stomachs of Arctic char, *Salvelinus alpinus*)
 Dunbar 1954: 723–724, fig. 5 (Ungava Bay)
- Pontoporeia femorata* Krøyer, 1842
 Shoemaker 1920: 10 (Bernard Hbr.)
 Dunbar 1954: 723 (Ungava Bay)
- FAMILY ISCHYROCERIDAE
- Ischyrocerus anguipes* Krøyer, 1838
 Shoemaker 1920: 22 (Bernard Hbr.)
 Shoemaker 1926: 10 (James Bay)
 Dunbar 1942a: 41 (Fort Ross)
 Dunbar 1954: 773, fig. 34 (Ungava Bay)
- Ischyrocerus megacheir* Boeck, 1871
 Dunbar 1942a: 41 (Lake Hbr.)
- FAMILY LYSIANASSIDAE
- Anonyx laticoxae* Gurjanova, 1962
 Dunbar 1954: 717–718, as *A. nugax* (Ungava Bay)
 Steele and Brunel 1968: 44 (E and N Hudson Bay; Ungava Bay; young specimens in plankton)
- Anonyx lilljeborgi* Boeck, 1870
 Dunbar 1954: 717–718, as *A. nugax* (Ungava Bay)
 Steele and Brunel 1968: 49 (Hudson Bay; Ungava Bay; young planktonic)
- Anonyx nugax* (Phipps, 1774)
 Stephensen 1937: 18 (Frozen Str.; Roes Welcome Sd.; identity uncertain)
 Dunbar 1942a: 38 (Gabriel Str.; identity uncertain)
 Dunbar 1954: 717–718 (Ungava Bay; some of this species, others of four other species of *Anonyx*)
 MacGinitie 1955: 157 (Pt. Barrow; identity uncertain)
 Steele and Brunel 1968: 5–7 (Hudson Bay; Ungava Bay; young planktonic)
- Anonyx pacificus* Gurjanova, 1962
 Dunbar 1954: 717–718, as *A. nugax* (Ungava Bay)
 Steele and Brunel 1968: 20 (Hudson Bay; Ungava Bay; young planktonic)
- Anonyx sarsi* Steele and Brunel, 1968
 Dunbar 1954: 717–718, as *A. nugax* (Ungava Bay)
 Steele and Brunel 1968: 28 (Hudson Bay; Ungava Bay; young planktonic)

- Onisimus edwardsi* (Krøyer, 1846)
- Dunbar 1954: 711 (Ungava Bay)
- Onisimus plautus* (Krøyer, 1845)
- Shoemaker 1920: 6 (Bernard Hbr.)
- Orchomenella minuta* (Krøyer, 1846)
- Shoemaker 1920: 7 (Bernard Hbr.)
 - Dunbar 1954: 719 (Ungava Bay)
- Orchomenella pinguis* (Boeck, 1861)
- Dunbar 1954: 719 (Ungava Bay)
- Pseudalibrotus glacialis* G. O. Sars, 1900
- Shoemaker 1920: 7 (S Beaufort Sea; Pt. Barrow)
 - Stephensen 1933a: 11 (Jones Sd.; off the E end of Hudson Str.)
 - Dunbar 1942a: 41 (Lake Hbr.; Gabriel Str.; Clyde R.; Fort Ross; Pond Inlet; Arctic Bay; Pangnirtung; Frobisher Bay)
 - Vibe 1950: 90 (Eureka Sd., Ellesmere Is.)
 - Dunbar 1954: 713–714 (Ungava Bay)
 - McLaren 1958: 94, 96 (Foxe Basin; Slidre Fjord, W Ellesmere Is.; from stomachs of ringed seal)
 - Mohr et al. 1961: 218 as *P. birulai* (Nuwuk L., N Alaska)
 - Grainger 1962: 394 (Foxe Basin)
 - Grainger 1965: 549 (S Beaufort Sea)
 - Holmquist 1965: 21ff, fig. 1(f2), 2(l) (Nuwuk Pond, N Alaska)
- Pseudalibrotus littoralis* (Krøyer, 1845)
- Sars 1909: 11 (Jones Sd. region)
 - Dunbar 1942a: 38 (Fort Ross; Pangnirtung)
 - Grainger 1953: 366–367 (head of Frobisher Bay and Adlorilik, Ungava Bay, from stomachs of Arctic char, *Salvelinus alpinus*)
 - Dunbar 1954: 713 (Ungava Bay)
 - MacGinitie 1955: 157, as *P. birulai* (Pt. Barrow)
 - Shoemaker 1955: 2–3, as *P. birulai* (Pt. Barrow)
- Pseudalibrotus nansenii* G. O. Sars, 1900
- Shoemaker, 1920: 7–8 (Pt. Barrow)
 - Stephensen 1933a: 10 (off Cape Walsingham, E Baffin Is.)
 - Dunbar 1942a: 38 (Lake Hbr.; Gabriel Str.; Frobisher Bay)
 - Vibe 1950: 90 (Eureka Sd., Ellesmere Is.)
 - Dunbar 1954: 714 (Ungava Bay)
 - McLaren 1958: 94, 96 (Foxe Basin; Parr Inlet, NE Ellesmere Is.; Slidre Fjord, W Ellesmere Is.)
 - Grainger 1962: 394 (Foxe Basin)
 - Grainger 1965: 549 (M'Clure Str.; N edge of Queen Elizabeth Is.)
- Pseudalibrotus* sp.
- McLaren 1969: 1548 (Ogac L., SE Baffin Is.)
- Socarnes bidenticulatus* (Bate, 1858)
- Dunbar 1954: 718 (Ungava Bay)
- FAMILY OEDICEROTIDAE
- Monoculodes edwardsi* Holmes, 1905
- Dunbar 1954: 746 (Ungava Bay)
- Monoculodes latimanus* (Goës, 1866)
- Dunbar 1954: 746 (Ungava Bay)
- Monoculodes longicornis* (Boeck, 1871)
- Shoemaker 1920: 12 (Bernard Hbr.)
- Monoculodes longirostris* (Goës, 1866)
- Shoemaker 1920: 12 (Bernard Hbr.)
 - Dunbar 1954: 744–746, fig. 19 (Ungava Bay; species identity uncertain)
- Monoculodes schneideri* G. O. Sars, 1895
- Shoemaker 1920: 12 (Pt. Barrow)
- Monoculodes tuberculatus* Boeck, 1871
- Dunbar 1954: 747 (Ungava Bay)
- Oediceros saginatus* Krøyer, 1842
- Dunbar 1954: 738 (Ungava Bay)

- Paroediceros lynceus* (M. Sars, 1858)
Dunbar 1954: 738 (Ungava Bay)
- Westwoodilla brevicalcar* (Goës, 1866)
Dunbar 1942a: 39 (Gabriel Str.)
Dunbar 1954: 738–739 (Ungava Bay)
- FAMILY PARDALISCIDAE
Pardalisca cuspidata Krøyer, 1842
Dunbar 1954: 737–738 (Ungava Bay)
- FAMILY PLEUSTIDAE
Parapleustes biscuspis (Krøyer, 1838)
Dunbar 1954: 751 (Ungava Bay)
- Parapleustes sinuipalma* Dunbar, 1954
Dunbar 1954: 752–753, fig. 23–24 (Ungava Bay; description)
- Pleustes panoplus* (Krøyer, 1838)
Dunbar 1942a: 41 (Lake Hbr.)
Dunbar 1954: 750 (Ungava Bay)
- Sympleustes glabroides* Dunbar, 1954
Dunbar 1954: 759–761, fig. 30 (Ungava Bay; description)
- FAMILY PODOCERIDAE
Dulichia porrecta (Bate, 1857)
Shoemaker 1920: 23 (Pt. Barrow)
- Dulichia* sp.
Dunbar 1942a: 41 (Fort Ross)
- FAMILY PONTOGENEIDAE
Pontogeneia inermis (Krøyer, 1838)
Shoemaker 1920: 15, 27 (Bernard Hbr.; NW Hudson Bay)
Shoemaker 1926: 7 (SE Hudson Bay)
Dunbar 1942a: 41 (Gabriel Str.)
Dunbar 1954: 763, fig. 41 (Ungava Bay)
- FAMILY STENOTHOIDAE
Metopa alderi (Bate, 1857)
Dunbar 1954: 729, fig. 9 (Ungava Bay)
- Metopa cariana* Gurjanova, 1929
Dunbar 1954: 727–728, fig. 8 (Ungava Bay)
- Metopa longirama* Dunbar, 1942
Dunbar 1942a: 39, fig. 2–11 (Clyde R.; adult female only described)
Dunbar 1954: 730, fig. 10 (Ungava Bay)
- Metopa norvegica* (Lilljeborg, 1851)
Dunbar 1954: 731, fig. 11 (Ungava Bay)
- Metopella carinata* (Hansen, 1887)
Dunbar 1954: 735 (Ungava Bay)
- Metopella neglecta* (Hansen, 1887)
Dunbar 1954: 733–734 (Ungava Bay)
- FAMILY TIRONIDAE
Syrrhoë crenulata Goës, 1866
Dunbar 1954: 747 (Ungava Bay)
- SUBORDER HYPERIIDEA
FAMILY HYPERIIDAE
Hyperia galba (Montagu, 1813)
Sars 1909: 10 (off Cape Sabine, E Ellesmere Is.)
Shoemaker 1920: 24 (S Beaufort Sea)
Shoemaker 1926: 3 (Richmond G.)
Stephensen 1933a: 61 (off the E end of Hudson Str.)
Dunbar 1942a: 37 (Lake Hbr.; Gabriel Str.)
Grainger 1953: 366 (head of Frobisher Bay, from stomachs of Arctic char, *Salvelinus alpinus*)
Dunbar 1954: 783 (Ungava Bay)
Shoemaker 1955: 71 (Pt. Barrow)
McLaren 1958: 92 (W Hudson Str., from stomachs of ringed seal)
Grainger 1962: 394 (Foxe Basin)

Hyperia medusarum (Müller, 1776)

- Smith 1879: 139 (Cumberland Sd.)
Murdoch 1885a: 143 (Pt. Barrow)
Shoemaker 1926: 3 (Richmond G.; James Bay; SE Hudson Bay)
Stephensen 1933a: 61 (off the E end of Hudson Str.)
Dunbar 1942a: 37 (Lake Hbr.)
Grainger 1953: 366–367 (head of Frobisher Bay and Herschel Is., from stomachs of Arctic char, *Salvelinus alpinus*)
Dunbar 1954: 782–783 (Ungava Bay)
MacGinitie 1955: 45, 156 (Pt. Barrow; breeding data)
Shoemaker 1955: 71 (Pt. Barrow)
Grainger 1962: 394 (Foxe Basin)
Grainger 1965: 549, fig. 5 (S Beaufort Sea; temperature and salinity data)

Hyperia spinigera Bovallius, 1889

- Dunbar 1942a: 37 (Lake Hbr., from ringed seal stomach; Clyde R.)

Hyperia sp.

- Shoemaker 1926: 4 (James Bay; SE Hudson Bay)
Dunbar 1942a: 37 (Fort Ross; Arctic Bay; Gabriel Str.; Clyde R.)

Hyperoche medusarum (Krøyer, 1837)

- Shoemaker 1920: 24–25, as *H. kroeyeri* (S Beaufort Sea; Pt. Barrow)
Stephensen 1933a: 61 (off Cape Walsingham, E Baffin Is.)
Dunbar 1942a: 37 (Port Burwell; Lake Hbr.; Arctic Bay; Pangnirtung; Gabriel Str.; Clyde R.)
Grainger 1953: 367 (Adlorilik, Ungava Bay; from stomachs of Arctic char, *Salvelinus alpinus*)
Dunbar 1954: 782 (Ungava Bay)
MacGinitie 1955: 156 (Pt. Barrow)
Shoemaker 1955: 71–72 (Pt. Barrow)
Grainger 1959: 466, 492–493 (year-round collections, Igloolik, N Foxe Basin)
Grainger 1962: 394 (Foxe Basin)
Grainger 1965: 549 (S Beaufort Sea)

Parathemisto abyssorum Boeck, 1870

- Shoemaker 1920: 25, as *P. oblivia* (S Beaufort Sea)
Stephensen 1933a: 61–62, as *Themisto* (Jones Sd.; off Cape Walsingham, E Baffin Is.; off the E end of Hudson Str.)
Dunbar 1942a: 38, as *Themisto* (Lake Hbr.)
Dunbar 1954: 783, as *Themisto* (Ungava Bay)
Shoemaker 1955: 72, as *Themisto* (Pt. Barrow)
Grainger 1959: 466, 493, as *Themisto* (year-round collection, Igloolik, N Foxe Basin)
Bowman 1960: 368–374, fig. 11 (j–k), 12, 13 (Chukchi and Beaufort seas; world distribution; description)
Grainger 1962: 394, as *Themisto* (Foxe Basin)
Dunbar 1964: pl. 6 (distribution NE North America)
Grainger 1965: 549, fig. 5 (S and E Beaufort Sea; Amundsen G.; M'Clure Str.; temperature and salinity data)

Parathemisto gaudichaudi (Guérin, 1825)

- Stephensen 1933a: 63–64, fig. 28, as *Themisto* (off the E end of Hudson Str.)
Dunbar 1954: 784, as *Themisto* (Ungava Bay)
Bowman 1960: 379–382, fig. 16a, 17 (SE Baffin Is.; world distribution; description)
Grainger 1962: 394, as *Themisto* (Foxe Basin)
Dunbar 1964: pl. 5 (distribution NE North America)

Parathemisto libellula (Lichtenstein, 1822)

- Walker 1862, as *Themisto arctica* (Bellot Str.)
Stimpson 1864: 139, as *Themisto arctica* (Cape Faraday, E Ellesmere Is., from seal stomach)
Miers et al. 1878: 246, as *Themisto libellula* (Cape Faraday, E Ellesmere Is., from seal stomach)
Murdoch 1885a: 144, as *Themisto* (Pt. Barrow)
Rodger 1894: 159, as *Euthemisto* (off Pond Inlet)

- Sars 1909: 10, as *Euthemisto* (Jones Sd. region)
- Shoemaker 1920: 23–24, 28–29, as *Euthemisto* (S Beaufort Sea; Bernard Hbr.; Cumberland Sd.; N Somerset Is.)
- Shoemaker 1926: 4, as *Themisto* (Richmond G.; James Bay)
- Stephensen 1933a: 63, fig. 28, as *Themisto* (Jones Sd.; off NE Baffin Is.; off Cape Walsingham, E Baffin Is.; off the E end of Hudson Str.)
- Vladykov 1933: 8, 26–27, as *Themisto* (Hudson Bay, food of Arctic char and Arctic cod)
- Dunbar 1942a: 37–38, as *Themisto* (Arctic Bay, Pond Inlet; Fort Ross; Clyde R.; Cape Walsingham, E Baffin Is.; Pangnirtung; Frobisher Bay; Lake Hbr.; Port Burwell; Gabriel Str.; Hantzsch R., E Foxe Basin)
- Dunbar 1946: 419–434, as *Themisto* (various eastern arctic localities (see Dunbar, 1942a); internal anatomy; food; breeding cycle)
- Grainger 1953: 366–367, as *Themisto* (head of Frobisher Bay; Adlorilik, E Ungava Bay; George R., S Ungava Bay; Herschel Is.; from stomachs of Arctic char, *Salvelinus alpinus*)
- Dunbar 1954: 783, as *Themisto* (Ungava Bay)
- MacGinitie 1955: 45, 156, as *Themisto* (Pt. Barrow; breeding data)
- Shoemaker 1955: 72, as *Themisto* (Pt. Barrow)
- Dunbar 1957: 804–817, fig. 3–14, as *Themisto* (N Foxe Basin; NE and NW Hudson Bay; Foxe Channel; Hudson Str.; Ungava Bay; Frobisher Bay; Cumberland Sd.; growth; production; breeding cycle)
- McLaren 1958: 16–17, 19, 90, 92, 94–97, as *Themisto* (N Hudson Bay; Foxe Basin; Ungava Bay; Hudson Str.; Parr Inlet, NE Ellesmere Is.; Slidre Fjord, W Ellesmere Is.; from stomachs of ringed seal)
- Bowman 1960: 382–386, fig. 16(d–o), 18–19 (world distribution)
- Grainger 1962: 394, fig. 7, as *Themisto* (Foxe Basin)
- Dunbar 1964: pl. 7 (distribution NE North America)
- Grainger 1965: 549 (S Beaufort Sea; Amundsen G.; N edge of Queen Elizabeth Is.)
- Grainger 1968: 352, 358, fig. 2 (Hudson Bay)
- McLaren 1969: 1548, as *Themisto* (Ogac L., SE Baffin Is.)
- Parathemisto* sp.
- Willey 1931: 489–490, as *Euthemisto* sp. (N and W Hudson Bay)
- Suborder Caprellidea
- FAMILY CAPRELLIDAE
- Aeginina longicornis* (Krøyer, 1842)
- Dunbar 1954: 784 (Ungava Bay)
- Caprella septentrionalis* Krøyer, 1842
- Dunbar 1954: 784 (Ungava Bay)
- ORDER EUPHAUSIACEA
- FAMILY EUPHAUSIIDAE
- Meganyctiphanes norvegica* (M. Sars, 1857)
- Dunbar 1942a: 42 (Lake Hbr., from seal stomach)
- McLaren 1958: 92 (W Hudson Str., from stomachs of ringed seal)
- Dunbar 1964: pl. 1 (distribution NE North America)
- Mauchline and Fisher 1967: pl. 1 (distribution NE North America; adults only)
- Thysanoessa inermis* (Krøyer, 1846)
- Schmitt 1919: 8 (Pt. Barrow; S Beaufort Sea)
- Dunbar 1942a: 42 (Clyde R., from stomach of ringed seal)
- Grainger 1953: 366–367 (head of Frobisher Bay and Adlorilik, E Ungava Bay, from stomachs of Arctic char, *Salvelinus alpinus*)
- Banner 1954: 137 (Pt. Barrow; Elson Lagoon, north Alaska)
- MacGinitie 1955: 166 (Pt. Barrow)
- Johnson 1956: 11, tab. 8, 12 (S Chukchi Sea)

- McLaren 1958: 90, 92, 95–96 (Foxe Basin; Ungava Bay; Hudson Str.; from stomachs of ringed seal)
- Grainger 1962: 395 (Foxe Basin)
- Holmquist 1963: 120–121 (Sinclair L., N Alaska)
- Dunbar 1964: pl. 3 (distribution NE North America)
- Thysanoessa longicaudata* (Krøyer, 1846)
- Stephensen 1933b: 7, fig. 3 (off the E end of Hudson Str.)
- Dunbar 1964: pl. 2 (distribution NE North America)
- Grainger 1968: 354 (E Hudson Bay)
- Thysanoessa longipes* Brandt, 1851
- Schmitt 1919: 8 (Pt. Barrow)
- Banner 1954: 137 (Pt. Barrow)
- MacGinitie 1955: 166 (Pt. Barrow)
- Thysanoessa raschii* (M. Sars, 1864)
- Schmitt 1919: 8 (Collinson Pt., N Alaska; S Beaufort Sea; Bernard Hbr.)
- Vladykov 1933: 26 (Hudson Bay, food of Arctic cod)
- Dunbar 1942a: 42 (Frobisher Bay; Lake Hbr., from seal stomach)
- Grainger 1953: 366 (head of Frobisher Bay, from stomachs of Arctic char, *Salvelinus alpinus*)
- Banner 1954: 136–137 (Elson Lagoon, N Alaska; Pt. Barrow)
- MacGinitie 1955: 165 (Pt. Barrow)
- Johnson 1956: 11, tab. 8–9, 12 (S Chukchi and Beaufort seas)
- Johnson 1958: 278 (Pt. Barrow)
- McLaren 1958: 90, 92, 95–96 (N Hudson Bay; Frobisher Bay; Hudson Str.; from stomachs of ringed seal)
- Grainger 1962: 395 (Foxe Basin)
- Holmquist 1963: 117, 120–121 (Elson Lagoon and Sinclair L., N Alaska)
- Dunbar 1964: pl. 4 (distribution NE North America)
- Grainger 1965: 549 (S Beaufort Sea)
- Grainger 1968: 358 (Hudson Bay)
- Thysanopoda acutifrons* Holt and Tattersall, 1905
- Stephensen 1933b: 4, fig. 1 (off the E end of Hudson Str.)
- ORDER DECAPODA
- Suborder Natantia
- FAMILY CRANGONIDAE
- Argis dentata* Rathbun, 1902
- Squires 1965: 71–82, fig. 1–7 (Ungava Bay, zoeae stages I and II and megalops, description, sizes, seasonal occurrence)
- FAMILY HIPPOLYTIIDAE
- Eualus* sp.
- Grainger 1962: 395 (Foxe Basin, larvae)
- FAMILY PASIPHAEIDAE
- Pasiphaea tarda* Krøyer, 1845
- Squires 1957: 469, 487 (E Hudson Str.; Port Burwell; length and egg size data; from stomachs of Atlantic cod)
- Squires 1966: 1, pl. 1 (NE Ungava Bay)
- FAMILY SERGESTIDAE
- Sergestes arcticus* Krøyer, 1855
- Squires 1957: 468–469, fig. 2 (E Hudson Str.; Port Burwell; length data; from stomachs of Atlantic cod and seal)
- McLaren 1958: 91 (Ungava Bay; from stomachs of ringed seal)
- Squires 1966: 1, pl. 1 (NE Ungava Bay; Hudson Str.)
- Suborder Reptantia
- FAMILY PAGURIDAE
- Pagurus* sp.
- Grainger 1962: 395, as *Eupagurus* (Foxe Basin, larvae)

PHYLUM CHAETOGNATHA

Eukrohnia hamata (Möbius, 1875)

- Kramp 1939: 22–28, fig. 7 (Jones Sd.; off Cape Walsingham, E Baffin Is.; off the E end of Hudson Str.)
Dunbar 1942b: 75 (Lake Hbr.; Frobisher Bay; Clyde R.)
MacGinitie 1955: 37, 42, 128 (Pt. Barrow; breeding data)
Grainger 1965: 549, fig. 5 (M'Clure Str.; N edge of the Queen Elizabeth Is.; temperature and salinity data)

Sagitta elegans Verrill, 1873

- Kramp 1939: 8–15, fig. 4, as *S. elegans artica* Aurivillius 1896 (Jones Sd.; off Cape Walsingham, E Baffin Is.; off the E end of Hudson Str.)
Dunbar 1941: 258ff. as *S. elegans artica* Aurivillius 1896 (Pond Inlet; Fort Ross; Clyde R.; Cape Walsingham, E Baffin Is.; Pangnirtung; Frobisher Bay; Lake Hbr.; Port Burwell; Gabriel St.; Hantzsch R., E Foxe Basin; breeding cycle)
Dunbar 1942b: 75, as *S. elegans artica* Aurivillius 1896 (same locations as under Dunbar 1941)
Vibe 1950: 92 (Bay Fjord, Ellesmere Is.)
MacGinitie 1955: 42, 128 (Pt. Barrow; breeding data)
Grainger 1959: 466, 473 (year-round collection, Igloolik, N Foxe Basin)

- Dunbar 1962: 76–91 (NW Hudson Bay; NE Hudson Bay; Igloolik, N Foxe Basin; Foxe Channel; W Hudson Str.; Ungava Bay; Frobisher Bay; life cycle)
Grainger 1962: 383 (Foxe Basin)
Grainger 1965: 549, fig. 5 (S and E Beaufort Sea; Amundsen G.; N edge of Queen Elizabeth Is.; temperature and salinity data)
McLaren 1966b: 852–854, fig. 1–3 (Ungava Bay; SE Hudson Bay; Winton Bay and Ogac L., SE Baffin Is.; Hudson Str.; NW relations; size range)
Cairns 1967: 560 (Tanquary Fjord, Ellesmere Is.; size data)
McLaren 1969: 1518–1527, fig. 1, 15–21 (Ogac L. SE Baffin Is.; life cycle; population dynamics; vertical distribution; growth; development; production)

Sagitta maxima (Conant, 1896)

- Kramp 1939: 15–19, fig. 5 (Jones Sd.; off the E end of Hudson Str.)
MacGinitie 1955: 128–129 (Pt. Barrow)

Sagitta sp.

- Murdoch 1885a: 156 (Pt. Barrow)
Murdoch 1885b: 194, 199 (Pt. Barrow)
Willey 1931: 489–491 (N, W, and S Hudson Bay)
Johnson 1953: 495 (SE Chukchi Sea)
Johnson 1958: 277–278 (Pt. Barrow; young specimens)
Johnson 1961: 314 (coastal lagoons, Cape Thompson region, NW Alaska)

PHYLUM CHORDATA

CLASS COPELATA

FAMILY FRITILLARIIDAE

Fritillaria borealis Lohmann, 1896

Grainger 1959: 466, 494–495 (year-round collection, Igloolik, N Foxe Basin; size data)

Grainger 1962: 395, fig. 6 (quantitative distribution, Foxe Basin)

Grainger 1965: 549, fig. 5 (S Beaufort Sea; Amundsen G.; N edge of Queen Elizabeth Is.; temperature and salinity data)

Fritillaria sp.

Willey 1931: 489–491 (all regions of Hudson Bay)

Oikopleura labradoriensis Lohmann, 1892

Kramp 1942a: 8, fig. 1 (off the E end of Hudson Str.)

Oikopleura vanhoeffeni Lohmann, 1896

Kramp 1942a: 4–8, fig. 1 (Jones Sd.; off Cape Walsingham, E Baffin Is.; off the E end of Hudson Str.)

Grainger 1959: 466, 494 (year-round collection, Igloolik, N Foxe Basin; size data)

Grainger 1962: 395, fig. 7 (Foxy Basin; quantitative distribution)

Grainger 1965: 549, fig. 5 (S and E Beaufort Sea; Amundsen G.; M'Clure Str.; N edge of Queen Elizabeth Is.; temperature and salinity data)

BIBLIOGRAPHY

- BANNER, A. H. 1954. New records of Mysidacea and Euphausiacea from the northeastern Pacific and adjacent areas. *Pac. Sci.* 8: 125-139.
- BIGELOW, H. B. 1920. Medusae and Ctenophora. Rep. Can. Arctic Exped. 1913-18 8(H): 22 p.
- BOWMAN, T. E. 1960. The pelagic amphipod genus *Parathemisto* (Hypertidae: Hypertidae) in the North Pacific and adjacent Arctic Ocean. *Proc. U.S. Nat. Mus.* 112: 343-392.
- BOWMAN, T. E., AND A. LONG. 1968. Relict populations of *Drepanopus bungei* and *Limnocalanus macrurus grimaldi* (Copepoda: Calanoida) from Ellesmere Island, N.W.T. *Arctic* 21(3): 172-180.
- BROCH, H. 1907. Hydroiden und Medusen. Rep. 2nd Norwegian Arctic Exped. "Fram" 1898-1902 12: 12 p.
- BRODSKY, K. A. 1950. [Calanoida of the far eastern seas of the USSR and the polar basin.] Opredelitel' Faune SSSR Zool. Inst. Akad. Nauk SSSR 35: 441 p. (In Russian)
1957. [The fauna of copepods, Calanoida, and the zoogeographic division of the northern part of the Pacific Ocean and the adjacent seas.] Izd. Akad. Nauk SSSR, Moskova-Leningrad. 222 p.
- CAIRNS, A. A. 1967. The zooplankton of Tanquary Fjord, Ellesmere Island, with special reference to calanoid copepods. *J. Fish. Res. Bd. Canada* 24(3): 555-568.
- CHAMBERLIN, R. V. 1920. Polychaeta. Rep. Can. Arctic Exped. 1913-18 9(B): 41 p.
- DALL, W. H. 1925. Pteropoda. Rep. Can. Arctic Exped. 1913-18 8(B): 9-12.
- DUNBAR, M. J. 1941. The breeding cycle in *Sagitta elegans elegans* Aurivillius. *Can. J. Res. D* 19(9): 258-266.
- 1942a. Marine macroplankton from the Canadian eastern arctic. I. Amphipoda and Schizopoda. *Can. J. Res. D* 20: 33-46.
- 1942b. Marine macroplankton from the Canadian eastern arctic. II. Medusae, Siphonophora, Ctenophora, Pteropoda, and Chaetognatha. *Can. J. Res. D* 20: 71-77.
1946. On *Themisto libellula* in Baffin Island coastal waters. *J. Fish. Res. Bd. Canada* 6(6): 419-434.
1954. The amphipod Crustacea of Ungava Bay, Canadian eastern arctic. *J. Fish. Res. Bd. Canada* 11(6): 709-798.
1957. The determinants of production in northern seas: a study of the biology of *Themisto libellula* Mandt. *Can. J. Zool.* 35: 797-819.
1962. The life cycle of *Sagitta elegans* in arctic and subarctic seas, and the modifying effects of hydrographic differences in the environment. *J. Mar. Res.* 20(1): 76-91.
1964. Euphausids and pelagic amphipods. *Ser. Atlas Mar. Environ., Amer. Geogr. Soc.* 6: 2 p., 8 pl.
- ENGLISH, T. S. 1966. Net plankton volumes in the Chukchi Sea, p. 809-815. In N. J. Wilimovsky and J. N. Wolfe [ed.] Environment of the Cape Thompson region, Alaska. U.S. Atomic Energy Commission, Oak Ridge, Tennessee.
- FEWKES, J. W. 1886. Report on the medusae collected by the Lady Franklin Bay Expedition, Lieut. A. W. Greely commanding, p. 399-408. In A. W. Greely [ed.] Three years of arctic service. Vol. 2, App. xi.
- 1888a. Medusae. Report on the proceedings of the United States Expedition to Lady Franklin Bay, Grinnell Land, 2: 39-45.
- 1888b. Echinodermata, Vermes, Crustacea, and Pteropod Mollusca. Report on the proceedings of the United States expedition to Lady Franklin Bay, Grinnell Land, 2: 47-54.
- FONTAINE, M. 1955. The planktonic copepods (Calanoida, Cyclopoida, Monstrilloida) of Ungava Bay, with special reference to the biology of *Pseudocalanus minutus* and *Calanus finmarchicus*. *J. Fish. Res. Bd. Canada* 12(6): 858-898.
- GEIGER, S. R. 1966. Size variation in *Metridia longa* (Lubbock), p. 335-341. In H. Barnes [ed.] Some contemporary studies in marine science. Allen and Unwin, London.
- GRAINGER, E. H. 1953. On the age, growth, migration, reproductive potential and feeding habits of the arctic char (*Salvelinus alpinus*) of Frobisher Bay, Baffin Island. *J. Fish. Res. Bd. Canada* 10(6): 326-370.
1954. Polychaetous annelids of Ungava Bay, Hudson Strait, Frobisher Bay and Cumberland Sound. *J. Fish. Res. Bd. Canada* 11(5): 507-528.
1959. The annual oceanographic cycle at Igloolik in the Canadian arctic. I. The zooplankton and physical and chemical observations. *J. Fish. Res. Bd. Canada* 16(4): 453-501.
1961. The copepods *Calanus glacialis* Jaschnov and *Calanus finmarchicus* (Gunnerus) in Canadian arctic-subarctic waters. *J. Fish. Res. Bd. Canada* 18(5): 663-678.

1962. Zooplankton of Foxe Basin in the Canadian arctic. *J. Fish. Res. Bd. Canada* 19(3): 377-400.
1963. Copepods of the genus *Calanus* as indicators of eastern Canadian waters. *Roy. Soc. Can. Spec. Publ.* 5: 68-94.
1965. Zooplankton from the Arctic Ocean and adjacent Canadian waters. *J. Fish. Res. Bd. Canada* 22(2): 543-564.
1968. Invertebrate animals, p. 351-360. *In C. S. Beals and D. A. Shenstone, [ed.] Science, history and Hudson Bay. Dept. of Energy Mines and Resources, Ottawa.*
- GRICE, G. D. 1962. Copepods collected by the nuclear submarine *Seadragon* on a cruise to and from the North Pole, with remarks on their geographic distribution. *J. Mar. Res.* 20(1): 97-109.
- GRIEG, J. A. 1909. Brachiopods and molluscs with a supplement to the echinoderms. *Rep. 2nd Norwegian Arctic Exped. "Fram" 1898-1902* 20: 45 p.
- HAND, C., AND L. B. KAN. 1961. The medusae of the Chukchi and Beaufort seas of the Arctic Ocean, including the description of a new species of *Eucodonium* (Hydrozoa: Anthomedusae). *Tech. Pap. Arctic Inst. N Amer.* 6: 23 p.
- HARRING, H. K. 1921. Rotatoria. *Rep. Can. Arctic Exped. 1913-18* 8(E): 21 p.
- HERON, G. A. 1964. Seven species of *Eurytemora* (Copepoda) from northwestern North America. *Crustaceana* 7: 199-211.
- HOLMQUIST, C. 1959. Problems on marine-glacial relicts. Lund. 270 p.
1963. Some notes on *Mysis relicta* and its relatives in northern Alaska. *Arctic* 16: 109-128.
1965. The amphipod genus *Pseudalibrotus*. *Z. Zool. Syst. Evolutionsforsch.* 3 (1-2): 19-46.
- JESPERSSEN, P. 1934. Copepoda. The Godthaab Expedition 1928. *Medd. Grønland* 79(10): 166 p.
- JOHNSON, M. W. 1953. Studies on plankton of the Bering and Chukchi seas and adjacent areas. *Proc. 7th Pac. Sci. Congr. (1949)* Zool. 4: 480-500.
1956. The plankton of the Beaufort and Chukchi sea areas of the arctic and its relation to the hydrography. *Tech. Pap. Arctic Inst. N Amer.* 1: 32 p.
1958. Observations on inshore plankton collected during summer 1957 at Point Barrow, Alaska. *J. Mar. Res.* 17: 272-281.
1961. On zooplankton of some arctic coastal lagoons of northwest Alaska, with description of a new species of *Eurytemora*. *Pac. Sci.* 15(3): 311-323.
1966. Zooplankton of some arctic coastal lagoons, p. 679-693. *In N. J. Wilimovsky and J. N. Wolfe [ed.] Environment of the Cape Thompson region, Alaska. U.S. Atomic Energy Commission, Oak Ridge, Tennessee.*
- JUDAY, C. 1920. Cladocera. *Rep. Can. Arctic Exped. 1913-18* 7(H): 8 p.
- KERSWILL, C. J. 1940. The distribution of pteropods in the waters of eastern Canada and Newfoundland. *J. Fish. Res. Bd. Canada* 5(1): 23-31.
- KRAMP, P. L. 1939. Chaetognatha. The Godthaab Expedition 1928. *Medd. Grønland* 80(5): 40 p.
- 1942a. Pelagic Tunicata. The Godthaab Expedition 1928. *Medd. Grønland* 80(10): 9 p.
- 1942b. Siphonophora. The Godthaab Expedition 1928. *Medd. Grønland* 80(8): 24 p.
- 1942c. Ctenophora. The Godthaab Expedition 1928. *Medd. Grønland* 80(9): 19 p.
- 1942d. Medusae. The Godthaab Expedition 1928. *Medd. Grønland* 81(1): 168 p.
1961. Pteropoda. The Godthaab Expedition. *Medd. Grønland* 81(4): 13 p.
- MACGINNIE, G. E. 1955. Distribution and ecology of the marine invertebrates of Point Barrow, Alaska. *Smithson. Misc. Collect.* 128(9): 201 p.
- MARSH, C. D. 1920. Freshwater Copepoda. *Rep. Can. Arctic Exped. 1913-18* 7(J): 25 p.
- MAUCHLINE, J., AND L. R. FISHER. 1967. Distribution of the euphausiid crustacean *Meganyctiphanes norvegica* (M. Sars). *Ser. Atlas Mar. Environ. Amer. Geogr. Soc.* 13: 3 p., 3 pl.
- MCLAREN, I. A. 1958. The biology of the ringed seal (*Phoca hispida* Schreber) in the eastern Canadian arctic. *Fish. Res. Board Can. Bull.* 118: 97 p.
1965. Some relationships between temperature and egg size, development rate, and fecundity, of the copepod *Pseudocalanus*. *Limnol. Oceanogr.* 10: 528-538.
- 1966a. Predicting development rate of copepod eggs. *Biol. Bull.* 131(3): 457-469.
- 1966b. Adaptive significance of large size and long life of the chaetognath *Sagitta elegans* in the arctic. *Ecology* 47(5): 852-855.
1969. Population and production ecology of zooplankton in Ogac Lake, a landlocked fjord on Baffin Island. *J. Fish. Res. Bd. Canada* 26: 1485-1559.
- MCLAREN, I. A., SUSAN M. WOODS, AND J. R. SHEA JR. 1966. Polyteny: a source of cryptic speciation among copepods. *Science* 153(3744): 1641-1642.
- MCLAREN, I. A., C. J. CORKETT, AND E. J. ZILLIOUX 1969. Temperature adaptation of copepod eggs from the arctic to the tropics. *Biol. Bull.* 137(3): 486-493.
- MIERS, E. J. 1877. Report on the Crustacea collected by the naturalists of the Arctic Expedition in 1875-76. *Ann. Mag. Natur. Hist.* 20 (Ser. 4): 52-66, 96-110.
- MIERS, E. J., ET AL. 1878. Crustacea, p. 240-256. *In Narrative of a voyage to the polar sea during 1875-76 in H. M. ships "Alert" and "Discovery", Vol. 2, App. 7. Lowe, Marston, Searle, and Rivington, London.*
- MOHR, J. L. 1953. Some observations on arctic crustaceans and their associates: notes on the fauna of Nuwuk Pond, Point Barrow. *Stanford Univ. Publ. Biol. Sci.* 11: 14-18.

- MOHR, J. L., D. J. REISH, J. L. BARNARD, R. W. LEWIS, AND F. R. GEIGER 1961. The marine nature of Nuuk Lake and small ponds of the peninsula of Point Barrow Alaska. Arctic 14(4): 211-223.
- MURDOCH, J. 1885a. Marine invertebrates (exclusive of mollusks), p. 136-176. In Report of the international polar expedition to Point Barrow, Alaska. U.S. Govt. Printing Office, Washington, D.C.
- 1885b. Notes on surface life under sea-ice, from February 27 to June 8, 1883, p. 193-200. In Report of the international polar expedition to Point Barrow, Alaska. U.S. Govt. Printing Office, Washington, D.C.
- NORMAN, A. M. 1878. Notes on the oceanic Copepoda, p. 249-253. In Narrative of a voyage to the polar sea during 1875-76 in H. M. ships "Alert" and "Discovery", Vol. 2, App. 7. Loew, Marston, Searle, and Rivington, London.
- PAVSHTIKS, E. A. 1968. The influence of currents upon seasonal fluctuations in the plankton of the Davis Strait. Second European symposium on marine biology. Sarsia 34: 383-392.
- PETTIBONE, M. H. 1954. Marine polychaete worms from Point Barrow, Alaska, with additional records from the North Atlantic and North Pacific. Proc. U.S. Nat. Mus. 103: 203-356.
- RODGER, A. 1894. Preliminary account of natural history collections in the Gulf of St. Lawrence and Davis Strait. Proc. Roy. Soc. Edinburgh 20: 154-163.
- ROSS, J. C. 1835. Marine invertebrate animals, p. 81-100. In A narrative of a second voyage in search of a north-west passage, and of a residence in the arctic regions during the years 1829, 1830, 1831, 1832, 1833. App. A. W. Webster, London.
- SABINE, E. 1824. Marine invertebrate animals, p. 219-239. In W. E. Parry, A supplement to the appendix to Captain Parry's voyage for the discovery of a north-west passage, in the years 1819-20, containing an account of the subjects of natural history. J. Murray, London.
- SARS, G. O. 1909. Crustacea. Rep. 2nd Norwegian Arctic Exped. "Fram" 1898-1902 18: 47 p.
- SCHMITT, W. L. 1919. Schizopod crustaceans. Rep. Can. Arctic Exped. 1913-18 7(B): 8 p.
- SEGERSTRÅLE, S. V. 1962. The immigration and prehistory of the glacial relicts of Eurasia and North America. A survey and discussion of modern views. Int. Rev. Gesamten Hydrobiol. 47(1): 1-25.
- SHOEMAKER, C. R. 1920. Amphipods. Can. Arctic Exped. 1913-18 7(E): 30 p.
1926. Results of the Hudson Bay Expedition of 1920. V. Report on the marine amphipods collected in Hudson and James Bays by Fritz Johansen in the summer of 1920. Contrib. Can. Biol. Fish. N.S. 3(1): 1-11.
1955. Amphipoda collected at the Arctic Laboratory, Office of Naval Research, Point Barrow, Alaska, by G. E. MacGinitie. Smithson. Misc. Collect. 128(1): 1-78.
- SMITH, S. I. 1879. Crustacea, p. 139-140. In L. Kumlien et al. Contributions to the natural history of arctic America. Bull. U.S. Nat. Mus. 15.
- SMITH, S. J. 1885. List of Crustacea from Port Burwell, p. 57-58. In R. Bell [ed.] Observations on the geology, mineralogy, zoology and botany of the Labrador coast, Hudson's Strait and Bay. Rep. Progr. Geol. Sur. Can. 1882-83-84 DD.
- SQUIRES, H. J. 1957. Decapod Crustacea of the Calanus expeditions in Ungava Bay, 1947 to 1950. Can. J. Zool. 36: 463-494.
1965. Larvae and megalopa of *Argis dentata* (Crustacea: Decapoda) from Ungava Bay. J. Fish. Res. Bd. Canada 22(1): 69-82.
1966. Distribution of decapod Crustacea in the northwest Atlantic. Ser. Atlas Mar. Environ. Amer. Geogr. Soc. 12: 4 p., 4 pl.
- STEELE, D. H., AND P. BRUNEL. MS 1968. Collections of amphipods of the genus *Anonyx*, mainly from the Atlantic and arctic coasts of North America. Fish. Res. Board Can. Tech. Rep. 47: 73 p.
- STEPHENSON, K. 1933a. Amphipoda. The Godthaab Expedition 1928. Medd. Grönland 79(7): 88 p.
- 1933b. Schizophoda. The Godthaab Expedition 1928. Medd. Grönland 79(9): 20 p.
1936. Crustacea Varia. The Godthaab Expedition 1928. Medd. Grönland 80(2): 38 p.
1937. Crustacea. Rep. 5th Thule Exped. 1921-24 2(9): 25 p.
- STIMPSON, W. 1864. Synopsis of the marine invertebrates collected by the late arctic expedition under Dr. J. J. Hayes. Proc. Acad. Natur. Sci. Philadelphia 15: 138-142.
- STØRMER, L. 1929. Copepods from the "Michael Sars" Expedition, 1924. Rapp. Procès-Verbaux Réunions Cons. Perma. Int. Explor. Mer 56(7): 57 p.
- SUTHERLAND, P. C. 1852. Zoology, p. 201-211. In Journal of a voyage in Baffin's Bay and Barrow Straits, in the years 1850-1851 performed by H. M. ships "Lady Franklin" and "Sophia", under the command of Mr. William Penny, in search of the missing crews of H. M. ships "Erebus" and "Terror". App. Longman, Brown, Green, and Longmans, London.
- TUCK, L. M., AND H. J. SQUIRES. 1955. Food and feeding of Brünnich's murre (*Uria lomvia*) on Akpatok Island. J. Fish. Res. Bd. Canada 12(5): 781-792.
- UCHIDA, T. 1969. Medusae from the Arctic Ocean. Publ. Seto Mar. Biol. Lab. 17(4): 285-287.
- VERRILL, A. E. 1879. Radiates, p. 151-153. In L. Kumlien et al. Contributions to the natural history of arctic America. U.S. Nat. Mus. Bull. 15.

- VIBE, C. 1950. The marine mammals and the marine fauna of the Thule district (northwest Greenland) with observations on ice conditions in 1939-41. Medd. Grønland 150(6): 115 p.
- VLADYKOV, V. D. 1933. Biological and oceanographic conditions in Hudson Bay. 9. Fishes from the Hudson Bay region (except the Coregonidae). Contrib. Can. Biol. N.S. 8: 13-49.
- WALKER, D. 1862. Notes on the zoology of the last arctic expedition under Captain Sir F. L. M'Clin-tock. J. Roy. Dublin Soc. 1860, 3: 61-77.
- WESENBERG-LUND, E. 1936. Tomopteridae and Typhloscolecidae. The Godthaab Expedition 1928. Medd. Grønland 80(3): 17 p.
- WHITEAVES, J. F. 1884. List of marine invertebrates from Hudson's Strait, p. 58-60. In R. Bell [ed.] Observations on the geology, mineralogy, zoology and botany of the Labrador coast, Hudson's Strait and Bay. Rep. Progr. Geol. Sur. Can. 1882-83-84 DD.
- WILLEY, A. 1920. Marine Copepoda. Rep. Can. Arctic Exped. 1913-18 7(K): 46 p.
1923. Notes on the distribution of free-living Copepoda in Canadian waters. Pt. 1. Contrib. Can. Biol. N.S. 1: 303-334.
1931. Biological and oceanographic conditions in Hudson Bay. 4. Hudson Bay copepod plankton. Contrib. Can. Biol. Fish. N.S. 6: 483-493.
- WILSON, C. B. 1936. Copepods from the far north collected by Capt. R. A. Bartlett. J. Wash. Acad. Sci. 26(9): 365-376.
- WILSON, M. S. 1965. North American harpacticoid copepods 7. A new species of *Stenelia* from Nuuvuk Lake on the arctic coast of Alaska. Proc. Biol. Soc. Wash. 78: 179-188.
1966. North American harpacticoid copepods, 8. The *Danielssenia sibirica* group, with description of *D. stefansoni* Willey from Alaska. Pac. Sci. 20(4): 435-444.
- WILSON, M. S., AND J. C. TASH. 1966. The euryhaline copepod genus *Eurytemora* in fresh and brackish waters of the Cape Thompson region, Chukchi Sea, Alaska. Proc. U.S. Nat. Mus. 118 (3534): 553-576.
- WOODS, S. M. 1969. Polyteny and size variation in the copepod *Pseudocalanus* from two semi-landlocked fjords on Baffin Island. J. Fish. Res. Bd. Canada 26: 543-556.

GAZETTEER

	N	W		N	W
Abloviak	59.30	65.20	Bradelle Bank	47.30	62.50
Active Pass (Strait of Georgia)	48.00	123.00	Bradore Bay	51.28	57.14
Adelaide Peninsula	68.09	97.45	Browns Bank	42.48	66.10
Admiralty Inlet	73.00	86.00	Buctouche	46.28	64.40
Alberni Canal	49.00	124.00	Burke Channel	52.10	127.30
Amphitrite Point	48.00	125.00	Burrard Inlet	49.00	123.00
Amundsen Gulf	71.00	124.00	Bute Inlet	50.00	125.00
Anaktalik Bay	56.35	62.00	Button Islands	60.38	64.40
Anticosti Island (<i>see</i> Ile d'Anticosti)			Cabot Strait	47.30	59.45
Annapolis Basin, Fundy	44.39	65.42	Cadboro Bay	48.00	123.00
Arctic Bay	73.02	85.11	Camano Island	48.10	122.30
Assistance Bay	74.39	94.18	Campobello Island	44.53	66.55
Baie de Gaspé	48.46	64.17	Canso (Cape)	45.18	60.56
Baie des Chaleurs	48.00	65.45	Cap Bon Ami	48.48	64.13
Ballenas Islands	49.00	124.00	Cap d'Espoir	48.26	64.20
Ballot Strait	71.58	95.45	Cap des Rosiers	48.52	64.14
Banc de l'orphelin	48.10	63.10	Cape Adair	71.30	71.32
Banc de Miscou	46.35	73.30	Cape Aillik	55.14	59.12
Banks Island	53.00	130.00	Cape Beale	48.00	125.00
Banquereau Bank	44.30	58.30	Cape Bonavista	48.42	53.05
Barkley Sound	48.00	125.00	Cape Breton	46.00	60.30
Barrow Strait	75.24	94.10	Cape Cod (Bay)	42.00	70.02
Bay Bulls	47.19	52.49	Cape Dyer	66.37	61.18
Bay du Vin	47.06	65.06	Cape Elizabeth	43.34	70.12
Bay Fjord	78.55	83.30	Cape Faraday	77.51	76.52
Bay of Exploits	49.20	55.10	Cape Flattery	48.24	124.43
Bay of Fundy	45.00	66.00	Cape Lisburne	68.53	166.04
Bay of Islands	49.10	58.14	Cape May	38.56	74.55
Baynes Sound	49.00	124.00	Cape Mudge	49.00	125.00
Beaufort Sea	72.00	132.00	Cape Race	46.40	53.05
Bell Island	49.10	58.14	Cape Roseway	43.37	65.16
Belle Isle Strait (<i>see</i> Strait of Belle Isle)			Cape Sabine	78.44	74.07
Bernard Harbour	68.45	114.45	Cape Sable	43.24	65.37
Bideford River	46.36	63.52	Cape Smyth	71.10	157.00
Black Tickle	53.28	55.45	Cape Thompson	68.08	165.58
Blue Hill Bay	44.15	68.30	Cape Walsingham	66.02	61.56
Boothbay Harbour	43.51	69.38	Cape Whittle	50.11	60.08
Boothia Gulf	71.00	91.00	Casco Bay	43.40	70.00
Boundary Bay (2)	49.00	123.00	Chaleur Bay (<i>see</i> Baie des Chaleurs)		
	49.00	122.00	Chamcook Harbour	45.07	67.03
			Cheticamp	46.38	61.01
			Chukchi Sea	69.00	171.00

	N	W		N	W
Clyde River	69.50	70.22	Fury & Hecla Strait	69.55	84.00
Cobequid Bay	63.30	45.30	Gabriel Strait	61.45	65.30
Coburg Island	76.00	79.25	Gabriola Island	49.00	123.00
Cocagne (Harbour)	46.21	64.36	Galiano Island	48.00	123.00
Collinson Point	70.00	144.05	Gaspé Bay (<i>see</i> Baie de Gaspé)		
Cumberland Sound	65.10	65.30	George River	58.30	66.00
Curtain Island (inside Malpeque Bay)	46.32	63.47	Golfe de Richmond	56.15	76.20
Damariscotta	44.02	69.31	Graham Island	53.00	132.00
Darnley Bay	69.35	123.30	Grand Bank	45.30	52.30
Davis Inlet	56.00	61.30	Grand Manan	44.42	66.47
Departure Bay	49.00	123.00	Grand Manan Channel	44.45	66.52
Deserted Bay	50.00	123.00	Grand Pabos	48.21	64.38
Devon Island	87.00	75.00	Grande Rivière	48.24	64.30
Digby Neck	44.30	66.05	Gready Harbour	53.48	56.26
Disraeli Fiord	74.00	86.00	Greater Melville area	59.30	53.40
Discovery Harbour	81.42	65.20	Griffin Cove	48.56	64.18
Dixon Entrance	54.00	132.00	Gulf of Boothia	71.00	91.00
Dochet Island	45.00	67.00	Gulf of Georgia (name changed to Strait of Georgia in 1865 — <i>see</i> "S")		
Dodd Narrows	49.00	123.00	Gulf of Maine	43.00	69.00
Dolphin & Union Strait	69.05	114.45	Gulf of St. Lawrence	48.00	62.00
Eastport	44.54	66.06	Halifax	44.39	63.36
Eglinton Fiord	70.41	69.50	Halifax Harbour	44.38	63.33
Ellesmere Island	81.00	80.00	Hamilton Inlet	54.00	57.30
Elson Lagoon	71.21	156.20	Hantzsch River	67.32	72.25
Emerald Bank	43.35	62.30	Harbour de Loutre (on Campobello Island)	44.53	66.55
Escalente Rocks	49.00	126.00	Harling Point	48.00	123.00
Esperanza Inlet	49.00	127.00	Haro Strait	48.35	123.10
Esquimalt Harbour	48.00	123.00	Harrison Cape	54.47	57.57
Esquiman Channel (Name changed, <i>see</i> Jacques Cartier Passage)			Hawke Island	53.04	55.50
Eureka Sound	79.00	86.00	Hawkes Harbour	53.01	56.00
Exeter Sound	66.14	62.00	Hebron	58.12	62.38
Father Point	48.31	68.28	Hecate Strait	53.00	131.00
Ferryland	47.02	52.53	Hecla Strait (<i>see</i> Fury & Hecla Strait)		
First Narrows (3)	59.00	133.00	Herschel Island	69.35	139.05
	49.00	123.00	Holyrood	47.23	53.08
Fischot Island	51.11	55.41	Hood Canal	47.35	123.00
Five Finger Island	49.00	123.00	Hopedale	55.28	60.13
Flat Island	52.57	55.51	Horswell Rock	49.00	123.00
Fogo Island	49.40	54.10	House Island	43.45	73.10
Fort Ross	72.00	94.05	Houston Stewart Channel	52.00	131.00
Fortune Bay	47.15	55.30	Howe Sound	49.00	123.00
Fosheim Peninsula	80.00	85.00	Hudson Bay	60.00	86.00
Foxe Basin	68.25	77.00	Hudson Bay Passage	54.00	130.00
Foxe Channel	64.30	80.00	Hudson Strait	62.30	70.00
Fraser River Estuary	49.10	123.10	Igloolik (N. Foxe Basin)	69.24	81.49
Frenchman Bay	44.19	68.05	Ile d'Anticosti	49.30	63.00
Friday Harbour	48.32	123.01	Iles de la Madeleine	47.30	61.45
Frobisher Bay	63.44	68.28			
Frozen Strait	66.08	85.00			

	N	W		N	W
Indian Arm	49.00	122.00	Miramichi Bay	47.07	65.08
Indian Harbour	54.25	57.20	Miramichi River	47.05	65.22
Isachsen	78.47	103.32	Mittelnacht Island	49.00	125.00
Jacques Cartier Passage (formerly Esquiman Channel)	50.00	61.00	Moresby Island (2)	48.00	123.00
James Bay	53.30	81.00	Mould Bay	52.00	131.00
Jesse Island	50.00	126.00	Mount Desert Island	76.14	119.20
Johnstone Strait	50.00	126.00	Mugford Bay	44.20	68.20
Jones Sound	76.00	85.00	Nahant	57.48	62.02
Juan de Fuca Strait	48.00	124.00	Nahmint Bay	42.25	70.55
Kiglapait Harbour	57.10	61.34	Nain	49.00	124.00
Kingcome Inlet	50.00	126.00	Nanaimo	56.32	61.41
Kivalina Lagoon	67.59	164.33	Nanoose Bay	49.00	123.00
Krusenstern Lagoon	67.10	163.45	Navy Island	49.00	124.00
Kuper Island	48.00	123.00	Nawuk Lake	45.04	67.04
Kyuquot	50.00	127.00	Newfoundland Grand Bank (<i>see</i> Grand Bank)	71.23	156.28
Lady Franklin Bay	81.35	64.55	Nootka Sound	49.00	126.00
Ladysmith Harbour	49.00	125.00	Northumberland Strait	46.30	64.30
LaHave Bank	43.08	64.05	Notre Dame Bay	49.45	55.00
Lake Harbour	62.51	69.53	Oak Bay, B.C.	48.00	123.00
Lake Melville	59.30	53.40	Oak Bay, N.B.	45.12	67.10
Lake Tuborg	80.57	75.35	Ogac Lake	62.51	67.20
Lancaster Sound	74.13	84.00	Okak	57.33	61.58
Laurentian Channel	46.00	58.00	Orcas Island	48.39	122.55
Little Mecatina Is., Gulf of St. Lawrence	50.33	59.20	Owl's Head	44.40	69.08
Liverpool (Harbour)	44.03	64.43	Pangnirtung	66.08	65.44
Liverpool Bay	69.45	130.00	Parr Bay	83.06	70.05
Logy Bay	47.38	52.40	Parry Channel	74.20	98.00
Long Harbour	48.00	123.00	Passamaquoddy Bay	45.06	66.59
Lunenburg (Bay and Harbour)	44.22	64.16	Passamaquoddy Bay adjacent area	45.10	67.00
Lurcher Shoal	43.52	66.29	Pendleton Island	45.02	66.57
Maces Bay	45.07	66.31	Pendrell Sound	50.00	124.00
Magaguadavic River	45.07	66.54	Penobscot Bay	44.15	68.52
Magdalen Island, G. Of St. Law. (<i>see</i> Iles de la Madeleine)			Petit Passage	44.24	66.13
Magdalen Shoal (surrounding shallow waters of Magdalen Islands)	47.30	61.45	Pictou Island	45.50	62.34
Malcolm Island	50.00	126.00	Pillar Point	37.30	122.30
Malpeque Bay	46.32	63.47	Placentia Bay	47.00	54.30
Margaree River	46.26	61.06	Point Barrow	71.23	156.28
Marryat Inlet	68.30	166.20	Point Hope	68.21	166.41
McClure Strait	74.30	116.00	Point Leprean	45.04	66.27
Miminegash	46.53	64.14	Pointe du Chene	46.14	64.32
Minas Basin	45.20	64.00	Pond Inlet	72.41	78.00
Minas Channel	45.15	64.45	Porcupine Island (in Frenchmen Bay, Me.)	44.19	68.05
Minister Island, Fundy	45.06	67.03	Port Angeles	48.07	123.27
Miquelon Island	47.03	56.20	Port Burwell	60.25	64.50
			Portland	43.39	70.17
			Portland Canal	55.00	130.00
			Port Madison (Wash.)	47.45	122.35
			Port Orchard	47.32	122.38

	N	W		N	W
Port Renfrew	48.00	124.00	Scotsman Bay (officially changed to "Scots Bay")		
Port Townsend	48.07	122.46	Seabeck	47.38	122.51
Prince Regent Inlet	73.00	90.30	Seattle	47.36	122.20
Princess Louisa Inlet	50.00	123.00	Sechelt Inlet	49.00	123.00
Puget Sound	47.50	122.30	Seven Islands Bay	59.25	63.45
Quatsino Sound	50.00	127.00	Shediac Bay	46.16	64.30
Queen Charlotte Channel	49.00	123.00	Sheepscot	44.00	69.50
Queen Charlotte Islands	53.00	132.00	Shelburne	43.46	65.19
Queen Charlotte Sound	51.00	129.00	Shubenacadie River	45.19	63.29
Queen Elizabeth Islands	78.00	95.00	Sidney Island	48.00	123.00
Restigouche River, Qué. <i>(see Rivière Restigouche)</i>			Sinclair Lake	71.60	154.45
Rice Strait	78.45	74.55	Skagit Bay	48.19	122.24
Richibucto	46.42	64.49	Skidegate Channel	53.00	132.00
Richmond Gulf (<i>see Golfe de Richmond</i>)			Slaney	48.00	123.00
Rich Point	50.42	57.25	Slidre Fiord	80.08	86.20
Rivière Restigouche	48.04	66.20	Smith Sound	51.18	127.48
Rivière Saguenay	48.08	69.44	Solander Island	50.00	127.00
Roes Welcome Sound	64.00	88.00	Steilacoom	47.10	122.36
Rosario Strait	48.30	122.44	Strait of Belle Isle	51.30	56.30
Rose Spit	54.00	131.00	Strait of Georgia	49.00	123.00
Saanich Inlet	48.00	123.00	Strait of Hare (<i>see Haro Strait</i>)		
Sable Island	43.57	59.55	Strait of Rosario (<i>see Rosario Strait</i>)		
Sable Island Bank	43.50	60.20	Swiftsure Bank	48.00	124.00
St. Andrews	45.07	67.05	Tanquary Fiord	81.00	79.45
St. Croix River	45.05	67.06	Tessiujarsuk Cove	57.31	62.00
St. George Bay	48.24	58.53	Trois Pistoles	68.05	69.12
Saint John	45.16	66.03	Tuborg Lake (<i>see Lake Tuborg</i>)		
Saint John River	45.15	66.04	Two Islands	45.16	61.08
St. John's	47.34	52.43	Ungava Bay	60.10	66.30
St. Lewis Inlet	52.20	55.49	Vancouver	49.00	123.00
St. Margarets Bay	44.35	64.00	Vancouver Island	49.00	125.00
St. Marys Bay	44.25	66.10	Vansittart Island	65.50	84.00
St. Paul's Bay	49.52	57.48	Victoria	48.00	123.00
St. Pierre	46.47	56.11	Wakeham Bay	61.38	71.58
St. Pierre Bank	46.00	56.00	Washington	38.54	77.01
Salmon Bay	51.11	56.00	Whidbey Island	48.15	122.40
Sambro Bank	43.40	63.20	Winton Bay	63.24	64.35
San Juan Archipelago	48.35	122.57	Yarmouth	43.50	66.07
San Juan Channel	48.35	123.02	Yarmouth Harbour	43.50	66.08
San Juan Island	48.30	123.05			
Scots Bay	45.18	64.27			

INDEX TO SPECIES NAMES

Each species name in the text is listed twice in the Index, namely, generic name first, specific name second, and vice versa. All species names adopted in this Bulletin are printed in roman type. Names printed in *italic* type include names used in the original publications but which were misspelled, wrongly identified, or considered to be synonyms by recent works.

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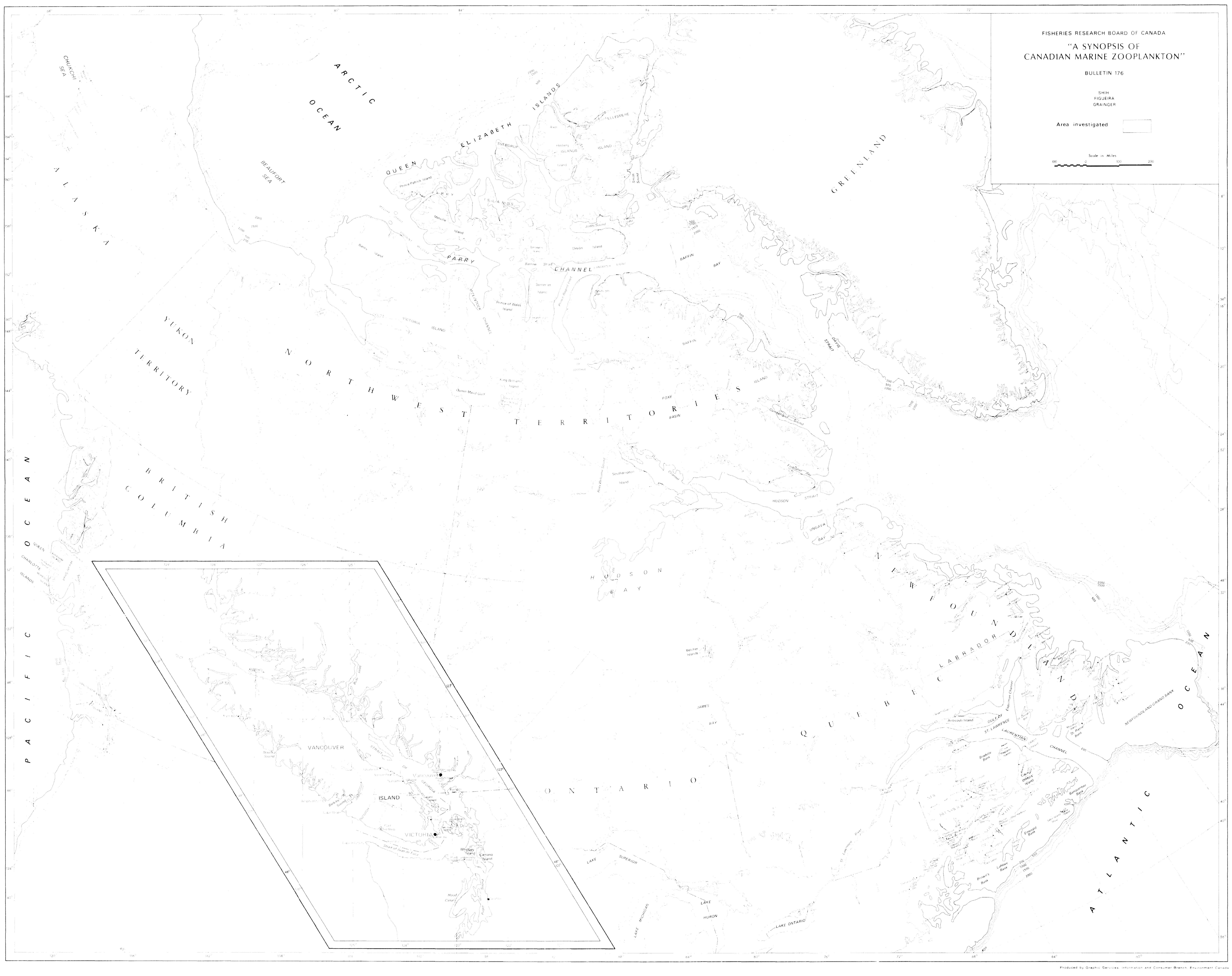
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"A SYNOPSIS OF
CANADIAN MARINE ZOOPLANKTON"

BULLETIN 176

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