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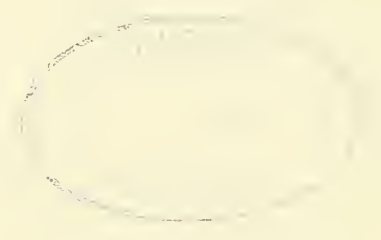
NOAA Technical Report NMFS SSRF-777



A Checklist of Parasites of California, Oregon, and Washington Marine and Estuarine Fishes

Milton S. Love and Mike Moser

December 1983



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service

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722. Gulf menhaden, *Brevoortia patronus*, purse seine fishery: Catch, fishing activity, and age and size composition, 1964-73. By William R. Nicholson. March 1978, iii + 8 p., 1 fig., 12 tables.
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727. Expendable bathythermograph observations from the NMFS MARAD Ship of Opportunity Program for 1975. By Steven K. Cook, Barclay P. Collins, and Christine S. Carty. January 1979, iv + 93 p., 2 figs., 13 tables, 54 app. figs.
728. Vertical sections of semimonthly mean temperature on the San Francisco-Honolulu route: From expendable bathythermograph observations, June 1966-December 1974. By J. F. T. Saur, L. E. Eber, D. R. McLain, and C. E. Dorman. January 1979, iii + 35 p., 4 figs., 1 table.
729. References for the identification of marine invertebrates on the southern Atlantic coast of the United States. By Richard E. Dowds. April 1979, iv + 37 p.
730. Surface circulation in the northwest Gulf of Mexico as deduced from drift bottles. By Robert F. Temple and John A. Martin. May 1979, iii + 13 p., 8 figs., 4 tables.
731. Annotated bibliography and subject index on the shortnose sturgeon, *Acipenser brevirostrum*. By James G. Hoff. April 1979, iii + 16 p.
732. Assessment of the Northwest Atlantic mackerel, *Scomber scombrus*, stock. By Emory D. Anderson. April 1979, iv + 13 p., 9 figs., 15 tables.
733. Possible management procedures for increasing production of sockeye salmon smolts in the Naknek River system, Bristol Bay, Alaska. By Robert J. Ellis and William J. McNeil. April 1979, iii + 9 p., 4 figs., 11 tables.
734. Escape of king crab, *Paralithodes camtschatica*, from derelict pots. By William L. High and Donald D. Worlund. May 1979, iii + 11 p., 5 figs., 6 tables.
735. History of the fishery and summary statistics of the sockeye salmon, *Oncorhynchus nerka*, runs to the Chignik Lakes, Alaska, 1888-1956. By Michael L. Dahlberg. August 1979, iv + 16 p., 15 figs., 11 tables.
736. A historical and descriptive account of Pacific coast anadromous salmonid rearing facilities and a summary of their releases by region, 1960-76. By Roy J. Wahle and Robert Z. Smith. September 1979, iv + 40 p., 15 figs., 25 tables.
737. Movements of pelagic dolphins (*Stenella* spp.) in the eastern tropical Pacific as indicated by results of tagging, with summary of tagging operations, 1969-76. By W. F. Perrin, W. E. Evans, and D. B. Holts. September 1979, iii + 14 p., 9 figs., 8 tables.
738. Environmental baselines in Long Island Sound, 1972-73. By R. N. Reid, A. B. Frame, and A. F. Draxler. December 1979, iv + 31 p., 40 figs., 6 tables.
739. Bottom-water temperature trends in the Middle Atlantic Bight during spring and autumn, 1964-76. By Clarence W. Davis. December 1972, iii + 13 p., 10 figs., 9 tables.
740. Food of fifteen northwest Atlantic gadiform fishes. By Richard W. Langton and Ray E. Bowman. February 1980, iv + 23 p., 3 figs., 11 tables.
741. Distribution of gammaridean Amphipoda (Crustacea) in the Middle Atlantic Bight region. By John J. Dickinson, Roland L. Wigley, Richard D. Brodeur, and Susan Brown-Leger. October 1980, iv + 46 p., 26 figs., 52 tables.
742. Water structure at Ocean Weather Station V, northwestern Pacific Ocean, 1966-71. By D. M. Husby and G. R. Seckel. October 1980, 18 figs., 4 tables.
743. Average density index for walleye pollock, *Theragra chalcogramma*, in the Bering Sea. By Loh-Lee Low and Ikuo Ikeda. November 1980, iii + 11 p., 3 figs., 9 tables.

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U.S. DEPARTMENT OF COMMERCE

Malcolm Baldrige, Secretary

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John V. Byrne, Administrator

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William G. Gordon, Assistant Administrator for Fisheries

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A Checklist of Parasites of California, Oregon, and Washington Marine and Estuarine Fishes

MILTON S. LOVE¹ and MIKE MOSER²

ABSTRACT

This report is a summary of the published records of parasites found from the marine and estuarine fishes of California, Oregon, and Washington. Coverage has not been limited to the western United States, but rather includes parasite reports from throughout each fish's range. Included is a host-parasite list and parasite-host cross-index.

INTRODUCTION

We have produced this survey because we felt there was a need for a single source which would list all the parasites infecting marine and estuarine fish from California, Oregon, and Washington. Pertinent sources are scattered over a number of journals, covering many years. Workers find it time consuming and laborious to search through the literature. Moreover, it is a task that many workers in the field have to duplicate. We hope this paper will shorten the job considerably.

We use "marine and estuarine" in a broad sense and include anadromous species in this survey. We have also included records from landlocked populations of anadromous fish, such as *Salmo gairdneri*, the rainbow trout, and *S. clarki*, the cutthroat trout. Though this survey (which encompasses works up to and including mid-1978) covers marine and estuarine fishes of California, Oregon, and Washington, we have included citations of parasites recorded from individual fish outside of this range, if the fish species has been reported from within it. Our reasoning is that many parasites found in hosts outside the California-Washington boundaries have subsequently been found to infect the same host species within the boundaries. We have not included all citations of a particular parasite from a particular host, as this is beyond the scope of our work.

The taxonomic status of various parasites is under debate in numerous cases. In listing these parasites we have, out of necessity, chosen one side of an argument over others. We make no pretense of being experts in the field of systematics and taxonomy. Many of the choices we made, however, were based on discussions with individuals more qualified than ourselves. No matter what choices were made, we realize there will be those who disagree. We are always open to suggestions on changes and corrections, and we hope they will be forthcoming. Both host names and their order in this publication follow Bailey et al. (1970).

We have included some unpublished data, primarily in the form of personal communications. We recognize that some workers believe that the possibility of errors in these circumstances is higher than in published works. It is our feeling that

workers using this list are capable of exercising their discretion as to which citation to accept or reject.

An example of the format for each citation is shown below, followed by an explanation of usages.

Squalus acanthias Spiny Dogfish

CESTODA

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. France. Joyeux and Baer (1936); Massachusetts. Spiral valve. Linton (1924) as *Rhynchobothrium bulbifer*.

Squalus acanthias—Host.

CESTODA—We have generally used either classes or subclasses for the initial heading. We have tried to use headings commonly used and familiar to most workers.

LACISTORHYNCHIDAE—Generally families are used below classes or subclasses.

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929.

Genus and species are given as in the cited paper, along with the original describer(s) and redescrider(s). Within each family, genera and species are not listed alphabetically.

France—If available, the geographic location of the host is given. Joyeux and Baer (1936)—This is the citation and will be found in the References section.

Massachusetts—If the parasite has been found from the same host in more than one geographic location, we often give multiple listings. We have not, as a rule, listed every citation.

Spiral valve—This is the site of infection within the host. In this instance, the initial citation (Joyeux and Baer 1936) did not mention site of infection.

Rhynchobothrium bulbifer—If the source listed used a name later supplanted, we have listed it for ease of reference.

We have marked with an asterisk (*), some revisions and comments on parasite taxonomy which have lately come to our attention. Deardorff and Overstreet (1981) have resurrected the genus *Hysterothylacium* to include the genus *Thynnascaris* and those members of *Contracaecum* which mature in fishes.

Among the copepods, Z. Kabata (pers. commun.) has the following comments. There are no authenticated records for *Bomolochus solae* from America. Though there is an old re-

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port of *Caligus curtus* from *Squalus acanthias*, this is a very doubtful record. *Pseudocaligus apodus* is properly placed in *Caligopsis*. *Clavella inversa* should not be within this genus.

Koyeria trecai, *Neobrachiella oblonga*, and *Pennella costai* are nomen nudum. *Perissopus oblongatus* is a composite taxon. *Haemobaphes theragrae* is species inquirenda.

HOST-PARASITE LIST

MYXINIDAE -- Hagfishes

Eptatretus stouti - Pacific Hagfish

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa californica Jameson 1929. Central California.
Gallbladder. Jameson (1929).

Leptotheca galeata (Jameson 1929) Kudo 1933. Central
California. Gallbladder. Jameson (1929) as Ceratomyxa g.

PETROMYZONTIDAE -- Lampreys

Lampetra tridentata - Pacific Lamprey

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Immature adults. British Columbia.
Digestive tract. Bangham and Adams (1954).

DIGENEA

NANOPHYETIDAE

Nanophyetus salmincola (Chapin 1926) Chapin 1927. Metacercaria.
Oregon. Gebhart et al. (1966).

NEMATODA

ACANTHOCHEILIDAE

Pseudanisakis tricupula Gibson 1973. Oregon. Shaw (1947)
as Acanthocheilus.

DIOCTOPHYMATIDAE

Eustrongylides sp. Larva. British Columbia. Bangham and
Adams (1954).

HEXANCHIDAE -- Cow Sharks

Hexanchus griseus - Sixgill Shark

CESTODA

LACISTORHYNCHIDAE

- Grillotia acanthoscolex Rees 1944. Atlantic. Intestine. Rees (1944).
Grillotia musculara (Hart 1936) Dollfus 1942. Washington. Hart (1936a) as Tentacularia m.
Grillotia scolecina (Rudolphi 1819). Washington; Mediterranean. Yamaguti (1959b) [poorly described - Dollfus (1942)].
Grillotia heptanchii (Vaullegeard 1899) Dollfus 1942. Chile. Carvajal (1971); France. Joyeux and Baer (1936) as G. instituta; British Columbia. Intestine. Wardle (1933b) as G. erinaceus.

ONCOBOTHRIIDAE

- Acanthobothrium paulum Linton 1890. France. Williams (1969) [Species incertae sedis - Goldstein (1967)].
Calliobothrium verticillatum (Rudolphi 1819) Van Beneden 1850. Southwell (1925); France. Joyeux and Baer (1936).

PHYLLOBOTHRIIDAE

- Phyllobothrium centrurum Southwell 1925. Atlantic. Williams (1968).
Phyllobothrium dohrnii (Oerley 1885) Zschokke 1888. Chile. Carvajal (1974); Britain. Spiral valve. Williams (1958); Central California. Riser (1955) as Orygmatobothrium d.
Phyllobothrium rotundum (Klaptocz 1906). Triest. Yamaguti (1959b).
Phyllobothrium triacis Yamaguti 1952. Mediterranean. Williams (1968) [=Crossobothrium? t. - Williams (1968)].
Phyllobothrium lactuca Van Beneden 1850. France. Laubier et al. (1966).
Phyllobothrium sinuosiceps Williams 1959. Chile. Carvajal (1974); Britain. Spiral valve. Williams (1959).
Anthobothrium auriculatum (Rudolphi 1819) Diesing, 1863. France. Joyeux and Baer (1936).

TENTACULARIIDAE

- Tentacularia megalobothrida Hart 1936. Washington. Spiral valve. Hart (1936a).
Tetrarhynchus sp. Larva. Washington, Alaska. Below pyloric valve. Hart (1936a). [May be Nybelinia surmenicola - Dollfus (1942)].

Hexanchus griseus (Continued)

COPEPODA

EUDACTYLINIDAE

Bariaka pamelae (Laubier 1966) Cressey. France. Branchial rays. Laubier et al. (1966) as Protodactylina p.

PANDARIDAE

Demoleus heptapus (Otto 1821) Heller 1865. Central California. External. Wilson (1935b) as D. paradoxus; France. Laubier et al. (1966).

DIGENEA

AZYGIIDAE

Otodistomum veliporum (Creplin 1837) Stafford 1904. Washington. Pratt and McCauley (1961); Stomach. British Columbia. Margolis³.
Otodistomum plicatum Kay 1947. Washington. Pyloric caeca. Kay (1947).

Otodistomum scymni (Risso 1826) Guiart 1938. France. Laubier et al. (1966).

MONOGENEA

HEXABOTHRIIDAE

Ercocotyle taschenbergi Maillard and Oliver 1966. France. Gills. Laubier et al. (1966).

Ercocotyle grisea (Cerfontaine 1899). France. Laubier et al. (1966); Washington. Bonham (1950) as Squalonchocotyle g.

NEMATODA

PHYSALOPTERIDAE

Proleptus elegans (Oerley, 1885). Stomach, intestine. Yamaguti (1961).

Notorynchus maculatus - Sevengill Shark

CESTODA

DASYRHYNCHIDAE

Floriceps saccatus Cuvier 1817. Baja California. Heinz and Dailey (1974).

PHYLLOBOTHRIIDAE

Anthobothrium cornucopia Van Beneden 1850. Northern California. Spiral valve. Pappas⁴.

Notorhynchus maculatus (Continued)

TENTACULARIIDAE

Nybelinia sp. Northern California. Spiral valve. Pappas (1970).

COPEPODA

PANDARIDAE

*Perissopus oblongatus (Wilson 1908) Cressey 1967. California.
Body surface. Wilson (1912a) as Achtheinus dentatus.
Pandarus bicolor Leach 1816. Northern California. Body
surface. Russo (1975).

HIRUDINOIDEA

PISCICOLIDAE

Branchellion lobata Moore 1952. Northern California.
Claspers, buccal cavity, fins. Russo (1975).

HETERODONTIDAE -- Bullhead Sharks

Heterodontus francisci - Horn Shark

CESTODA

ONCOBOTHRIIDAE

Acanthobothrium bajaensis Appy and Dailey 1973. Baja
California. Spiral valve. Appy and Dailey (1973).

TENTACULARIIDAE

Nybelinia anthicosum Heinz and Dailey 1974. Baja California.
Stomach, spiral valve. Heinz and Dailey (1974).

ISOPODA

CYMOTHOIDAE

Nerocila californica Schioedte and Meinert 1881. California.
Dorsal fin. Richardson (1905).

NEMATODA

GNATHOSTOMATIDAE

Echinocephalus pseudouncinatus Millemann 1951. Southern
California; Gulf of California. Spiral valve. Millemann
(1963).

Heterodontus francisci (Continued)

PHYSALOPTERIDAE

Proleptus acutus Dujardin 1845. Southern California. Stomach.
Specian et al. (1975).

RHINCODONTIDAE -- Whale Sharks

Rhincodon typus - Whale Shark

COPEPODA

PANDARIDAE

Prosaetes rhinodontis (Wright 1874) Wilson 1907. Seychelles
Islands, Indian Ocean. Gills. Wilson (1907b).

ODONTASPIDIDAE -- Sand Tigers

Odontaspis ferox - Ragged-tooth Shark

CESTODA

LITOBOTHRIDAE

Litobothrium gracile Dailey 1971. Southern California.
Spiral valve. Dailey (1971).

COPEPODA

EUDACTYLINIDAE

Nemesis lamna Risso 1826. Mediterranean. Yamaguti (1963a)
from Odontaspis sp. Likely this is O. ferox.

ALUPIIDAE -- Thresher Sharks

Alopias superciliosus - Bigeye Thresher

CESTODA

LITOBOTHRIDAE

Litobothrium alopias Dailey 1969. Southern California. Spiral
valve. Dailey (1969a).

Alopias superciliosus (Continued)

Litobothrium coniformis Dailey 1969. Southern California.
Spiral valve. Dailey (1969b).

Litobothrium daileyi Kurochkin and Slankis 1973. Spiral
valve. Kurochkin and Slankis (1973).

Renyxa amplificata Kurochkin and Slankis 1973. Spiral valve.
Kurochkin and Slankis (1973).

SPHYRIOCEPHALIDAE

Sphyriocephalus viridis Wagener 1854. Southern California.
Heinz and Dailey (1974).

Sphyriocephalus pelorosoma Heinz and Dailey 1974. Southern
California. Stomach. Heinz and Dailey (1974).

COPEPODA

EUDACTYLINIDAE

Bariaka alopiiae Cressey 1966. Indian Ocean. Gill filaments.
Cressey (1967a).

PANDARIDAE

Dinemoura discrepans Cressey 1967. Madagascar, Pacific
Ocean. Body surface. Cressey (1967c).

Pagina tunica Cressey 1963. Madagascar. Body surface.
Cressey (1963).

Alopias vulpinus - Thresher Shark
(SYNONYMS - Alopecias vulpes, Alopes vulpinus,
Vulpecula marina)

CESTODA

GYMNORHYNCHIDAE

Molicola uncinatum (Linton 1924). Southern California.
Heinz and Dailey (1974).

HEPATOXYLIDAE

Hepatoxylon squali Bosc 1811. Southern California.
Heinz and Dailey (1974). [= H. trichiuri - Dollfus (1942)].

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Larva.
Massachusetts. Spiral intestine. Linton (1924) as
Rhynchobothrium bulbifer.

Alopias vulpinus (Continued)

ONCOBOTHRIIDAE

- Phoreiobothrium lasium Linton 1889. Massachusetts. Yamaguti (1959b).
Acanthobothrium coronatum (Rudolphi 1819) Van Beneden 1849. South Atlantic. Digestive tract. Parukhin (1968).

PHYLLOBOTHRIIDAE

- Anthobothrium exiquum Yamaguti 1935. Japan. Spiral valve. Yamaguti (1934b) as A. parvum.
Marsupiobothrium alopias Yamaguti 1952. Pacific coast of Japan. Interior. Yamaguti (1952).
Crossobothrium angustum (Linton 1889) Linton 1901. Chile. Carvajal (1974); France. Euzet (1956); Pacific coast of Japan. Yamaguti (1952) as Phyllobothrium filiferum.
Pithophorus vulpeculae Yamaguti 1952. Japan. Yamaguti (1952).

SPHYRIOCEPHALIDAE

- Sphyriocephalus tergestinus Pinter 1913. France. Joyeux and Baer (1936).

COPEPODA

CALIGIDAE

- Caligus elongatus Nordmann 1832. England. Leigh-Sharpe (1936) as C. rabidus.

EUDACTYLINIDAE

- Nemesis robusta (Van Beneden 1851) Brian 1906. England. Leigh-Sharpe (1936); Massachusetts. Gills. Wilson (1932); New Zealand. Hewitt (1969c).
Nemesis aggregata Cressey 1967. Indian Ocean. Gill filaments. Cressey (1967a).
Nemesis atlantica Wilson 1922. Massachusetts. Gills. Wilson (1924).
Nemesis lamna Risso 1826. Yamaguti (1963a) as N. mediterranea.

PANDARIDAE

- Dinemoura producta (Müller 1785) Latreille 1829. Faroe Islands. Exterior. Yamaguti (1963a); Africa. Barnard (1955).
Dinemoura latifolia Steenstrup and Lütken 1861. Italy. Hewitt (1967).
Dinemoura discrepans Cressey 1967. Indian Ocean. Body surface. Cressey (1967c).
Echthrogaleus denticulatus Smith 1874. Indian Ocean. Body surface. Cressey (1967c).

Alopias vulpinus (Continued)

- Pandarus cranchii Leach 1819. Indian Ocean. Body surface.
Cressey (1967a).
Pandarus smithii Rathbun 1886. Indian Ocean. Body surface.
Cressey (1967a).
*Perissopus oblongatus (Wilson 1908) Cressey 1967. Southern
California. Exterior. Wilson (1921) as Achthenius dentatus.
Gangliopus pyriformis Gerstaecker 1854. Indian Ocean. Gill
filaments. Cressey (1967a).

LAMNIDAE -- Mackerel Sharks

Carcharodon carcharias - White Shark

CESTODA

HEPATOXYLIDAE

- Hepatoxylon trichiuri (Holten 1802) Dollfus 1942. New
Zealand. Spiral valve. Robinson (1959a); Postlarva.
Atlantic. Dollfus (1942).

PHYLLOBOTHRIIDAE

- Phyllobothrium tumidum Linton 1922. Southern California.
Spiral valve. Riser (1955).
Phyllobothrium lactuca Van Beneden 1850. New Zealand. Spiral
valve. Robinson (1959a).
Dinobothrium septaria Van Beneden 1889. Massachusetts.
Yamaguti (1959b).
Dinobothrium plicatum Linton 1922. Baylis (1950).

TENTACULARIIDAE

- Tentacularia coryphaenae Bosc 1802. Brazil. Stomach. Dollfus
(1942).

COPEPODA

DICHELESTHIIDAE

- Anthosoma crassum (Abildgaard 1794) Gould 1841. Massachusetts.
Gills. Wilson (1924); Hawaii. Lewis (1966); New Zealand.
Buccal cavity. Hewitt (1968c).

EUDACTYLINIDAE

- Nemesis robusta (van Beneden 1851) Brian 1906. Massachusetts.
Gills. Wilson (1932).
Nemesis lamna Risso 1826. Florida. Cressey (1970); Mediterranean.
Wilson (1932); Indian Ocean. Cressey (1967a); New Zealand. Hewitt
(1969c).

Carcharodon carcharias (Continued)

PANDARIDAE

Pandarus cranchii Leach 1819. West coast of Florida. Pectoral, caudal fins. Cressey (1970); Massachusetts. Cressey (1967c); Indian Ocean. Cressey (1967a).

Pandarus smithii Rathbun 1886. West coast of Florida. Body surface. Cressey (1970).

Pandarus floridanus Cressey 1967. West coast of Florida. Body surface. Cressey (1970); Massachusetts. Cressey (1967c).

Pandarus sinuatus Say 1817. Massachusetts, North Carolina. Fins. Wilson (1907b).

Nesippus orientalis Heller 1865. West coast of Florida. Mouth, gill arches. Cressey (1970); Indian Ocean. Cressey (1967a); South Africa. Barnard (1955) as N. alatus.

Nesippus crypturus Heller 1865. West coast of Florida. Mouth. Cressey (1970).

Echthrogaleus denticulatus Smith 1874. Massachusetts. Wilson (1932).

Dinemoura latifolia Steenstrup and Lütken 1861. Massachusetts. Body surface. Wilson (1932); New Zealand. Buccal cavity, gills, body surface. Hewitt (1967); Hawaii. Lewis (1966).

Dinemoura producta (Müller 1785) Latreille 1829. Maine. Cressey (1967c); New Zealand. Body surface. Hewitt (1967).

Cetorhinus maximus -- Basking Shark

SYNONYM - Selache maximus

CESTODA

PHYLLOBOTHRIIDAE

Dinobothrium septaria Van Beneden 1889. France. Joyeux and Baer (1936).

Gastrolecithus planus (Linton 1922) Yamaguti 1952. Central California. Spiral valve. Riser (1955); Great Britain. Sproston (1948), both as Dinobothrium planum.

Reesium paciferum (Sproston 1948) Euzet 1956. Central California. Spiral valve. Riser (1955) as Dinobothrium spinosum; France. Euzet (1956).

Anthobothrium variabile (Linton 1889) Southwell 1925. Southwell (1925).

Cetorhinus maximus (Continued)

COPEPODA

DICHELESTHIIDAE

Anthosoma crassum (Abildgaard 1794) Gould 1841. Africa.
Between teeth. Barnard (1955).

EUDACTYLINIDAE

Nemesis lamna Risso 1826. Florida. Cressey (1970);
Africa. Barnard (1955); New Zealand. Hewitt (1969c);
Britain. Leigh-Sharpe (1933) as N. vermi.

PANDARIDAE

Dinemoura producta (Müller 1785) Latreille 1829. Amsterdam.
Cressey (1967c); Africa. Barnard (1955); New Zealand.
Hewitt (1967).

CRUSTACEA

LEPADIDAE

Conchoderma auritum. Gills. Delamare-Deboutteville (1948).

DIGENEA

SPIRORCHIDAE

Genera and species. Great Britain. Blood vessels. Sproston
(1948).

NEMATODA

ANISAKIDAE

Contracaecum plagiostomorum (Linstow 1905). Ceylon. Gills.
Baylis (1936).

Isurus oxyrinchus -- Shortfin Mako

SYNONYMS - Isuropsis glauca, Isurus tigris, Isurus glaucus,
Isurus de kayi, Isurus nasus

CESTODA

GYMNORHYNCHIDAE

Gymnorhynchus isuri Robinson 1959. New Zealand. Spiral
valve. Robinson (1959a).

Isurus oxyrinchus (Continued)

- Gymnorhynchus gigas (Cuvier 1817). Southern California.
Heinz and Dailey (1974).
Molicola horridus (Goodsir 1841). Southern California.
Heinz and Dailey (1974).

HEPATOXYLIDAE

- Hepatoxylon trichiuri (Holten 1802) Dollfus 1942. Postlarva.
New Zealand. Body cavity. Robinson (1959a).

ONCOBOTHRIIDAE

- Ceratobothrium xanthocephalum Monticelli 1892. Japan.
Yamaguti (1959b); France. Euzet (1956); New Zealand.
Spiral valve. Robinson (1959a).

PHYLLOBOTHRIIDAE

- Phyllobothrium tumidum Linton 1922. France. Euzet (1956).

PROSOBOTHRIIDAE

- Platybothrium parvum Linton 1901. Massachusetts. Yamaguti
(1959b).

SPHYRIOCEPHALIDAE

- Sphyriocephalus tergestinus Pintner 1913. Japan. Dollfus
(1942).

TENTACULARIIDAE

- Nybelinia pintneri Yamaguti 1934. Southern California. Heinz
and Dailey (1974).
Nybelinia lingualis (Cuvier 1817) Dollfus 1929. Mediterranean.
Intestine. Dollfus (1942).
Nybelinia robusta (Linton 1890) Dollfus 1930. Massachusetts.
Spiral valve. Dollfus (1942).

COPEPODA

CALIGIDAE

- Caligus coryphaenae Steenstrup and Lütken 1861. Japan. Body
surface. Shiino (1959e).

DICHELESTHIIDAE

- Anthosoma crassum (Abildgaard 1794) Gould 1841. Southern
California, Central Pacific, New Jersey, Indian Ocean, North
Atlantic, Chile, Peru. Between teeth. Cressey (1968);
New Zealand. Buccal cavity. Hewitt (1968c); South Africa.
Barnard (1955).

Isurus oxyrinchus (Continued)

EUDACTYLINIDAE

Nemesis lamna Risso 1826. Southern California, Indian Ocean, Chile, Peru, Mediterranean. Gill filaments. Cressey (1968); New Zealand. Hewitt (1969c).

EURYPHORIDAE

Euryphorus brachypturus (Gerstaecker 1853) Heegaard 1972. Japan. Inner surfaces of gill operculums. Shiino (1959e) as E. hemiptera.

PANDARIDAE

Pandarus bicolor Leach 1816. Pacific. Hewitt (1967).

Pandarus satyrus Dana 1852. South America. Mouth, gill arches. Cressey (1968); Japan. Shiino (1954e); New Zealand. Buccal cavity, body surface. Hewitt (1967) as P. cranchii.

Pandarus smithii Rathbun 1886. North Atlantic, Indian Ocean. Mouth, body surface. Cressey (1968).

Pandarus katoii Cressey 1967. South America. Mouth, gill arches. Cressey (1968).

Echthrogaleus coleoptratus (Guerin 1817) Wilson 1907. Japan. Buccal cavity, body surface. Shiino (1954e); Massachusetts. Wilson (1932).

Echthrogaleus denticulatus Smith 1874. Southern California, Central Pacific, Chile, Peru, Indian Ocean. Body surface. Cressey (1968); Japan. Buccal cavity, body surface. Shiino (1954e).

Nesippus borealis (Steenstrup and Lütken 1861) Wilson 1907. Body surface. Hewitt (1967).

Gangliopus pyriformis Gerstaecker 1854. South America. Cressey (1968).

Phyllothyreus cornutus (Edwards 1840) Bassett - Smith 1899. South America. Gill chambers. Cressey (1968); New Zealand. Hewitt (1967).

Dinemoura latifolia Steenstrup and Lütken 1861. Western North America, Caribbean Sea, Indian Ocean, west coast South America, central Pacific. Body surface. Cressey (1968); New Zealand. Buccal cavity, gills. Hewitt (1967).

Dinemoura producta (Müller 1785) Latreille 1829. North Atlantic, Southern California, Chile, Peru. Fins. Cressey (1968).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. New Zealand. Stomach. Hewitt and Hine (1972).

Lamna ditropis -- Salmon Shark

SYNONYMS - Lamna nasus, L. cornubica

CESTODA

PHYLLOBOTHRIIDAE

- Dinobothrium septaria Van Beneden 1889. Central California.
Spiral valve. Riser (1955).
Dinobothrium simile Van Beneden 1889. Central California.
Spiral valve. Riser (1955).
Phyllobothrium tumidum Linton 1922. Central California.
Spiral valve. Riser (1955).

TENTACULARIIDAE

- Nybelinia sp. Central California. Spiral valve. Riser
(1955).
Nybelinia palliata (Linton 1924) Dollfus 1929. Southern
California. Young (1954).
Nybelinia surmenicola Okada 1929. Alaska. Stomach.
Shimazu (1975).

COPEPODA

DICHELESTHIIDAE

- Anthosoma crassum (Abildgaard 1794) Gould 1841. Central
California. Outer surface. Wilson (1935b); Japan. Buccal
cavity. Shiino (1955c); New Zealand. Hewitt (1968c).

EUDACTYLINIDAE

- Nemesis lamna Risso 1826. Southern California. Gills.
Wilson (1935b).

PANDARIDAE

- Echthrogaleus coleoptratus (Guerin 1817) Wilson 1907. Japan.
Body surface, fins. Shiino (1957); British Columbia.
Bere⁵; New Zealand. Hewitt (1967).
Dinemoura latifolia (Steenstrup and Lutken 1861). Central
California. Outer surface. Wilson (1935b); Japan. Shiino
(1957).
Dinemoura producta (Muller 1785) Latreille 1829. Japan. Body
surface, fins. Shiino (1957) as Dinematura a.

SCYLIORHINIDAE -- Cat Sharks

Apristurus brunneus - Brown Cat Shark

NEMATODA

ACANTHOCEILIDAE

Acanthocheilus quadridentatus Molin 1858. Northern California.
Free in coelomic cavity, encysted in stomach wall. Pappas⁴.

PROTOZOA (MYXOSPORIDA)

Genera and species. Southern California. Gallbladder. Noble (1966a).

Cephaloscyllium ventriosum -- Swell Shark

ASPIDOCOTYLEA

ASPIDOGASTERIDAE

Multicalyx cristata (Faust and Tang 1936) Stunkard 1962. Southern
California. Bile ducts. Hendrix and Overstreet (1977).

CARCHARHINIDAE -- Requiem Sharks

Carcharhinus leucas - Bull Shark

CESTODA

CATHETOCEPHALIDAE

Cathetocephalus thatcheri Dailey and Overstreet 1973. Florida.
Spiral valve. Dailey and Overstreet (1973).

DASYRHYNCHIDAE

Dasyrhynchus giganteus (Diesing 1850) Pintner 1929. Florida.
Intestine. Dollfus (1969b).

DISCULICIPITIDAE

Disculiceps pileatus (Linton 1890) Joyeux and Baer 1935. Gulf
of Mexico. Chandler (1954).

ONCOBOTHRIIDAE

Phoreiobothrium lasium Linton 1889. Caribbean. Chandler (1954)
as Cylindrophorus l.
Phoreiobothrium exceptum Linton 1924. Texas. Chandler (1924) as
Cylindrophorus e.

Carcharhinus leucas (Continued)

OTOBOTHRIIDAE

- Otobothrium penetrans Linton 1907. Caribbean.
Chandler (1954).
Otobothrium crenacolle Linton 1890. Caribbean.
Chandler (1954).

PHYLLOBOTHRIIDAE

- Phyllobothrium musteli (Van Beneden 1850).
Caribbean. Chandler (1954).
Anthobothrium laciniatum Linton 1890. Caribbean.
Chandler (1954).

COPEPODA

EUDACTYLINIDAE

- Nemesis robusta (Van Beneden 1851) Brian 1906. Madagascar.
Gill filaments. Cressey (1967a).
Nemesis atlantica Wilson 1922. West Florida. Gills.
Cressey (1970).

EURYPHORIDAE

- Alebion carchariae Krøyer 1863. West Florida. Body surface.
Cressey (1970).
Alebion gracilis Wilson 1905. Indian Ocean. Body surface.
Cressey (1967a).
Paralebion elongatus Wilson 1911. West Florida. Body
surface. Cressey (1970); Indian Ocean. Cressey (1967a);
West Africa. Caudal fin. Vaissiere (1959).

KROYERIIDAE

- Kroyeria gracilis Wilson 1932. Madagascar, Indian Ocean. Gill
filaments. Cressey (1967a).

PANDARIDAE

- Nesippus orientalis Heller 1865. West Florida. Body surface.
Cressey (1970); Indian Ocean. Cressey (1967a).
Nesippus crypturus Heller 1865. West Florida. Mouth.
Cressey (1970); Indian Ocean. Cressey (1967a).
Perissopus dentatus Steenstrup and Lütken 1861. West Florida.
Exterior. Cressey (1970); Indian Ocean. Cressey (1967a).
Pandarus smithii Rathbun 1886. West Florida. Exterior.
Cressey (1970).
Pandarus cranchii Leach 1819. West Florida. Tail, pectoral
fins. Cressey (1970).
Pandarus sinuatus Say 1817. West Florida. Exterior. Cressey
(1970).
Pandarus carcharini Ho 1960. Madagascar. Cressey (1967c).

Carcharhinus leucas (Continued)

HIRUDINOIDEA

PISCICOLIDAE

Stibarobdella macrothela (Schmarda 1861) Llewellyn 1966.
Florida. External surface, mouth. Sawyer et al. (1975).

MONOGENEA

HEXABOTHRIIDAE

Heteroncocotyle leucas Hargis 1955. Louisiana. Hargis
(1955b).

Carcharhinus longimanus - Oceanic Whitetip Shark

CESTODA

DASYRHYNCHIDAE

Dasyrhynchus talismani Dollfus 1935. Pacific Ocean -
Northern Mexico. Heinz and Dailey (1974).

TENTACULARIIDAE

Tentacularia coryphaenae Bosc 1802. Pacific Ocean -
Northern Mexico. Heinz and Dailey (1974).

COPEPODA

EURYPHORIDAE

Alebion gracilis Wilson 1905. Indian Ocean. Body surface.
Cressey (1967a).

KROYERIIDAE

Kroyeria gracilis Wilson 1932. Indian Ocean. Gill filaments.
Cressey (1967a).

PANDARIDAE

Pandarus cranchii Leach 1819. Indian Ocean. Body surface,
fin. Cressey (1967a).
Nesippus crypturus Heller 1865. Indian Ocean. Mouth.
Cressey (1967a).

Carcharhinus longimanus (Continued)

HIRUDINOIDEA

PISCICOLIDAE

Stibarobdella macrothela (Schmarda 1861) Llewellyn 1966.
Atlantic. External surface, mouth. Sawyer et al. (1975).

Carcharhinus obscurus - Dusky Shark

SYNONYM - Carcharias obscurus

CESTODA

DASYRHYNCHIDAE

Floriceps saccatus Cuvier 1817. Atlantic. Dollfus (1942).
Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931.
Yamaguti (1959b) as Callotetrarhynchus g.

DISCULICIIDAE

Disculiceps pileatus (Linton 1891) Joyeux and Baer 1936.
Massachusetts. Intestine wall. Linton (1891) as
Discocephalum p.

LACISTORHYNCHIDAE

Grillotia erinacea (Van Beneden 1858) Guiart 1927. Massachusetts.
Linton (1924) as Rhynchobothrium imparispine.

ONCOBOTHRIIDAE

Phoreiobothrium lasium Linton 1889. Massachusetts. Spiral
valve. Linton (1889).
Phoreiobothrium triloculatum Linton 1901. Massachusetts.
Linton (1924).

OTOBOTHRIIDAE

Otobothrium crenacolle Linton 1891. North Carolina, Massachusetts,
Gulf of Mexico. Spiral valve. Stomachs. Linton (1924).
Otobothrium dipsacum Linton 1897. North Carolina. Linton
(1905) as O. insigne.

PHYLLOBOTHRIIDAE

Phyllobothrium foliatum Linton 1891. Massachusetts. Linton
(1891).
Anthobothrium laciniatum Linton 1891. Massachusetts. Linton
(1891).

Carcharhinus obscurus (Continued)

Crossobothrium angustum (Linton 1889) Linton 1901.
Massachusetts. Linton (1924).

PROSOBOTHRIIDAE

Platybothrium cervinum Linton 1891. Massachusetts. Spiral
valve. Linton (1891).

PTEROBOTHRIIDAE

Pterobothrium heteracanthum Diesing 1850. Larva. Massachusetts.
Cysts in stomach. Linton (1924) as Synbothrium filicolle.

TENTACULARIIDAE

Nybelinia bisulcata (Linton 1889) Dollfus 1929. Massachusetts.
Intestines. Linton (1889) as Rhynchobothrium bisulcatum.

Nybelinia robusta (Linton 1891) Dollfus 1930. Massachusetts.
Dollfus (1942).

Tentacularia coryphaenae Bosc 1802. Postlarva and adult.
Massachusetts. Dollfus (1942).

TRYPANORHYNCHA

Tetrarhynchus bicolor (Bartels 1832) Wagener 1854.
Massachusetts. Linton (1924). [= Tentacularia coryphaenae -
Dollfus (1942).] [Species incertae sedis - Yamaguti (1961).]
Rhynchobothrium tumidulum Linton 1905. Massachusetts. Spiral
valve. Linton (1924).

COPEPODA

DICHELESTHIIDAE

Anthosoma crassum (Abildgaard 1794) Gould 1841. Wilson
(1932).

EUDACTYLINIDAE

Nemesis robusta (van Beneden 1851) Brian 1906. Massachusetts.
Wilson (1932); Gulf of Mexico. Gills. Bere (1936) as N. pallida.

Nemesis spinulosus Cressey 1970. West Florida. Gills.
Cressey (1970).

Nemesis atlantica Wilson 1922. Massachusetts. Gills.
Wilson (1924).

Eudactylina spinifera Wilson 1932. Gulf of Mexico. Gills.
Bere (1936).

EURYPHORIDAE

Paralebion elongatus Wilson 1911. Gulf of Mexico. Mouth.
Bere (1936).

Carcharhinus obscurus (Continued)

- Alebion carchariae Krøyer 1863. West Florida. Body surface.
Cressey (1970); Massachusetts. Wilson (1932); West Africa.
Pectoral fin. Vaissiere (1959).
Alebion gracilis Wilson 1905. Indian Ocean. Body surface,
fin. Cressey (1967a); Laysan Island. Wilson (1932).

KROYERIIDAE

- Kroyeria gracilis Wilson 1932. West Florida. Wilson (1932).

PANDARIDAE

- Nesippus orientalis Heller 1865. Angola. Surface. Nunes-
Ruiivo (1956); Gulf of Mexico. Mouth and body
surface. Bere (1936); Massachusetts. Wilson (1932)
as N. alatus.
Nesippus gracilis Wilson 1935. Gulf of Mexico. Mouth and
body surface. Bere (1936).
Pandarus smithii Rathbun 1886. West Florida. Body surface.
Cressey (1970). Massachusetts. Wilson (1932).
Pandarus cranchii Leach 1819. West Florida. Tail and
pectoral fin. Cressey (1970).
Pandarus satyrus Dana 1852. Gulf of Mexico. Body surface.
Bere (1936).
Pandarus sinuatus Say 1817. Gulf of Mexico. Body surface.
Bere (1936); Massachusetts. Wilson (1907b);
North Africa. Exterior on fin. Capart (1953) as
P. affinis.
Perissopus communis Rathbun 1887. Massachusetts. Rathbun
(1887); Gulf of Mexico. Body surface. Bere (1936).
Perissopus dentatus Steenstrup and Lütken 1861. Indian
Ocean. Body surface. Cressey (1967a).

SPHYRIIDAE

- Paeon elongatus Wilson 1932. Massachusetts. Gill cavity.
Wilson (1932).
Opimia exilis Wilson 1908. Gulf of Mexico. Gills. Bere
(1936).

DIGENEA

BUCEPHALIDAE

- Prosorhynchoides arcuata (Linton 1900) n. comb. Massachusetts.
Dollfus (1937).

HIRUDINOIDEA

PISCICOLIDAE

- Stibarobdella macrothela (Schmarda 1861) Llewellyn 1966.
Atlantic. External surface, mouth. Sawyer et al. (1975).

Carcharhinus obscurus (Continued)

MONOGENEA

MONOCOTYLIDAE

Cathariotrema selachii (MacCallum 1916) Johnston and Tiegs
1922. Massachusetts. Olfactory organs. MacCallum (1916).

NEMATODA

ANISAKIDAE

Terranova brevicapitata (Linton 1901) Musgovoy 1951. North
America. Yamaguti (1961).

Galeocerdo cuvieri - Tiger Shark

SYNONYMS - Galeocerdo arcticus, Galeocerdo tigrinus,
Galeocerdo tygrinus

CESTODA

BALANOBOTHRIIDAE

Balanobothrium parvum Southwell 1925. Ceylon. Southwell
(1930).

ONCOBOTHRIIDAE

Pedibothrium longispine Linton 1909. Ceylon. Southwell
(1930).

Pedibothrium hutsoni (Southwell 1911) Southwell 1924.
Ceylon. Southwell (1930)

Phoreiobothrium lasium Linton 1839. Massachusetts. Yamaguti
(1959b).

Thysanocephalum rugosum Chandler 1942. Florida. Chandler
(1954).

Thysanocephalum crispum (Linton 1889) Linton 1891.
Massachusetts. Spiral valve. Linton (1889); India.
Subhapradha (1955).

OTOBOTHRIIDAE

Otobothrium curtum (Linton 1909) Dollfus 1942. Caribbean.
Chandler (1954).

PHYLLOBOTHRIIDAE

Monorygma galeocerdonis MacCallum 1921. Massachusetts.
Williams (1968) [=Phyllobothrium? g. - Williams (1968)].

Galeocerdo cuvieri (Continued)

- Phyllobothrium dagnallum Southwell 1927. Ceylon. Southwell (1930).
Phyllobothrium lactuca van Beneden 1850. Ceylon. Southwell (1930).
Phyllobothrium musteli (van Beneden 1850). Yamaguti (1959b).

PTEROBOTHRIIDAE

- Pterobothrium heteracanthum Diesing 1850. Massachusetts. Stomach.
Dollfus (1942).

TENTACULARIIDAE

- Tentacularia coryphaenae Bosc 1802. Postlarva, adults. Massachusetts.
Stomach, pyloric caeca. Dollfus (1942).
Tentacularia macropora (Shipley and Hornell 1906) Southwell 1930.
Ceylon. Southwell (1930).
Nybelinia bisulcata (Linton 1889) Dollfus 1929. Massachusetts.
Stomach. Dollfus (1942).

TRYPANORHYNCHA

- Rhynchobothrium exile Linton 1909. Caribbean. Chandler (1954).

COPEPODA

EUDACTYLINIDAE

- Eudactylina pusilla Cressey 1967. West Florida. Gills. Cressey
(1970); Indian Ocean. Cressey (1967a).
Nemesis robusta (van Beneden 1851) Brian 1906. Massachusetts. Gills.
Wilson (1932) as N. pallida.

EURYPHORIDAE

- Alebion carchariae Krøyer 1863. West Florida. Body surface.
Cressey (1970); Australia. Pectoral fins. Heegaard (1962).
Alebion gracilis Wilson 1905. West Florida. Cressey (1970).

KROYERIIDAE

- Kroyeria papillipes Wilson 1932. Massachusetts. Gills. Wilson (1932).
Kroyeria dispar Wilson 1935. West Florida. Gills. Cressey (1970);
Madagascar. Cressey (1967a).
Kroyerina elongata Wilson 1932. Massachusetts. Gills. Wilson (1944).

PANDARIDAE

- Nesippus orientalis Heller 1865. West Florida. Body surface.
Cressey (1970); Madagascar. Cressey (1967c).
Nesippus crypturus Heller 1865. West Florida. Mouth. Cressey
(1970); Madagascar. Cressey (1967c).
Nesippus tigris Cressey 1965. West Florida. Nasal cavity. Cressey
(1967a); Madagascar. Cressey (1967c).
Pandarus cranchii Leach 1819. Eniwetok Atoll. Body surface. Lewis
(1968); West Africa. Cressey (1967c).

Galeocерdo cuvieri (Continued)

NEMATODA

ACANTHOCHEILIDAE

Acanthocheilus nudiflex Linton 1900. Massachusetts. Yamaguti (1961). ["Should not be in this genus" - Yamaguti (1961)].

ANISAKIDAE

Terranova brevicapitata (Linton 1901) Musgovoy 1951. North America. Yamaguti (1961).

Terranova galeocерdonis (Thwaite 1927) Johnston and Mawson 1945. Ceylon. Baylis (1936) as Porrocaecum g.

PHYSALOPTERIDAE

Proleptus australis Baylis 1933. Queensland. Baylis (1933).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa lunata Davis 1917. North Carolina. Gallbladder. Kudo (1920).

Galeorhinus zyopterus Soupfin Shark

CESTODA

PHYLLOBOTHRIIDAE

Scyphophyllideum giganteum (Van Beneden 1858) Woodland 1927. Central California. Spiral valve. Riser (1955).

Orygmatobothrium musteli (Van Beneden 1850) Diesing 1854. California. Riser (1955).

COPEPODA

EUDACTYLINIDAE

Eudactylinodes uncinata (Wilson 1908) Wilson 1932. Gills. Wilson (1908a) as Eudactylina u.

PANDARIDAE

Pandarus cranchii (Leach 1819) Wilson 1907. California. Wilson (1908a).

Pandarus bicolor Leach 1816. Northern California. Russo (1975).

SPHYRIIDAE

Opimia exilis Wilson 1908. Southern California. Mouth, gill cavity. Wilson (1908a).

Galeorhinus zyopterus (Continued)

HIRUDINOIDEA

PISCICOLIDAE

Branchellion lobata Moore 1952. Northern California. Claspers,
buccal cavity, fins. Russo (1975).

MONOGENEA

HEXABOTHRIIDAE

Erpocotyle squali (MacCallum 1931) Price 1942. Northern California.
Gills. Pappas⁴.

PROTOZOA (MYXOSPORIDA)

SPHAEROSPORIDAE

Chloromyxum ovatum Jameson 1929. Central California. Gallbladder.
Jameson (1929).

Mustelus californicus Gray Smoothhound
(Synonym - Galeus californicus)

CESTODA

EUTETRARHYNCHIDAE

Eutetrarhynchus macrotrachelus Heinz and Dailey 1974. Southern
California. Spiral valve. Heinz and Dailey (1974).
Eutetrarhynchus litocephalus Heinz and Dailey 1974. Southern
California. Spiral valve. Heinz and Dailey (1974).

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Southern
California. Heinz and Dailey (1974).

ONCOBOTHRIIDAE

Calliobothrium pellucidum Riser 1955. Southern California. Riser
(1955).

COPEPODA

LERNAEOPODIDAE

Pseudocharopinus bicaudatus (Krøyer 1837) Kabata 1964. Central
California. Spiracles. Wilson (1935b) as Charopinus b.

Mustelus californicus (Continued)

PANDARIDAE

*Perissopus oblongatus (Wilson 1908) Cressey 1967. Southern California. Flesh. Ho (1975) as Achtheinus o.

DIGenea

HETEROPHYIDAE

Stictodora sawakinesis Looss 1899. Metacercaria. USSR. Ginetsinskaya (1955).

NEMATODA

PHYSALOPTERIDAE

Proleptus acutus Dujardin 1845. Southern California. Stomach. Specian et al. (1975).

PROTOZOA (MYXOSPORIDA)

SPHAEROSPORIDAE

Chloromyxum ovatum Jameson 1929. Southern California. Gallbladder. Jameson (1931).

Mustelus henlei Brown Smoothhound

CESTODA

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Southern California. Heinz and Dailey (1974).

PHYLLOBOTHRIIDAE

Pithophorus p. Northern California. Spiral valve. Pappas⁴.

Anthobothrium parvum Stossich 1895. Northern California. Spiral valve. Pappas⁴.

Phyllobothrium radioductum Kay 1942. Northern California. Spiral valve. Pappas⁴.

Gastrolecithus planus (Linton 1922) Yamaguti 1952. Northern California. Spiral valve. Pappas⁴.

Orygmatobothrium musteli (Van Beneden 1850) Diesing 1854. California. Riser (1955).

Mustelus henlei (Continued)

COPEPODA

PANDARIDAE

Pandarus bicolor Leach 1816. Northern California. Body surface.
Russo (1975).

*Perissopus oblongatus (Wilson 1908) Cressey 1967. Northern
California. Body surface. Russo (1975).

HIRUDINOIDEA

PISCICOLIDAE

Branchellion lobata Moore 1952. California. Moore (1952).

MONOGENEA

HEXABOTHRIIDAE

Pseudohexabothrium rajae Brinkman 1952. Northern California.
Gills. Pappas⁴.

Erpocotyle squali (MacCallum 1931) Price 1942. Northern California.
Gills. Pappas⁴.

NEMATODA

ACANTHOCHEILIDAE

Acanthocheilus quadridentatus Molin 1858. Northern California.
Encysted in stomach wall. Pappas⁴.

PHYSALOPTERIDAE

Proleptus obtusus Dujardin 1845. Northern California. Attached
to internal stomach lining. Pappas⁴.

Proleptus acutus Dujardin 1845. Southern California. Stomach.
Specian et al. (1975).

PROTOZOA (MYXOSPORIDA)

SPHAEROSPORIDAE

Chloromyxum ovatum Jameson 1929. Southern California. Gallbladder.
Jameson (1931).

Mustelus lunulatus Sicklefin Smoothound

COPEPODA

PANDARIDAE

Mustelus lunulatus (Continued)

*Perissopus oblongatus (Wilson 1908) Cressey 1967. Southern California. Exterior. Wilson (1921) as Achtheinus dentatus.

DIGENEA

GORGODERIDAE

Probolitrema richiardii (Lopez 1888) Looss 1902. Gulf of California. Coelomic cavity. Markell (1956) as P. mexicana.

Prionace glauca Blue Shark

CESTODA

DASYRHYNCHIDAE

Floriceps saccatus Cuvier 1817. Japan. Spiral intestine. Dollfus (1942).

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931. Southern California. Heinz and Dailey (1974).

HEPATOXYLIDAE

Hepatoxylon trichiuri (Holten 1802) Dollfus 1942. Postlarva. Mediterranean, Japan. Dollfus (1942); New Zealand. Body cavity. Hewitt and Hine (1972).

Hepatoxylon squali Bosc 1811. Postlarva. Off Northern California. Liver. Pappas (1970). [= H. trichiuri - Dollfus (1942)].

ONCOBOTHRIIDAE

Cylindrophorus posteroporus Riser 1955. Central California. Riser (1955).

Acanthobothrium coronatum (Rudolphi 1819) Van Beneden 1849. South Atlantic. Digestive tract. Parukhin (1968).

Calliobothrium verticillatum (Rudolphi 1819) Van Beneden 1850. Chile. Carvajal (1974).

PHYLLOBOTHRIIDAE

Anthobothrium laciniatum Linton 1890. Central California. Riser (1955); New Zealand. Spiral valve. Alexander (1963). Anthobothrium minutum Guiart 1935. Cape Verde Island. Yamaguti (1959b).

Anthobothrium cornucopia Van Beneden 1850. France. Joyeux and Baer (1936).

Anthobothrium auriculatum (Rudolphi 1819) Diesing 1863. France. Joyeux and Baer (1936).

Phyllobothrium dagnallium Southwell 1927. Newfoundland. Threlfall (1969).

Prionace glauca (Continued)

- Phyllobothrium prionacis Yamaguti 1934. Japan. Yamaguti (1934b).
[= Crossobothrium p. - Williams (1968)].
Dinobothrium septaria Van Beneden 1889. Baylis (1950).
Dinobothrium keilini Sproston 1948. English Channel. Intestine.
Sproston (1948).
Crossobothrium angustum (Linton 1889). Central California.
Riser (1955) as Scyphophyllidium a.; Massachusetts. Spiral valve.
Linton (1924); Chile. Carvajal (1974).
Pelichnibothrium speciosum Monticelli 1889. Northern California.
Spiral valve. Pappas⁴; Pacific coast of Japan.
Yamaguti (1959b).

PROSOBOTHRIIDAE

- Platybothrium auriculatum Yamaguti 1952. Chile. Carvajal (1974);
Pacific Coast, Japan. Yamaguti (1952).
Platybothrium cervinum Linton 1891. Massachusetts. Spiral valve.
Linton (1924).
Platybothrium parvum Linton 1901. Newfoundland. Threlfall (1969).
Platybothrium baeri Euzet 1952. Naples. Yamaguti (1959b).
Prosobothrium japonicum Yamaguti 1934. Japan. Yamaguti (1934b);
California. Riser (1955).
Prosobothrium armigerum Cohn 1902. Central California. Spiral
valve. Riser (1955); France. Joyeux and Baer (1936).
Prosobothrium adherans (Linton 1924) Riser 1955. Massachusetts.
Spiral valve. Linton (1924) as Ichthyotaenia a.

TENTACULARIIDAE

- Tentacularia coryphaenae Bosc 1802. Pacific Japan. Yamaguti (1959b).
Nybelinia pintneri Yamaguti 1934. Pacific coast of Japan.
Yamaguti (1934b).
Nybelinia lingualis (Cuvier 1817) Dollfus 1929. Mediterranean.
Spiral valve. Dollfus (1942).

COPEPODA

DICHELESTHIIDAE

- Anthosoma crassum (Abildgaard 1794) Gould 1841. Japan. Buccal
cavity. Shiino (1955c).

EUDACTYLINIDAE

- Nemesis lamna Risso 1826. Great Britain. Gills. Sproston (1948).
Nemesis robusta (Van Beneden 1851) Brian 1906. Mediterranean.
Delamare-Deboutteville and Nunes-Ruivo (1953).
Nemesis carchariaeglauci (Hesse 1883) Wilson 1922. Northern
California. Gills. Pappas⁴; Mediterranean.
Delamare-Deboutteville and Nunes-Ruivo (1953) both as Kroyeria c.
Species Inquireae, may be N. robusta.

Prionace glauca (Continued)

KROYERIIDAE

Kroyeria aculeata (Gerstaecker 1854) Brian 1906. Mediterranean.
Delamare-Deboutteville and Nunes-Ruivo (1953) as Lonchidium
aculeatum.

Kroyeria gracilis Wilson 1932. Massachusetts. Nostrils.
Wilson (1932).

Kroyerina elongata Wilson 1932. Massachusetts. Gills. Wilson
(1932).

PANDARIDAE

Pandarus bicolor Leach 1816. North Atlantic, Mediterranean.
Hewitt (1967).

Pandarus satyrus Dana 1852. Japan. Body surface, fins.
Kabata and Gusev (1966); Indian Ocean. Cressey (1967a);
West Pacific, Western North Atlantic. Cressey (1967c).

Gangliopus pyriformis Gerstaecker 1854. Indian Ocean, North Atlantic.
Gills. Cressey (1967c).

Phyllothyreus cornutus (Edwards 1840) Bassett-Smith 1899.
Indian Ocean, Western North Atlantic. Gill chambers.
Cressey (1967c); Hawaii. Lewis (1966).

Dinemoura producta (Müller 1785) Latreille 1829. Maine.
Cressey (1967c).

Dinemoura latifolia Steenstrup and Lütken 1861. Lewis (1966).

Echthrogaleus coleoptratus (Guerin 1837) Wilson 1907. Northern
California. Body surface, fins. Pappas ⁴; Western North
Atlantic. Cressey (1967c); Indian Ocean. Cressey (1967a);
Australia. Heegaard (1962).

DIGENEA

PTYCHOGONIMIDAE

Ptychogonimus megastomus (Rudolphi 1819) Lühe 1900. Stomach.
Nicoll (1915).

NEMATODA

ANISAKIDAE

Anisakis sp. Post larva. New Zealand. Stomach. Hewitt and
Hine (1972).

Triakis semifasciata Leopard Shark

CESTODA

EUTETRARHYNCHIDAE

Triakis semifasciata (Continued)

Eutetrarhynchus litocephalus Heinz and Dailey 1974. Southern California. Spiral valve. Heinz and Dailey (1974).

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Southern California. Young (1954).

PHYLLOBOTHRIIDAE

Phyllobothrium radioductum Kay 1942. Southern California. Young (1954).

Phyllobothrium lactuca Van Beneden 1850. Central California. Spiral valve. Riser (1955).

Anthobothrium parvum Stossich 1895. Northern California. Spiral valve. Pappas⁴.

Dinobothrium planum Linton 1922. Northern California. Spiral valve. Pappas⁴.

Orygmatobothrium musteli (Van Beneden 1850) Diesing 1854. California. Riser (1955).

TENTACULARIIDAE

Nybelinia anthicosum Heinz and Dailey 1974. Southern California. Stomach, spiral valve. Heinz and Dailey (1974).

COPEPODA

EUDACTYLINIDAE

Nemesis carchariaglauci (Hesse 1883) Wilson 1922. Northern California. Gill's. Pappas⁴, as Kroyeria c. Species Inquireae, may be N. robusta.

LERNAEOPODIDAE

Lernaeopoda galei Krøyer 1837. Northern California. Head. Russo (1975) as L. scylicola.

PANDARIDAE

Pandarus cranchii Leach 1819. Northern California. External behind last gill slits. Pappas⁴.

Pandarus bicolor Leach 1816. Northern California. Body surface. Russo (1975).

*Perissopus oblongatus (Wilson 1908) Cressey 1967. Southern California. Wilson (1908a) as Achtheinus oblongus.

Echthrogaleus coleoptratus (Guerin 1837) Wilson 1907. Northern California. Body, fins. Russo (1975).

SPHYRIIDAE

Paeon elongatus Wilson 1932. Northern California. Gill chambers. Pappas⁴.

Triakis semifasciata (Continued)

HIRUDINOIDEA

PISCICOLIDAE

Branchellion lobata Moore 1952. Northern California. Claspers,
buccal cavity, fins. Russo (1975).

ISOPODA

CYMOTHOIDAE

Nerocila californica Schioedte and Meinert 1881, California.
Fins. Richardson (1905).

MONOGENEA

HEXABOTHRIIDAE

Erpocotyle squali (MacCallum 1931) Price 1942. Northern California.
Gills. Pappas⁴.
Genera and species. Eastern Pacific. Kunnenkeri and Martin (1963).

NEMATODA

PHYSALOPTERIDAE

Proleptus obtusus Dujardin 1845. Northern California. Internal
stomach lining. Pappas⁴.

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa jamesoni (Jameson 1931) Kudo 1933. Southern California.
Gallbladder. Jameson (1931) as C. habena.

SPHYRNIDAE - Hammerhead Sharks

Sphyrna lewini Scalloped Hammerhead

COPEPODA

EURYPHORIDAE

Alebion crassus Wilson 1932. Hawaii. External surface.
Lewis (1966) as E. echinatus.

KROYERIIDAE

Kroyeria praelongacicula Lewis 1966. Hawaii. Gill cavity.
Lewis (1966).

Sphyrna lewini (Continued)

PANDARIDAE

Pandarus cranchii Leach 1819. Hawaii. External surface. Lewis (1966).

SPHYRIIDAE

Paeon vaissierei ? Delamare-Deboutteville and Nunes-Ruivo 1953. Hawaii. Gill cavity. Lewis (1966).

MONOGENEA

HEXABOTHRIIDAE

Erpocotyle sphyrnae (MacCallum 1931) Price 1942. Hawaii. Gills. Yamaguti (1968b).

NEMATODA

ANISAKIDAE

Terranova galeocerdonis (Thwaite 1927) Johnston and Mawson 1945. West Africa. Campana-Rouget (1955).

Sphyrna tiburo - Bonnethead

SYNONYMS - Reniceps tiburo, Sphyrna tibulo, Cestracion tiburo

CESTODA

TRYPANORHYNCHA

Dibothriorhynchus maccallumi MacCallum 1921. Australia. Yamaguti (1959b) [Species Incertae Sedis - Yamaguti (1959b)].
Rhynchobothrium plicatum Linton 1905. Yamaguti (1959b) [Species Incertae Sedis - Yamaguti (1959b)].

COPEPODA

BOMOLOCHIDAE

Taeniacanthus albidus Wilson 1911. North Carolina. Wilson (1911).

CALIGIDAE

Caligus praetextus Bere 1936. Gulf of Mexico. Bere (1936).

EUDACTYLINIDAE

Nemesis robusta (Van Beneden 1851) Brian 1906. Florida. Bere (1936) as E. pallida.

Sphyrna tiburo (Continued)

Eudactylina longispina Bere 1936. West Florida. Gills. Bere (1936).
Eudactylinodes nigra (Wilson 1908) Wilson 1932. North Carolina. Gill filaments. Wilson (1908b) as Eudactylina n.

PANDARIDAE

Pandarus sinuatus Say 1817. Texas. Body surface. Causey (1955).
Perissopus dentatus Steenstrup and Lütken 1861. West Florida. Body surface. Cressey (1970).
Perissopus communis Rathbun 1887. Gulf of Mexico. On body surface. Bere (1936).
Nesippus orientalis Heller 1865. Texas. Pearse (1952); North Carolina. Throat. Wilson (1932) both as N. alatus.

SPHYRIIDAE

Paeon ferox Wilson 1919. Texas. Gills. Pearse (1952).

MONOGENEA

HEXABOTHRIIDAE

Erpocotyle tiburonis (Brooks 1934) Yamaguti 1963. Florida. Price (1942) as Neoerpocotyle t.

NEMATODA

CYSTIDICOLIDAE

Parascarophis galeata (Linton 1905) Campana-Rouget 1955. North Carolina. Airbladder, esophagus. Yamaguti (1961).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa mesospora Davis 1917. North Carolina. Gallbladder. Kudo (1920).

SPHAEROSPORIDAE

Chloromyxum sphyrnae Cunha and Fonseca 1918. Brazil. Gallbladder. Kudo and Meglitsch⁶.
Chloromyxum leydigi Mingazzini 1890. North Carolina. Gallbladder. Kudo (1920).

Sphyrna zygaena - Smooth Hammerhead

SYNONYM - Cestracion zygaena

Sphyrna zygaena (Continued)

CESTODA

ONCOBOTHRIIDAE

- Phoreiobothrium exceptum Linton 1924. Massachusetts. Linton (1924); France. Euzet (1956).
Phoreiobothrium pectinatum Linton 1924. Massachusetts. Spiral valve. Linton (1924); France. Euzet (1956).
Phoreiobothrium lasium Linton 1889. Massachusetts. Linton (1924).
Thysanocephalum crispum (Linton 1889) Linton 1891. Massachusetts. Spiral valve. Linton (1924); France. Euzet (1956).

OTOBOTHRIIDAE

- Otobothrium crenacolle Linton 1891. Massachusetts. Spiral valve. Linton (1891).
Otobothrium penetrans Linton 1907. Massachusetts. Spiral valve. Linton (1924).
Otobothrium propecysticum Dollfus 1969. Mediterranean. Intestine. Dollfus (1969a).
Otobothrium pephrikos Dollfus 1969. Mediterranean. Intestine. Dollfus (1969a).

PHYLLOBOTHRIIDAE

- Anthobothrium laciniatum Linton 1891. France. Euzet (1956); Massachusetts. Linton (1924).
Marsupiobothrium forte (Linton 1924) Yamaguti 1959. Massachusetts. Spiral valve. Linton (1924) as Orygmatobothrium f.

PROSOBOTHRIIDAE

- Platybothrium parvum Linton 1901. Massachusetts. Spiral valve. Linton (1924); France. Euzet (1956).
Prosobothrium adhaerens (Linton 1924) Riser 1955. Massachusetts. Linton (1924) as Ichthyotaenia a.

TENTACULARIIDAE

- Nybelinia bisulcata (Linton 1889) Dollfus 1929. Yamaguti (1959b).
Nybelinia palliata (Linton 1924) Dollfus 1929. Florida. Chandler (1954); Massachusetts. Spiral valve. Linton (1924) as Tetrarhynchus palliatus.
Nybelinia sphyrnae Yamaguti 1952. Japan. Yamaguti (1952).
Nybelinia syngenes Pintner 1928. Japan, Florida. Yamaguti (1959b).
Tentacularia coryphaenae Bosc 1802. Bonin Islands, Pacific. Stomach, intestine. Dollfus (1942).

COPEPODA

BOMOLOCHIDAE

- Taeniacanthus flagellans Wilson 1913. Jamaica. Gill cavity. Wilson (1913).

Sphyrna zygaena (Continued)

CALIGIDAE

Lepeophtheirus longispinosus Wilson 1908. North America. Inside gill cavity. Wilson (1908b).

ERGASILIDAE

Ergasilus myctarothus Wilson 1913. Jamaica. Nasal tubes. Wilson (1913).

EUDACTYLINIDAE

Nemesis versicolor Wilson 1913. Jamaica. Wilson (1913).

Nemesis robusta (van Beneden 1851) Brian 1906. Angola.

Nunes - Ruivo (1956); Gulf of Mexico. Gills. Bere (1936) as N. pallida.

EURYPHORIDAE

Alebion echinatus Capart 1953. Japan. Shiino (1955a).

Alebion crassus Wilson 1932. Japan. Cressey (1972); Massachusetts. Wilson (1932).

KROYERIIDAE

Kroyeria gracilis Wilson 1932. Gulf of Mexico. Gills. Bere (1936).

Kroyeria lineata Van Beneden 1853. Massachusetts. Gills. Wilson (1924); Mediterranean. Delamare-Deboutteville and Nunes-Ruivo (1958).

Kroyeria papillipes Wilson 1932. Massachusetts. Gills. Wilson (1932).

Kroyeria echinata Rangnekar 1956. India. Body surface. Rangnekar (1956).

Kroyeria sphyrnae Rangnekar 1957. India. Pillai (1967).

*Kroyeria trecai Delamare - Debutteville and Nunes - Ruivo 1958. Senegal. Yamaguti (1963a).

PANDARIDAE

Perissopus dentatus Steenstrup and Lütken 1861. Hewitt and Hine (1972).

*Perissopus oblongatus (Wilson 1908) Cressey 1967. Gulf of California. Body surface. Wilson (1944) as Achtheinus d.

Pandarus satyrus Dana 1852. Japan. Body surface. Shiino (1954e).

Pandarus smithii Rathbun 1886. Brazil. Cressey (1967c); Japan. Yamaguti (1963a).

Pandarus cranchii Leach 1819. Formosa. Body surface, fins. Cressey (1967c).

Nesippus crypturus Heller 1865. Java; Puerto Rico. Lewis (1966).

Nesippus orientalis Heller 1865. South Africa. Mouths, gill arches. Cressey (1967c); Angola. Nunes-Ruivo (1956).

Sphyrna zygaena (Continued)

Nesippus orientalis Heller 1865. North Carolina, Massachusetts.
Throat. Wilson (1932) as N. alatus.

Echthrogaleus denticulatus Smith 1874. Japan. Body surface.
Shiino (1959e).

Phyllosthyreus cornutus Bassett - Smith 1899. Massachusetts. Gills.
Wilson (1924) as Parapandarus nodulosus.

Pannosus japonicus. Japan. Body surface. Shiino (1960b) as
Gangliopus j.

MONOGENEA

CAPSALIDAE

Tristoma coccineum Cuvier 1817. Massachusetts. Price (1939).

HEXABOTHRIIDAE

Erpocotyle sphyrnae (MacCallum 1931) Price 1942. Massachusetts.
Gills. Price (1942).

Erpocotyle microstoma (Brooks 1934) Yamaguti 1963. North
Carolina. Price (1942) as Neoerpocotyle m.; North Carolina.
Gills. Brooks (1934) as Squalonchocotyle microstoma.

Erpocotyle grisea (Cerfontaine 1899). Atlantic. Price (1942)
as Neoerpocotyle.

Neoerpocotyle platensis Mañe-Garzón 1968. Uruguay. Gills.
Mañe-Garzon and Hoffman-Spector (1968).

LOIMOIDAE

Loimosina wilsoni Manter 1944. Jamaica. Gills. Yamaguti (1963b).

MONOCOTYLIDAE

Cathariotrema selachii (MacCallum 1916) Johnston and Tiegs 1922.
Massachusetts. Nasal glands. MacCallum (1916) as Monocotyle
selachii.

NEMATODA

ACANTHOCHEILIDAE

Acanthocheilus nudiflex Linton 1900. Massachusetts. Yamaguti
(1961) ["Should not be referred to this genus"- Yamaguti (1961)].

ANISAKIDAE

Terranova galeocerdonis (Thwaite 1927) Johnston and Mawson 1945.
West Africa. Campana-Rouget (1955).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Sphyrna zygaena (Continued)

Ceratomyxa recurvata Davis 1917. North Carolina. Gallbladder.
Kudo (1920).

Ceratomyxa mesospora Davis 1917. North Carolina. Gallbladder.
Kudo (1920).

Leptotheca fusiformis Davis 1917. North Carolina. Gallbladder.
Kudo (1920).

SPHAEROSPORIDAE

Chloromyxum sp. India. Gallbladders. Tripathi (1953).

Chloromyxum leydigi Mingazzini 1890. North Carolina. Gallbladder.
Kudo (1920).

SQUALIDAE -- Dogfish Sharks

Euprotomicrus bispinatus - Pygmy Shark

CESTODA

SPHYRIOCEPHALIDAE

Sphyriocephalus tergestinus Pintner 1913. Pacific and Indian Oceans.
Stomach. Hubbs et al. (1967).

Sphyriocephalus sp. North central Pacific; Indian Ocean, South
Pacific. Stomach. Dollfus (1967).

Somniosus pacificus - Pacific Sleeper Shark

SYNONYMS - Somniosus microcephalus , Somniosus brevipinna

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium magnum Hart 1936. Washington. Hart (1936b)
[= Monogyra m. - Williams (1968)].

Monorygma perfectum (Van Beneden 1853) Diesing 1863. Alaska.
Stomach. Linton (1924).

MONOGENEA

HEXABOTHRIIDAE

Erpocotyle somniosi (Causey 1926) Price 1942. Alaska. Gills.
Guberlet (1936a) as Squalonchocotyle s.

Squalus acanthias Spiny Dogfish

SYNONYMS - Acanthias vulgaris, Squalus lebruni,
Squalus kirki, Squalus suckleyi

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Golvan (1969).

CESTODA

EUTETRARHYNCHIDAE

Eutetrarhynchus ruficollis (Eysenhardt 1829) Pintner 1913.
France. Joyeux and Baer (1936).

GILQUINIDAE

Gilquinia squali (Fabricius 1794) Dollfus 1930. Southern
California. Heinz and Dailey (1974); British Columbia.
Margolis²; Newfoundland. Threlfall (1969); Sea of Japan.
Zhukov (1960a).

HEPATOXYLIDAE

Hepatoxylon trichiuri (Holten 1802) Dollfus 1942. Postlarva.
New Zealand. Body cavity. Robinson (1959a); Mediterranean.
Dollfus (1942).

LACISTORHYNCHIDAE

Grillotia erinacea (Van Beneden 1858) Guiart 1927. Massachusetts.
Spiral valve. Linton (1924) as Rhynchobothrium imparispine.
Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. France.
Joyeux and Baer (1936); Massachusetts. Spiral valve. Linton
(1924) as Rhynchobothrium bulbifer.

ONCOBOTHRIIDAE

Acanthobothrium coronatum (Rudolphi 1819) Van Beneden 1849. France.
Joyeux and Baer (1936).

Calliobothrium verticillatum (Rudolphi 1819) Van Beneden 1850.
Massachusetts. Spiral valve. Linton (1924); France. Joyeux
and Baer (1936).

OTOBOTHRIDAE

Otobothrium crenacolle Linton 1890. Larva. Massachusetts.
Stomach. Linton (1924).

Squalus acanthias (Continued)

PHOREIOBOTHRIIDAE

Trilocularia acanthiaevulgaris (Olsson 1867) Olsson 1869. France. Euzet (1956); immature. Iceland. Stomach, spiral valve. Manger (1972); New Zealand. Alexander (1963); Newfoundland. Threlfall (1969) as I. gracilis.

PHYLLOBOTHRIIDAE

Phyllobothrium gracile Wedl 1855. Sea of Japan. Zhukov (1960a).
Phyllobothrium thridax Van Beneden 1849. Sea of Japan. Zhukov (1960a).
Phyllobothrium squali Yamaguti 1952. Japan. Yamaguti (1952); France. Euzet (1956) as Crossobothrium s. [=Crossobothrium s. - Williams (1968)].
Phyllobothrium lactuca Van Beneden 1850. France. Joyeux and Baer (1936).
Phyllobothrium sp. Newfoundland. Threlfall (1969).
Scyphophyllideum giganteum (Van Beneden 1858) Woodland 1927. Newfoundland. Threlfall (1969).
Rhodobothrium pulvinatum Linton 1889. Massachusetts. Yamaguti (1959b).
Monorygma sp. Massachusetts. Linton (1924).
Anthobothrium pulvinatum Linton 1891. Massachusetts. Linton (1924).

PROSOBOTHRIIDAE

Prosobothrium armigerum Cohn 1902. Atlantic. Cohn (1902); France. Joyeux and Baer (1936).

PTYCHOBOTHRIIDAE

Clestobothrium crassiceps (Rudolphi 1808) Lühe 1899. Massachusetts. "Introduced with Food". Linton (1924).

TENTACULARIIDAE

Nybelinia bisulcata (Linton 1889) Dollfus 1929. Massachusetts. Stomach. Dollfus (1942).

TRYPANORHYNCHA

Tetrarhynchus tetrabothrium Van Beneden 1849. Central California. Pintner (1930).

COPEPODA

CALIGIDAE

*Caligus curtus Müller 1785. Scandinavia. Parker et al. (1968).
Caligus elongatus Nordmann 1832. New England. External surface. Wilson (1905b); Greenland, North Sea. Wilson (1932) both as C. rapax.

Squalus acanthias (Continued)

Caligus coryphaenae Steenstrup and Lütken 1861. Indian Ocean.
Fins. Wilson (1923); South Africa. Barnard (1955).
Lepeophtheirus cuneifer Kabata 1974. Alaska. Kabata (1974).
Questionable host.

CECROPIDAE

Philorthagoriscus serratus (Krøyer 1863) Horst 1897. Newfoundland.
Yamaguti (1963a).

EUDACTYLINIDAE

Eudactylina acuta Van Beneden 1853. Britain. Gills. Leigh-Sharpe
(1933).
Eudactylina acanthii Scott 1901. Angola. Nunes-Ruivo (1956);
British Columbia. Bere (1930); New Brunswick. Gills. Bere
(1930).
Eudactylina valei Nunes-Ruivo 1956. Angola. Nunes-Ruivo (1956).

EURYPHORIDAE

Alebion gracilis Wilson 1905. Layman Island, Pacific. Outside
surface. Wilson (1932).
Alebion glaber Wilson 1907. Massachusetts. Exterior . Wilson
(1907a).

LERNAEOPODIDAE

Lernaeopoda galei Krøyer 1837. England. Exterior. Bassett-
Smith (1896).
Pseudocharopinus bicaudatus (Krøyer 1837) Kabata 1964.
Massachusetts. Wilson (1932); Britain. Delamare-Deboutteville
and Nunes (1952) both as Charopinus bicaudatus.

PANDARIDAE

Demoleus latus Shiino 1954. New Zealand. Hewitt (1967).
Demoleus heptapus (Otto 1821) Heller 1865. Britain. Body
surface . Leigh-Sharpe (1933) as D. paradoxus.
Pandarus spinaciacantias Hesse 1883. Wilson (1907b) as
Nogagus s-a (Species Inquire).
Pandarus bicolor Leach 1816. North Atlantic, Netherlands.
Body surface . Cressey (1967c); Central California. Wilson
(1935b); New Zealand. Hewitt (1967).
*Perissopus oblongatus (Wilson 1908) Cressey 1967. Angola.
Nunes-Ruivo (1956) as Achtheinus dentatus.
Nogagus ambiguus Scott 1907. Britain. Body surface .
Leigh-Sharpe (1933) [A male of some species of Perissopus -
Yamaguti (1963a)].
Echthrogaleus coleoptratus (Guerin 1837) Wilson 1907. Newfoundland.
Yamaguti (1963a).

Squalus acanthias (Continued)

TREBIIDAE

Trebius caudatus Krøyer 1838. Lewis (1966).

DIGENEA

AZYGIIIDAE

Otodistomum veliporum (Creplin 1837) Stafford 1904. British Columbia. Stomach. Margolis³; Newfoundland. Threlfall (1969).

BUCEPHALIDAE

Prosorhynchus squamatus Odhner 1905. Gulf of St. Lawrence. Myers (1959).

GORGODERIDAE

Probolitrema richiardii (Lopez 1888) Looss 1902. New Zealand. Body cavity. Manter (1954a) as P. phillipi.

HEMIURIDAE

Genarchopsis muelleri (Levinsen 1881) Yamaguti 1954. Sea of Japan. Stomach. Zhukov (1960a) as Genarches m.
Derogenes varicus (Müller 1784) Looss 1901. Newfoundland. Threlfall (1969).
Hemiurus levinseni Odhner 1905. Gulf of St. Lawrence. Myers (1959).

ZOOGONIDAE

Steganoderma formosum Stafford 1904. Newfoundland. Threlfall (1969).

HIRUDINOIDEA

PISCICOLIDAE

Branchellion lobata Moore 1952. Central California. Body surface. Moore (1952).
Calliobdella vivida (Verrill 1872) Sawyer, Lawyer and Overstreet 1975. Newfoundland. Threlfall (1969) as C. nodulifera.

MONOGENEA

DACTYLOGYRIDAE

Amphibdelloides maccallumi (Johnston and Tiegs 1922) Price 1937. Massachusetts. Price (1937b).

Squalus acanthias (Continued)

HEXABOTHRIIDAE

- Hexabothrium appendiculata (Kuhn 1829) Nordmann 1840. Britain. Gills. Nicoll (1915); Canadian Atlantic. Stafford (1904) both as Onchocotyle a.
- Erpocotyle abbreviata Olsson 1876. Washington. Guberlet (1932); Newfoundland. Threlfall (1969); Norway. Brinkman (1952) as Squaloncocotyle a.
- Erpocotyle squali (MacCallum 1931) Price 1942. Massachusetts. Gills. Price (1942); New Zealand. Gills. Dillon and Hargis (1968).
- Erpocotyle striata (Miller 1927) Price 1942. Washington. Price (1942).

MICROBOTHRIIDAE

- Microbothrium apiculatum Olsson 1869. Canada, USA, Arctic. Skin. Dawes (1947).

MONOCOTYLIDAE

- Heterocotyle minima (MacCallum 1916) Price 1938. Massachusetts. Price (1938a).
- Calicotyle ramsayi Robinson 1961. New Zealand. Cloaca. Robinson (1961).

NEMATODA

ACANTHOCHEILIDAE

- Pseudanisakis tricupola Gibson 1973. Newfoundland. Threlfall (1969) as Eustoma rotundatum.
- Acanthocheilus quadridentatus Molin 1858. Northern California. Stomach wall. Pappas (1970).
- Acanthocheilus bicuspis (Wedl 1855) York and Maplestone 1926. Mediterranean. Digestive tracts. Nikolaeva and Naidenova (1964).

ANISAKIDAE

- Anisakis sp. Larva. British Columbia. Stomach. Margolis³; New Zealand. Hewitt and Hine (1972).
- *Thynnascaris clavata (Rudolphi 1809) Hartwich 1957. Newfoundland. Threlfall (1969) as Contraeaecum c.
- Phocanema sp. Larva. Newfoundland. Threlfall (1969) as Porrocaecum sp.

PHILOMETRIDAE

- Phlyctainophora squali Mudry and Dailey 1961. Southern California. Subcutaneous tissues. Mudry and Dailey (1969).

PHYSALOPTERIDAE

Squalus acanthias (Continued)

Proleptus obtusus Dujardin 1845. Atlantic Coast. Yamaguti (1961).
Proleptus acutus Dujardin 1845. Mediterranean. Stomach.
Nikolaeva and Naidenova (1964) as P. robustus.

PROTOZOA (MYXOSPORIDA)

SPHAEROSPORIDAE

Chloromyxum leydigi Mingazzini 1890. England. Dunkerly (1920).
Chloromyxum ovatum Jameson 1929. Central California. Gallbladder.
Jameson (1929).

PROTOZOA (SPOROZOA)

EIMERIIDAE

Eimeria lucida (Labbe 1893) Reichenow 1921. Spiral valve.
Pellerdy (1965).
Eimeria squali Fitzgerald 1975. Washington. Fitzgerald (1975).

HAEMOGREGARINIDAE

Haemogregarina delagei Laveran and Mesnil 1902. New Brunswick.
Blood. Laird and Bullock (1969).

SQUATINIDAE -- Angel Sharks

Squatina californica - Pacific Angel Shark

CESTODA

LACISTORHYNCHIDAE

Grillotia smarigora (Wagener 1854) Dollfus 1947. Southern
California. Heinz and Dailey (1974).

DIGenea

AZYGIIDAE

Otodistomum veliporum (Creplin 1837) Stafford 1904. Southern
California. Stomach. Caballero and Caballero (1969b).

HIRUDINOIDEA

PISCICOLIDAE

Branchellion lobata Moore 1952. Central California. Body surface.
Moore (1952).

Squatina californica (Continued)

PROTOZOA (MYXOSPORIDA)

SPHAEROSPORIDAE

Chloromyxum levigatum Jameson 1931. Southern California.
Gallbladder. Jameson (1931).

RHINOBATIDAE -- Guitarfishes

Platyrhinoidis triseriata - Thornback

CESTODA

EUTETRARHYNCHIDAE

Prochristianella minima Heinz and Dailey 1974. Southern California.
Spiral valve. Heinz and Dailey (1974).

ONCOBOTHRIIDAE

Acanthobothrium goldsteini Appy and Dailey 1973. Southern California.
Spiral valve. Appy and Dailey (1973).

DIGENEA

GORGODERIDAE

Probolitrema richiardii (Lopez 1888) Looss 1902. California.
Stunkard (1935) as P. californiense.

NEMATODA

PHYSALOPTERIDAE

Proleptus acutus Dujardin 1845. Southern California. Stomach.
Specian et al. (1975).

Rhinobates productus - Shovelnose Guitarfish

CESTODA

EUTETRARHYNCHIDAE

Eutetrarhynchus schmidti Heinz and Dailey 1974. Southern California.
Spiral valve. Heinz and Dailey (1974).

Prochristianella fragilis Heinz and Dailey 1974. Southern
California. Spiral valve. Heinz and Dailey (1974).

Parachristianella monomegacantha Kruss 1959. Southern California.
Heinz and Dailey (1974).

Rhinobatos productus (Continued)

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Southern California. Heinz and Dailey (1974).

ONCOBOTHRIIDAE

Acanthobothrium dujardinii Van Beneden 1849. Southern California. Young (1954).

Acanthobothrium rhinobati Alexander 1953. Southern California. Spiral valve. Alexander (1953).

Acanthobothrium robustum Alexander 1953. Southern California. Spiral valve. Alexander (1953).

Acanthobothrium olsenii Dailey and Mudry 1968. Southern California. Spiral valve. Dailey and Mudry (1968).

TETRAPHYLLIDEA

Genera and species. Red pigmented plerocercoid. Southern California. Stomachs. Kunnenkeri and Martin (1962).

COPEPODA

PANDARIDAE

*Perissopus oblongatus (Wilson 1908) Cressey 1967. Southern California. Flesh. Ho (1975) as Achtheinus oblongus.

DIGENEA

GORGODERIDAE

Probolitrema richiardii (Lopez 1888) Looss 1902. California. Body cavity. Stunkard (1935) as P. californiense.

MONOGENEA

HEXABOTHRIIDAE

Rhinobatonchocotyle cyclovaginatus Doran 1953. Southern California. Gills. Doran (1953).

MONOCOTYLIDAE

Spinuris lophosoma Doran 1953. Southern California. Gills. Doran (1953).

Anoplacotyloides papillata (Doran 1953) Young 1967. Southern California. Gills. Doran (1953) as Heterocotyle p.

Genera and species. Eastern Pacific. Olfactory cavities. Kunnenkeri and Martin (1963).

TORPEDINIDAE -- Electric Rays

Torpedo californica - Pacific Electric Ray

SYNONYM - Tetronarce californica

CESTODA

ONCOBOTHRIIDAE

Acanthobothrium hispidum Riser 1955. Central California. Spiral valve. Riser (1955).

MONOGENEA

DACTYLOGYRIDAE

Amphibdelloides maccallumi (Johnston and Tiegs 1922) Price 1937. Southern California. Gills. Alexander (1954).

PROTOZOA (MYXOSPORIDA)

SPHAEROSPORIDAE

Chloromyxum leydigi Mingazzini 1890. Central California. Gallbladder. Jameson (1929).
Chloromyxum ovatum Jameson 1929. Central California. Gallbladder. Jameson (1929).

RAJIDAE -- Skates

Raja binoculata - Big Skate

CESTODA

ONCOBOTHRIIDAE

Acanthobothrium dujardinii Van Beneden 1849. Washington. Hart 1936b).
Acanthobothrium brachyacanthum Riser 1955. Central California. Riser (1955).
Pinguicollum pinguicollum (Sleggs 1927) Riser 1955. Central California. Riser (1955).

PHYLLOBOTHRIIDAE

Echeneibothrium myzorhynchum Hart 1936. Central California. Riser (1955). ["Provisionally accepted as a valid species." Williams 1966].
Echeneibothrium octorchis Riser 1955. Central California. Riser (1955).

Raja binocularata (Continued)

Phyllobothrium radioductum Kay 1942. Washington. Kay (1942a);
Central California. Spiral valve. Riser (1955).

COPEPODA

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. British Columbia.
Fraser (1920); Kabata (1973).

Lepeophtheirus cuneifer Kabata 1974. Alaska. Kabata (1974).

Lepeophtheirus pravipes Wilson 1912. British Columbia. Kabata
(1973).

LERNAEOPODIDAE

Schistobrachia tertia Kabata 1970. British Columbia. Gills and
buccal cavity. Kabata (1970c).

Pseudocharopinus dentatus (Wilson 1912) Kabata 1964. Oregon.
Surface. Wilson (1935b); British Columbia. Fraser (1920) both
as Charopinus d.

Lernaeopoda galei Krøyer 1837. Northern California. Head. Russo
(1975) as L. scylicola.

PANDARIDAE

*Perissopus oblongatus (Wilson 1908) Cressey 1967. California.
Wilson (1911) as Achtheinus dentatus.

DIGENEA

AZYGIIDAE

Otodistomum veliporum (Creplin 1837) Stafford 1904. Washington.
Stomach. Lloyd (1938); Oregon. Pratt and McCauley (1961).

HIRUDINOIDEA

PISCICOLIDAE

Branchellion lobata Moore 1952. Central California. Body surface.
Moore (1952).

Orientobdella sp. Oregon. Exterior surface. Burreson⁷.

MONOGENEA

ACANTHOCOTYLIDAE

Allacanthocotyla pugetensis (Guberlet 1934) Yamaguti 1963.
Washington. Gills, nasal filaments. Robinson (1961) as
Acanthocotyle p; Northern California. Crane (1972).

Pseudacanthocotyla pacifica (Guberlet 1937) Yamaguti 1963.
Washington. On body, gills, nasal filaments. Robinson (1961)
as Acanthocotyle p.

Raja binoculata (Continued)

HEXABOTHRIIDAE

Rajonchocotyle sp. Washington. Guberlet (1936a).
Rajonchocotyle batis Cerfontaine 1899. Washington. Gills.
Robinson (1961).

MONOCOTYLIDAE

Merizotyle pugetensis Kay 1942. Washington. Nostrils. Kay (1942a).

PROTOZOA (SARCOMASTIGOPHORA)

TRYPANOSOMATIDAE

Trypanosoma gargantua Laird 1951. Oregon. Blood. Burreson⁷.

Raja inornata - California skate

SYNONYM - Raja montereyensis

CESTODA

ONCOBOTHRIIDAE

Acanthobothrium brachyacanthum Riser 1955. Central California.
Riser (1955).
Pinguicollum pinguicollum (Sleggs 1927) Riser 1955. Central
California. Riser (1955).

PHYLLOBOTHRIIDAE

Discobothrium (=Echeneibothrium) fallax Van Beneden 1870. Central
California. Spiral valve. Riser (1955). "Generic position and
systematic identity unclear" - Williams (1966)
Echeneibothrium octorchis Riser 1955. Central California. Riser
(1955).
Echeneibothrium macrascum Riser 1955. Central California. Riser
(1955).
Phyllobothrium radioductum Kay 1942. Central California. Spiral
valve. Riser (1955).

COPEPODA

LERNAEOPODIDAE

Dendrata cameroni longiclavata Kabata and Gussev 1966. British
Columbia. Skin. Kabata (1970c).

Raja rhina - Longnose Skate

CESTODA

LACISTORHYNCHIDAE

Grillotia musculara (Hart 1936) Dollfus 1942. Washington.
Spiral valve. Hart (1936a) as Tentacularia m.

ONCOBOTHRIIDAE

Pinguicollum pinguicollum (Sleggs 1927) Riser 1955. Central
California. Riser (1955).

PHYLLOBOTHRIIDAE

Discobothrium [=Echeneibothrium] fallax Van Beneden 1870. Central
California. Spiral valve. Riser (1955) ["Generic position and
systematic identity unclear" - Williams (1966)].

Echeneibothrium octorchis Riser 1955. Central California.
Riser (1955).

Echeneibothrium dolichoophorum Riser 1955. Central California.
Riser (1955).

Echeneibothrium dubium abyssorum Campbell 1977. Western North
Atlantic. Spiral valve. Campbell (1977).

Phyllobothrium radioductum Kay 1942. Central California. Spiral
valve. Riser (1955).

COPEPODA

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. British Columbia.
Kabata (1973).

LERNAEOPODIDAE

Schistobrachia tertia Kabata 1970. British Columbia.
Gills and buccal cavity. Kabata (1970c).

Lernaeopodina pacifica Kabata and Gussev 1966. British Columbia.
Gills. Kabata (1970c).

Pseudocharopinus dentatus (Wilson 1912) Kabata 1964. British
Columbia. Buccal cavity, gills, skin, claspers. Kabata (1970c).

DIGENEA

AZYGIIIDAE

Otodistomum veliporum (Creplin 1837) Stafford 1904.
British Columbia. Stomach. Margolis³.

MONOGENEA

Raja rhina (Continued)

ACANTHOCOTYLIDAE

Pseudacanthocotyla pacifica (Guberlet 1937) Yamaguti 1963.
Washington. Bonham and Guberlet (1938).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Various parts of body.
Margolis³.

Raja stellulata - Starry Skate

MONOGENEA

ACANTHOCOTYLIDAE

Pseudacanthocotyla pacifica (Guberlet 1937) Yamaguti 1963.
Washington. Bonham and Guberlet (1938) as Acanthocotyla p.

HEXABOTHRIIDAE

Rajonchocotyle batis Cerfontaine 1899. Washington. Price (1942).

DASYATIDAE -- Stingrays

Dasyatis violacea - Pelagic Stingray

CESTODA

ONCOBOTHRIIDAE

Acanthobothrium magnum (Euzet 1956) Goldstein 1967. France.
Euzet (1956) as A. crassicolle.
Acanthobothrium benedeni Lönnberg 1889. Mediterranean. Williams
(1969).

PHYLLOBOTHRIIDAE

Rhinebothrium palombi Baer 1948. France. Euzet (1956).

TETRAGONOCEPHALIDAE

Tetragonocephalum trygonis Shipley and Hornell 1905. France.
Euzet (1956).

MONOGENEA

Dasyatis violacea (Continued)

CAPSALIDAE

Entobdella diadema (Monticelli 1902) Johnston 1929. Mediterranean.
Yamaguti (1963b).

Gymnura marmorata - California Butterfly Ray

SYNONYM - Pteroplatea marmorata

CESTODA

ONCOBOTHRIIDAE

Acanthobothrium parviuncinatum Young 1954. Southern California.
Young (1954).

COPEPODA

TREBIIDAE

Trebius latifurcatus Wilson 1921. Southern California. Exterior.
Wilson (1921).

Urolophus halleri - Round Stingray

SYNONYM - Urobatis halleri

CESTODA

EUTETRARHYNCHIDAE

Christianella trygonbrucco (Wagener 1854) Joyeux and Baer 1936.
California. Young (1954).

Parachristianella trygonis Dollfus 1946. Southern California.
Young (1954).

Eutetrarhynchus schmidti Heinz and Dailey 1974. Southern California.
Spiral valve. Heinz and Dailey (1974).

Mecistobothrium myliobati Heinz and Dailey 1974. Southern
California. Spiral valve. Heinz and Dailey (1974).

Prochristianella minima Heinz and Dailey 1974. Southern California.
Spiral valve. Heinz and Dailey (1974).

ONCOBOTHRIIDAE

Acanthobothrium olseni Dailey and Mudry 1968. Southern California.
Appy and Dailey (1973).

Acanthobothrium dujardini Van Beneden 1849. Southern California.
Young (1954).

Acanthobothrium crassicolle Wedl 1855. Southern California.
Young (1954).

Urolophis halleri (Continued)

PHYLLOBOTHRIDAE

- Anthobothrium laciniatum Linton 1891. Southern California. Young (1954), California. Linton (1891).
Anthobothrium oligorchidum Young 1954. Southern California. Young (1954).
Rhinebothrium flexile Linton 1891. Southern California. Young (1954) as Echeneibothrium f.
Rhinebothrium tumidulum Rudolphi 1819. Southern California. Young (1954) as Echeneibothrium t.
Rhinebothrium ditesticulum Appy and Dailey 1977. Southern California. Spiral valve. Appy and Dailey (1977).
Rhinebothrium minimum Euzet 1956. Southern California. Young (1954) as Echeneibothrium m.
Rhinebothrium bilobatum (Young 1955) Appy and Dailey 1977. California. Yamaguti (1959b) as Echeneibothrium b.
Rhinebothrium urobatidium (Young 1955) Appy and Dailey 1977. Southern California. Yamaguti (1959b) as Echeneibothrium u.
Caulobothrium multorchidum (Young 1954) Appy and Dailey 1977. Southern California. Young (1954) ["Not in this genus" - Williams (1966)] as Echeneibothrium m.

TETRAPHYLLIDEA

Genera and species. Red pigmented plerocercoid. Southern California. Spiral valve. Kunnenkeri and Martin (1962).

COPEPODA

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. California. Wilson (1924).

TREBIIDAE

Trebius tenuifurcatus Rathbun 1887. Southern California. Exterior. Wilson (1908a).
Trebius latifurcatus Wilson 1921. Southern California. Exterior. Wilson (1921).

MONOGENEA

CAPSALIDAE

Entobdella guberleti Caballero and Bravo-Hollis 1962. West Coast of Mexico. Gills. Caballero and Bravo-Hollis (1962).

PROTOZOA (MYXOSPORIDA)

SPHAEROSPORIDAE

Chloromyxum ovatum Jameson 1929. California. Gallbladder. Jameson (1931).

MYLIOBATIDAE -- Eagle Rays

Myliobatis sp.

ISOPODA

CYMOTHOIDAE

Nerocila californica Schioedte and Meinert 1881. California.
Fins. Richardson (1905). Probably from M. californica.

Myliobatis californica - Bat ray

SYNONYMS - Aetobatus californicus, Holorhinus californicus

CESTODA

ECHINOBOUHRIDAE

Caulobothrium tetrascaphium Riser 1955. Central California. Riser (1955).
Caulobothrium opisthorchis Riser 1955. Central California.
Riser (1955).

EUTETRARHYNCHIDAE

Mecistobothrium myliobati Heinz and Dailey 1974. Southern
California. Spiral valve. Heinz and Dailey (1974).

LECANICEPHALIDAE

Discobothrium myliobatidis Dailey and Mudry 1968. Southern
California. Spiral valve. Dailey and Mudry (1968).

ONCOBOUHRIDAE

Acanthobothrium holorhini Alexander 1953. Southern California.
Spiral valve. Alexander (1953).
Acanthobothrium microcephalum Alexander 1953. Southern California.
Spiral valve. Alexander (1953).
Acanthobothrium unilateralis Alexander 1953. Southern California.
Spiral valve. Alexander (1953).
Acanthobothrium maculatum Riser 1955. Central California. Riser
(1955).

PHYLLOBOUHRIDAE

Echeneibothrium myzorhynchum? Hart 1936. Northern California.
Sparks and Chew (1966).
Rhinebothrium flexile Linton 1890. Southern California. Young
(1954) as Echeneibothrium f.
Inermiphyllidium brachyascum Riser 1955. Central California.
Riser (1955).

Myliobatis californica (Continued)

COPEPODA

TREBIIDAE

Trebius caudatus Krøyer 1838. California. Body surface.
Guberlet (1936a).

Trebius latifurcatus Wilson 1921. Southern California. Body
surface. Wilson (1921).

DIGENEA

GORGODERIDAE

Probolitrema californiense Stunkard 1935. Central California.
Coelom. Stunkard (1935).

MONOGENEA

CAPSALIDAE

Pseudoentobdella pacifica (Guberlet 1936) Yamaguti 1963.
California. Price (1939) as Benedenia p.; Guberlet (1936b)
as Epibdella p.

UDONELLIDAE

Udonella caligorum Johnston 1835. On parasitic copepods Trebius
caudatus, T. latifurcatus. Central California. Price (1938a).

NEMATODA

GNATHOSTOMATIDAE

Echinocephalus pseudouncinatus Millemann 1951. Gulf of California.
Spiral valve. Millemann (1963).

MOBULIDAE -- Mantas

Mobula lucasana - Smoothtail Mobula

COPEPODA

CALIGIDAE

Pupulina brevicauda Wilson 1952. Southern California. Wilson
(1952).

Pupulina minor Wilson 1952. Southern California. Mouth, anterior
end of body. Wilson (1952).

CHIMAERIDAE -- Chimaeras

Hydrolagus colliei - Ratfish

ASPIDOCOTYLEA

ASPIDOGASTRIDAE

Taeniocotyle elegans (Olsson 1869) Stunkard 1962. Washington.
Hendrix and Overstreet (1977).

RUGOGASTRIDAE

Rugogaster hydrolagi Schell 1973. Washington. Rectal
gland. Schell (1973a).

CESTODARIA

GYROCOTYLIDAE

Gyrocotyle fimbriata Watson 1911. Washington. Intestine. Lynch
(1945); British Columbia. Wardle (1932) as G. urna; Southern
California. Olson⁸.

Gyrocotyle parvispinosa (Lynch 1945) Land and Dienske 1968.
Washington. Intestine. Lynch (1945) as G. urna parvispinosa.

COPEPODA

CALIGIDAE

Caligus sp. Southern California. Wilson (1908a) as C. gurnardi.
Caligus clemensi Parker and Margolis 1964. British Columbia.
Skin. Bere⁵.

CHONDRACANTHIDAE

Acanthochondria epachthes (Wilson 1908) Oakley 1930. Central and
Southern California. Wilson (1935b); British Columbia. Claspers.
Kabata (1968) as A. holocephalarum.

Acanthochondria rectangularis (Fraser 1920) Markevich 1957.
British Columbia. Bere⁵ as Chondracanthus r. from "ratfish".

DIGENEA

AZYGIIDAE

Otodistomum hydrolagi Schell 1972. Washington. Coelom.
Schell (1972).

CEPHALOPORIDAE

Plectognathotrema hydrolagi Olson, Hanson and Pratt 1970. Oregon.
Olson et al. (1970).

Hydrolagus colliei (Continued)

HIRUDINOIDEA

PISCICOLIDAE

Branchellion lobata Moore 1952. Southern California. Olson⁸.

ISOPODA

AEGIIDAE

Rocinela belliceps (Stimpson 1864) Richardson 1899. Richardson
(1905).

MONOGENEA

CHIMAERICOLIDAE

Chimaericola leptogaster (Leuckart 1830) Brinkman 1942.
Washington. Bonham (1950) as Octobothrium 1.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Smedley (1934) as
Contracecum sp.

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca fisheri (Jameson 1929) Kudo 1933. Central California.
Gallbladder. Jameson (1929) as Ceratomyxa f.

ACIPENSERIDAE -- Sturgeons

Acipenser sp.

CESTODA

AMPHILINIDAE

Amphilina bipunctata Riser 1948. Oregon. Coelom. Riser (1948).

Acipenser medirostris - Green Sturgeon

CESTODA

AMPHILINIDAE

Acipenser medirostris (Continued)

Amphilina japonica Goto and Ishii 1936. Amur Basin, USSR.
Body cavity. Dubinina (1971).

MONOGENEA

CAPSALIDAE

Nitzschia quadritestes Pratt and Herrmann 1962. Columbia River.
Tip of gill filaments, anterior parts of mouth. Pratt and
Herrmann (1962).

DICLYBOTHRIIDAE

Paradiclybothrium pacificum Bykhovsky and Gussev 1950. Tartar
Strait, USSR. Gills. Bykhovsky and Gussev (1950).

Acipenser transmontanus - White Sturgeon

CESTODA

AMPHILINIDAE

Amphilina bipunctata Riser 1948. British Columbia.
Body cavity. Margolis³.

COPEPODA

CALIGIDAE

Lepeophtheirus salmonis (Krøyer 1838). British Columbia. Kabata
(1973).

DIGENEA

DEROPROSTIDAE

Cestrahelmins rivularis Becker 1971. Columbia River. Intestine.
Becker (1971).

HEMIURIDAE

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Washington.
Stomach. Becker (1970b).

MONOGENEA

CAPSALIDAE

Nitzschia quadritestes Pratt and Herrmann 1962. Columbia River.
Tips of gill filaments, anterior parts of mouth. Pratt and
Herrmann (1962).

Acipenser transmontanus (Continued)

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Many places in body.
Margolis³.

CYSTOOPSIDAE

Cystoopsis acipenseri Wagner 1867. Oregon. Cutaneous vesicles.
Yamaguti (1961).

ALBULIDAE -- Bonefishes

Albula vulpes - Bonefish

ACANTHOCEPHALA

RHADINORHYNCHIDAE

Illiosentis africanus Golvan 1956. West Africa. Golvan (1956)
as I. furcatus africanus.

ASPIDOCOTYLEA

ASPIDOGASTERIDAE

Lobatostoma albulae Yamaguti 1968. Hawaii. Intestine. Yamaguti
(1968b).

DIGenea

ALBULATREMATIDAE

Albulatrema ovale Yamaguti 1965. Hawaii. Swim bladder.
Yamaguti (1965a).

BOTULISACCIDAE

Botulisaccus pisceus Caballero, Bravo-Hollis, and Grocott 1955.
Panama (Pacific Coast). Intestine. Caballero et al. (1955);
Florida. Overstreet (1969).

CRYPTOGONIMIDAE

Claribulla longula Overstreet 1969. Florida. Intestine.
Overstreet (1969).

Albula vulpes (Continued)

HEMIURIDAE

Gonocercella trachinoti (MacCallum 1913) Yamaguti 1954.
Florida. Stomach, upper intestine. Overstreet (1969).
Lecithochirium albulae Yamaguti 1970. Hawaii. Stomach. Yamaguti
(1970).

MONORCHIIDAE

Lasiotocus albulae Overstreet 1969. Florida. Intestine.
Overstreet (1969).
Lasiotocus oculatus (Manter and Pritchard 1961) Yamaguti 1970.
Hawaii. Intestine. Manter and Pritchard (1961) as Genolopa
oculata.

ZOOGONIDAE

Diphtherostomum albulae Overstreet 1969. Florida. Overstreet
(1969).

MONOGENEA

PTERINOTREMATIDAE

Pseudopterinotrema albulae Yamaguti 1966. Hawaii. Gills.
Yamaguti (1966).
Pterinotrema macrostomon Caballero, Bravo-Hollis, and Grocott
1954. Panama. Gills. Caballero et al. (1954).
Pterinotrema mirabilis Bykhovsky and Nagibina 1959. South China
Sea. Gills. Bykhovsky and Nagabina (1959).

NEMATODA

CYSTIDICOLIDAE

Spinitectus beaveri Overstreet 1970. Florida. Mucosa of stomach.
Overstreet (1970).

MURAENIDAE -- Morays

Gymnothorax mordax - California Moray

SYNONYM - Lycodontis mordax

COPEPODA

HATSCHEKIIDAE

Hatschekia pinguis Wilson 1908. Southern California. Gills.
Wilson (1908a).

Gymnothorax mordax (Continued)

DIGenea

BUCEPHALIDAE

Dollfustrema californiae Montgomery 1957. Southern California. Intestine. Montgomery (1957); Baja California. Stomach. Reid et al. (1965).

HEMIURIDAE

Magniscyphus taboganus (Sogandres-Bernal 1959) Reid, Coil and Kuntz (1965). Southern California. Intestine. Reid et al. (1965).

Lecithophyllum intermedium (Manter 1934) Margolis 1958.

Baja California. Intestine. Arai (1962).

Sterrhurus taboganus Sogandres-Bernal 1959. Baja California. Stomach. Arai (1962).

HIRUDINOIDEA

PISCICOLIDAE

Aestabdella abditovesiculata (Moore 1952) Bureson 1976. California. Bureson (1976a).

NEMICHTHYIDAE -- Snipe Eels

Serrivomer sector - Sawtooth Snipe Eel

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California; Baja California. Mesentery, intestine. Collard⁹.

Phocanema sp. Larva. Baja California. Mesentery. Collard⁹ as Terranova sp.

CYSTIDICOLIDAE

Ascarophis sp. Larva. Southern California. Mesentery. Collard⁹.

PROTOZOA (MYXOSPORIDA)

Genera and species. Southern California. Gallbladder. Noble (1966a).

CLUPEIDAE -- Herrings

Alosa sapidissima - American Shad

BRANCHIURA

ARGULIDAE

Argulus canadensis Wilson 1916. Connecticut. Opercula.
Davis (1956).

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium caudatum (Zschokke and Heitz 1914). Northern
California. Intestine. Hensley and Nahhas (1975) as
Pelichnibothrium speciosum.

TETRAPHYLLIDEA

Genera and species. Red pigmented plerocercoids. Southern California.
Intestine, pyloric caeca. Kunnenkeri (1962).

COPEPODA

CALIGIDAE

Caligus elongatus Nordmann 1832. New England. External surface.
Wilson (1905b) as C. rapax.

DIGENEA

CLINOSTOMATIDAE

Clinostomum marginatum (Rudolphi 1819) Braun 1899. Metacercaria.
Maryland. Throughout body. Hollis and Coker (1948).

NEMATODA

ANISAKIDAE

Raphidascaris sp. Northern California. Coelom, mesentery.
Hensley and Nahhas (1975).
Contracaecum brachyurum (Ward and Magath 1917). Northern California.
Intestine, caeca. Hensley and Nahhas (1975).

Clupea harengus harengus - Atlantic Herring
and C. h. pallasii, Pacific Herring

Hubbs (pers. comm.) states that the Atlantic (C. h. harengus) and Pacific forms (C. h. pallasii) are treated variously as conspecific or distinct species by different authorities. We have lumped them under a single species with two subspecies. Fish taken from the Bering Sea or Pacific Ocean are C. h. pallasii and those from the Atlantic Ocean, North Sea, Baltic Sea or White Sea are C. h. harengus.

Clupea harengus (Continued)

ACANTHOCEPHALA

ECHINORHYNCHIDAE

- Echinorhynchus gadi Zoega in Müller 1776. Baltic Sea. Intestine. Dollfus (1956); Kamchatka, USSR. Strelkov (1960).
Metechinorhynchus salmonis (Müller 1784) Petrotchenko 1956. Finland. Intestine. Dollfus (1956) as Echinorhynchus s.
Pseudoechinorhynchus clavula (Dujardin 1845) Petrotchenko 1956. Finland. Intestine. Dollfus (1956) as Echinorhynchus c.
Acanthocephalus lucii? (Müller 1776) Lühe 1911. Golvan (1969).

POLYMORPHIDAE

- Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Larva. Kamchatka, USSR. Skryabina (1963); Baltic Sea. Peritoneum. Dollfus (1956).
Corynosoma semerme (Forsell 1904) Lühe 1911. Larva. Baltic Sea. Body cavity. Dollfus (1956).

POMPHORHYNCHIDAE

- Pomphorhynchus kostylewi Petrochenko 1956. Baltic Sea. Intestine. Rokicki (1973).
Pomphorhynchus laevis (Zoega in Müller 1776) Van Cleave 1924. Baltic Sea. Intestine. Dollfus (1956).

RHADINORHYNCHIDAE

- Serrasentis sagittifer (Linton 1889) Linton 1932. Postlarva. U.S. Atlantic. Abdomen. Dollfus (1956) as Serrasentis socialis.

BRANCHIURA

ARGULIDAE

- Argulus alosae Gould 1912. Western North Atlantic. Body surface. Sindermann (1957).

CESTODA

AMPHICOTYLIDAE

- Eubothrium crassum (Bloch 1779) Nybelin 1922. Plerocercoid. Finland. Stomach, intestine. Dollfus (1956).

BOTHRIOCEPHALIDAE

- Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. Massachusetts. Intestine. Dollfus (1956).

LACISTORHYNCHIDAE

- Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Larva. Massachusetts. Muscle, viscera. Dollfus (1956).
Grillotia erinacea (Van Beneden 1858) Guiart 1927. Larva. Massachusetts. Stomach. Dollfus (1956).

Clupea harengus (Continued)

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

PSEUDOPHYLLIDEA

Genera and species. Kamchatka, USSR. Skryabina (1963).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Sweden. Digestive tube. Dollfus (1956); Sea of Japan. Intestine, gallbladder. Zhukov (1960a); California. Kunnenkeri (1962).

COPEPODA

BOMOLOCHIDAE

Bomolochus cuneatus Fraser 1920. British Columbia. Fraser (1920).

CALIGIDAE

Caligus clemensi Parker and Margolis 1964. British Columbia. External. Parker and Margolis (1964); Fraser (1920) as C. gurnardi.

Caligus elongatus Nordman 1832. Scotland. Dollfus (1956) as C. rapax.
Lepeophtheirus pollachius Bassett-Smith 1896. Scotland. Buccal cavity. Dollfus (1956).

PENNELLIDAE

Lernaenicus sprattae (Sowerby 1806) Olsson 1869. Britain. Dollfus (1956).

DIGENEA

BUCEPHALIDAE

Bucephalus polymorphus Baer 1827. Yamaguti (1971).
Prosorhynchoides gracilescens (Rudolphi 1819) n. comb. Sea of Japan. Mesentery. Zhukov (1960a) as Bucephalopsis g.

FELLODISTOMATIDAE

Pseudopentagramma petrowi (Layman 1930) Yamaguti 1971. British Columbia. Pyloric caeca, intestine. Margolis and Ching (1965) as Pentagramma p.

HEMIURIDAE

Lecithaster confusus Odhner 1905. Massachusetts. Linton (1940); North Sea. Yamaguti (1971).

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia. Intestine. Arai (1969b); Baltic, Scotland, Canada. Dollfus (1956).

Clupea harengus (Continued)

- Parahemiurus merus (Linton 1910) Woolcock 1935. British Columbia. Stomach, intestine. Arai (1969b); Central California. Nahhas¹⁰.
Hemiurus levinseni Odhner 1905. Kamchatka, USSR. Stomach. Pyloric caeca. Skryabina (1963); Canadian Atlantic. Dollfus (1956).
Hemiurus luehei Odhner 1905. Sweden. Looss (1907a).
Derogenes varicus (Müller 1784) Looss 1901. Britain, New Brunswick. Viscera, muscle. Dollfus (1956); Kamchatka, USSR. Stomach, intestine. Skryabina (1963).
Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Kamchatka, USSR. Stomach. Skryabina (1963), Massachusetts. Linton (1940).
Brachyphallus amuriensis Babaskin 1928. USSR. Yamaguti (1971).
Pronopyge ocreata (Rudolphi 1802) Looss 1899. Europe. Stomach. Yamaguti (1971).

HETEROPHYIDAE

- Cryptocotyle lingua (Creplin 1825) Lühe 1899. Metacercaria. Maine. Skin, muscle. Sindermann and Rosenfield (1954).

LEPOCREADIIDAE

- Opechona bacillaris (Molin 1859) Looss 1907. Britain. Stomach. Dollfus (1956).

OPECOELIDAE

- Podocotyle reflexa (Creplin 1825) Odhner 1905. Kamchatka, USSR. Stomach, intestine, pyloric caeca. Skryabina (1963).

RENICOLIDAE

- Renicola sp. Metacercaria. North Sea. Pyloric caeca. MacKenzie (1975).

MONOGENEA

GYRODACTYLIDAE

- Gyrodactylus harengi MalMBERG 1956. Bering Sea, USSR. Gills. Zhukov (1960b); Sweden. Yamaguti (1971).
Gyrodactylus dogieli Zhukov 1960. Bering Sea. Gills. Zhukov (1960b).
Gyrodactyloides baueri Kulachkova 1970. White Sea. Nasal cavity. Kulachkova (1970).
Gyrodactyloides petruschewskii Bykhovskiy 1947. Bering Sea. Gills. Zhukov (1960b).

GYRODACTYLOIDEA

- Genera and species. British Columbia. Gills, body surface. Arai (1969b).

Clupea harengus (Continued)

MAZOCRAEIDAE

Mazocraeoides georgei Price 1936. Massachusetts. Gills. Price (1961b).

Mazocraes harengi (Van Beneden and Hesse 1863) Nicoll 1915. France. Gills. Dollfus (1956).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. North Sea. Body cavity. Khalil (1969); British Columbia. Margolis³; Kamchatka, USSR. Intestine, abdominal wall, body cavity. Skryabina (1963).

* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Adults. Larva. Belgium. Digestive tube. Dollfus (1956) as Contracecum a. Phocanema decipiens (Krabbe 1878) Myers 1959. Larva.

U.S. Atlantic. Intestine. Dollfus (1956) as Porrocaecum d.

Phocanema sp. Larva. Kamchatka, USSR. Strelkov (1960) as Porrocaecum sp.

Contracecum hypomesi Fujita 1932. Larva. Japan. Yamaguti (1961).

Contracecum sp. Larva. British Columbia. Body cavity. Arai (1969b); Japan. Kagei et al. (1970).

Contracecum sp.? California. Kunnenkeri (1962).

CYSTIDICOLIDAE

Ascarophis pacificus Zhukov 1960. Kamchatka, USSR. Strelkov (1960).

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

Trichodina ploveri Zhukov 1964. Bering Sea, USSR. Gills. Zhukov (1964).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa acadiensis Mayor 1915. Canadian Atlantic. Gallbladder. Ellis (1930) Tentative identification.

Ceratomyxa orientalis (Dogiel 1948) Shulman 1953. USSR, Sea of Japan. Gallbladder. Kudo and Meglitsch⁶.

Ceratomyxa auerbachii Kabata 1962. North Sea. Gallbladder. Kabata (1962).

SPHAEROSPORIDAE

Sphaerospora orientalis Shulman and Shulman - Albova 1953. White Sea. Urinary bladder. Shulman (1955).

Clupea harengus (Continued)

TETRACAPSULIDAE

Kudoa clupeiidae (Hahn 1917) Meglitsch 1947. Massachusetts.
Muscle. Kudo (1920) as Chloromyxum c.

PROTOZOA (SARCOMASTIGOPHORA)

HEXAMITIDAE

Hexamita salmonis (Moore 1922). Sanzin (1965).

PROTOZOA (SPOROZOA)

EIMERIIDAE

Eimeria nishin Fujita 1934. Japan. Testes. Pellerdy (1965)

"Probably C. h. pallasii."

Eimeria sardinae (Thelohan 1890) Reichenow 1921. North Atlantic.
Gonads. Dollfus (1956).

Eimeria clupearum (Thelohan 1894) Doflein 1909. North Atlantic.
Liver. Dollfus (1956).

Dorosoma petenense - Threadfin Shad

ACANTHOCEPHALA

NEOECHINORHYNCHIDAE

Tanaorhamphus longirostris (Van Cleave 1913) Ward 1918. Oklahoma.
Hopkins (1966).

Gracilisentis gracilisentis (Van Cleave 1913) Van Cleave 1919.
Oklahoma. Hopkins (1966).

COPEPODA

ERGASILIDAE

Ergasilus clupearum Johnson and Rogers 1972. Alabama. Gill
filaments. Johnson and Rogers (1972).

DIGenea

CLINOSTOMATIDAE

Clinostomum marginatum (Rudolphi 1819) Braun 1899. Southern
California. Skin, muscle, coelom, mesentery, orbit of eyes.
Miller et al. (1973).

NEMATODA

ANISAKIDAE

Contracaecum sp. Juveniles. Oklahoma. Hopkins (1966).

Dorosoma petenense (Continued)

CAMALLANIDAE

Camallanus sp. Juvenile. Oklahoma. Hopkins (1966).
Camallanus oxycephalus Ward and Magath 1917. Louisiana.
Arnold et al. (1966).

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

Trichodina microdenticulata Wellborn 1967. Louisiana. Body
surface. Wellborn (1967).

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia sp. California. Hoffman (1967).

Sardinops sagax - Pacific Sardine

CESTODA

TETRAPHYLLIDEA

Genera and species. Red pigmented plerocercoid. Southern California.
Intestine, pyloric caeca. Kunnenkeri (1962).

DIGenea

HEMIURIDAE

Parahemiurus merus (Linton 1910) Woolcock 1935. Central California.
Intestine. Nahhas¹⁰.
Parahemiurus noblei King 1962. Baja California. Intestine.
King (1962).
Myosaccium ecaude Montgomery 1957. California. Kunnenkeri (1962).

NEMATODA

ANISAKIDAE

Anisakis sp. Not clear if larva or adult. California. Kunnenkeri
(1962).
Contracaecum sp. Not clear if larva or adult. California.
Kunnenkeri (1962).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa orientalis (Dogiel 1948) Shulman 1953. USSR.
Gallbladder. Kudo and Meglitsch⁶.

Sardinops sagax (Continued)

Ceratomyxa filiformis Dogiel 1948. USSR. Gallbladder. Kudo
and Meglitsch⁶.

ENGRAULIDAE -- Anchovies

Cetengraulis mysticetus - Anchoveta

ISOPODA

CYMOTHOIDAE

Nerocila californica Schioedte and Meinert 1881. Gulf of California.
Gills. Brusca (1977).

Engraulis mordax - Northern Anchovy

CESTODA

TENTACULARIIDAE

Nybelinia sp. Larva. Southern California. Coelom. Mizrahi¹¹.

TETRAPHYLLIDEA

Genera and species. Red pigmented plerocercoid. Southern California.
Intestine, pyloric caeca. Kunenkeri (1962).

COPEPODA

CALIGIDAE

Caligus klawei Shiino 1959. Southern California. External.
Shiino (1959b).

Caligus bonito Wilson 1905. Southern California. External. Mizrahi¹¹
as C. kuroshio.

DIGENEA

DIDYMOZOIDAE

Genera and species. Larva. Southern California. Coeloms-viscera.
Mizrahi¹¹ as Torticaecum fenestratum.

HEMIURIDAE

Parahemiurus merus (Linton 1910) Woolcock 1935. Southern California.
Intestine. Mizrahi¹¹.

Engraulis mordax (Continued)

ISOPODA

CYMOTHOIDAE

Lironeca californica Schioedte and Meinert 1884. Southern California.
Gill chambers. Mizrahi¹¹.

Nerocila californica Schioedte and Meinert 1881. Southern California.
Gill chambers. Mizrahi¹¹.

MONOGENEA

DICLIDOPHORIDAE

Cyclobothrium sp. Southern California. Gill chambers. Mizrahi¹¹.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Coelom. Mizrahi¹¹.

Contracaecum sp. Larva. Southern California. Coelom. Mizrahi¹¹.

Raphidascaaris sp. Larva. Southern California. Coelom. Mizrahi¹¹.

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Sphaeromyxa reinhardtii Jameson 1929. Central California.
Gallbladder. Jameson (1929).

PROTOZOA (SPOROZOA)

EIMERIIDAE

Eimeria clupearum (Thélohan 1894) Doflein 1908. Southern California.
Liver and other visceral organs. Mizrahi¹¹.

SALMONIDAE -- Trouts

Oncorhynchus gorbuscha - Pink Salmon

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Datta, USSR.
Intestine. Bogdanova (1963); British Columbia. Ekbaum (1938).

Oncorhynchus gorbuscha (Continued)

POLYMORPHIDAE

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Juvenile.

North Pacific. Margolis (1958b).

Corynosoma villosum Van Cleave 1953. Juvenile. Alaska.

Margolis (1958b).

Bolbosoma caenoforme (Heitz 1920) Meyer 1933. Larva. Kamchatka,

USSR. Body cavity. Trofimenko (1962).

RHADINORHYNCHIDAE

Rhadinorhynchus trachuri Harada 1935. Kamchatka, USSR. Mamaev
et al. (1959).

BRANCHIURA

ARGULIDAE

Argulus coregoni Thorell 1864. Amgun River, USSR. Gills.

Bogdanova (1963).

CESTODA

AMPHICOTYLIDAE

Eubothrium crassum (Bloch 1779) Nybelin 1922. Kamchatka, USSR.

Digestive tract. Trofimenko (1962).

CYATHOCEPHALIDAE

Bothrimonus sturionis Duvernoy 1842.

Alaska. Intestine.

Burt and Sandemann (1969).

DIPHYLLOBOTHRIDAE

Diphyllobothrium sp. Larva. Amgun River, USSR. Muscles.

Bogdanova (1963).

Diphyllobothrium latum (Linneus 1758) Matz 1892. Larva. Japan.

Muscles. Eguchi (1932).

PHYLLOBOTHRIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Boyce
(1969).

Phyllobothrium caudatum (Zschokke and Heitz 1914). Larva.

Amgun River, USSR. Intestine. Bogdanova (1963); British
Columbia. Stomach, pyloric caeca. Margolis as P. ketae.

Oncorhynchus gorbuscha (Continued)

PROTEOCEPHALIDAE

Gangesia parasiluri Yamaguti 1934. USSR. Yamaguti (1959b).

TENTACULARIIDAE

Nybelinia sp. Larva. British Columbia. Stomach. Wardle (1932).

Nybelinia surmenicola Okada 1929. Larva. Amgun River, USSR.

Body cavity. Bogdanova (1963).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Amur Basin, USSR. Gallbladder.

Dubinina (1971).

Scolex polymorphus Rudolphi 1819. Kamchatka, USSR. Akmerov (1954a).

COPEPODA

BOMOLOCHIDAE

Bomolochus cuneatus Fraser 1920. Gulf of Alaska. Gills. Vervoort
(1964) as Parabomolochus c.

CALIGIDAE

Caligus clemensi Parker and Margolis 1964. British Columbia.

Body surface. Parker and Margolis (1964).

Lepeophtheirus salmonis (Krøyer 1838). Alaska. Gills and gill
cavity. Wilson (1905b); Japan. Yamaguti (1939b).

ERGASILIDAE

Ergasilus wilsoni Markevich 1933. Amgun River, USSR. Body surface.
Bogdanova (1963).

Ergasilus briani Markevich 1934. Amgun River, USSR. Gills.
Bogdanova (1963).

LERNAEOPODIDAE

Genera and species. Nasal cavity. Smirnova et al. (1964).

DIGenea

ALLOCREADIIDAE

Crepidostomum ussuriensis Layman 1930. Primore Region, USSR.
Intestine. Bogdanova (1963).

Oncorhynchus gorbuscha (Continued)

BUCEPHALIDAE

Prosorhynchoides basargini (Layman 1930) Margolis and Arthur 1979. Kamchatka, USSR. Intestine. Akhmerov (1955) as Bucephalopsis b.
Prosorhynchoides gracilescens (Rudolphi 1819) n. comb. Kamchatka, USSR. Digestive tract. Trofimenko (1962).

FELLODISTOMATIDAE

Pseudopentagramma petrowi (Layman 1930) Yamaguti 1971. British Columbia. Intestine. Boyce (1969) as Pentagramma p.

HEMIURIDAE

Parahemiurus merus (Linton 1910) Woolcock 1935. British Columbia. Stomach. Boyce (1969); Primore Region, USSR. Intestine. Bogdanova (1963).

Derogenes varicus (Müller 1784) Looss 1901. USSR. Intestine. Bogdanova (1963).

Genolinea anura (Layman 1930) Yamaguti 1954. USSR. Stomach. Bykhovskaya-Pavlovskaya et al. (1962).

Genolinea oncorhynchi Margolis and Adams 1956. British Columbia. Margolis and Adams (1956).

Brachyphallus amuriensis Babaskin 1928. Kamchatka, USSR. Akhmerov (1954b).

Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Kamchatka, USSR. Digestive tract. Trofimenko (1962).

Genarchopsis muelleri (Levinsen 1881) Yamaguti 1954. Kamchatka, USSR. Digestive tract. Trofimenko (1962) as Genarches m.

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia. Intestine, pyloric caeca. Margolis and Boyce (1969); Kamchatka, USSR. Trofimenko (1962).

Lecithaster stellatus Looss 1907. USSR. Intestine. Bykhovskaya-Pavlovskaya et al. (1962).

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. British Columbia. Intestine. Margolis and Boyce (1969); Primore Region, USSR. Intestine. Bogdanova (1963).

Hemiurus levinseni Odhner 1905. British Columbia. Margolis (1956a); Primore Region, USSR. Intestine. Bogdanova (1963).

Lecithophyllum botryophorum (Olsson 1868) Odhner 1905. British Columbia. Stomach. Margolis (1958a) as L. anteroporum.

HETEROPHYIDAE

Apophallus sp. Larva. USSR. Gills. Bogdanova (1963).

Galactosomum phalacrocoracis Yamaguti 1939. Metacercaria. British Columbia. Encysted in viscera? Pearson et al. (1978).

LAMPFITREMATIDAE

Lampfitrema miescheri (Zschokke 1890) Margolis 1962. Pacific Ocean, USSR. Margolis (1962).

Oncorhynchus gorbuscha (Continued)

OPECOELIDAE

Podocotyle enophrysi Park 1937. Washington. Intestine.
Aldrich¹².

Podocotyle gibbonsiae Johnson 1949. Washington. Intestine.
Aldrich¹².

Podocotyle atomon (Rudolphi 1802) Odhner 1905. Sea of Japan.
Stomach. Zhukov (1960a).

SYNCOELIDAE

Syncoelium filiferum (Leuckart, in Sars 1885) Odhner 1911. Washington.
Branchial cavity. Lloyd and Guberlet (1936).

HIRUDINOIDEA

GLOSSOPHONIDAE

Hemiclepsis marginata (Müller 1774) Vezhdovskii 1844. Kamchatka,
USSR. Lukin (1962).

PISCICOLIDAE

Piscicola salmositica Meyer 1946. Washington. Pectoral and pelvic
fins, gills. Becker and Katz (1965a).

MOLLUSCA

UNIONIDAE

Genera and species. Amgun River, USSR. Gill cavity. Bogdanova
(1963).

MONOGENEA

GYRODACTYLIDAE

Gyrodactyloides strelkowi Bykhovsky and Polyanski 1953. Kurile
Islands, USSR. Bykhovsky and Polyanski (1953).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b);
Kamchatka, USSR. Trofimenko (1962).

Contracaecum hypomesi Fujita 1932. Larva. Japan. Body cavity.
Fujita (1939).

Contracaecum robustum Chandler 1935. Larva. Japan. Intestine.
Fujita (1939).

Contracaecum sp. Larva. British Columbia. Intestine. Boyce
(1969).

Oncorhynchus gorbuscha (Continued)

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Larva. Amgun River, USSR. Intestine. Bogdanova (1963); adult. Kamchatka, USSR. Trofimenko (1962) both as Contracaecum a.

CUCULLANIDAE

Truttaedacnitis trutta (Fabricius 1774) Petter 1974. Kamchatka, USSR. Intestine. Strelkov (1960) as Cucullanus t.; USSR. Bykhovskaya-Pavlovskaya et al. (1962) as Cucullanus laevis.

CYSTIDICOLIDAE

Cystidicola farionis Fisher 1798. Soviet far east; Alaska. Swimbladder. Margolis (1967a) "probable host".
Ascarophis skrjabini (Layman 1933) Poljansky 1952. USSR. Intestine. Ko and Anderson (1969).

PHILOMETRIDAE

Philonema oncorhynchi Kuitunen-Ekbaum 1933. Kamchatka, USSR. Mamaev et al. (1959).

PROTOZOA (CILIOPHORA)

OPHRYOGLLENIDAE

Ichthyophthirius multifillis Fouquet 1876. Amgun River, USSR. Gills. Bogdanova (1963).

URCEOLARIIDAE

Trichodina truttae. Sakhalin, USSR. Fins, gills, body surface. Bogdanova and Stein (1963).
Trichodina gracilis Polyanski 1955. Sakhalin, USSR. Bogdanova and Stein (1963).
Tripartiella californica (Davis 1947). Rivers of South Sakhalin, USSR. Gills. Bogdanova and Stein (1963).

PROTOZOA (HAPLOSPORIDA)

Genera and species. British Columbia. Kidneys. Hoskins et al.¹³

PROTOZOA (MICROSPORIDA)

Genera and species. Rivers leading into White Sea, USSR. Kidneys. Grozdilova (1968).

NOSEMATIIDAE

Glugea takedai Awakura 1974. Japan. Muscles. Awakura (1974).

Oncorhynchus gorbuscha (Continued)

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca krogiusi Konovalov and Shulman 1965. Kamchatka, USSR.
Urinary bladder. Shulman (1966).

MYXIDIIDAE

Myxidium oviforme Parisi 1912. USSR. Gallbladder. Bykhovskaya-
Pavlovskaya et al. (1962).

Myxidium obscurum Konovalov 1966. Kamchatka, USSR. Intestine.
Urinary bladder. Shulman (1966)

Zschokkella orientalis Konovalov and Shulman 1966. USSR. Gallbladder.
Schulman (1966).

MYXOBOLIDAE

Henneguya salminicola Ward 1919. Alaska. Cysts in muscles. Fish (1939).

MYXOSOMATIDAE

Myxosoma cerebralis (Hofer and Plehn 1903) Kudo 1933. Sakhalin Island,
USSR. Cartilage of head, gill arches and bones. Bogdanova (1960a).

SPHAEROSPORIDAE

Chloromyxum giganteum Fujita 1923. Japan. Gallbladder. Fujita (1923).

Chloromyxum quadiforme Fujita 1923. Gallbladder. Fujita (1923).

Chloromyxum orientalis Shulman 1962. Kamchatka, USSR. Vinnichenko
et al. (1971).

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia salmositica Katz 1951. Washington. Blood. Becker and
Katz (1965b).

Cryptobia makeevi (Akhmerov 1959) Bykhovskaya-Pavlovskaya 1962.
Amur River, USSR. Blood. Bykhovskaya-Pavlovskaya et al. (1962).

TETRAMITIDAE

Ichthyobodo necatrix (Henneguy 1884). Kola Peninsula, USSR.
Bogdanova (1967) as Costia n.

Oncorhynchus keta - Chum Salmon

SYNONYM - Salmo keta

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Acanthocephalus echigoensis Fujita 1920. Japan. Fujita (1920);
Kamchatka, USSR. Mamaev et al. (1959) as A. aculeatus.
Echinorhynchus gadi Zoega in Müller 1776. Amur Basin, USSR. Intestine.
Sokolovskaya (1971); British Columbia. Ekbaum (1938).

NEOECHINORHYNCHIDAE

Neoechinorhynchus rutili (Müller 1780) Hamann 1892. British Columbia.
Intestine. Arai (1969b).

POLYMORPHIDAE

Corynosoma villosum Van Cleave 1953. Larva. USSR. Coelom.
Bykhovskaya-Pavlovskaya et al. (1962).
Bolbosoma caenoforme (Heitz 1920) Meyer 1933. Amur Basin, USSR.
Body cavity. Sokolovskaya (1971).

RHADINORHYNCHIDAE

Rhadinorhynchus trachuri Harada 1935. Okhotsk Sea, USSR. Intestine.
Bogdanova (1963).

BRANCHIURA

ARGULIDAE

Argulus coregoni Thorell 1864. Amgun River, USSR. Gills.
Bogdanova (1963).

CESTODA

AMPHICOTYLIDAE

Eubothrium crassum (Bloch 1779) Nybelin 1922. Kamchatka, USSR.
Intestine. Bogdanova (1963); British Columbia. Margolis³ as
E. oncorhynchi.

DIPHYLLOBOTHRIIDAE

Diphyllobothrium sp. Larva. Amgun River, USSR. Muscles.
Bogdanova (1963).
Diphyllobothrium latum (Linnaeus 1758) Matz 1892. Plerocercoid.
Japan. Muscles. Eguchi (1932).

Oncorhynchus keta (Continued)

HEPATOXYLIDAE

Hepatoxylon trichiuri (Holten 1802) Dollfus 1942. Larva. Amur Basin, USSR. Muscles. Dubinina (1971).

PHYLLOBOTHRIIDAE

Phyllobothrium caudatum (Zschokke and Heitz 1914). Larva. Okhotsk Sea, Amgun River, USSR. Intestine, anus. Bogdanova (1963); Alaska. Canavan (1928); British Columbia. Stomach, pyloric caeca. Margolis³ latter two as P. ketae.

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

PROTEOCEPHALIDAE

Gangesia parasiluri Yamaguti 1934. USSR. Yamaguti (1959b).
Proteocephalus exiguus La Rue 1911. Kamchatka, USSR. Mamaev et al. (1959).

TENTACULARIIDAE

Nybelinia sp. Larva. British Columbia. Stomach. Wardle (1932).

Nybelinia surmenicola Okada 1929. Larva. Amgun River, USSR. Body cavity. Bogdanova (1963).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Amur Basin, USSR. Gallbladder. Dubinina (1971).

TRIAENOPHORIDAE

Trienophorus crassus Forel 1868. Larva. Hoffman (1967).

COPEPODA

CALIGIDAE

Caligus clemensi Parker and Margolis 1964. British Columbia. Fraser (1920) as C. gurnardi; British Columbia. Body surface. Parker and Margolis (1964).

Lepeophtheirus salmonis (Krøyer 1838). Japan. Body surface. Shiino (1959e); USSR. Bykhovskaya-Pavlovskaya et al. (1962).

Oncorhynchus keta (Continued)

LERNAEOPODIDAE

- Salmincola salmoneus (Linneus 1761) Wilson 1915. USSR. Gills.
Bykhovskaya-Pavlovskaya et al. (1962) as S. salmonea.
Salmincola californiensis (Dana 1853) Wilson 1915. USSR. Gills.
Kabata (1969c).

DIGENEA

ALLOCREADIIDAE

- Crepidostomum salmonis Fujita 1921. Japan. Fujita (1921b).

BUCEPHALIDAE

- Prosorhynchoides gracilescens (Rudolphi 1819) n. comb. Kamchatka,
USSR. Mamaev et al. (1959).

ISOPARORCHIIDAE

- Isoparorchis hypselobagri (Billet 1898) Ejsmont 1932. Juvenile.
Amur Basin, USSR. Akhmerov (1961).

HEMIURIDAE

- Hemiurus levinseni Odhner 1905. Kamchatka, USSR. Mamaev et al.
(1959).
Parahemiurus merus (Linton 1910) Woolcock 1935. Kamchatka, USSR.
Mamaev et al. (1959).
Brachyphallus amuriensis Babaskin 1928. Kamchatka, USSR. Akhmerov
(1954b).
Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. British Columbia.
Stomach. Margolis²; Kamchatka, USSR. Trofimenko (1962); Japan.
Machida et al. (1972).
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. British
Columbia. Intestine. Margolis and Boyce (1969); USSR.
Bykhovskaya-Pavlovskaya et al. (1962).
Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine. Margolis and Boyce (1969); Kamchatka, USSR.
Trofimenko (1962); Japan. Intestine. Yamaguti (1934a) as
L. salmonis.
Lecithaster stellatus Looss 1907. USSR. Intestine. Bykhovskaya-
Pavlovskaya et al. (1962).
Genarchopsis muelleri (Levinson 1881) Yamaguti 1954. Kamchatka,
USSR. Trofimenko (1962) as Genarches m.

HETEROPHYIDAE

- Apophallus sp. Larva. Amgun River, USSR. Gills. Bogdanova (1963).
Galactosomum sp. Larva. British Columbia. Gills (encysted).
Arai (1969b).

Oncorhynchus keta (Continued)

NANOPHYETIDAE

Nanophyetus salminicola (Chapin 1926) Chapin 1927. Metacercaria. Oregon. Simms et al. (1931); USSR. Filimonova (1964) as N. schikhobalowi.

HIRUDINOIDEA

PISCICOLIDAE

Piscicola salmositica Meyer 1946. Washington. Pectoral and pelvic fins, gill lamellae. Becker and Katz (1965a).
Trachelobdella okae Moore 1924. Amur Basin, USSR. Epshtein (1964).

MOLLUSCA

UNIONIDAE

Unio sp. Larva. Amgun River, USSR. Gills. Bogdanova (1963).

MONOGENEA

GYRODACTYLIDAE

Gyrodactylus lenoki Gussev 1953. Sakhalin Island, USSR. Gills. Bogdanova (1960b).
Gyrodactyloides strelkowi Bykhovsky and Polyanski 1953. Kamchatka, USSR. Mamaev et al. (1959).

NEMATODA

ANISAKIDAE

Contracaecum benimasu Fujita 1932. Larva. Japan. Fukui (1958).
Contracaecum longispiculum Fujita 1940. Larva. Japan. Body cavity. Fujita (1940).
Contracaecum oshoroense Fujita 1940. Japan. Body cavity. Fujita (1940).
Contracaecum tridentatum Fujita 1939. Larva. Japan. "In body." Fujita (1939).
Contracaecum unidentatum Fujita 1939. Larva. Japan. Body cavity. Fujita (1939).
Contracaecum hypomesi Fujita 1932. Larva. Japan. Body cavity. Fujita (1939).
Contracaecum sp. Larva. British Columbia. Body cavity. Arai (1969b).
*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Larva. Okhotsk Sea, Amgun River, USSR. Livers, body cavity. Bogdanova (1963) as Contracaecum a.
Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b); Kamchatka, USSR. Trofimenko (1962).
Goezia oncorhynchi Fujita 1940. Larva. Japan. Intestine. Fujita (1940).

Oncorhynchus keta (Continued)

CYSTIDICOLIDAE

- Ascarophis skrjabini (Layman 1933) Polyanski 1952. Kamchatka, USSR. Mamaev et al. (1959).
Salvelinema ishii (Fujita 1941) Margolis 1968. Japan. Intestine. Fujita (1941) as Metabronema i.
Salvelinema salmonicola (Ishii 1916) Margolis 1966. Japan to USSR. Swimbladder. Margolis (1967a).

PHILOMETRIDAE

- Philonema oncorhynchi Kuitunen-Ekbaum 1933. Kamchatka, USSR. Akhmerov (1954b).
Philonema kondai Fujita 1939. Body cavity. Fujita (1939).

THELAZIIDAE

- Rhabdochona oncorhynchi (Fujita 1921) Fujita 1927. Japan. Intestine. Fujita (1940).

PROTOZOA (CILIOPHORA)

DENDROSOMATIDAE

- Trichophyra intermedia Prost 1952. Kola Peninsula, USSR. Bogdanova (1967).

OPHRYOGLLENIDAE

- Ichthyophthirius multifiliis Fouquet 1876. Amgun River, USSR. Gills. Bogdanova (1963).

SCYPHIDIIDAE

- Scyphidia arctica Zhukov 1960. Kola Peninsula, USSR. Bogdanova (1967).
Glossatella conica Timofeev 1962. Kola Peninsula, USSR. Bogdanova (1967).

URCEOLARIIDAE

- Trichodina gracilis Polyanski 1955. Sakhalin Island, USSR. Bogdanova and Stein (1963).
Trichodina truttae. Sakhalin Island, USSR. Gills, fins, body surface. Bogdanova and Stein (1963).
Trichodina domerguei f. latispina Dogiel 1940. Sakhalin, USSR. Bogdanova and Stein (1963).
Tripartiella californica (Davis 1947). Sakhalin Island, USSR. Gills. Bogdanova and Stein (1963).

PROTOZOA (MICROSPORIDA)

NOSEMATIDAE

Oncorhynchus keta (Continued)

Plistophora sp. Japan. Muscles of head. Awakura (1965).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa shasta Noble 1950. British Columbia. Lesions in kidneys, pyloric caeca, intestine, muscle. Margolis and Evelyn (1975).
Leptotheca krogiosi Konovalov and Shulman 1965. Kamchatka, USSR. Urinary bladder. Shulman (1966).

MYXIDIIDAE

Myxidium oviforme Parisi 1912. USSR. Gallbladder. Bykhovskaya-Pavlovskaya et al. (1962).
Myxidium obscurum Konovalov 1966. Kamchatka, USSR. Anterior part of intestine, urinary bladder. Kudo and Meglitsch⁶.
Myxidium minteri Yasutake and Wood 1957. Oregon. Gallbladder. Sanders and Fryer (1970).

MYXOBOLIDAE

Henneguya salminicola Ward 1919. Alaska. Cysts in muscles. Fish (1939).

MYXOSOMATIDAE

Myxosoma cerebralis (Hofer and Plehn 1903) Kudo 1933. Sakhalin Island, USSR. Cartilage of head, gill arches, bones. Bogdanova (1960a).
Myxosoma salmonis Hoshina 1949. Japan. Cysts in skin. Hoshina (1949).
Myxosoma soldatovi (Akhmerov 1960) Kudo and Meglitsch⁶. Amur River, USSR. Cysts under scales. Akhmerov (1960) as Myxobolus s.
Myxosoma dermatobia (Ishii 1916) Hoshina 1952. Tissue. Kudo and Meglitsch⁶.
Myxosoma squamalis Iverson 1954. Washington. Body surface. Iverson (1954).

SPHAEROSPORIDAE

Chloromyxum orientalis Schulman 1962. Kamchatka, USSR. Vinnichenko et al. (1971).
Chloromyxum chitosense Fujita 1923. Japan. Gallbladder. Fujita (1923).
Chloromyxum quadriforme Fujita 1923. Japan. Gallbladder. Fujita (1923).
Chloromyxum tanakai Fujita 1936. Japan. Gallbladder. Fujita (1936).

Oncorhynchus keta (Continued)

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia makeevi (Akhmerov 1959) Bykhovskaya-Pavlovskaya et al. 1962. Amur River Basin, USSR. Blood. Bykhovskaya-Pavlovskaya et al. (1962).

Cryptobia salmositica Katz 1951. Washington. Becker and Katz (1965b).

TETRAMITIDAE

Ichthyobodo necatrix (Henneguy 1884). Kamchatka, USSR. Bogdanova (1967) as Costia n.

Oncorhynchus kisutch - Silver Salmon

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Metechinorhynchus salmonis (Müller 1784) Petrotchenko 1956. Lake Michigan. Intestine. Amin and Burrows (1977).

Metechinorhynchus lateralis (Leidy 1851) Golvan 1969. Humboldt Bay, California. Intestine. Haderlie (1953) as Echinorhynchus l.

Echinorhynchus gadi Zoega in Müller 1776. British Columbia. Intestine. Arai (1969b); Kamchatka, USSR. Strelkov (1960).

NEOECHINORHYNCHIDAE

Neoechinorhynchus rutili (Müller 1780) Hamann 1892. British Columbia. Intestine. Arai (1969b); USSR. Bykhovskaya-Pavlovskaya et al. (1962).

Neoechinorhynchus cristatus Lynch 1936. Kamchatka, USSR. Intestine. Akhmerov (1955).

POLYMORPHIDAE

Bolbosoma caenoforme (Heitz 1920) Meyer 1933. Larva. Kamchatka, USSR. Intestine. Strelkov (1960).

Corynosoma sp. Juvenile. British Columbia. Intestine. Arai (1969b).

POMPHORYNCHIDAE

Pomphorhynchus bulbocolli Linkins in Van Cleave 1919. British Columbia. Bangham and Adams (1954).

RHADINORHYNCHIDAE

Rhadinorhynchus trachuri Harada 1935. Kamchatka, USSR. Mamaev et al. (1959); Oregon. Olson (1978a) as Nipporhynchus t.

Oncorhynchus kisutch (Continued)

BRANCHIURA

ARGULIDAE

Argulus pugettensis Dana 1852. Pacific Coast. Wilson (1908a).

CESTODA

AMPHICOTYLIDAE

Eubothrium crassum (Bloch 1779) Nybelin 1922. Kamchatka, USSR.
Streĭkov (1960); British Columbia. Pyloric caeca. Wardle (1932)
as E. oncorhynchi.

Eubothrium salvelini (Schrank 1790) Nybelin 1922. Alberta, Leong
and Holmes (1974); Kamchatka, USSR. Intestine. Konovalov (1971).

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Larva. Oregon. Intestine. Olson (1978a).

CYATHOCEPHALIDAE

Cyathocephallus truncatus (Pallas 1781) Kessler 1868. USSR.
Intestine. Bykhovskaya-Pavlovskaya et al. (1962).

DIPHYLLOBOTHRIIDAE

Diphyllobothrium cordiceps (Leidy 1871) Matz 1892. Larva. Montana.
Body cavity. Simms and Shaw (1931) as Dibothrium c.
Diphyllobothrium sp. Larva. British Columbia. Body cavity. Arai
(1969b).

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).
Phyllobothrium caudatum (Zschokke and Heitz 1914). Kamchatka, USSR.
Mamaev et al. (1959).

PROTEOCEPHALIDAE

Proteocephalus sp. Larva. British Columbia. Intestine. Arai (1969b).
Proteocephalus salmonidicola Alexander 1951. Washington. Intestine.
Becker (1967a).
Proteocephalus ambloplitis (Leidy 1887) Benedict 1900. Plerocercoid.
Washington. Becker (1967a).
Proteocephalus exiquus La Rue 1911. Kamchatka, USSR. Konovalov (1971).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Kamchatka, USSR. Mamaev et al.
(1959).
Nybelinia sp. Larva. British Columbia. Stomach. Wardle (1932).

Oncorhynchus kisutch (Continued)

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Kamchatka, USSR. Intestine.
Strelkov (1960).

Scolex polymorphus Rudolphi 1819. Kamchatka, USSR. Akhmerov (1954a).

TRIAENOPHORIDAE

Trienophorus nodulosus (Pallas 1760) Rudolphi 1819. Plerocercoid.
Canada. Leong and Holmes (1974).

COPEPODA

CALIGIDAE

Lepeophtheirus salmonis (Krøyer 1838). British Columbia. Skin
surface. Margolis⁵; Oregon. Olson (1978a).

Caligus clemensi Parker and Margolis 1964. British Columbia. Body
surface. Parker and Margolis (1964).

ERGASILIDAE

Ergasilus auritus Markevich 1940. Alberta. Gills. Leong and
Holmes (1974).

Ergasilus nerkae Roberts 1963. Alberta. Gills. Leong and Holmes
(1974).

LERNAEOPODIDAE

Salmincola californiensis (Dana 1853) Wilson 1915. British Columbia.
Pectoral fins. Arai (1969b).

DIGenea

ALLOCREADIIDAE

Crepidostomum farionis (Müller 1780) Lühe 1909. British Columbia.
Bangham and Adams (1954).

DIDYMOZOIDAE

Genera and species. Larva. Kamchatka, USSR. Mamaev et al. (1959)
as Monilicaecum ventricosum.

DIPLOSTOMATIDAE

Diplostomum sp. British Columbia. Bangham and Adams (1954);
Kamchatka, USSR. Mamaev et al. (1959).

Spathaceum indistinctum (Guberlet 1923) Hughes 1929. Metacercaria.
Washington. Eyes. Becker (1967a) as Diplostomum flexicaudum.

HERMIURIDAE

Hemiurus levinseni Odhner 1905. Kamchatka, USSR. Intestine.
Strelkov (1960).

Oncorhynchus kisutch (Continued)

Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Kamchatka, USSR. Strelkov (1960); Oregon. Stomach. Olson (1978a).

Deropegus aspina (Ingles 1936) McCauley and Pratt 1961. Oregon. Stomach. McCauley and Pratt (1961).

Parahemiurus merus (Linton 1910) Woolcock 1935. British Columbia. Intestine, pyloric caeca. Arai (1969b).

Derogenes sp. Pratt and McCauley (1961).

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.

Intestine, pyloric caeca. Arai (1969b); Kamchatka, USSR. Strelkov (1960); Washington. Ching (1960a) as L. salmonis.

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Washington. Ching (1960a).

HETEROPHYIDAE

Apophallus donicus (Skrjabin and Lindtrop 1919) Price 1931. Metacercaria. Oregon. Skins. Niemi and Macy (1974).

NANOPHYETIDAE

Nanophyetus salmincola (Chapin 1926) Chapin 1927. Metacercaria. Oregon. Simms et al. (1931).

OPECOELIDAE

Podocotyle sp. Oregon. Intestine. Olson (1978a).

Plagioporus shawi (McIntosh 1939) Margolis 1970. Oregon. Intestine. McIntosh (1939) as Podocotyle s.

STRIGEIDAE

Cotylurus erraticus (Rudolphi 1809) Szidat 1928. Metacercaria. Montana. Pericardial cavity. Olson (1970).

SYNCOELIIDAE

Syncoelium filiferum (Leuckart in Sars 1885) Odhner 1911. Kamchatka, USSR. Mamaev et al. (1959); Oregon. Gills. Olson (1978a) as S. katuwo.

HIRUDINOIDEA

PISCICOLIDAE

Piscicola salmositica Meyer 1946. British Columbia, Washington, Oregon. Pectoral, pelvic fins, gills. Becker and Katz (1965a).

MONOGENEA

Oncorhynchus kisutch (Continued)

CAPSALIDAE

Encotyllabe masu Ishii and Sawada 1938. Japan. Gills. Sproston (1946).

GYRODACTYLIDAE

Gyrodactyloides strelkowi Bykhovsky and Polyanski 1953. Kamchatka, USSR. Mamaev et al. (1959).

GYRODACTYLOIDEA

Genera and species. British Columbia. Gills. Arai (1969b).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b); Kamchatka, USSR. Strelkov (1960); Oregon. Olson (1978a).

Contraecum crassicaudatum Fujita 1939. Larva. Japan. Body cavity. Fujita (1939).

Contraecum hippoglossi Fujita 1932. Larva. Japan. Fujita (1932).

Contraecum sp. Larva. British Columbia. Body cavity. Arai (1969b).

* Thynnascaris sp. Oregon. Intestine. Olson (1978a).

* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. British Columbia. Stomach, intestine. Margolis³; USSR. Bykhovskaya-Pavlovskaya et al. (1962). Both as Contraecum a.

CAPILLARIIDAE

Capillaria sp. British Columbia. Stomach. Arai (1969b).

Skrjabinocapillaria bakeri (Mueller and Van Cleave 1932) Skrjabin and Schikhobalova 1954. Bangham and Adams (1954) as Hepaticola bakeri.

CUCULLANIDAE

Cucullanus sp. British Columbia. Intestine. Arai (1969b).

Truttaedacnitis trutta (Fabricius 1794) Petter 1974. Kamchatka, USSR. Strelkov (1960) as Dacnitis t.

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. British Columbia. Intestine. Arai (1969b).

Cystidicoloides tenuissima (Zeder 1800) Rasheed 1966. British Columbia. Margolis (1965); California. Intestine. Haderlie (1953). Both as Metabronema salvelini.

Oncorhynchus kisutch (Continued)

Cystidicola farionis Fischer 1798. Soviet Far East. Swimbladder. Margolis (1967a). "Probable host".

Salvelinema walkeri (Ekbaum 1935) Margolis 1967. California. Swimbladder. Margolis (1967a); British Columbia. Ekbaum (1935) as Cystidicola w; California. Haderlie (1953) as Cystidicola stigmatura.

DIOCTOPHYMATIDAE

Eustrongylides sp. Larva. British Columbia. Viscera. Godfrey¹⁴.

PHILOMETRIDAE

Philonema oncorhynchi Kuitunen-Ekbaum 1933. Kamchatka, USSR. Mamaev et al. (1959); Larva. British Columbia. Bangham and Adams (1954).

Philonema agubernaculum Simon and Simon 1936. Canada. Leong and Holmes (1974).

Philonema sp. British Columbia. Swimbladder wall. Arai (1969b).

THELAZIIDAE

Rhabdochona kisutchi Margolis, Moravec and McDonald 1975. British Columbia. Intestine, pyloric caeca. Margolis et al. (1975).

PROTOZOA (CILIOPHORA)

DENDROSOMATIDAE

Trichophyra sp. Washington. Gills. Becker (1967a).

URCEOLARIIDAE

Trichodina sp. Washington. Gills. Becker (1967a).

PROTOZOA (HAPLOSPORIDA)

Genera and species. British Columbia. Kidneys. Hoskins et al.¹³

PROTOZOA (MICROSPORIDA)

NOSEMATIDAE

Plistophora salmonae Putz, Hoffman and Dunbar 1965. California. Gills. Leitritz and Lewis (1976).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca krogiusi Konovalov and Shulman 1965. Kamchatka, USSR. Urinary bladder. Shulman (1966).

Ceratomyxa shasta Noble 1950. Columbia River. Sanders et al. (1970).

Oncorhynchus kisutch (Continued)

MYXIDIIDAE

Myxidium minteri Yasutake and Wood 1957. Washington, Oregon. Renal tubules. Yasutake and Wood (1957); gallbladder. Sanders and Fryer (1970).

Zschokkella orientalis Konovalov and Shulman 1966. USSR. Gallbladder. Shulman (1966).

MYXOBOLIDAE

Myxobolus squamae Keysseilitz 1908. Oregon. Flesh. Shaw et al. (1934).

Myxobolus kisutchi Yasutake and Wood 1957. Washington. Spinal cord. Yasutake and Wood (1957).

Myxobolus neurobius Schuberg and Schroder 1905. Kamchatka, USSR. Cysts in nervous tissues. Kudo and Meglitsch⁶.

Myxobolus insidiosus Wyatt and Pratt 1963. Washington. Muscles. Wyatt (1978).

Henneguya salminicola Ward 1919. Alaska, Washington. Cysts in muscles. Fish (1939); Kamchatka, USSR. Zschokke and Heitz (1914) as H. zschokkei.

MYXOSOMATIDAE

Myxosoma squamalis Iverson 1954. Washington. Body surface. Iverson (1954); British Columbia. Margolis³.

Myxosoma dermatobia (Ishii 1916) Hoshina 1952. USSR. Skin. Bykhovskaya-Pavlovskaya et al. (1962).

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia borreli (Laveran and Mesnil 1901). Northern California. Blood. Wales and Wolf (1955).

Cryptobia salmositica Katz 1951. Oregon. Blood. Davison and Breese (1954); British Columbia, Washington. Becker and Katz (1965b); USSR. Bykhovskaya-Pavlovskaya et al. (1962).

THECAMOEBIDAE

Thecamoeba hoffmani Sawyer, Hnath, and Conrad 1974. Oregon, Washington. Gills. Sawyer et al. (1974).

Oncorhynchus nerka - Sockeye Salmon

ACANTHOCEPHALA

Oncorhynchus nerka (Continued)

ECHINORHYNCHIDAE

Metechinorhynchus salmonis (Müller 1784) Petrotschenko 1956. Lake Huron. Intestine. Collins and Dechtiar (1974); Kamchatka, USSR. Konovalov et al. (1970).

Echinorhynchus gadi Zoega in Müller 1776. Kamchatka, USSR. Trofimenko (1962).

Acanthocephalus echigoensis Fujita 1920. Japan. Van Cleave (1931) as A aculeatus.

Acanthocephalus jacksoni Bullock 1962. Lake Huron. Intestine. Collins and Dechtiar (1974).

LEPTORHYNCHOIDIDAE

Leptorhynchoides thecatus (Linton 1891) Kostylew 1924. Lake Huron. Intestine. Collins and Dechtiar (1974).

NEOECHINORHYNCHIDAE

Neoechinorhynchus rutili (Müller 1780) Hamann 1892. British Columbia. Intestine. Arai (1969b); Oregon. Intestine. Merritt and Pratt (1964); Kamchatka, USSR. Trofimenko (1962); Lake Huron. Collins and Dechtiar (1974).

Neoechinorhynchus tumidus Van Cleave and Bangham 1949. Lake Huron. Intestine. Collins and Dechtiar (1974).

Neoechinorhynchus pungitius Dechtiar 1971. Lake Huron. Intestine. Collins and Dechtiar (1974).

POLYMORPHIDAE

Bolbosoma caenoforme (Heitz 1920) Meyer 1933. Kamchatka, USSR. Akhmerov (1954b); Washington to Alaska. Margolis (1963).

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Juvenile. North Pacific. Margolis (1958b); Kamchatka, USSR. Trofimenko (1962).

Corynosoma semerme (Forssell 1904) Lühe 1911. Juvenile. Alaska. Margolis (1958b).

Corynosoma wegneri Heinze 1934. Juvenile. Alaska. Margolis (1958b).

POMPHORHYNCHIDAE

Pomphorhynchus bulbocolli Linkins in Van Cleave 1919. British Columbia. Bangham and Adams (1954); Lake Huron. Intestine. Collins and Dechtiar (1974).

RHADINORHYNCHIDAE

Rhadinorhynchus trachuri Harada 1935. Washington. Margolis (1963) as Nipporhynchus t.

ARACHNOIDEA

Oncorhynchus nerka (Continued)

HYDRACHNIDAE

Hydrachna sp. Lake Huron. Gills. Collins and Dechtiar (1974).

CESTODA

AMPHICOTYLIDAE

Eubothrium crassum (Bloch 1779) Nybelin 1922. Kamchatka, USSR.
Mamaev et al. (1959).

Eubothrium salvelini (Schrank 1790) Nybelin 1922. Washington to Alaska.
Intestine. Smith (1973); Kamchatka, USSR. Konovalov et al. (1970).

Eubothrium sp. British Columbia, Alaska. Margolis (1963).

CYATHOCEPHALIDAE

Cyathocephalus truncatus (Pallas 1781) Kessler 1868. USSR.
Intestine. Bykhovskaya-Pavlovskaya et al. (1962).

Bothrimonus sturionis Durvernoy 1842. Alaska. Margolis (1963) as
Diplocotyle olkirki.

DIPHYLLOBOTHRIDAE

Diphyllobothrium ursi Rausch 1954. Pleroceroid. Alaska. Intestine.
Rausch (1954).

Diphyllobothrium sp. Larva. British Columbia. Body cavity. Arai
(1969b); Kamchatka, USSR. Body cavity. Trofimenko (1962);
California. Haderlie (1953).

Diphyllobothrium latum (Linnaeus 1758) Matz 1892. Larva. Alaska.
Merrell (1964).

Diphyllobothrium cordiceps (Leidy 1871) Matz 1892. Larva. Canada.
Body cavity. Mudry and Anderson¹⁵.

LIGULIDAE

Schistocephalus sp. Larva. British Columbia. Bangham and Adams
(1954).

PHYLLOBOTHRIDAE

Pelichnibothrium sp. Larva. Japan. Seki (1975).

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

Phyllobothrium caudatum (Zschokke and Heitz 1914). Larva.
Kamchatka, USSR. Digestive tract. Trofimenko (1962) as Pelichnibo-
thrium speciosum; Washington. Margolis (1965).

PROTEOCEPHALIDAE

Proteocephalus arcticus Cooper 1921. British Columbia. Wardle (1933b).
[Species Inquirae Freze (1965)].

Proteocephalus exiguus La Rue 1911. British Columbia. Bangham and
Adams (1954); Kamchatka, USSR. Akhmerov (1954b).

Oncorhynchus nerka (Continued)

Proteocephalus laruei Faust 1920. Hoffman (1967).

Proteocephalus sp. Larva. Washington to Alaska. Margolis (1963).

TENTACULARIIDAE

Nybelinia sp. Larva. British Columbia. Stomach. Wardle (1932).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Kamchatka, USSR. Intestine.
Strelkov (1960).

Scolex polymorphus Rudolphi 1819. Kamchatka, USSR. Intestine.
Akhmerov (1955).

TRIAENOPHORIDAE

Triaienophorus crassus Forel 1868. Alaska. Margolis (1967b).

Triaienophorus nodulosus (Pallas 1760) Rudolphi 1819. Larva. Lake
Huron. Liver. Collins and Dechtiar (1974).

COPEPODA

CALIGIDAE

Lepeophtheirus salmonis (Krøyer 1838). British Columbia.

Margolis³; Pacific Coast. Wilson (1908a) as L.
pacificus.

ERGASILIDAE

Ergasilus auritus Markevich 1940. Alaska, British Columbia. Roberts
(1963); Kamchatka, USSR. Konovalov et al. (1970).

Ergasilus nerkae Roberts 1963. British Columbia. Gills. Roberts
(1963).

Ergasilus turgidus Fraser 1920. Alaska. Gills, fins. Cope (1959).

Ergasilus caeruleus Wilson 1911. Lake Huron. Gills. Collins and
Dechtiar (1974).

LERNAEOPODIDAE

Salmincola edwardsii (Olsson 1869) Wilson 1915. Kamchatka, USSR.
Akhmerov (1954b).

Salmincola californiensis (Dana 1853) Wilson 1915. Oregon, Washington,
Idaho, British Columbia. Gills. Kabata (1969c); Japan. Mouth.
Yamaguti (1939c); USSR. Bykhovskaya-Pavlovskaya et al. (1962) as
Salminicola falculata.

Salminicola carpionis (Krøyer 1837) Wilson 1915. British Columbia.
Foerster (1929).

DIGENEA

ALLOCREADIIDAE

Oncorhynchus nerka (Continued)

Crepidostomum farionis (Müller 1780) Lühe 1909. British Columbia. Bangham and Adams (1954); Kamchatka, USSR. Trofimenko (1962); California. Intestine, pyloric caeca. Haderlie (1953); Lake Huron. Collins and Dechtiar (1974).

BUCEPHALIDAE

Prosorhynchoides gracilescens (Rudolphi 1819) n. comb. Kamchatka, USSR. Mamaev et al. (1959); Alaska. Margolis (1963).

DIPLOSTOMATIDAE

Diplostomum sp. Larva. Kamchatka, USSR. Mamaev et al. (1959).
Diplostomum spathaceum (Rudolphi 1819) Olsson 1876. Metacercaria. Lake Huron. Eyes. Collins and Dechtiar (1974).
Tetracotyle sp. Larva. North Pacific. Margolis (1963).

FELLODISTOMATIDAE

Pseudopentagramma petrowi (Layman 1930) Yamaguti 1971. Alaska. Pyloric caeca, intestine. Margolis and Ching (1965) as Pentagramma p.

GORGODERIDAE

Phyllodistomum conostomum (Olsson 1876) Odhner 1902. Kamchatka, USSR. Konovalov et al. (1970).

HEMIURIDAE

Genolinea laticauda Manter 1925. British Columbia. Stomach. Arai (1969b).
Parahemiuris merus (Linton 1910) Woolcock 1935. British Columbia. Intestine. Arai (1969b).
Sterrhurus sp. Kamchatka, USSR. Akhmerov (1954b).
Hemiurus levinseni Odhner 1905. Kamchatka, USSR. Intestine. Strelkov (1960); Alaska, British Columbia. Margolis (1963).
Derogenes varicus (Müller 1784) Looss 1901. Kamchatka, USSR. Mamaev et al. (1959); British Columbia, Alaska. Margolis (1963).
Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Kamchatka, USSR. Digestive tract. Trofimenko (1962); Washington to Alaska. Margolis (1963).
Genarchopsis muelleri (Levinsen 1881) Yamaguti 1954. Kamchatka, USSR. Digestive tract. Trofimenko (1962) as Genarches m.
Lecithophyllum botryophorum (Olsson 1868) Odhner 1905. British Columbia, Alaska. Stomach. Margolis (1963) as L. anteroporum.
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Washington. Margolis (1965).

Oncorhynchus nerka (Continued)

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine. Arai (1969b); Kamchatka, USSR. Trofimenko (1962).

LAMPRITREMATIDAE

Lampritrema miescheri (Zschokke 1890) Margolis 1962. Okhotsk Sea, USSR. Stomach,
gills. Margolis (1962).

OPECOELIDAE

Plagioporus shawi (McIntosh 1939) Margolis 1970. Washington.
Intestine. Margolis (1970b).

STRIGEIDAE

Cotylurus erraticus (Rudolphi 1809) Szidat 1928. Metacercaria.
Montana. Pericardial cavity. Olson (1970).

SYNCOELIIDAE

Syncoelium filiferum (Leuckart, in Sars 1885) Odhner 1911. Washington.
Branchial cavity. Lloyd and Guberlet (1936); British Columbia.
Margolis (1963) as S. katuwo.

HIRUDINOIDEA

PISCICOLIDAE

Piscicola salmositica Meyer 1946. British Columbia, Washington.
Pectoral, pelvic fins, gills. Becker and Katz (1965a).

MOLLUSCA

UNIONIDAE

Anodonta beringiana Middendorf. Glochidium. Alaska. Gills, body
surface. Cope (1959).

MONOGENEA

GYRODACTYLIDAE

Gyrodactyloides strelkowi Bykhovsky and Polyanski 1953. Kamchatka,
USSR. Mamaev et al. (1959); Alaska. Pennell et al. (1973).

TETRAONCHIDAE

Tetraonchus alaskensis Price 1937. Alaska. Margolis (1963).

NEMATODA

ANISAKIDAE

Oncorhynchus nerka (Continued)

- Contracaecum hypomesi Fujita 1932. Larva. Japan. Body cavity.
Fujita (1939).
Contracaecum benimasu Fujita 1932. Larva. Japan. Yamaguti (1961).
Contracaecum elongatum Fujita 1939. Larva. Japan. Body cavity.
Fujita (1939).
Contracaecum hippoglossi Fujita 1932. Larva. Japan. Fujita (1932).
Contracaecum ochotense Fujita 1932. Larva. Japan. Fujita (1932).
Contracaecum sp. Larva. British Columbia. Body cavity. Arai
(1969b); Japan. Seki (1975).
Contracaecum spiculigerum (Rudolphi 1809). Railliet and Henry 1912.
Larva. British Columbia. Bangham and Adams (1954).
*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. British Columbia.
Stomach, intestine. Margolis³; Kamchatka, USSR. Trofimenko (1962)
both as Contracaecum a.
Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b);
Washington. Margolis (1965); Kamchatka, USSR. Trofimenko (1962).
Raphidascaris sp. Japan. Fukui (1958).

CAPILLARIIDAE

- Capillaria sp. Alaska. Margolis (1963).
Thominx catenata (Van Cleave and Mueller 1932) Skrjabin and Schikhobalova
1954. Lake Huron. Intestine. Collins and Dectiar (1974) as
Capillaria c.

CUCULLANIDAE

- Truttaedacnitis trutta (Fabricius 1794) Petter 1974. Kamchatka,
USSR. Akhmerov (1954b) as Dacnitis truttae.

CYSTIDICOLIDAE

- Ascarophis sebastodis Olsen 1952. British Columbia. Intestine.
Arai (1969b).
Cystidicola farionis Fisher 1798. Japan Sea, USSR to Bering Sea,
Alaska. Swimbladder. Margolis (1967a).
Cystidicola stigmatura (Leidy 1886) Ward and Magath 1916. Lake
Huron. Swimbladder. Collins and Dectiar (1974).
Salvelinema salmonicola (Ishii 1916) Margolis (1966). Japan, USSR,
Alaska. Swimbladder. Margolis (1967a); Kamchatka, USSR.
Trofimenko (1962) as S. cristata.
Cystidicoloides tenuissima (Zeder 1800) Rasheed 1969. Probably
Russian waters. Intestine. Ko and Anderson (1969); British
Columbia. Bangham and Adams (1954); USSR. Stomach, intestine.
Byhovskaya-Pavlovskaya et al. (1962) latter two as Metabronema
salvelini.
Metabronema laticauda Fujita 1939. Kamchatka, USSR. Intestine.
Fujita (1939).
Spinitectus gracilis Ward and Magath 1917. Lake Huron. Intestine.
Collins and Dectiar (1974).

Oncorhynchus nerka (Continued)

PHILOMETRIDAE

Philonema oncorhynchi Kuitunen-Ekbaum 1933. British Columbia. Peritoneum, pyloric caeca, gonads, mesentery. Dombroski (1955); Kamchatka, USSR. Trofimenko (1962).

THELAZIIDAE

Rhabdochona fujii (Fujita 1921) Fujita 1927. Japan. Intestine. Fujita (1921a) as Cystidicola f.
Rhabdochona cascadii Wigdor 1918. British Columbia. Bangham and Adams (1954); Lake Huron. Intestine. Collins and Dechtiar (1974).

PROTOZOA (CILIOPHORA)

DENDROSOMATIDAE

Trichophrya piscium Bütschli 1889. Kamchatka, USSR. Konovalov et al. (1970).

URCEOLARIIDAE

Trichodina nigra kamchatka. Kamchatka, USSR. Konovalov et al. (1970).

PROTOZOA (MICROSPORIDA)

NOSEMATIDAE

Plistophora sp. Northern California. Gills. Wales and Wolf (1955); Muscles of head. Awakura (1965).
Glugea takedai Awakura 1974. Japan. Muscles. Awakura (1974).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca krogiosi Konovalov and Shulman 1965. Kamchatka, USSR. Urinary bladder. Shulman (1966).

MYXIDIIDAE

Myxidium oviforme Parisi 1912. USSR. Gallbladder. Bykhovskaya-Pavlovskaya et al. (1962).
Myxidium obscurum Konovalov 1966. Kamchatka, USSR. Anterior intestine, urinary bladder. Shulman (1966).

Oncorhynchus nerka (Continued)

MYXOBOLIDAE

- Henneguya salminicola Ward 1919. Kamchatka, USSR. Muscles. Akhmerov (1954a); British Columbia. Muscles. Margolis (1963).
Myxobolus neurobius Schuberg and Schroder 1905. Kamchatka, USSR. Cysts in nervous tissues. Bykhovskaya-Pavlovskaya et al. (1962).
Myxobolus krokhini Konovalov and Shulman 1966. Kamchatka, USSR. Konovalov et al. (1970).

MYXOSOMATIDAE

- Myxosoma cerebrialis (Hofer and Plehn 1903) Kudo 1933. Asia. Brain. Halliday (1976).

SPHAEROSPORIDAE

- Chloromyxum wardi Kudo 1920. Alaska, USSR. Gallbladder. Kudo (1920).
Chloromyxum correioni Bauer 1948. USSR. Gallbladder. Kudo and Meglitsch⁶.

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

- Cryptobia salmositica Katz 1951. Becker (1970a).
Cryptobia branchialis. Japan. Gills. Sano (1970).

HEXAMITIDAE

- Hexamita salmonis (Moore 1922). British Columbia. Duff (1934).

TETRAMITIDAE

- Ichthyobodo necatrix (Henneguy 1884). British Columbia. Gills. Hoskins et al.¹³ as Costia necatrix.

Oncorhynchus tshawytscha - Chinook Salmon

ACANTHOCEPHALA

ECHINORHYNCHIDAE

- Echinorhynchus gadi Zoega in Müller 1776. British Columbia. Intestine. Arai (1969b); Kamchatka, USSR. Trofimenko (1962).
Metechinorhynchus salmonis (Müller 1784) Petrotchenko 1956. Lake Michigan. Intestine. Amin and Burrows (1977).

NEOECHINORHYNCHIDAE

- Neoechinorhynchus cristatus Lynch 1936. Kamchatka, USSR. Akhmerov (1954b).

POLYMORPHIDAE

- Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Larva. Kamchatka, USSR. Trofimenko (1962).
Bolbosoma caenoforme (Heitz 1920) Meyer 1933. USSR. Trofimenko (1962).

Oncorhynchus tshawytscha (Continued)

BRANCHIURA

ARGULIDAE

Argulus sp. Oregon. Shaw (1947).

CESTODA

AMPHICOTYLIDAE

Eubothrium sp. Oregon. Shaw (1947).

Eubothrium crassum (Bloch 1779) Nybelin 1922. Kamchatka, USSR.

Trofimenko (1962); British Columbia. Pyloric caeca.

Wardle (1932) as E. oncorhynchi.

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Larva. Oregon. Intestine. Olson (1978a).

DIPHYLLOBOTHRIIDAE

Diphyllobothrium sp. Larva. Kamchatka, USSR. Mamaev et al. (1959).

HEPATOXYLIDAE

Hepatoxylon trichuri (Holten 1802) Dollfus 1942. Post larva.

Kamchatka, USSR. Zschokke and Heitz (1914) as Coenomorphus grossus.

PHYLLOBOTHRIIDAE

Phyllobothrium caudatum (Zschokke and Heitz 1914). Larva. Kamchatka, USSR. Mamaev et al. (1959).

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b); Oregon. Olson (1978a).

PROTEOCEPHALIDAE

Proteocephalus exiguus La Rue 1911. Kamchatka, USSR. Intestine.

Akhmerov (1955).

TENTACULARIIDAE

Nybelinia sp. Larva. British Columbia. Stomach. Wardle (1932).

Nybelinia surmenicola Okada 1929. Larva. Kamchatka, USSR.

Strelkov (1960).

Tentacularia coryphaenae Bosc 1802. Larva. Kamchatka, USSR.

Zschokke and Heitz (1914) as Tetrahynchus quadrirostris.

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Kamchatka, USSR. Intestine.

Strelkov (1960).

Oncorhynchus tshawytscha (Continued)

Scolex polymorphus Rudolphi 1819. Kamchatka, USSR. Akhmerov (1954a).

CALIGIDAE

CALIGIDAE

Caligus sp. Central California. Body surface. Wilson (1908a) as C. gurnardi.

Lepeophtheirus salmonis (Krøyer 1838). British Columbia. Margolis³; Central California. Gills. Wilson (1908a).

LERNAEIDAE

Lernaea cyprinacea Linnaeus 1758. Oregon. Eyes. Uzman and Rayner (1958).

LERNAEPODIDAE

Salmincola californiensis (Dana 1853) Wilson 1915. California, Oregon. Gills, Kabata (1969c); Bykhovskaya-Pavlovskaya et al. (1962) as Salminicola falculata.

THERODAMASIDAE

Paeonodes nemaformis Hewitt 1969. New Zealand. Hewitt (1969a).

DIGENEA

AZYGIIDAE

Azygia robusta Odhner 1911. Kamchatka, USSR. Trofimenko (1962).

BUCEPHALIDAE

Prosorhynchoides gracilescens (Rudolphi 1819) n. comb. Kamchatka, USSR. Trofimenko (1962).

HEMIURIDAE

Deropegus aspina (Ingles 1936) McCauley and Pratt 1961. Oregon. Stomach. McCauley and Pratt (1961).

Genolinea lintoni Skrjabin and Guschanskaja 1955. California. Stomach. Linton (1940) as Genarches sp.

Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Washington. Stomach. Lloyd (1938); Oregon. Shaw (1947); Kamchatka, USSR. Trofimenko (1962).

Derogenes sp. Pratt and McCauley (1961).

Derogenes infirmus (Linton 1940) Yamaguti 1971. Northern California. Stomach, esophagus. Linton (1940) as Genarches i.

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Washington.

Intestine. Lloyd (1938); British Columbia. Intestine. Arai (1969b).

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Oregon.

Stomach. McCauley (1960); British Columbia. Stomach. Margolis³ as T. nanaimoensis.

Oncorhynchus tshawytscha (Continued)

NANOPHYETIDAE

Nanophyetus salmincola (Chapin 1926) Chapin 1927. Metacercaria. Oregon. Simms et al. (1931); Oregon. Kidneys. Millemann et al. (1964).

HIRUDINOIDEA

PISCICOLIDAE

Piscicola salmositica Meyer 1946. Washington, Oregon. Pectoral, pelvic fins, gills. Becker and Katz (1965a); California. Haderlie (1953).

MOLLUSCA

UNIONIDAE

Anodonta beringiana Middendorf. Glochidium. Alaska. Skin, fins, mouth. Cope (1959).
Margaritifera margaritifera (Linnaeus). Glochidium. Washington. Gills. Davis (1953).

NEMATODA

ANISAKIDAE

- *Thynnascaris sp. Oregon. Intestine. Olson (1978a).
- *Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Kamchatka, USSR. Intestine. Strelkov (1960) as Contraecaecum a.
Contraecaecum sp. Larva. British Columbia. Body cavity. Arai (1969b); Kamchatka, USSR. Strelkov (1960).
Contraecaecum spiculigerum (Rudolphi 1809) Railliet and Henry 1912. Larva. Oregon. Intestine. Shaw et al. (1934).
Rhaphidascaris sp. Oregon. Shaw (1947).
Anisakis sp. Larva. British Columbia. Many places in body. Margolis³; Kamchatka, USSR. Trofimenko (1962); Oregon. Olson (1978a).

CAPILLARIIDAE

Capillaria sp. British Columbia. Stomach. Arai (1969b).

CUCULLANIDAE

Truttaedacnitis trutta (Fabricius 1794) Petter 1974. Kamchatka, USSR. Mamaev et al. (1959) as Dacnitis t.

CYSTIDICOLIDAE

Salvelinema walkeri (Ekbaum 1935) Margolis 1967. British Columbia. Swimbladder. Godfrey¹⁴.

Oncorhynchus tshawytscha (Continued)

PHILOMETRIDAE

Philonema oncorhynchi Kuitunen-Ekbaum 1933. British Columbia.

Body cavity. Margolis³.

Philonema sp. Larva. British Columbia. Swimbladder wall. Arai (1969b).

PROTOZOA (CILIOPHORA)

CHLAMYDODONTIDAE

Chilodonella cyprini (Moroff 1902). California. Skin. Leitritz and Lewis (1976).

URCEOLARIIDAE

Tripartiella californica (Davis 1947). USSR. Body surface, fins, gills. Bykhovskaya-Pavlovskaya et al. (1962); Sacramento River, California. Davis (1947) as Trichodina c.

PROTOZOA (HAPLOSPORIDA)

Dermocystidium salmonis Davis 1947. Northern California. Gills. Davis (1947).

PROTOZOA (MICROSPORIDA)

NOSEMATIIDAE

Plistophora salmonae Putz, Hoffman and Dunbar 1965. California. Gills. Leitritz and Lewis (1976).

Glugea takedai Awakura 1974. Japan. Muscles. Awakura (1974).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa shasta Noble 1950. Oregon. Sanders et al. (1970).

Leptotheca krogiusi Konovalov and Shulman 1965. Kamchatka, USSR.

Urinary bladder. Shulman (1966).

MYXIDIIDAE

Myxidium minteri Yasutake and Wood 1957. Washington. Renal tubules. Yasutake and Wood (1957); Oregon. Gallbladder. Sanders and Fryer (1970).

Myxidium oviforme Parisi 1912. USSR. Gallbladder. Bykhovskaya-Pavlovskaya et al. (1962).

Zschokkella orientalis Konovalov and Shulman 1966. USSR. Gallbladder. Shulman (1966).

Oncorhynchus tshawytscha (Continued)

MYXOBOLIDAE

- Henneguya salminicola Ward 1919. Alaska. Muscles (cysts). Fish (1939).
Myxobolus insidiosus Wyatt and Pratt 1963. Oregon. Muscles. Wyatt
and Pratt (1963).
Myxobolus kisutchi Yasutake and Wood 1957. Washington. Brain. Wyatt
(1978).

SPHAEROSPORIDAE

- Chloromyxum majori Yasutake and Wood 1957. Washington. Glomeruli.
Yasutake and Wood (1957).

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

- Cryptobia salmositica Katz 1951. Northern California. Blood.
Davison and Breese (1954); Washington. Becker and Katz (1965b).
Cryptobia borreli (Laveran and Mesnil 1901). Northern California.
Blood. Wasles and Wolf (1955).

HEXAMITIDAE

- Hexamita salmonis (Moore 1922). Washington. Intestine. Uzman et al.
(1965).

THECAMOEBIDAE

- Thecamoeba hoffmani Sawyer, Hnath and Conrad 1974. Washington, Oregon.
Gills. Sawyer et al. (1974).

Salmo clarki - Cutthroat Trout

ACANTHOCEPHALA

ECHINORHYNCHIDAE

- Metechinorhynchus lateralis (Leidy 1851) Golvan 1969. Northern
California. Intestine. Haderlie (1953) as Echinorhynchus l.

NEOECHINORHYNCHIDAE

- Neoechinorhynchus rutili (Müller 1780) Hamann 1892. British Columbia.
Bangham and Adams (1954); Wyoming. Intestine. Heckmann (1971).
Neoechinorhynchus crassus Van Cleave 1919. USSR. Intestine.
Bykhovskaya - Pavlovskaya et al. (1964).

POMPHORHYNCHIDAE

- Pomphorhynchus bulbocolli Linkins in Van Cleave 1919. British Columbia.
Bangham and Adams (1954).

CESTODA

Salmo clarki (Continued)

AMPHICOTYLIDAE

Eubothrium salvelini (Schrank 1790) Nybelin 1922. British Columbia.
Bangham and Adams (1954).

CYATHOCEPHALIDAE

Cyathocephalus sp. Washington. Neiland (1952).

DIPHYLLOBOTHRIIDAE

Diphyllobothrium cordiceps (Leidy 1871) Matz 1892. Larva. Montana.
Body cavity. Simms and Shaw (1931) as Dibothrium c.
Diphyllobothrium sp. Larva. Washington. Becker and Brunson (1967).

PROTEOCEPHALIDAE

Proteocephalus primaverus Neiland 1952. Washington. Neiland (1952).
Proteocephalus ambloplitis (Leidy 1887) Benedict 1900. Plerocercoid.
Washington. Becker (1967a).

Proteocephalus arcticus Cooper 1921. British Columbia. Wardle
(1933b) [Species Inquireae - Freze (1965)].

Proteocephalus laruei Faust 1920. Immature. Wyoming. Digestive
tract. Bangham (1951).

Proteocephalus salmonidicola Alexander 1951. British Columbia.
Bangham and Adams (1954); Washington. Intestine. Becker (1967a).

COPEPODA

CALIGIDAE

Lepeophtheirus salmonis (Krøyer 1838). British Columbia. Skin.
Margolis (1958c).

LERNAEOPODIDAE

Salmincola edwardsii (Olsson 1869) Wilson 1915. British Columbia.
Bere⁵ as S. bicauliculata.

DIGENEA

ALLOCREADIIDAE

Crepidostomum farionis (Müller 1780) Lühe 1909. Northern
California. Gallbladder. Haderlie (1953); Wyoming. Heckmann
(1971).

Crepidostomum cooperi Hopkins 1931. Wyoming. Probably rectum.
Hunninen and Hunter (1933) as C. fausti.

Crepidostomum transmarinum (Nicol 1909). North America. Hunninen
and Hunter (1933).

Allocreadium lobatum Wallin 1909. Wyoming. Bangham (1951).

Salmo clarki (Continued)

CLINOSTOMATIDAE

Clinostomum marginatum (Rudolphi 1819) Braun 1899. Metacercaria.
Washington. Throughout body. Uzman and Douglass (1966).

DIPLOSTOMATIDAE

Diplostomum sp. British Columbia. Bangham and Adams (1954).
Neascus sp. British Columbia. Bangham and Adams (1954).
Posthodiplostomum minimum (MacCallum 1921) Dubois 1936. Larva.
Wyoming. Bangham (1951).

HEMIURIDAE

Derogenes sp. Pratt and McCauley (1961).
Deropegus aspina (Ingles 1936) McCauley and Pratt 1961. Oregon.
Stomach. McCauley and Pratt (1961).

HETEROPHYIDAE

Apophallus sp. Larva. Wyoming. Bangham (1951).

NANOPHYETIDAE

Nanophyetus salmincola (Chapin 1926) Chapin 1927. Metacercaria.
Oregon. Simms et al. (1931).

OPECOELIDAE

Plagioporus siliculus Sinitsin 1931. Oregon. Sinitsin (1931).
Plagioporus shawi (McIntosh 1939) Margolis 1970. Yamaguti (1971)
as Peracreadium s.

SANGUINICOLIDAE

Cardicola davis (Wales 1958) Meade and Pratt 1965. Oregon.
Davis et al. (1961) as Sanguinicola d.
Cardicola alseae Meade and Pratt 1965. Oregon. Blood. Meade
and Pratt (1965).
Cardicola klamathensis (Wales 1958) Meade and Pratt 1965. Oregon.
Wales (1958) as Sanguinicola k.

HIRUDINOIDEA

PISCICOLIDAE

Piscicola salmositica Meyer 1946. Wyoming. Fins. Heckmann (1971).
Myzobdella sp. Wyoming. Bangham (1951) as Illinobdella sp.

Salmo clarki (Continued)

MOLLUSCA

UNIONIDAE

Margaritifera margaritifera (Linnaeus). Glochidia. Wyoming.
Bangham (1951).

MONOGENEA

GYRODACTYLIDAE

Gyrodactylus elegans Nordmann 1832. Washington. Wood and Mizelle
(1957).

TETRAONCHIDAE

Tetraonchus alaskensis Price 1937. Alaska. Gills. Price (1937a).

NEMATODA

ANISAKIDAE

Contracaecum sp. Larva. British Columbia. Bangham and Adams
(1954).

CAPILLARIIDAE

Skrjabinocapillaria bakeri (Mueller and Van Cleave 1932) Skrjabin
and Schikhobalova 1954. Wyoming. Bangham (1951); British
Columbia. Bangham and Adams (1954) both as Hepaticola b.
Thominx catenata (Van Cleave and Mueller 1932) Skrjabin and
Schikhobalova 1954. Idaho. Fritts (1959).

CYSTIDICOLIDAE

Salvelinema walkeri (Ekbaum 1935) Margolis 1967. Northern
California. Intestine. Haderlie (1953) as Cystidicola
stigmatura.

Cystidicoloides tenuissima (Zeder 1800) Rasheed 1966. Wyoming.
Bangham (1951) as Metabronema salvelini; Oregon. Shaw (1947)
as Ascarophis hardwoodi.

Cystidicoloides sp. Idaho. Fritts (1959).

Genera and species. Larva. Wyoming. Bangham (1951) as
Agamospirua sp.

CUCULLANIDAE

Truttaedacnitis trutta (Fabricius 1794) Petter 1974. Oregon.
Shaw (1947) as Cucullanus t; Wyoming. Intestine, liver,
mesentery. Bangham (1951) as Bulbodacnitis scotti; British
Columbia. Bangham and Adams (1954) as B. globosa.

Salmo clarki (Continued)

DIOCTOPHYMATIDAE

Eustrongylides sp. Larva. Oregon. Muscles. Shaw et al. (1934);
British Columbia. Bangham and Adams (1954).

PHILOMETRIDAE

Philonema onchorhynchi Kuitunen-Ekbaum 1933. British Columbia.
Bangham and Adams (1954).
Philometra sp. Oregon. Shaw (1947).

THELAZIIDAE

Rhabdochona sp. Idaho. Fritts (1959).
Rhabdochona cascadilla Wigdor 1918. British Columbia. Bangham
and Adams (1954).

PROTOZOA (CILIOPHORA)

DENDROSOMATIDAE

Trichophyra sp. Washington. Gills. Becker (1967a).

URCEOLARIIDAE

Trichodina truttiae. Oregon. Body surface. Davis (1947).
Trichodina sp. Wyoming. Gills. Heckmann (1971).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa shasta Noble 1950. Oregon. Sanders et al. (1970).

MYXIDIIDAE

Myxidium minteri Yasutake and Wood 1957. Columbia River.
Gallbladder. Sanders and Fryer (1970).

MYXOSOMATIDAE

Myxosoma cerebrealis (Hofer and Plehn 1904) Kudo 1934. USA. Brain.
Halliday (1976).

PROTOZOA (SARCOMASTIGOPHORA)

HEXAMITIDAE

Hexamita salmonis (Moore 1922). British Columbia. Duff (1934).

Salmo clarki (Continued)

TETRAMITIDAE

Ichthyobodo necatrix (Henneguy 1884), Hoffman (1967) as Costia n. Costia pyriformis Davis 1943. Wyoming. Gills. Heckmann (1971).

PROTOZOA (SPOROZOA)

HAEMOGREGARINIDAE

Haemogregarina sp. Wyoming. Blood. Heckmann (1971).

Salmo gairdneri -- Rainbow Trout

SYNONYMS - Salmo irideus, Salmo shasta

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Metechinorhynchus lateralis (Leidy 1851) Golvan 1969. Newfoundland. Intestine. Sandemann and Pippy (1967) as Echinorhynchus l.

Metechinorhynchus salmonis (Müller 1784) Petrotschenko 1956.

Yugoslavia. Zitnan and Cankovic (1970); USSR. Intestine.

Bykhovskaya-Pavlovskaya et al. (1962); Lake Michigan. Amin and Burrows (1977).

Metechinorhynchus truttae (Schrank 1788) Petrotschenko 1956.

Yugoslavia. Zitnan and Cankovic (1970); Ireland. Intestine.

Kane (1966); USSR. Bykhovskaya-Pavlovskaya et al. (1962).

Metechinorhynchus leidyi (Van Cleave 1924) Golvan 1969. Lake Huron, Canada-USA. Bangham (1944).

Acanthocephalus echigoensis Fujita 1920. Japan. Van Cleave (1931) as A. acerbus.

Acanthocephalus anguillae (Müller 1780) Lühe 1911. USSR. Intestine. Bykhovskaya-Pavlovskaya et al. (1962).

Acanthocephalus jacksoni Bullock 1962. New England. Bullock (1962).

Acanthocephalus minor Yamaguti 1935. Japan. Awakura (1972).

Acanthocephalus opsariichthys Yamaguti 1935. Japan. Intestine.

Nakajima and Egusa (1975a).

Acanthocephalus parksidei Amin 1975. Wisconsin. Amin (1975).

Pseudorhadinorhynchus samegaiensis Nakajima and Egusa 1975. Japan. Intestine. Nakajima and Egusa (1975b).

Pseudoechinorhynchus clavula (Dujardin 1845) Petrotschenko 1956.

USSR. Petrushevski and Shulman (1955) as Echinorhynchus c.

LEPTORHYNCHOIDIDAE

Leptorhychoides thecatus (Linton 1891) Kostylev 1924. Golvan (1969).

Salmo gairdneri (Continued)

NEOECHINORHYNCHIDAE

Neoechinorhynchus rutili (Müller 1780) Hamann 1892. Oregon.
Intestine. Merritt and Pratt (1964).

RHADINORHYNCHIDAE

Rhadinorhynchus sp. Northern California. Intestine. Edwards and
Nahhas (1968).

POMPHORHYNCHIDAE

Pomphorhynchus laevis (Zoega in Müller 1776) Van Cleave 1924.
Ireland. Rectum. Kane (1966); Yugoslavia. Zitnan and
Cankovic (1970).

Pomphorhynchus bulbocolli Linkins in Van Cleave 1919. British
Columbia. Bangham and Adams (1954).

BRANCHIURA

ARGULIDAE

Argulus pugettensis Dana 1852. British Columbia. External.
Wilson (1912b).

Argulus foliaceus (Linnaeus 1758). Great Britain. Fins, body
surface. Wootten (1973b).

CESTODA

AMPHICOTYLIDAE

Eubothrium sp. Washington. Intestine. Griffith (1953).

Eubothrium crassum (Bloch 1779) Nybelin 1922. Ireland. Intestine.
Kane (1966).

Eubothrium salvelini (Schränk 1790) Nybelin 1922. British
Columbia. Bangham and Adams (1954); Newfoundland. Intestine.
Sandemann and Pippy (1967).

CYATHOCEPHALIDAE

Cyathocephalus truncatus (Pallas 1781) Kessler 1868. USSR.
Petrushevski (1955); France. Joyeux and Baer (1936).

DIPHYLLOBOTHRIDAE

Diphyllobothrium sp. Plerocercoid. Alaska. Outer surface of stomach,
intestine. Needham and Behnke (1965); California. Haderlie
(1953); Ireland. Chappell and Owen (1969).

Salmo gairdneri (Continued)

Diphyllobothrium cordiceps (Leidy 1871) Matz 1892. Plerocercoid.
Montana. Simms and Shaw (1931); Oregon. Shaw (1947).

Diphyllobothrium latum (Linnaeus 1758) Matz 1892. USSR.
Petrushevski and Shulman (1955).

Diphyllobothrium dendriticum (Nitzsch 1824) Matz 1892. Plerocercoid.
Europe. Chappell and Owen (1969).

Diphyllobothrium ditremum (Creplin 1825) Matz 1892. Plerocercoid.
Canada. Viscera. Mudry and Anderson¹⁵.

LIGULIDAE

Schistocephalus sp. Larva. British Columbia. Bangham and Adams
(1954).

Schistocephalus solidus (Müller 1776) Steenstrup 1857. Plerocercoid.
Ireland. Chappell and Owen (1969).

Ligula intestinalis (Linnaeus 1758). Larva. Hoffman (1967).

PHYLLOBOTHRIIDAE

Pelichnibothrium sp. Northern California. Edwards and Nahhas (1968).

PROTEOCEPHALIDAE

Proteocephalus ambloplitis (Leidy 1887) Benedict 1900. Plerocercoid.
Washington. Becker (1967a).

Proteocephalus pinguis La Rue 1911. Immature. Wisconsin.
Digestive tract. Bangham (1944).

Proteocephalus longicollis (Zeder 1800) Nufer 1905. USSR.
Petrushevski and Shulman (1955).

Proteocephalus salmonidicola Alexander 1951. Oregon. Alexander
(1951); California. Intestine. Haderlie (1953); British
Columbia. Bangham and Adams (1954).

Proteocephalus sp. Idaho. Fritts (1959).

Proteocephalus percae (Müller 1780) Kailliet 1889. Larva. Great
Britain. Intestine. Wootton (1973b).

TRIAENOPHORIDAE

Triaienophorus lucii (Müller 1776). Plerocercoid. USSR.
Petrushevski and Shulman (1955).

COPEPODA

CALIGIDAE

Caligus elongatus Nordmann 1832. Atlantic. Skin. Sutterlin
et al. (1976).

Caligus clemensi Parker and Margolis 1964. British Columbia.
Fraser (1920) as C. gurnardi.

Lepeophtheirus salmonis (Krøyer 1838). British Columbia. Fraser
(1920).

Salmo gairdneri (Continued)

ERGASILIDAE

Ergasilus nerkae Roberts 1963. British Columbia. Bangham and Adams (1954) as E. caeruleus.
Ergasilus sieboldi Nordmann 1832. Poland. Hoffman (1967).

LERNAEIDAE

Lernaea cyprinacea Linnaeus 1758. Oregon. Eyes. Uzmann and Rayner (1958); Great Britain. Skin. Kennedy (1975).

LERNAEOPODIDAE

Salmincola californiensis (Dana 1853) Wilson 1915. California, Oregon. Gills. Kabata (1969c).
Salmincola edwardsii (Olsson 1869) Wilson 1915. Northern California. Kabata (1969c); British Columbia. Bangham and Adams (1954).

DIGENEA

ALLOCREADIIDAE

Bunodera luciopercae (Müller 1776) Lühe 1909. Canada. Mudry and Anderson (1977).
Crepidostomum metoecus (Braun 1900) Braun 1900. Yugoslavia. Rukavina and Delic (1965).
Crepidostomum canadense Hopkins 1931. Oregon. Shaw (1947) as C. laureatum.
Crepidostomum cooperi Hopkins 1931. Oregon. Shaw (1933).
Crepidostomum farionis (Müller 1780) Lühe 1909. Oregon. Shaw (1947); British Columbia. Bangham and Adams (1954); USSR. Petrushevski and Shulman (1955); California. Intestine and pyloric caeca; Haderlie (1953); Newfoundland. Sandemann and Pippy (1967).
Allocreadium lobatum Wallin 1909. British Columbia. Bangham and Adams (1954).

AZYGIIIDAE

Azygia lucii (Müller 1776) Lühe 1909. Yugoslavia. Zitnan and Cankovic (1970).

CLINOSTOMATIDAE

Clinostomum marginatum (Rudolphi 1819) Braun 1899. Metacercaria. Washington. Throughout body. Uzmann and Douglas (1966); California. Haderlie (1953).

DIPLOSTOMATIDAE

Diplostomum spathaceum (Rudolphi 1819) Olsson 1876. Metacercaria. Europe. Chappell and Owen (1969); Finland. Eyes. Tiainen (1966).

Salmo gairdneri (Continued)

Spathaceum indistinctum (Guberlet 1923) Hughes 1929. Metacercaria. Washington. Eyes. Becker (1967a) as Diplostomum flexicaudum.
Tylodelphys clavata (Nordmann 1832) Diesing 1850. Larva. Great Britain. Eyes. Wootten (1973b).
Tylodelphys podicipina Kozicka and Niewiadomska 1960. Larva. Great Britain. Eyes. Wootten (1973b).

ECHINOSTOMATIDAE

Echinochasmus milvi Yamaguti 1939. Metacercaria. Washington. Gill tissues. Uzman and Hayduk (1964).

GORGODERIDAE

Phyllodistomum lachancei Choquette 1947. Hoffman (1967).

HEMIURIDAE

Aponurus sp. Oregon. Shaw (1947).
Deropegus aspina (Ingles 1936) McCauley and Pratt 1961. Oregon. Stomach. McCauley and Pratt (1961).
Derogenes sp. Shaw (1947).

HETEROPHYIDAE

Apophallus donicus (Skrjabin and Lindtrop 1919) Price 1931. Metacercaria. Oregon. Skin. Niemi and Macy (1974).

NANOPHYETIDAE

Nanophyetus salminicola (Chapin 1926) Chapin 1927. Metacercaria. Oregon. Simms et al. (1931).

OPECOELIDAE

Plagioporus shawi (McIntosh 1939) Margolis 1970. Oregon. Intestine. McIntosh (1939); Washington. Griffith (1953) both as Podocotyle s.
Plagioporus augusticolle (Hausmann 1896) Dobrovolsky 1939. Washington. Intestine. Becker (1967a); Northern California. Intestine. Haderlie (1953).
Crowcrocaecum testiobliquum (Wisniewski 1932) Skrjabin and Koval 1956. Yugoslavia. Zitnan and Cankovic (1970) [= Nicolla T. - Yamaguti (1971)].
Crowcrocaecum wisniewskii Slusarki 1958. Europe. Slusarki (1958).

SANGUINICOLIDAE

Cardicola davisii (Wales 1958) Meade and Pratt 1965. California. Blood vessels of gills. Wales (1958); Oregon. Davis et al. (1961) both as Sanguinicola d.
Cardicola alseae Meade and Pratt 1965. Oregon. Vascular system. Meade and Pratt (1965).

Salmo gairdneri (Continued)

Sanguinicola idahoensis Schell 1974. Idaho. Blood vessels, eyes, brain surface. Schell (1974).

STEGANODERMATIDAE

Pseudochetosoma salmonicola Dollfus 1951. Bulgaria. Gallbladder. Kakatcheva-Avramova (1966).

STRIGEIDAE

Cotylurus erraticus (Rudolphi 1809) Szidat 1928. Metacercaria. Europe and North American. Pericardial cavity. Wootten (1973a).

HIRUDINOIDEA

PISCICOLIDAE

Piscicola salmositica Meyer 1946. Washington. Pectoral and pelvic fins, gill lamellae. Becker and Katz (1965a); California. Meyer (1946).

Piscicola geometra (Linnaeus 1761). USSR. Petrushevski and Shulman (1955).
Myzobdella sp. British Columbia. Bangham and Adams (1954) as Illinobdella sp.

MOLLUSCA

UNIONIDAE

Margaritifera margaritifera (Linnaeus). Glochidia. California. Gills. Davis (1953).
Anodonta sp. Larva. Great Britain. Gills. Wootten (1973b).

MONOGENEA

DISCOCOTYLIDAE

Discocotyle salmonis Schaffer 1916. Long Island. Gills. Shaffer (1916).
Discocotyle sagittata (Leuckart 1842) Diesing 1850. Europe. Gills. Chappell and Owen (1969).

GYRODACTYLIDAE

Gyrodactylus elegans Nordmann 1832. California. Gills, skin. Haderlie (1953); Washington. Wood and Mizelle (1957).

Gyrodactylus colemanensis Mizelle and Kritsky 1967. Northern California. Skin. Mizelle and Kritsky (1967c).

Gyrodactylus salaris Malmberg 1956. Yugoslavia. Zitan and Cankovic (1970).

Gyrodactylus brevis Crane and Mizelle 1967. Northern California. Skin. Crane and Mizelle (1967).

Salmo gairdneri (Continued)

NEMATODA

ANISAKIDAE

- Goezia ascaroides (Goeze 1782). France. Dollfus (1935a); USSR. Bykhovskaya-Pavlovskaya et al. (1962).
Raphidascaris acus (Bloch 1779) Railliet and Henry 1915. Italy. Hoffman (1967).
Contraecaecum spiculigerum (Rudolphi 1809) Railliet and Henry 1915. Larva. Northern California. Mesentery, peritoneum, stomach wall. Haderlie (1953); Oregon. Stomach, intestine. Shaw (1947).
Contraecaecum sp. Larva. New Zealand. Stomach. Hewitt and Hine (1972).

CAMALLANIDAE

- Camallanus lacustris (Zoega 1776) Railliet and Henry 1915. USSR. Petrushevski and Shulman (1955); Ireland. Kane (1966).

CAPILLARIIDAE

- Capillaria salvelini Polyanski 1952. Yugoslavia. Zitnan and Cankovic (1970).
Capillaria sp. Japan. Seki (1975).
Skrjabinocapillaria bakeri (Mueller and Van Cleave 1932) Skrjabin and Schikhobalova 1954. British Columbia. Bangham and Adams (1954) as Hepaticola b.

CUCULLANIDAE

- Bulbodacnitis ampullastoma Maggenti 1971. Northern California. Pyloric caeca, duodenum. Maggenti (1971).
Truttaedacnitis trutta (Fabricius 1794) Petter 1974. Oregon. Shaw (1947) as Cucullanus t. and C. globosus; British Columbia. Bangham and Adams (1954) as Bulbodacnitis globosa; California. Haderlie (1953) as Bulbodacnitis occidentalis.

CYSTIDICOLIDAE

- Cystidicoloides tenuissima (Zeder 1800) Rasheed 1966. British Columbia. Bangham and Adams (1954) as Metabronema salvelini; Northern California. Haderlie (1953) as Metabronema salvelini; Yugoslavia. Rukavina and Delic (1965) as Sterliadochona t.; USSR. Stomach. Zitnan (1968) as Metabronema truttae.
Cystidicola farionis Fischer 1798. USSR. Zitnan (1968); Ireland. Chappell and Owen (1969).
Salvelinema walkeri (Ekbaum 1935) Margolis 1967. British Columbia. Bangham and Adams (1954) as Cystidicola stigmatura.
Ascarophis skrjabini (Layman 1933) Polyanski 1952. USSR. Intestine. Bykhovskaya-Pavlovskaya et al. (1962).

Salmo gairdneri (Continued)

Spinitectus gordani Cordero-del-Campillo and Alvarez-Pellitero 1976.
Spain. Esophagus and stomach. Cordero-del-Campillo and Alvarez-Pellitero (1976).
Spinitectus gracilis Ward and Magath 1917. Hoffman (1967).

DIOCTOPHYMATIDAE

Eustrongylides sp. Larva. New Zealand. Stomachs, mesenteries, intestine. Hewitt and Hine (1972).

PHILOMETRIDAE

Philometra sp. Oregon. Shaw (1947).
Philonema oncorhynchi Kuitunen-Ekbaum 1933. Body cavity. Meyer (1960); Northern California. Haderlie (1953); Larva. British Columbia. Bangham and Adams (1954).
Philonema agubernaculum Simon and Simon 1936. Wyoming. Body cavity. Simon and Simon (1936) [=Philonema oncorhynchi - Baylis (1936)].
Philonema sp. Alaska. Needham and Behnke (1965); Larva. Washington. Abdominal cavity. Becker (1967a).

THELAZIIDAE

Rhabdochona cascadilla Wigdor 1918. British Columbia. Bangham and Adams (1954).
Rhabdochona denudata (Dujardin 1845) Railliet 1916. USSR. Bykhovskaya-Pavlovskaya et al. (1962).
Sterliadochona pedispicula Maggenti and Paxman 1971. Northern California. Stomach and esophagus. Maggenti and Paxman (1971).

PROTOZOA (CILIOPHORA)

CHLAMYDONTIDAE

Chilodonella cyprini (Moroff 1902). California. Skin. Leitritz and Lewis (1976); USSR. Petrushevski and Shulman (1955).

DENDROSOMATIDAE

Trichophyra piscium Butschli 1889. Newfoundland. Gills. Sandemann and Pippy (1967).
Trichophyra sp. Washington. Gills. Becker (1967a).

EPISTYLIDAE

Epistylis sp. California. Skin. Leitritz and Lewis (1976).

OPHRYOGLENIDAE

Ichthyophthirius multifilllis Fouquet 1876. USSR. Petrushevski and Shulman (1955). Yugoslavia. Zitnan and Cankovic (1970); California. Skin. Leitritz and Lewis (1976).

Salmo gairdneri (Continued)

SCYPHIDIIDAE

Scyphidia sp. Washington. Gills. Becker (1967a).
Glossatella USSR. Bajljozov et al. (1964).

URCEOLARIIDAE

Trichodina salmincola Wellborn 1967. North Carolina. Fins, body surface. Wellborn (1967).
Trichodina fultani Davis 1947. West Virginia. Body surface, fins, gills. Davis (1947).
Trichodina domerguei. USSR. Petrushevski and Shulman (1955).

PROTOZOA (HAPLOSPORIDA)

Dermocystidium salmonis Davis 1947. California. Gills, skin.
Leitritz and Lewis (1976).

PROTOZOA (MICROSPORIDA)

NOSEMATIDAE

Glugea takedai Awakura 1974. Japan. Muscles. Awakura (1974).
Plistophora sp. Northern California, British Columbia. Gills.
Wales and Wolf (1955); Japan. Muscles of head. Awakura (1965).
Plistophora salmonae Putz, Hoffman and Dunbar 1965. California.
Gills. Putz et al. (1965).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa shasta Noble 1950. California. Viscera. Noble (1950).

MYXIDIIDAE

Myxidium minteri Yasutake and Wood 1957. Oregon. Renal tubules.
Yasutake and Wood (1957); Gallbladder. Sanders and Fryer (1970).
Myxidium oviforme Parisi 1912. California. Gallbladder. Jameson (1931).
Zschokkella nova Klokacawa 1914. USSR. Petrushevski and Shulman (1955).

MYXOBOLIDAE

Myxobolus kisutchi Yasutake and Wood 1957. Oregon. Epidermal scales.
Yasutake and Woods (1957).

MYXOSOMATIDAE

Myxosoma squamalis Iverson 1954. Washington. Body surface. Iverson (1954).
Myxosoma cerebralis (Hofer and Plehn 1903). New Zealand. Cartilage of head. Hewitt and Hine (1972); USSR. Petrushevski and Shulman (1955).

Salmo gairdneri (Continued)

SPHAEROSPORIDAE

Chloromyxum majori Yasutake and Wood 1957. Washington. Glomerulus.
Yasutake and Wood (1957).

Chloromyxum truttae Leger 1961. USSR. Petrushevski and Shulman (1955).

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia salmositica Katz 1951. Washington. Blood. Becker and
Katz (1965b).

Cryptobia borreli (Laveran and Mesnil 1901). Northern California.
Blood. Wales and Wolf (1955).

HEXAMITIDAE

Hexamita salmonis (Moore 1922). USA. Intestine. Davis (1923)
as Octomitus s.

Octomitus truttae Schmidt 1920. USSR. Intestine. Bykhovskaya-
Pavlovskaya et al. (1962); Yugoslavia. Zitnan and Cankovic (1970).

TETRAMITIDAE

Costia pyriformis Davis 1943. West Virginia. Gills. Davis (1943).

Ichthyobodo necatrix (Henneguy 1884). USSR. Petrushevski and Shulman (1955);
Yugoslavia. Zitnan and Cankovic (1970) both as Costia n.

THECAMOEBIDAE

Thecamoeba hoffmani Sawyer, Hnath and Conrad 1974. Michigan.
Gills. Sawyer et al. (1974).

Schizamoeba salmonis Davis 1925. West Virginia. Stomach. Davis
(1925).

Salvelinus malma - Dolly Varden

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Acanthocephalus minor Yamaguti 1935. Japan. Awakura (1972).

Echinorhynchus gadi Zoega in Muller 1776. British Columbia.
Intestine. Arai (1969b); Kamchatka, USSR. Zhukov (1963).

NEOECHINORHYNCHIDAE

Neoechinorhynchus rutili (Muller 1780) Hamann 1892. British Columbia.
Intestine. Bangham and Adams (1954).

Salvelinus malma

POLYMORPHIDAE

Bolbosoma caenoforme (Heitz 1920) Meyer 1933. Kamchatka, USSR.
Zhukov (1963).

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Larva. Kamchatka,
USSR. Intestine. Zhukov (1963).

CESTODA

AMPHICOTYLIDAE

Eubothrium crassum (Bloch 1779) Nybelin 1922. Kamchatka, USSR.
Zhukov (1963).

Eubothrium salvelini (Schränk 1790) Nybelin 1922. British Columbia.
Zhukov (1963).

CYATHOCEPHALIDAE

Bothrimonus sturionis Duvernoy 1842. Canada. Intestine. Cooper
(1921).

DIPHYLLOBOTHRIIDAE

Diphyllobothrium cordiceps (Leidy 1871) Matz 1892. Larva. Canada.
Body cavity. Mudry and Anderson¹⁵.

Diphyllobothrium dallii Rausch 1956. Larva. Kamchatka, USSR.
Zhukov (1963).

Diphyllobothrium latum (Linnaeus 1758) Matz 1892. Larva. Canada.
Mudry and Anderson¹⁵.

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai
(1969b).

PROTEOCEPHALIDAE

Proteocephalus salmonidicola Alexander 1951. British Columbia.
Bangham and Adams (1954).

TETRAPHYLLIDAE

Scolex pleuronectis Müller 1788. Kamchatka, USSR. Zhukov (1963).

COPEPODA

LERNAEOPODIDAE

Salmincola californiensis (Dana 1852) Wilson 1915. Canada. Gills.
Wilson (1920).

Salmincola carpionis (Krøyer 1837) Wilson 1915. Alaska. Kabata
(1969c).

Salvelinus malma (Continued)

Salmonicola edwardsii (Olsson 1869) Wilson 1915. British Columbia.
Bangham and Adams (1954).

DIGENEA

ALLOCREADIIDAE

Crepidostomum metoecus (Braun 1900) Braun 1900. Japan. Seki (1975).
Crepidostomum tarionis (Müller 1780) Lühe 1909. British Columbia.
Intestine. Arai (1969b); Kamchatka, USSR. Zhukov (1963).
Neophasis oculata (Levinsen 1881) Miller 1941. Kamchatka, USSR.
Zhukov (1963).
Bunodera luciopercae (Müller 1780) Lühe 1909. Oregon. Mudry
and Anderson (1977).

AZYGIIIDAE

Azygia lucii (Müller 1776) Luhe 1909. Japan. Seki (1975).

BUCEPHALIDAE

Prosorhynchoides gracilescens (Rudolphi 1819) n. comb. Kamchatka,
USSR. Intestine. Zhukov (1963).
Prosorhynchoides ozakii (Ozaki 1928) Margolis and Arthur 1979. British Columbia.
Bangham and Adams (1954) as Bucephalopsis o.
Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Kamchatka,
USSR. Zhukov (1963).

FELLODISTOMATIDAE

Pseudopentagramma petrowi (Layman 1930) Yamaguti 1971. Kamchatka,
USSR. Zhukov (1963) as Bacciger p.

HEMIURIDAE

Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Kamchatka,
USSR. Strelkov (1960); British Columbia. Bangham and Adams
(1954).
Genarchopsis muelleri (Levinsen 1881) Yamaguti 1954. Kamchatka,
USSR. Zhukov (1963).
Genolinea anura (Layman 1930) Yamaguti 1954. Kamchatka, USSR.
Zhukov (1963).
Derogenes varicus (Müller 1784) Looss 1901. Kamchatka, USSR.
Zhukov (1963).
Hemiurus levinseni Odhner 1905. Kamchatka, USSR. Zhukov (1963).
Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine, pyloric caeca. Arai (1969b); Kamchatka, USSR.
Zhukov (1963).
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. British
Columbia. Stomach. Arai (1969b).

Salvelinus malma (Continued)

OPECOELIDAE

Podocotyle atomon (Rudolphi 1802) Odhner 1905. Kamchatka, USSR.
Zhukov (1963).

Podocotyle reflexa (Creplin 1825) Odhner 1905. Kamchatka, USSR.
Zhukov (1963).

MONOGENEA

DISCOCOTYLIDAE

Discocotyle sagittata (Leuckart 1842) Diesing 1850. British
Columbia. Bangham and Adams (1954).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Kamchatka, USSR. Strelkov (1960).

Contraeaecum sp. Larva. British Columbia. Body cavity. Arai
(1969b).

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Kamchatka, USSR.
Strelkov (1960) as Contraeaecum a.

CAPILLARIIDAE

Capillaria sp. Japan. Seki (1975).

CUCULLANIDAE

Truttaedacnitis trutta (Fabricius 1794) Petter 1974. Kamchatka,
USSR. Zhukov (1963); British Columbia. Bangham and Adams (1954)
both as Cucullanus t.

Cucullanus sp. Japan. Seki (1975).

CYSTIDICOLIDAE

Ascarophis pacificus Zhukov 1960. Kamchatka, USSR. Zhukov (1963).

Cystidicola sp. Canada. Ko and Anderson (1969).

Cystidicoloides tenuissima (Zeder 1800) Rasheed 1966. British
Columbia. Bangham and Adams (1954) as
Metabronema salvelini.

DIOCTOPHYMATIDAE

Eustrongyloides sp. Larva. British Columbia. Bangham and Adams
(1954).

PHILOMETRIDAE

Philonema oncorhynchi Kuitunen-Ekbaum 1933. Kamchatka, USSR.
Zhukov (1963); British Columbia. Bangham and Adams (1954).

Salvelinus malma (Continued)

THELAZIIDAE

Rhabdochona milleri (Choquette 1951) Moravec and Arai 1971. Canada.
Mudry and Anderson (1977).

PROTOZOA (MICROSPORIDA)

NOSEMATIIDAE

Glugea takedai Awakura 1974. Japan. Muscles. Awakura (1974).

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Myxidium oviforme Parisi 1912. Kamchatka, USSR. Zhukov (1964).

MYXOSOMATIDAE

Myxosoma cerebralis (Hofer and Plehn 1903) Kudo 1933. USA. Brain.
Halliday (1976).

OSMERIDAE -- Smelts

Hypomesus pretiosus - Surf Smelt

DIGenea

FELLODISTOMATIDAE

Pseudopentagramma petrowi (Layman 1930) Yamaguti 1971. British
Columbia. Pyloric caeca, intestine. Margolis and Ching (1965)
as Pentagramma p.

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Robinson et al.¹⁸

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Washington. Loose in body cavity and
encysted in liver. Kilambi and DeLacy (1967).
Contracaecum sp. Larva. British Columbia. Mesentery, stomach,
liver. Margolis³.

* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. British
Columbia. Stomach, intestine. Margolis³ as Contracaecum a.

CESTODA

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Kamchatka, USSR. Zhukov (1963).

DIGENEA

FELLODISTOMATIDAE

Pseudopentagramma petrowi (Layman 1930) Yamaguti 1971. British Columbia. Margolis and Ching (1965) as Pentagramma p.

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Kamchatka, USSR. Zhukov (1963).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Margolis³.
*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Kamchatka, USSR. Zhukov (1963).

Spirinchus thaleichthys - Longfin Smelt

SYNONYM - Spirinchus dilatus

DIGENEA

FELLODISTOMATIDAE

Pseudopentagramma petrowi (Layman 1930) Yamaguti 1971. British Columbia. Pyloric caeca, intestine. Margolis and Ching (1965) as Pentagramma p.

Thaleichthys pacificus - Eulachon

CESTODA

PHYLLOBOTHRIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

Thaleichthys pacificus (Continued)

COPEPODA

PENNELLIDAE

Haemobaphes disphaerocephalus Grabda 1976. Washington, Oregon.
Gill cavity. Grabda (1976).
Haemobaphes diceraus Wilson 1917. British Columbia. Gills.
Hoskins et al.¹³

DIGenea

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine. Arai (1969b).

NEMATODA

ANISAKIDAE

Contraecum sp. Larva. British Columbia. Body cavity. Arai
(1969b).

ALEPOCEPHALIDAE -- Slickheads

Bajacalifornia burragei

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Myxidium bajacalifornium Noble 1966. Southern California.
Gallbladder. Noble (1966a).

BATHYLAGIDAE -- Deepsea Smelts

Bathylagus ochotensis - Popeye Blacksmelt

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia sp. Noble and Collard (1970).

Bathylagus wesethi - Snubnose Blacksmelt

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia sp. Noble and Collard (1970).

Leuroglossus stilbius - California Smoothtongue

COPEPODA

PENNELLIDAE

Cardiodectes medusaeus (Wilson 1908) Yamaguti 1963. Central California. Flesh (embedded). Anderson.¹⁷

DIGENEA

HEMIURIDAE

Aponurus californicus Noble and Orias 1970. Southern California; Mexico. Stomach. Noble and Orias (1970).

PROTOZOA (MYXOSPORIDA)

MYXOBOLIDAE

Myxobolus sp. Southern California. Gallbladder. Noble (1966a).

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia stilbia Noble 1968. Southern California. Stomach. Noble (1968).

GONOSTOMATIDAE -- Lightfishes

Cyclothone acclinidens - Benttooth Bristlemouth

NEMATODA

ANISAKIDAE

Paranisakis sp. Larva. Southern California. Cysts in mesentery. Collard².

STERNOPTYCHIDAE -- Hatchetfishes

Argyropelecus pacificus - Pacific Hatchetfish

ACANTHOCEPHALA

Genera and species. Larva. Southern California. Intestine.
Collard⁹.

DIGENEA

DIDYMOZOIDAE

Genera and species. Larvae. Southern California. Gills.
Collard⁹.

Sternoptyx diaphana - Longspine Hatchetfish

CESTODA

TETRAPHYLLIDEA

Genera and species. Plerocercoid. Southern California. Pyloric
caeca, intestine. Collard⁹.

STOMIATIDAE -- Scaly Dragonfishes

Stomias atriventer - Blackbelly Dragonfish

CESTODA

TETRAPHYLLIDEA

Genera and species. Plerocercoid. Southern California; Baja
California. Intestine. Collard⁹.

SYNODONTIDAE -- Lizardfishes

Synodus lucioceps - California Lizardfish

BRANCHIURA

ARGULIDAE

Argulus borealis Wilson 1912. Southern California. Jensen¹⁸.

CESTODA

BOTHRIOCEPHALIDAE

Synodus lucioceps (Continued)

Anatrum histocephalum Jensen and Heckmann 1977.
California. Intestine. Jensen and Heckmann (1977a).

DASYRHYNCHIDAE

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931. Larva.
Southern California. Viscera. Jensen¹⁸.

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Larva.
Southern California. Viscera. Jensen¹⁸.

Grillotia smarigora (Wagener 1854) Dollfus 1947. Larva.
Southern California. Mesentery. Jensen¹⁸.

ONCOBOTHRIIDAE

Acanthobothrium sp. Larva. Southern California. Intestine. Jensen¹⁸.

COPEPODA

CALIGIDAE

Caligus hobsoni Cressey 1969. Southern California. Jensen¹⁸.

DIGenea

OPECOELIDAE

Helicometrina nimia Linton 1910. Intestine. Arai (1962).

ISOPODA

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. California. Turner et al. (1969).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).
Contracaecum sp. Larva. Southern California. Dailey et al. (in press).
Phocanema sp. Larva. Southern California. Dailey et al. (in press).
*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Southern California.
Jensen¹⁸.

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa sp. Southern California. Gallbladder. Jensen¹⁸.

SEARSIIDAE -- Tubeshoulders

Sagamichthys abei - Shining Tubeshoulders

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Myxidium melanostigmum Noble 1966. Southern California. Gall-
bladder. Noble (1966a).

ALEPISAUROIDAE -- Lancetfishes

Alepisaurus ferox - Longnose Lancetfish

CESTODA

PHYLLOBOTHRIDAE

Phyllobothrium caudatum (Zschokke and Heitz 1914). Larva. Central California. Riser (1956); Medeira. Yamaguti (1959b).

TENTACULARIIDAE

Tentacularia coryphaenae Bosc 1802. Larva. Central California. Musculature. Riser (1956).

DIGenea

BOTULIDAE

Botulus alepidosauri Guiart 1938. Mediterranean. Stomach. Guiart (1938a).

PARALEPIDIDAE -- Barracudinas

Macroparalepis sp.

CESTODA

TETRAPHYLLIDEA

Genera and species. Larva. Southern California. Caeca. Collard⁹.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Mesentery. Collard⁹.
Phocanema sp. Larva. Southern California. Mesentery. Collard⁹.
Contracecum sp. Larva. Southern California. Intestine. Collard⁹.

MYCTOPHIDAE -- Lanternfishes

Ceratoscopelus townsendi - Dogtooth Lampfish

CESTODA

PSEUDOPHYLLIDEA

Genera and species. Larva. Baja California. Pyloric caeca. Collard⁹.

Ceratoscopelus townsendi (Continued)

TETRAPHYLLIDEA

Genera and species. Larva. Collard⁹.

COPEPODA

Genera and species. Intermediate stage. Baja California. Dorsal fin. Collard⁹.

DIGenea

FELLODISTOMATIDAE

Genera and species. Equatorial Pacific. Stomach. Collard⁹.

HEMIURIDAE

Genera and species. Equatorial Pacific; Baja California. Stomach, intestine. Collard⁹.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Equatorial Pacific. Intestine. Collard⁹.
Phocanema sp. Larva. Equatorial Pacific. Liver, mesentery. Collard⁹
as Terranova
Contracecum sp. Larva. Collard⁹.

Diaphus theta - California Headlight Fish

CESTODA

PSEUDOPHYLLIDEA

Genera and species. Larva. Southern California. Intestine, colon/rectum, pyloric caeca. Collard⁹.

TETRAPHYLLIDEA

Genera and species. Larva. Southern California. Intestine. Collard⁹.

COPEPODA

PENNELLIDAE

Cardiodectes medusaeus (Wilson 1908) Yamaguti 1963. Southern California. Heart. Collard⁹.

Diaphus theta (Continued)

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Pyloric caeca. Collard⁹.
Contraecaecum sp. Larva. Southern California. Pyloric caeca, coelom,
mesentery. Collard⁹.

Lampanyctus regalis - Pinpoint Lampfish

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Coelom. Collard⁹.

Lampanyctus ritteri - Broadfin Lampfish

CESTODA

PSEUDOPHYLLIDEA

Genera and species. Larva. Southern California. Intestine.
Collard⁹.

TETRAPHYLLIDEA

Genera and species. Larva. Southern California. Heart, pyloric
caeca, intestine. Collard⁹.

COPEPODA

PENNELLIDAE

Cardiodectes medusaeus (Wilson 1908) Yamaguti 1963. Southern California.
Heart. Moser¹⁹.

MONOGENEA

MACROVALVITREMATIDAE

Genera and species. Southern California. Gills. Collard⁹.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California, Oregon. Liver, heart,
mesentery, kidneys, coelom, peritoneum. Collard⁹.
Paranisakis sp. Larva. Southern California. Gonads. Collard⁹.
Contraecaecum sp. Larva. Southern California. Mesentery. Collard⁹.

Parvilux ingens - Giant Lampfish

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Coelom. Collard^g.

Stenobranchius leucopsarus - Northern Lampfish

SYNONYM - Nannobranchium leucopsarium

ACANTHOCEPHALA

Genera and species. Larva. Southern California. Intestine. Collard^g.

CESTODA

PSEUDOPHYLLIDEA

Genera and species. Plerocercoid. Southern California. Colon, intestine. Collard^g.

TETRAPHYLLIDEA

Genera and species. Plerocercoid. Southern California, Oregon. Colon, mesentery. Collard^g.

COPEPODA

PENNELLIDAE

Cardiodectes medusaeus (Wilson 1908) Yamaguti 1963. Southern California, Oregon. Heart. Collard^g; Central California. Flesh (embedded). Wilson (1908a) as Lernaeenicus m.

DIGenea

DIDYMOZOIDAE

Genera and species. Larva. Southern California. Collard^g as Monilicaecum.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Coelom, liver, colon, mesentery. Collard^g.

Contracecum sp. Larva. Southern California, Oregon, Alaska. Coelom, mesentery, liver, pyloric caeca, kidneys. Collard^g.

Phocanema sp. Larva. Southern California. Intestine. Collard^g as Terranova sp.

Stenobranchius leucopsarus (Continued)

CYSTIDICOLIDAE

Ascarophis sp. Larva. California. Collard^g.

PROTOZOA (MYXOSPORIDA)

Genera and species. Southern California. Gallbladder. Noble (1966a).

Symbolophorus californiensis - California Lanternfish

CESTODA

PSEUDOPHYLLIDEA

Genera and species. Larva. Southern California. Colon, rectum.
Collard^g.

TETRAPHYLLIDEA

Genera and species. Larva. Southern California. Colon, rectum.
Collard^g.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Coelom. Collard^g.

Tarletonbeania crenularis - Blue Lanternfish

CESTODA

Genera and species. Larva. Southern California, Oregon. Stomach,
liver. Collard^g.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Coelom. Collard^g.
Contraeacum sp. Larva. Southern California. Coelom. Collard^g.

Triphoturus mexicanus - Mexican Lampfish

CESTODA

PSEUDOPHYLLIDEA

Genera and species. Larva and adults. Southern California.
Intestine. Collard^g.

Triphoturus mexicanus (Continued)

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Mesentery. Collard⁹.
Contraecum sp. Larva. Southern California. Coelom. Collard⁹.

PROTOZOA (MYXOSPORIDA)

Genera and species. Trophic stages. Noble and Collard (1970).

BATRACHOIDIDAE -- Toadfishes

Porichthys sp.

DIGENEA

HEMIURIDAE

Aponurus trachinoti Manter 1940. Southern California. Stomach.
Manter and Van Cleave (1951).
Brachadena pyriformis Linton 1910. Southern California. Stomach.
Manter and Van Cleave (1951). Probably P. myriaster.
Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Washington.
Intestine. Ching (1960b) as L. salmonis.

Porichthys notatus - Plainfin Midshipman

DIGENEA

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Washington. Ching
(1960a).
Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Washington.
Ching (1960a) as L. salmonis.
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. British
Columbia. Stomach. Arai (1969b).

LEPOCREADIIDAE

Opechona alaskensis Ward and Fillingham 1934. Alaska. Ching (1960a).

OPECOELIDAE

Podocotyle atomon (Rudolphi 1802) Odhner 1905. Washington.
Intestine. Aldrich¹².

Porichthys notatus (Continued)

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa elegans Jameson 1929. Central California. Gallbladder.
Jameson (1929); Washington. Kuris²⁰.

SINUOLINEIDAE

Davisia sp. Washington. Urinary bladder. Kuris²⁰.
Davisia bidens (Jameson 1931) Laird 1953. California. Urinary
bladder. Jameson (1931) as Sinuolinea b.; Washington. Kuris²⁰.
Davisia cella (Jameson 1931) Laird 1953. California. Urinary
bladder. Jameson (1931) as Sinuolinea c.
Sinuolinea dimorpha (Davis 1917) Kudo 1920. California. Urinary
bladder. Jameson (1931) as Sphaerospora d.

GOBIESOCIDAE -- Clingfishes

Gobiesox maeandricus - Northern Clingfish

SYNONYM - Caularchus maeandricus

DIGenea

HEMIURIDAE

Sterrhurus exodicus (McFarlane 1936) Yamaguti 1958. Central
California. Stomach. Nahhas¹⁰.

OPECOELIDAE

Helicometrina elongata Noble and Park 1937. Northern California.
Small intestine. Noble and Park (1937).
Podocotyle gibbonsiae Johnson 1949. Central California.
Digestive tract. Johnson (1949).

NEMATODA

PHILOMETRIDAE

Philometra americana Kuitunen-Ekbaum 1933. British Columbia.
Body cavity, lateral walls. Kuitunen-Ekbaum (1933a).

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Zschokkella sp. Washington. Urinary bladder. Kuris²⁰.
Sphaeromyxa balbianii Thélohan 1895. Washington. Gallbladder.
Kuris²⁰.

Gobiesox maeandricus (Continued)

SINUOLINEIDAE

Davisia sp. Washington. Urinary bladder. Kuris²⁰.

Gobiesox rhesodon - California Clingfish

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Sphaeromyxa ovula Noble 1939. Southern California. Gallbladder.
Noble (1939).

Rimicola eigenmanni - Slender Clingfish

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca compressa Noble 1939. Southern California. Urinary
bladder. Noble (1939).

GADIDAE -- Codfishes

Gadus macrocephalus - Pacific Cod

SYNONYM - Gadus morhua macrocephalus

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. British Columbia.
Intestine. Margolis³; Kamchatka, USSR. Skryabina (1963).

POLYMORPHIDAE

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Larva. Kamchatka,
USSR. Skryabina (1963); Washington. Van Cleave (1953).

CESTODA

AMPHICOTYLIDAE

Abothrium gadi Van Beneden 1871. Kamchatka, USSR. Intestine.
Skryabina (1963); British Columbia. Margolis³.

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Larva. Kamchatka, USSR. Pyloric caeca,
intestine. Skryabina (1963).

Gadus macrocephalus (Continued)

PHYLLOBOTHRIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Sea of Japan. Zhukov (1960a).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Kamchatka, USSR. Intestine, gallbladder. Skryabina (1963).

COPEPODA

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. Alaska, British Columbia. Exterior. Townsend (1938) as L. septentrionalis; USSR. Wilson (1908a).

Lepeophtheirus hospitalis Fraser 1920. British Columbia. Fraser (1920).

Lepeophtheirus dissimulatus Wilson 1905. Eastern Pacific. Lewis (1967).

Lepeophtheirus cuneifer Kabata 1974. Alaska. Kabata (1974)
Questionable host.

CHONDRACANTHIDAE

Chondracanthus palpifera Wilson 1912. British Columbia. Gill cavity. Fraser (1920).

LERNAEOPODIDAE

Clavella adunca (Strøm 1762) Dollfus 1953. British Columbia. Gills, branchial cavity. Kabata (1970c); Japan. Gills. Yamaguti (1939c) as C. uncinata.

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. Alaska. Gills. Wilson (1915).

DIGenea

ACANTHOCOLPIDAE

Stephanostomum baccatum (Nicol 1907) Manter 1934. Sea of Japan. Intestine. Zhukov (1960a).

Gadus macrocephalus (Continued)

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Sea of Japan.
Intestine. Zhukov (1960a).

FELLODISTOMATIDAE

Pseudopentagramma petrowi (Layman 1930) Yamaguti 1971. Pacific
Ocean-USSR. Margolis and Ching (1965) as Pentagramma p.;
Kamchatka, USSR. Skryabina (1963) as Bacciger p.
Stenakron vetustum Stafford 1904. Kamchatka, USSR. Strelkov (1960).

HEMIURIDAE

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Sea of
Japan. Stomach, intestine. Zhukov (1960a).
Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Sea of Japan.
Stomach. Zhukov (1960a).
Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine, pyloric caeca. Arai (1969b); Sea of Japan. Zhukov
(1960a).
Parahemiuris merus (Linton 1910) Woolcock 1935. British Columbia.
Intestine, stomach, pyloric caeca. Arai (1969b).
Hemiurus levinseni Odhner 1905. Kamchatka, USSR. Stomach, caeca.
Skryabina (1963).
Derogenes varicus (Müller 1784) Looss 1901. Kamchatka, USSR.
Stomach, intestine. Skryabina (1963).

LEPOCREADIIDAE

Lepidapedon gadi (Yamaguti 1934) Acena 1947. Japan. Intestine.
Acena (1947); Kamchatka, USSR. Skryabina (1963).

OPECOELIDAE

Podocotyle atomon (Rudolphi 1802) Odhner 1905. Kamchatka, USSR.
Intestine. Strelkov (1960).
Podocotyle reflexa (Creplin 1825) Odhner 1905. Kamchatka, USSR.
Stomach, intestine, caeca. Skryabina (1963).

ZOOGONIDAE

Steganoderma formosum Stafford 1904. Kamchatka, USSR. Intestine.
Strelkov (1960).

HIRUDINOIDEA

PISCICOLIDAE

Beringobdella rectangulata (Levinsen 1882) Caballero 1974. Alaska.
Gills, gill cavity. Moore and Meyer (1951) as genus? r.

Gadus macrocephalus (continued)

MONOGENEA

GYRODACTYLIDAE

Gyrodactylus marinus Bykhovsky and Polyanski 1953. Sea of Japan. Gills. Bykhovsky and Polyanski (1953).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b); Japan. Saito et al. (1970); Kamchatka, USSR. Body cavity, intestine, abdominal wall. Skryabina (1963).

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. British Columbia. Stomach, intestine. Margolis³; Sea of Japan. Zhukov (1960a) both as Contraecaecum a.

Contraecaecum sp. Japan. Kagei et al. (1970); Kamchatka, USSR. Intestine, liver, kidney, body cavity. Skryabina (1963).

Phocanema sp. Larva. British Columbia. Cysts in musculature. Margolis³; Kamchatka, USSR. Muscle, body cavity. Skryabina (1963). Both as Porrocaecum sp.

Phocanema decipiens (Krabbe 1878) Myers 1959. Larva. British Columbia. Margolis (1956b) as Terranova d.

CYSTIDICOLIDAE

Ascarophis pacificus Zhukov 1960. Sea of Japan. Stomach. Zhukov (1960a). Ascarophis filiformis Polyanski 1952. Sea of Japan. Stomach. Zhukov (1960a).

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

Trichodina murmanica Polyansky 1955. USSR. Gills. Zhukov (1964). [Nomen dubium Lom and Laird (1969)].

PROTOZOA (MYXOSPORIDA)

TETRACAPSULIDAE

Kudoa sp. British Columbia. Muscle. Hoskins et al.¹³

MYXIDIIDAE

Myxidium ochotense Fujita 1923. Japan. Gallbladder. Fujita (1923).

Merluccius productus - Pacific Hake

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus ospariichthydis Yamaguti 1934. Northeast Pacific. Kovalenko (1970).

Bothriocephalus sp. Northeast Pacific. Kovalenko (1970).

Merluccius productus (Continued)

DIPHYLLOBOTHRIIDAE

Diphyllobothrium sp. Northeast Pacific. Kovalenko (1970).

PTYCHOBOTHRIIDAE

Clestobothrium crassiceps (Rudolphi 1808) Lühe 1899. British Columbia. Intestine. Margolis³.

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Post larva. British Columbia. Stomach wall. Margolis³.

TRYPANORHYNCHA

Genera and species. Larva. Northeast Pacific. Kovalenko (1970).

COPEPODA

CALIGIDAE

Lepeophtheirus dissimulatus Wilson 1905. Baja California. Causey (1960).
Caligus sp. British Columbia. Lee (1975).

CHONDRACANTHIDAE

Chondracanthus palpifera Wilson 1912. British Columbia. Bere⁵
as Acanthochondria p. from "Hake".
Acanthochondria sp. Northeast Pacific. Kovalenko (1970).

LERNAEOPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. British Columbia. Gill arches. Kabata (1970b) as Brachiella l.
Neobrachiella sp. Northeast Pacific. Kovalenko (1970) as
Parabrachiella.
Clavella perfida Wilson 1915. British Columbia. Lee (1975).

PENNELLIDAE

Haemobaphes sp. Northeast Pacific. Kovalenko (1970).

DIGENEA

FELLODISTOMATIDAE

Fellodistomum furcigerum (Olsson 1867) Yamaguti 1954. Northeast Pacific. Kovalenko (1970).

Merluccius productus (Continued)

HEMIURIDAE

Lecithophyllum botryophorum (Olsson 1868) Odhner 1905. British Columbia. Margolis (1958a) as L. anteroporum.

Aponurus argentini Polyanski 1952. Northeast Pacific. Kovalenko (1970).

Derogenes varicus (Müller 1784) Looss 1901. Northeast Pacific. Kovalenko (1970).

Derogenes macrostoma Yamaguti 1938. Northeast Pacific. Kovalenko (1970).

Lecithochirium sp. Northeast Pacific. Kovalenko (1970).

SANGUINICOLIDAE

Aporocotyle margolisi Smith 1967. British Columbia. Bulbus arteriosus. Smith (1967).

MONOGENEA

DISCOCOTYLIDAE

Anthocotyle americana (MacCallum 1916) Price 1943. Northern California. Gills. Crane (1972); Northeast Pacific. Kovalenko (1970).

Anthocotyle merlucci Van Beneden and Hesse 1863. Northeast Pacific. Kovalenko (1970).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Many places in body. Margolis³; Southern California. Dailey et al. (in press).

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeast Pacific. Kovalenko (1970) as Contracaecum a.

*Thynnascaris melanogrammi (Smedley 1934). Northeast Pacific. Kovalenko (1970).

Contracaecum sp. Larva. Northeast Pacific. Kovalenko (1970).

PROTOZOA (MYXOSPORIDA)

SINUOLINEIDAE

Conispora renalis Sankurathri 1977. British Columbia. Kidney tubules. Sankurathri (1977).

Microgadus proximus - Pacific Tomcod

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Microgadus proximus (Continued)

Echinorhynchus gadi Zoega in Müller 1776. Canada. Van Cleave (1920).
Metechinorhynchus leidyi (Van Cleave 1924) Golvan 1969. Canada.
Van Cleave (1920) as E. salvelini.

COPEPODA

CALIGIDAE

Lepeophtheirus cuneifer Kabata 1974. Southeast Alaska. Kabata
(1974). Questionable host.

LERNAEOPODIDAE

Clavella adunca (Strøm 1762) Dollfus 1953. British Columbia. Gills,
branchial cavity. Kabata (1970c).
Clavella canaliculata Wilson 1915. Pectoral fins. Wilson (1915).

DIGENEA

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Oregon. McCauley (1960).
Hemiurus levinseni Odhner 1905. Oregon. McCauley (1960).

MONOGENEA

GYRODACTYLIDAE

Gyrodactylus californiensis Mizelle and Kritsky 1967. Northern
California. Skin. Mizelle and Kritsky (1967a).
Gyrodactylus cranei Mizelle and Kritsky 1967. Northern California.
Skin. Mizelle and Kritsky (1967a).
Gyrodactylus pacificus Mizelle and Kritsky 1967. Northern California.
Skin. Mizelle and Kritsky (1967a).
Gyrodactylus rogersi Mizelle and Kritsky 1967. Northern California.
Skin. Mizelle and Kritsky (1967a).
Gyrodactylus elongatus Mizelle and Kritsky 1967. Northern California.
Skin. Mizelle and Kritsky (1967a).

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Sphaeromyxa maiyai Morrison and Pratt 1973. Oregon. Gallbladder.
Morrison and Pratt (1973).

Theragra chalcogramma - Walleye Pollock

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. British Columbia. Arai
(1969b); Kamchatka, USSR. Skryabina (1963).

Theragra chalcogramma (Continued)

POLYMORPHIDAE

Bolbosoma nipponicum Yamaguti 1939. Kamchatka, USSR. Intestine. Mamaev and Baeva (1963).

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Larva. Kamchatka, USSR. Mesentery, intestine. Mamaev and Baeva (1963); British Columbia. Margolis (1956b).

CESTODA

AMPHICOTYLIDAE

Abothrium gadi Van Beneden 1871. British Columbia. Intestine. Margolis²; Kamchatka, USSR. Mamaev and Baeva (1963).

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. Larva. British Columbia. Intestine. Arai (1969b); Kamchatka, USSR. Intestine, pyloric caeca. Skryabina (1963).

DIPHYLLOBOTHRIIDAE

Pyramicocephalus phocarum (Fabricius 1780). Larva. Kamchatka, USSR. Intestine, body cavity. Mamaev and Baeva (1963).

Diphyllobothrium sp. Larva. Western Kamchatka, USSR. On digestive tract. Tsimbalyuk and Semeshko (1971).

LACISTORHYNCHIDAE

Grillotia erinacea (Van Beneden 1858) Guiart 1927. Kamchatka, USSR. Body cavity. Mamaev and Baeva (1963).

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

PSEUDOPHYLLIDEA

Genera and species. Larva. Kamchatka, USSR. Intestine, abdominal wall. Mamaev and Baeva (1963).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. British Columbia. Intestine, stomach. Arai (1969b); Kamchatka, USSR. Body cavity, abdominal wall. Skryabina (1963).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Kamchatka, USSR. Gallbladder, intestine. Skryabina (1963).

Theragra chalcogramma (Continued)

COPEPODA

CALIGIDAE

- Lepeophtheirus cuneifer Kabata 1974. Alaska. Kabata (1974),
questionable host.
Lepeophtheirus parviventris Wilson 1905. Japan, USSR. Kabata
(1973).
Caligus clemensi Parker and Margolis 1964. British Columbia.
Body surface. Parker and Margolis (1964).

CHONDRACANTHIDAE

- Chondracanthus theragrae Yamaguti 1939. Japan. Gills. Yamaguti
(1939c).

LERNAEOPODIDAE

- Clavella perfida Wilson 1915. British Columbia. Gills. Kabata
(1970c); Alaska. Wilson (1915).
Clavella adunca (Strøm 1792) Dollfus 1953. North Pacific. Akhmerov
(1951) as C. irina and C. uncinata.

PENNELIDAE

- * Haemobaphes theragrae Yamaguti 1939. Japan. Yamaguti (1939b).
Haemobaphes diceraus Wilson 1917. North Pacific. Gills. Grabda (1975).

DIGENEA

ALLOCREADIIDAE

- Anisorchis opisthorchis Polyanski 1955. Kamchatka, USSR. Intestine.
Strelkov (1960).

BUCEPHALIDAE

- Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Sea of Japan.
Intestine. Zhukov (1960a).
Prosorhynchoides gracilescens (Rudolphi 1819) n. comb. Kamchatka,
USSR. Intestine. Strelkov (1960) as Bucephalopsis g.

FELLODISTOMATIDAE

- Fellodistomum furcigerum (Olsson 1867) Yamaguti 1954. Kamchatka,
USSR. Strelkov (1960) as Stringophorus f.

HEMIURIDAE

- Hemiurus communis Odhner 1905. Washington. Stomach. Ching (1960b).
Hemiurus odhneri Yamaguti 1934. Japan. Stomach. Yamaguti (1934a).
Hemiurus levinseni Odhner 1905. Washington. Ching (1960a);
Kamchatka, USSR. Stomach, pyloric caeca. Skryabina (1963).

Theragra chalcogramma (Continued)

- Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia. Intestine. Arai (1969b); Kamchatka, USSR. Mamaev and Baeva (1963).
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Washington. Ching (1960a).
Genolinea anura (Layman 1930) Yamaguti 1954. Sea of Japan. Stomach. Zhukov (1960a).
Lecithophyllum sphaerolecithum (Manter 1925) Odhner 1927. Kamchatka, USSR. Stomach. Mamaev and Baeva (1963).
Derogenes varicus (Müller 1784) Looss 1901. Kamchatka, USSR. Esophagus, stomach. Mamaev and Baeva (1963).
Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Kamchatka, USSR. Stomach. Mamaev and Baeva (1963).

LEPOCREADIIDAE

- Opechona alaskensis Ward and Fillingham 1934. Sea of Japan. Intestine. Zhukov (1960a).
Lepidapedon microtyleum (Odhner 1905) Yamaguti 1958. Washington. Intestine. Ching (1960a); British Columbia. Arai (1969b).
Lepidapedon gadi (Yamaguti 1934) Acena 1947. Kamchatka, USSR. Digestive tract. Mamaev and Baeva (1963); Japan. Machida et al. (1972).

OPECOELIDAE

- Podocotyle reflexa (Creplin 1825) Odhner 1905. Kamchatka, USSR. Digestive tract. Mamaev and Baeva (1963).
Podocotyle sinusacca Ching 1960. British Columbia. Intestine. Arai (1969b) as Neopodocotyloides s.
Opecoelina theragrae Lloyd 1938. Washington. Intestine. Lloyd (1938).

SANGUINICOLIDAE

- Aporocotyle theragrae Ichihara 1970. Japan. Blood vessels. Ichihara (1970).
Aporocotyle simplex Odhner 1900. Kamchatka, USSR. Mamaev and Baeva (1963).

ZOOGONIDAE

- Steganoderma formosum Stafford 1904. Kamchatka, USSR. Digestive tract. Mamaev and Baeva (1963).

HIRUDINOIDEA

PISCICOLIDAE

- Beringobdella rectangulata (Levinsen 1882) Caballero 1974. North Pacific. Akhmerov (1951).

MONOGENEA

Theragra chalcogramma (Continued)

GYRODACTYLIDAE

Gyrodactylus marinus Bykhovsky and Polyanski 1953. Sea of Japan. Gills. Bykhovsky and Polyanski (1953).

Gyrodactylus pterigialis Bykhovsky and Polyanski 1953. USSR. Bykhovsky (1957).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Arai (1969b).

Contracaecum sp. Larva. British Columbia. Arai (1969b); Japan. Kagei et al. (1970); Kamchatka, USSR. Many places in body. Skryabina (1963).

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. British Columbia. Stomach, intestine. Margolis³; larva. Kamchatka, USSR. Body cavity, muscles, etc. Mamaev and Baeva (1963). Both as Contracaecum a.

Phocanema sp. Larva. British Columbia. Intestines. Arai (1969b); Kamchatka, USSR. Muscles, body cavity. Skryabina (1963) as Porrocaecum sp.

Phocanema decipiens (Krabbe 1878) Myers 1959. Larva. Bering Sea, USSR. Muscles. Schiller (1954) as Terranova d.

CYSTIDICOLIDAE

Ascarophis skrjabini (Layman 1933) Polyanski 1952. Kamchatka, USSR. Stomach, intestine. Mamaev and Baeva (1963).

Ascarophis pacificus Zhukov 1960. Sea of Japan. Stomach. Zhukov (1960a).

PROTOZOA (MICROSPORIDA)

NOSEMATIDAE

Glugea punctifera Thélohan 1895. Sea of Japan. Muscles. Dogiel (1955).

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Myxidium theragrae Fujita 1923. Japan. Gallbladder. Fujita (1923).

OPHIDIIDAE -- Cusk-eels and Brotulas

Parabassogigas grandis

Parabassogigas grandis (Continued)

DIGenea

HEMIURIDAE

Gonocerca oregonensis McCauley, Pequegnat and Brownell 1970.
Oregon. Stomach. McCauley et al. (1970).

ZOARCIDAE -- Eelpouts

Aprodon cortezianus - Bigfin Eelpout

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. British Columbia.
Intestine. Arai (1969b).

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. British
Columbia. Intestine. Arai (1969b).

PHYLLOBOTHRIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai
(1969b).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. British Columbia. Intestine.
Arai (1969b).

DIGenea

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine. Arai (1969b).
Parahemiuris merus (Linton 1910) Woolcock 1935. British Columbia.
Intestine. Arai (1969b).

OPECOELIDAE

Podocotyle sp. Immature. British Columbia. Intestine. Arai
(1969b).

NEMATODA

Aprodon cortezianus (Continued)

ANISAKIDAE

Contracaecum sp. Larva. British Columbia. Body cavity. Arai (1969b).

CAPILLARIIDAE

Capillaria sp. British Columbia. Stomach. Arai (1969b).

Lycodapus fierasfer - Blackmouth Eelpout

COPEPODA

PENNELLIDAE

Haemobaphes enodis Wilson 1917. California. Gills. Wilson (1917).

Lycodapus mandibularis - Pallid Eelpout

COPEPODA

PENNELLIDAE

Cardiodectes medusaeus (Wilson 1908) Yamaguti 1963. Central California. Flesh (embedded). Anderson ¹⁷.

Lycodes brevipes - Shortfin Eelpout

DIGENEA

ZOOGONIDAE

Zoogonus dextrocirrus Aldrich 1961. Washington. Intestine. Aldrich (1961).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Margolis³.

CAPILLARIIDAE

Capillaria sp. British Columbia. Margolis³.

Lycodopsis pacifica - Blackbelly Eelpout

DIGENEA

Lycodopsis pacifica (Continued)

OPECOELIDAE

- Pseudopecoelus vulgaris (Manter 1934) Van Wicklen 1946. Washington.
Intestine. Lloyd (1938) as Cymbephallus v.
Podocotyle gibbonsiae Johnson 1949. Washington. Intestine.
Aldrich¹².
Podocotyle enophrysi Park 1937. Washington. Intestine. Aldrich¹²
as P. pacifica.

ZOOGONIDAE

- Zoogonus dextrocirrus Aldrich 1961. Washington. Intestine.
Aldrich¹².

MONOGENEA

MICROCOTYLIDAE

- Microcotyle pacifica Crane 1972. Northern and Southern California.
Gills. Crane (1972).

PROTOZOA (MICROSPORIDA)

- Genera and species. Noble and Collard (1970).

Maynea californica - Persimmon Eelpout

ACANTHOCEPHALA

ECHINORHYNCHIDAE

- Echinorhynchus canyonensis Huffman and Kliever 1977. Central
California. Intestine. Huffman and Kliever (1977).

COPEPODA

CHONDRACANTHIDAE

- Acanthochondria cornuta (Müller 1777) Oakley 1927. Central
California. Kliever²¹.

Melanostigma pammelae - Midwater Eelpout

DIGENEA

FELLODISTOMATIDAE

- Fellodistomum melanostigum Noble and Orias 1975. Southern California.
Stomach, intestine. Noble and Orias (1975).

HEMIURIDAE

- Aponurus pacificus Noble and Orias 1975. Southern California.
Stomach. Noble and Orias (1975).

Melanostigma pammelae (Continued)

Aponurus californicus Noble and Orias 1970. Southern California.
Stomach. Noble and Orias (1975).

Aponurus sp. Southern California. Stomach. Noble and Orias (1975).

Dissosaccus sp.? Southern California. Intestine. Noble and
Orias (1975).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Coiled in mesentery.
Noble and Orias (1975).

Contracecum sp. Larva. Southern California. Coiled in
mesentery, intestine. Noble and Orias (1975).

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Myxidium melanostigmum Noble 1966. Southern California. Gallbladder.
Noble (1966a).

MORIDAE -- Codlings

Antimora microlepis - Finescale Codling

COPEPODA

PHILICHTHYIDAE

Sarcotaces komaii Shiino 1953. Japan. Avdeev and Avdeev (1975).

DIGENEA

LEPOCREADIIDAE

Lepidapedon antimorae McCauley 1968. Oregon. Intestine.
McCauley (1968).

MONOGENEA

Antimora microlepis (Continued)

DICLIDOPHORIDAE

Choriocotyle oregonensis McCauley and Smoker 1969. Oregon.
Gills. McCauley and Smoker (1969).

MACROURIDAE -- Grenadiers

Coelorinchus scaphopsis - Shoulderspot Grenadier

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca informis Auerbach 1910. Pacific - Mexico. Gallbladder.
Yoshino and Moser (1974).

MYXIDIIDAE

Zschokkella rovignensis Nemecek 1922. Mexico. Urinary bladder
and kidneys. Moser and Noble (1977d).

MYXOBOLIDAE

Myxobolus mexicanus Yoshino and Noble 1973. Gulf of California.
Kidneys. Yoshino and Noble (1973).

Coryphaenoides sp.

DIGENEA

LEPOCREADIIDAE

Lepidapedon lutem abyssensis McCauley 1968. Oregon. Intestine.
McCauley (1968).

Coryphaenoides acrolepis - Pacific Rattail

SYNONYMS - Hemimacrurus acrolepis, Macrurus acrolepis

COPEPODA

CHONDRACANTHIDAE

Lateracanthus quadripedis Kabata and Gusev 1966. Aleutian deep.
Walls of branchial cavity. Kabata and Gusev (1966).

LERNAEPODIDAE

Coryphaenoides acrolepis (Continued)

Neobrachiella annulata (Markevich 1940) Kabata 1979. East of Japan.
Buccal cavity. Kabata and Gusev (1966) as Brachiella a.

DIGENEA

HEMIURIDAE

Dinosoma oregonensis McCauley and Pequegnat 1968. Oregon.
Stomach. McCauley and Pequegnat (1968).

Dinosoma pectoralis McCauley and Pequegnat 1968. Oregon. Stomach.
McCauley and Pequegnat (1968).

LEPOCREADIIDAE

Lepidapedon luteum abyssensis McCauley 1968. Oregon. Intestine.
McCauley (1968).

MONOGENEA

DISCOCOTYLIDAE

Cyclocotyloides pinguis (Linton 1940) Price 1943. Oregon. Gills,
mouths. McCauley and Smoker (1969).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca armatura Yoshino and Moser 1974. Southern California.
Gallbladder and bile duct. Moser and Noble (1976b).

Leptotheca minima Meglitsch 1960. Northern California. Urinary
bladder, kidney tubules. Yoshino and Moser (1974).

Leptotheca informis Auerbach 1910. California.
Gallbladder. Yoshino and Noble (1973).

Ceratomyxa hokarari Meglitsch 1960. California.
Gallbladder. Yoshino and Noble (1973); Northern California.
Yoshino and Moser (1974).

MYXIDIIDAE

Zschokkella globulosa Davis 1917. Northern California. Kidneys.
Moser and Noble (1977d).

SINUOLINEIDAE

Davisia pectoralis Moser and Noble 1975. Northern California.
Urinary bladder and kidneys. Moser and Noble (1977a).

Davisia coryphaenoidia Yoshino and Noble 1973. Southern California.
Urinary bladder. Yoshino and Noble (1973); Northern California.
Yoshino and Moser (1974).

Coryphaenoides acrolepis (Continued)

Sinuolinea magna Yoshino and Noble 1973. Southern California.

Urinary bladder. Yoshino and Noble (1973).

Sinuolinea triangulata Schulman 1966. Northern Mexico to Oregon.

Urinary bladder and kidneys. Moser and Noble (1977c).

Myxoproteus californicus Yoshino and Noble 1973. Southern California.

Urinary bladder. Yoshino and Noble (1973); Northern California.

Yoshino and Moser (1974).

Myxoproteus rosenblatti Moser and Noble 1977. Oregon. Gallbladder.

Moser and Noble (1977b).

Myxoproteus abyssus Yoshino and Moser 1974. Southern California,

British Columbia. Gallbladder. Yoshino and Moser (1974).

SPHAEROSPORIDAE

Auerbachia pulchra Lom, Noble and Laird 1975. Northern California.

Gallbladder. Moser and Noble (1977a).

Chloromyxum kabatai Moser and Noble 1977. Oregon. Gallbladder.

Moser and Noble (1977a).

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia coryphaenoideana Noble 1968. Mexico. Stomach. Noble
1968.

Coryphaenoides armatus

SYNONYMS - Malacocephalus abyssorum, Coryphaenoides abyssorum

CESTODA

LACISTORHYNCHIDAE

Grillotia (Paragrillotia) rowei Campbell 1977. Plerocercoid.

Western North Atlantic. Liver, mesentery, etc. Campbell (1977).

COPEPODA

CHONDRACANTHIDAE

Chondracanthodes rickettsi Wilson 1935. California. Gill cavity.
Wilson (1935b).

Chondracanthodes deflexus Wilson 1932. Southern California.

Gill cavity. Ho (1970) from Malacocephalus abyssorum. Hubbs
(pers. comm.) states that M. abyssorum does not exist and he cannot
find any reference to it. He suggests that it may be a gross
misstating of C. abyssorum.

Coryphaenoides armatus (Continued)

DIGENEA

HEMIURIDAE

- Glomicirrus ulmeri Campbell and Munroe 1977. Western North Atlantic. Stomach and intestine. Campbell and Munroe (1977).
Gonocerca phycidis Manter 1925. Western North Atlantic. Stomach. Campbell and Munroe (1977).
Gonocerca haedrichi Campbell and Munroe 1977. Western North Atlantic. Ureter and urinary bladder. Campbell and Munroe (1977).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

- Leptotheca minima Meglitsch 1960. Oregon. Central California. Urinary bladder and duct, kidney tubules. Yoshino and Moser (1974).
Leptotheca armatura Yoshino and Moser 1974. Southern California. Gallbladder. Yoshino and Moser (1974).
Leptotheca coelorhynchus Yoshino and Noble 1973. South Australia. Gallbladder. Moser and Noble (1976b).

MYXIDIIDAE

- Myxidium pearcyi Moser, Noble and Lee 1976. Mexico, California. Gallbladder. Moser et al. (1976).
Myxidium coryphaenoidium Noble 1966. Oregon, Central California. Gallbladder. Yoshino and Moser (1974).
Zschokkella globulosa Davis 1917. Oregon, Central California. Urinary bladder and duct, kidney tubules. Yoshino and Moser (1974).
Zschokkella russelli Tripathi 1948. Oregon. Urinary bladder. Yoshino and Moser (1974).
Zschokkella meglitschi Moser and Noble 1977. Oregon. Urinary bladder and kidneys. Moser and Noble (1977d).

MYXOBOLIDAE

- Myxobolus mexicanus Yoshino and Noble 1973. Northern California. Kidneys. Moser and Noble (1977c).

SINUOLINEIDAE

- Sinuolinea triangulata Schulman 1966. Mexico-Oregon. Urinary bladder and kidneys. Moser and Noble (1977c).
Myxoproteus abyssus Yoshino and Moser 1974. Northern California. Urinary bladder and duct. Yoshino and Moser (1974).
Myxoproteus rosenblatti Moser and Noble 1977. Costa Rica. Urinary bladder and kidneys. Moser and Noble (1977b).

Coryphaenoides armatus (Continued)

SPHAEROSPORIDAE

Chloromyxum subsphaericum Shulman 1966. Costa Rica. Gallbladder.
Moser and Noble (1977a).

Coryphaenoides filifer - Threadfin Grenadier

DIGENEA

HEMIURIDAE

Gonocerca oregonensis McCauley, Pequegnat and Brownell 1970.
Oregon. Stomach. McCauley et al. (1970).

LEPOCREADIIDAE

Lepidapedon luteum abyssensis McCauley 1968. Oregon. Intestine.
McCauley (1968).

Lepidapedon yaquina McCauley 1968. Oregon. Intestine. McCauley
(1968).

Lepidapedon cascadiensis McCauley 1968. Oregon. Intestine.
McCauley (1968).

Lepidapedon oregonensis McCauley 1968. Oregon. Intestine.
McCauley (1968).

Lepidapedon filiformis McCauley 1968. Oregon. Intestine.
McCauley (1968).

MONOGENEA

DISCOCOTYLIDAE

Cyclocotyloides pinguis (Linton 1940) Price 1943. Oregon.
Aleutian Islands. Gills, mouth. McCauley and Smoker (1969).

PROTOZOA (MICROSPORIDA)

Genera and species. Noble and Collard (1970).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa sp. Noble and Collard (1970).

Leptotheca informis Auerbach 1970. Oregon. Gallbladder.
Yoshino and Moser (1974).

Coryphaenoides filifer (Continued)

MYXIDIIDAE

Myxidium coryphaenoidium Noble 1966. Oregon. Gallbladder.
Yoshino and Moser (1974).

Zschokkella russelli Tripathi 1948. Oregon. Urinary bladder.
Yoshino and Moser (1974).

Zschokkella meglitschi Moser and Noble 1977. Oregon. Urinary
bladder. Moser and Noble (1977d).

SINUOLINEIDAE

Myxoproteus abyssus Yoshino and Moser 1974. Oregon. Urinary
bladder. Moser and Noble (1977b).

Myxoproteus rosenblatti Moser and Noble 1977. Canada. Gallbladder.
Moser and Noble (1977b).

Sinuolinea triangulata Schulman 1966. Oregon. Urinary bladder.
Yoshino and Moser (1974).

SPHAEROSPORIDAE

Auerbachia pulchra Lom, Noble and Laird 1975. Oregon-Canada.
Gallbladder. Moser and Noble (1977a).

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia sp. Noble and Collard (1970).

Coryphaenoides leptolepis - Ghostly Grenadier

DIGENEA

HEMIURIDAE

Glomericirrus ulmeri Campbell and Munroe 1977. Western North
Atlantic. Stomach, intestine. Campbell and Munroe (1977).

LEPOCREADIIDAE

Lepidapedon luteum abyssensis McCauley 1968. Oregon. Intestine.
McCauley (1968).

Lepidapedon yaquina McCauley 1968. Oregon. Intestine. McCauley (1968).

Lepidapedon cascadenis McCauley 1968. Oregon. Intestine.
McCauley (1968).

Lepidapedon oregonensis McCauley 1968. Oregon. Intestines. McCauley (1968).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca armatura Yoshino and Moser 1974. Central California.
Urinary bladder and kidney tubules. Yoshino and Moser (1974).

Coryphaenoides leptolepis (Continued)

MYXIDIIDAE

- Myxidium pearcyi Moser, Noble and Lee 1976. California to Washington. Gallbladder. Moser et al. (1976).
Myxidium coryphaenoidium Noble 1966. Washington, Oregon, Central California. Gallbladder. Yoshino and Moser (1974).
Myxidium orientalis Schulman 1962. Central California. Gallbladder. Yoshino and Moser (1974).
Zschokkella globulosa Davis 1917. Washington, Oregon, Central California. Urinary bladder and ducts, kidney tubules. Yoshino and Moser (1974).

SINUOLINEIDAE

- Sinuolinea triangulata Schulman 1966. Oregon. Urinary bladder. Yoshino and Moser (1974).

Coryphaenoides pectoralis - Giant Grenadier

SYNONYM - Albatrossia pectoralis

COPEPODA

LERNAEOPODIDAE

- Neobrachiella nitida (Wilson 1915) Kabata 1979. Northern Pacific. Mouth. Wilson (1935b) as Brachiella n.

DIGENEA

HEMIURIDAE

- Dinosoma oregonensis McCauley and Pequegnat 1968. Oregon. Stomach. McCauley and Pequegnat (1968).
Dinosoma pectoralis McCauley and Pequegnat 1968. Oregon. Stomach. McCauley and Pequegnat (1968).
Gonocerca oregonensis McCauley, Pequegnat and Brownell 1970. Oregon. Stomach. McCauley et al. (1970).
Gonocerca oshoro Shimazu 1970. Gulf of Alaska. Ovaries. Shimazu (1970).

MONOGENEA

DICLIDOPHORIDAE

- Cyclocotyloides pinguis (Linton 1940) Price 1943. Northwest Pacific. Mouth. Linton (1940) as Diclidophora p.; Oregon, Alaska. McCauley and Smoker (1969).

PROTOZOA (MYXOSPORIDA)

Coryphaenoides pectoralis (Continued)

CERATOMYXIDAE

- Leptotheca armatura Yoshino and Moser 1974. Washington, California.
Urinary bladder, kidney tubules. Yoshino and Moser (1974).
Leptotheca informis Auerbach 1910. Washington, Central and
Northern California. Gallbladder. Yoshino and Moser (1974).

MYXIDIIDAE

- Zschokkella meglitschi Moser and Noble 1977. Central California.
Urinary bladder. Moser and Noble (1977d).

SINUOLINEIDAE

- Sinuolinea magna Yoshino and Noble 1973. Northern California.
Urinary bladder. Yoshino and Moser (1974).
Sinuolinea triangulata Schulmar 1966. Northern California.
Kidneys. Moser and Noble (1977c).
Davisia coryphaenoidia Yoshino and Noble 1973. Northern California.
Urinary bladder and kidneys. Moser and Noble (1977a).
Davisia pectoralis Moser and Noble 1975. Northern California.
Urinary bladder, kidney tubules. Moser and Noble (1975).

- Myxoproteus californicus Yoshino and Noble 1973. Washington,
Northern California. Urinary bladder, kidney tubules.
Yoshino and Moser (1974).

SPHAEROSPORIDAE

- Auerbachia pulchra Lom, Noble and Laird 1975. Northern California.
Moser and Noble (1977a).

Nezumia liolepis - Smooth Grenadier

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

- Myxidium coryphaenoidium Noble 1966. Southern California.
Gallbladder. Moser et al. (1976).
Zschokkella globulosa Davis 1917. Southern California. Urinary
bladder and kidney. Moser and Noble (1977d).

Nezumia stelgidolepis - California Rattail

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Nezumia stelgidolepis (Continued)

Ceratomyxa hopkinsi Jameson 1929. Southern California.
Gallbladder. Moser and Noble (1976a).

MYXIDIIDAE

Zschokkella meglitschi Moser and Noble 1977. Southern California.
Urinary bladder. Moser and Noble (1977d).

Zschokkella globulosa Davis 1917. Southern California. Urinary
bladder. Moser and Noble (1977d).

Myxidium coryphaenoidium Noble 1966. Southern California. Gall-
bladder. Yoshino and Noble (1973).

SCOMBERESOCIDAE -- Sauries

Cololabis saira - Pacific Saury

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. North Pacific. Baeva
(1970).

POLYMORPHIDAE

Bolbosoma caenoforme (Heitz 1920) Meyer 1933. North Pacific.
Baeva (1970).

RHADINORHYNCHIDAE

Rhadinorhynchus selkirki Van Cleave 1921. Japan. Internal.
Yamaguti (1963c).

Rhadinorhynchus cololabis Laurs and McCauley 1964. Oregon.
Intestine. Laurs and McCauley (1964).

Rhadinorhynchus trachuri Harada 1935. Sea of Japan. Baeva (1965a).

CESTODA

PHYLLOBOTHRIIDAE

Genera and species. Plerocercoid. Southern California. Stomach,
intestine. Collard⁹.

TETRABOTHRIIDAE

Priapocephalus sp. Larva. North Pacific. Intestine. Baeva
(1965a).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. North Pacific. Intestine.
Baeva (1965a).

Cololabis saira (Continued)

COPEPODA

BOMOLOCHIDAE

Bomolochus decapteri Yamaguti 1936. North Pacific. Baeva (1970).

CALIGIDAE

Caligus macarovi Gussev 1951. Oregon, Washington, British Columbia. Hughes (1973); Japan. Body surface. Shiino (1954a) as C. fulvipurpureus.

PENNELLIDAE

Pennella sp. Oregon, Washington, British Columbia. Body surface. Hughes (1973).

DIGENEA

DIDYMOZOIDAE

Genera and species. Larva. North Pacific. Baeva (1970) as Torticaecum metacercaria, Monilicaecum ventricosum metacercaria.

FELLODISTOMATIDAE

Lintonium novikovi Baeva 1965. North Pacific. Intestine. Baeva (1965a) ["not referable to Lintonium" - Yamaguti (1971)].

HEMIURIDAE

Genera and species. Southern California. Stomach, intestine. Collard⁹; North Pacific. Baeva (1970).

Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. North Pacific. Baeva (1970).

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Peter the Great Gulf, USSR. Akhmerov (1955).

Lecithaster sayori Yamaguti 1938. North Pacific. Intestine. Baeva (1965a).

NEMATODA

ANISAKIDAE

Anisakis sp. Japan. Gut. Otsuru et al. (1965); North Pacific. Muscle. Baeva (1965a).

*Contracaecum fabri (Rudolphi 1819). North Pacific. Digestive tract. Baeva (1965a).

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. North Pacific. Baeva (1970).

CYSTIDICOLIDAE

Spinitectus sp. North Pacific. Intestine. Baeva (1965a).

Spinitectus pacificus Sobolev and Belogurov 1968. Pacific. Sobolev and Belogurov (1968).

Cololabis saira (Continued)

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Sphaeromyxa parva Dogiel 1948. Bay of Peter the Great, USSR.
Gallbladder. Dogiel (1948).

PROTOZOA (SPOROZOA)

EIMERIIDAE

Eimeria auxidis Dogiel 1948. Peter the Great Gulf, USSR.
Kidneys. Pellerdy (1965).

CYPRINODONTIDAE -- Killifishes

Fundulus parvipinnis - California Killifish

COPEPODA

ERGASILIDAE

Ergasilus sp. Southern California. Gills. Baker²².

DIGenea

CYATHOCOTYLIDAE

Mesostephanus appendiculatus (Ciurea 1916) Lutz 1935. Metacercaria.
Southern California. Muscle. Martin (1961).

DIPLOSTOMATIDAE

Posthodiplostomum minimum (MacCallum 1921) Dubois 1936.
Metacercaria. Southern California. Egg sacs. Yoshino (1972).

GORGODERIDAE

Phyllodistomum sp. Manter and Van Cleave (1951).

HETEROPHYIDAE

Euhaplorchis californiensis Martin 1950. Metacercaria. Southern
California. Brain surface. Yoshino (1972).
Ascocotyle angrense Travassos 1916. Metacercaria. Southern
California. Gill filaments. Yoshino (1972).
Ascocotyle sexidigita Martin and Steele 1970. Metacercaria.
Southern California. Gut wall lateral musculature. Yoshino
(1972); California. Martin and Steele (1970).
Phocitremonides ovale Martin 1950. Metacercaria. Southern
California. Scales. Yoshino (1972).

Fundulus parvipinnis (Continued)

Stictodora hancocki (Martin 1950) Witenberg 1953. Metacercaria. Southern California. Muscle, brain case, etc. Martin (1950) as Parastictodora h.

Pygidiopsoides spindalis Martin 1951. Metacercaria. Southern California. Gills. Martin (1951).

RENICOLIDAE

Renicola cerithidicola Martin 1971. Metacercaria. Southern California. Gills. Martin (1971).

Renicola buchani (Martin and Gregory 1951). Metacercaria. Southern California. Liver. Martin (1971).

MONOGENEA

DACTYLOGYRIDAE

Urocleidus sp. Southern California. Gill filaments. Yoshino (1972).

GYRODACTYLIDAE

Gyrodactylus sp. Southern California. Gills. Baker²².

NEMATODA

CAMALLANIDAE

Spirocamallanus pereirai (Annereaux 1946) Olsen 1952. Larva and adult. Southern California. Stomach, intestine. Noble and King (1960).

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

Trichodina sp. Southern California. Gills. Baker²².

ATHERINIDAE -- Silversides

Atherinops affinis - Topsmelt

COPEPODA

BOMOLOCHIDAE

Bomolochus constrictus Cressey in Cressey and Collette 1970. Southern California. Gills. Hobson (1971) as Parabomolochus c.

CALIGIDAE

Caligus serratus Shiino 1965. Southern California. Body surface. Hobson (1971).

Atherinops affinis (Continued)

ERGASILIDAE

Ergasilus sp. Southern California. Body surface. Baker²².

PENNELLIDAE

Peniculus fissipes Wilson 1917. Southern California. Embedded in fins. Hobson (1971).

DIGENEA

HETEROPHYIDAE

Ascotyle angrense Travassos 1916. Metacercaria. Southern California. Baker²².

Cercarioides humbargari (Park 1936) Dubois and Mahon 1959. Metacercaria. Southern California. Olson⁸.

ISOPODA

CYMOTHOIDAE

Nerocila californica Schioedte and Meinert 1881. Southern California. Gills. Brusca (1977). Speculative host.

MONOGENEA

GYRODACTYLIDAE

Archigyrodactylus atherinops Mizelle and Kritsky 1967. Northern California. Skin. Mizelle and Kritsky (1967b).

Gyrodactylus sp. Southern California. Gills. Baker²².

POLYOPISTHOCOTYLEA

Genera and species. Southern California. Gills. Baker²².

NEMATODA

ANISAKIDAE

Contracaecum sp. Immature. Southern California. Olson⁸.

CAMALLANIDAE

Spirocamallanus pereirai (Annereaux 1946) Olsen 1952. Southern California. Intestine. Noble and King (1960).

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

Trichodina sp. Southern California. Gills. Baker²².

Atherinopsis californiensis - Jacksmelt

CESTODA

TETRAPHYLLIDEA

Genera and species. Yellow pigmented plerocercoid. Southern California. Encysted in rectal mesentery. Kunnenkeri (1962).

COPEPODA

CALIGIDAE

Caligus serratus Shiino 1965. Southern California. Shiino (1965b).

DIGENEA

LEPOCREADIIDAE

Lepocreadium sp. Central California. Intestine. Chapa²³.

MONORCHIIDAE

Asymphyldora atherinopsidis Annereaux 1947. Northern California. Intestine. Annereaux (1947).

ISOPODA

CYMOTHOIDAE

Nerocila californica Schioedte and Meinert 1881. Southern California. Gills. Brusca (1977). Speculative host.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).
Contracaecum sp. Larva. Southern California. Dailey et al. (in press).

CAMALLANIDAE

Spirocamallanus pereirai (Annereaux 1946) Olsen 1952. Northern California. Intestine. Annereaux (1946) as Procamallanus p.

Leuresthes tenuis - California Grunion

BRANCHIURA

ARGULIDAE

Argulus melanostictus Wilson 1935. Southern California, Baja California. Fins. A. C. Olson (1972).

Leuresthes tenuis (Continued)

CESTODA

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929.
Plerocercoid. Southern California. Muscles, abdominal areas.
Olson⁸.

COPEPODA

BOMOLOCHIDAE

Bomolochus cuneatus Fraser 1920. Southern California. Gill
chambers. A. C. Olson (1972) as Bomolochus pectinatus.

CALIGIDAE

Caligus olsoni Pearse 1953. Southern California. Skin. Pearse
(1953).

LERNAEOPODIDAE

Clavellopsis sp. Southern California and Baja California. Mouth,
pharynx. A. C. Olson (1972).

DIGENEA

BUCEPHALIDAE

Prosorhynchoides labiatus (Manter and Van Cleve 1951) n. comb.
Metacercaria. Southern California. Muscle of heart ventricle.
A. C. Olson (1975) as Bucephalopsis 1.

DIDYMOZOIDAE

Genera and species. Larva. Southern California. Coelom. Olson⁸
as Torticaecum fenestratum.

HETEROPHYIDAE

Cercarioides humbargari (Park 1936) Dubois and Mahon 1959.
Metacercaria. Southern California. Coelom-viscera. Olson⁸

LEPOCREADIIDAE

Lepocreadium manteri Olson 1978. Southern California and Baja
California. Intestine. Olson (1978).

MONORCHIIDAE

Asymphyllodora atherinosidis Annereaux 1947. Southern California.
Intestine. Olson⁸.

Leuresthes tenuis (Continued)

ISOPODA

CYMOTHOIDAE

Nerocila californica Schioedte and Meinert 1881. California. Body surface. A. C. Olson (1972).

Lironeca californica Schioedte and Meinert 1884. California. Gill chambers. A. C. Olson (1972).

MONOGENEA

HETERAXINIDAE

Leuresthicola olsoni Price 1962. Southern California. Gills. Price (1962b).

NEMATODA

ANISAKIDAE

Contracaecum sp. Larva. Southern California. Coelom-viscera. Olson⁸.

CAMALLANIDAE

Spirocamallanus pereirai (Annereaux 1946) Olsen 1952. Southern California. Intestine. Olson⁸.

CUCULLANIDAE

Cucullanus sp. Larva. Southern California. Coelom. Olson⁸.

ZEIDAE -- Dories

Zenopsis nebulosa - Mirror Dory

CESTODA

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Larva. New Zealand. Body cavity. Robinson (1959a).

TRIAENOPHORIDAE

Eubothrioides lamellatum Yamaguti 1952. Japan. Yamaguti (1952).

COPEPODA

CALIGIDAE

Lepeophtheirus goniistii Yamaguti 1936. Japan. Body surface. Shiino (1959e).

Anuretes quadrilaterus Shiino 1954. Japan. Body surface. Shiino (1954d).

Caligus glandifer Shiino 1954. Japan. Shiino (1954b).

Zenopsis nebulosus (Continued)

CHONDRACANTHIDAE

Chondracanthus distortus Wilson 1922. Japan. Mouth. Yamaguti (1939c).

DIGENEA

OPECOELIDAE

Pseudopecoelus japonicus (Yamaguti 1938) Von Wicklen 1946. Japan.
Intestine. Yamaguti ~~22~~ as Cymbephallus j.

NEMATODA

ANISAKIDAE

- * Contracecum zenopsis Yamaguti 1941. Japan. Small intestine. Yamaguti (1941); New Zealand. Hewitt and Hine (1972).
Contracecum sp. Larva. New Zealand. Stomach, intestine, body cavity. Hewitt and Hine (1972).
Anisakis sp. Larva. New Zealand. Viscera, mesentery, under peritoneum. Hewitt and Hine (1972).

LAMPRIDIDAE -- Opahs

Lampris regius - Opah

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium caudatum (Zschokke and Heitz 1914). Pacific coast of Japan. Intestine. Yamaguti (1963a) as Pelichnibothrium speciosum.

COPEPODA

LERNAEOPODIDAE

Clavellistes shoyoe Shiino 1963. Pacific. External, around the eyes. Shiino (1963c).
Neobrachiella regius (Lewis 1967) Kabata 1979. Hawaii. Gill arches. Lewis (1967) as Brachiella r.

DIGENEA

DIDYMOZOIDAE

Lamprididymozoon lampridis (Yamaguti 1940) Yamaguti 1971. Pacific coast of Japan. Gill filaments, arches. Yamaguti (1940) as Nematobothrium l.
Metadidymocystis cymbiformis Yamaguti 1970. Hawaii. Muscles. Yamaguti (1970).

HEMIURIDAE

Lampritrema nipponicum Yamaguti 1940. Baja California. Intestine. Arai (1962); Japan. Stomach. Yamaguti (1940).

Lampritrema hawaiiense Yamaguti 1970. Hawaii. Stomach. Yamaguti (1970).

Lampris regius (Continued)

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. New Zealand. Viscera. Hewitt and Hine (1972).

GASTEROSTEIDAE -- Sticklebacks

Aulorhynchus flavidus - Tube-snout

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Larva. British Columbia. Intestine. Arai (1969b).

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

DIGenea

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine. Arai (1969b).

OPECOELIDAE

Podocotyle atomon (Rudolphi 1802) Odhner 1905. British Columbia.
Intestine. Arai (1969b).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).
*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Larva. British
Columbia. Body cavity. Arai (1969b) as Contracaecum a.

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. Larva. British Columbia. Intestine.
Arai (1969b).

Gasterosteus aculeatus - Threespine Stickleback

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Metechinorhynchus salmonis (Müller 1784) Petrotschenko 1956. USSR.
Intestine. Bykhovskaya-Pavlovskaya et al. (1962).

Metechinorhynchus lateralis (Leidy 1851) Golvan. Newfoundland,
Labrador. Hanek and Threlfall (1970); USSR. Bykhovskaya-
Pavlovskaya et al. (1962).

Echinorhynchus gadi Zoega in Müller 1776. Barents Sea, USSR.
Intestine. Polyanski (1955b).

Gasterosteus aculeatus (Continued)

- Pseudoechinorhynchus clavula (Dujardin 1845) Petrotschenko 1956.
USSR. Bykhovskaya-Pavlovskaya et al. (1962); Britain. Intestine.
Chubb (1970b) as Acanthocephalus c.
Acanthocephalus lucii (Müller 1776) Lühe 1911. USSR. Intestine.
Bykhovskaya-Pavlovskaya et al. (1962).
Acanthocephalus minor Yamaguti 1935. Japan. Awakura (1972).

NEOECHINORHYNCHIDAE

- Neoechinorhynchus cristatus Lynch 1936. Kamchatka, USSR.
Intestine. Skryabina (1963).
Neoechinorhynchus rutili (Müller 1780) Hamann 1892. Newfoundland,
Labrador. Hanek and Threlfall (1970); British Columbia.
Bangham and Adams (1954); USSR. Bykhovskaya-Pavlovskaya et al.
(1962).

POLYMORPHIDAE

- Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Larva. USSR.
Bykhovskaya-Pavlovskaya et al. (1962).
Corynosoma semerme (Forssell 1904) Lühe 1911. Larva. USSR.
Bykhovskaya-Pavlovskaya et al. (1962).

POMPHORHYNCHIDAE

- Pomphorhynchus laevis (Zoega in Müller 1776) Van Cleave 1924.
Larva. Ireland. Intestine. Kane (1966); USSR. Bykhovskaya-
Pavlovskaya et al. (1962).

RHADINORHYNCHIDAE

- Telosentis exiquus (Von Linstow 1901) Van Cleave 1921. Black Sea.
Intestine. Yamaguti (1963c).

BRANCHIURA

ARGULIDAE

- Argulus foliaceus (Linnaeus 1758). USSR. Body surface.
Bykhovskaya-Pavlovskaya et al. (1962).
Argulus canadensis Wilson 1916. Newfoundland. Body surface.
Threlfall (1968).
Argulus alosae Gould 1912. Gulf of St. Lawrence. Body surface.
Wilson (1917).
Argulus japonicus Thiele 1900. Ukraine, USSR. Sukhenko (1966).

CESTODA

AMPHICOTYLIDAE

- Eubothrium crassum (Bloch 1779) Nybelin 1922. Larva. Norway.
Liver, viscera, body cavity. Vik (1963).
Eubothrium sp. England. Chappell and Owen (1969).

Gasterosteus aculeatus (Continued)

BOTHRIOCEPHALLIDAE

Bothriocephalus? claviceps (Goeze 1782) Rudolphi 1810. England.
Chappell and Owen (1969).

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. Larva.
British Columbia. Intestine. Arai (1969b); USSR. Bykhovskaya-
Pavlovskaya et al. (1962).

Bothriocephalus sp. Labrador, Newfoundland. Hanek and Threlfall
(1970).

CYATHOCEPHALIDAE

Cyathocephalus truncatus (Pallas 1781) Kessler 1868. British
Columbia. Intestine. Lester (1974); Norway. Vik (1954).

DIPHYLLOBOTHRIIDAE

Diphyllobothrium sp. Plerocercoid. British Columbia. Liver.
Lester (1974).

Diphyllobothrium dendriticum (Nitzsch 1824) Matz 1892. Plerocercoid.
Ireland. Kane (1966); USSR. Bykhovskaya-Pavlovskaya et al.
(1962).

Diphyllobothrium ditremum (Creplin 1825) Matz 1892. Plerocercoid.
Britain. Chubb (1970a); USSR. Bykhovskaya-Pavlovskaya et al.
(1962) as D. norvegicum.

Diphyllobothrium vogeli Kuhl 1952. Plerocercoid. West Germany.
Liver. Vik et al. (1969).

LIGULIDAE

Schistocephalus solidus (Müller 1776) Steenstrup 1857. Plerocercoid.
England. Body cavity. Pennycuik (1971); Labrador, Newfoundland.
Hanek and Threlfall (1970); USSR. Bykhovskaya-Pavlovskaya et al.
(1962); British Columbia. Lester (1974); California. Haderlie
(1953).

Schistocephalus sp. Larva. British Columbia. Bangham and Adams
(1954).

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai
(1969b).

PROTEOCEPHALIDAE

Proteocephalus filicollis (Rudolphi 1802) Weinland 1858. England.
Intestine. Chappell (1969); Labrador, Newfoundland. Hanek
and Threlfall (1970); USSR. Ginetsinskaya (1955).

Proteocephalus pugetensis Hoff and Hoff 1929. British Columbia.
Bangham and Adams (1954).

Proteocephalus longicollis (Zeder 1800) Nufer 1905. USSR.
Intestine. Freze (1965). Possible host.

Proteocephalus percae (Müller 1780) Kailliet 1889. USSR. Intestine.
Freze (1965). Possible host.

Gasterosteus aculeatus (Continued)

TETRAPHYLLIDEA

Scolex polymorphus Rudolphi 1819. Barents Sea, USSR. Polyanski (1955a).

TRIAENOPHORIDAE

Trienophorus crassus Forel 1868. Europe. Intestine. Yamaguti (1959b).

Trienophorus lucii (Müller 1776). Plerocercoid. USSR. Petrushevski et al. (1949) as T. nodulosus.

COPEPODA

BOMOLOCHIDAE

Bomolochus cuneatus Fraser 1920. British Columbia. Kabata (1971).

CALIGIDAE

Caligus lacustris Steenstrup and Lütken 1861. USSR. Skin, gills. Bykhovskaya-Pavlovskaya et al. (1962).

Caligus clemensi Parker and Margolis 1964. British Columbia. Body surface. Parker and Margolis (1964).

ERGASILIDAE

Ergasilus globosus Krøyer 1838-40. Yamaguti (1963a) [Species inquireae - Yamaguti (1963a)].

Ergasilus turgidus Fraser 1920. British Columbia. Probably gills. Fraser (1920).

Ergasilus auritus Markevich 1940. British Columbia. Gills, body surface. Arai (1969b); Labrador, Newfoundland. Hanek and Threlfall (1970); USSR. Bykhovskaya-Pavlovskaya et al. (1962).

Ergasilus manicatus Wilson 1911. Massachusetts. Roberts (1970).

Ergasilus sieboldi Nordmann 1832. Poland. Gills. Grabda (1963).

Thersitina gasterostei (Pagenstecher 1861) Normon 1905. Newfoundland, Labrador. Hanek and Threlfall (1970); Baltic Sea. Kozikowska (1965); British Columbia. Lester (1974).

LERNAEIDAE

Lernaea cyprinacea Linnaeus 1758. Britain. Skin. Kennedy (1975); USSR. Skin, gills. Bykhovskaya-Pavlovskaya et al. (1962) as L. esocina.

DIGENEA

ALLOCREADIIDAE

Allobunodera mediovitellata (Tsimbalyuk and Roytman 1965) Yamaguti 1971. British Columbia. Lester (1974).

Gasterosteus aculeatus (Continued)

- Bunodera luciopercae (Müller 1776) Lühe 1909. Labrador, Newfoundland. Hanek and Threlfall (1970).
Bunoderina eucaliae Miller 1936. British Columbia. Bangham and Adams (1954); Oregon. Pratt and McCauley (1961) both as Bunodera.
Cainocreadium gasterostei (Bovien 1932). Yamaguti (1971).
Crepidostomum cornutum (Osborn 1903) Stafford 1904. Oregon. Pratt and McCauley (1961).
Crepidostomum cooperi Hopkins 1931. Newfoundland. Hanek and Threlfall (1969b).
Crepidostomum farionis (Müller 1780) Lühe 1909. Newfoundland. Threlfall (1968).

CYATHOCOTYLIDAE

- Holostephanus luhei Szidat 1936. Metacercaria. England. Erasmus (1962).

DIPLOSTOMATIDAE

- Posthodiplostomum brevicaudatum (Nordmann 1832) Wisniewski 1858. Metacercaria. Europe. Yamaguti (1971).
Posthodiplostomum cuticola (Nordmann 1832) Dubois 1936. Larva. USSR. Skin, fins. Bykhovskaya-Pavlovskaya et al. (1962).
Posthodiplostomum minimum (MacCallum 1921) Dubois 1936. British Columbia. Bangham and Adams (1954).
Diplostomum scudleri (Olivier 1841) Dubois 1936. Metacercaria. British Columbia. Eyes. Lester (1974).
Diplostomum pungitius Shigin 1965. Metacercaria. USSR. Eyes. Shigin (1965).
Diplostomum gobiorum Shigin 1965. Metacercaria. USSR. Eyes. Shigin (1965).
Diplostomum sp. Larva. British Columbia. Bangham and Adams (1954).
Diplostomum spathaceum (Rudolphi 1819) Olsson 1876. Newfoundland, Labrador. Hanek and Threlfall (1970); Metacercaria. Scotland. Eyes. Williams (1966); USSR. Bykhovskaya-Pavlovskaya et al. (1962); British Columbia. Lester (1974).
Diplostomum clavatum (Ciurea 1928). Metacercaria. USSR. Getsevichiute (1958).
Diplostomum gasterostei Williams 1966. Metacercaria. England. Retinal layer of eyes. Pennycuik (1971).
Tetracotyle sp. British Columbia. Bangham and Adams (1954).
Neascus sp. Metacercaria. Northern California. Skins. Haderlie (1953).
Neascus brevicaudatus (Nordmann 1832). Larva. USSR. Eyes. Getsevichiute (1958).
Tylodelphys clavata (Nordmann 1832) Diesing 1850. Larva. England. Eyes. Wootten (1973b).

ECHINOSTOMATIDAE

- Patasiger cf. pungens (Linstow 1894). Metacercaria. France. Gills, stomach. Dollfus (1961) as Echinostomum p.

Gasterosteus aculeatus (Continued)

FELLODISTOMATIDAE

Faustula gasterostei Schell 1973. Washington. Intestine.
Schell (1973b).

GORGODERIDAE

Phyllodistomum folium (Olfers 1816) Braun 1899. England.
Urinary bladder, ureter. Dawes (1947).

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Barents Sea, USSR.
Intestine. Polyanski (1955b); British Columbia. Intestine.
Arai (1969b); Labrador, Newfoundland. Hanek and Threlfall (1969a);
Washington. Ching (1960a).

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Washington.
Ching (1960a).

Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Labrador,
Newfoundland. Hanek and Threlfall (1969a); USSR. Bykhovskaya-
Pavlovskaya et al. (1962).

Parahemiurus merus (Linton 1910) Woolcock 1935. Washington. Gut.
Ching (1960a).

Derogenes varicus (Müller 1784) Looss 1901. Washington. Ching
(1960a); Barents Sea, USSR. Intestine. Polyanski (1955b);
British Columbia. Intestine. Arai (1969b); Labrador, Newfoundland.
Hanek and Threlfall (1969a).

HETEROPHYIDAE

Apophallus bacalloti (Morozov 1852) Balozet and Callot 1939.
Larva. France. Body surface. Timon-David (1963).

Apophallus brevis Ransom 1920. Metacercaria. Quebec. Gills,
skin. Hanek and Molnar (1974).

Cryptocotyle concavum (Creplin 1825) Lühe 1899. Metacercaria.
Central California. Wootton (1957).

OPECOELIDAE

Podocotyle apodichthysi Park 1937. California. Intestine. Park
(1937b).

Podocotyle enophrysi Park 1937. Washington. Intestine. Ching
(1960a) as P. pacifica.

Podocotyle atomon (Rudolphi 1802) Odhner 1905. Labrador,
Newfoundland. Hanek and Threlfall (1969a); USSR. Bykhovskaya-
Pavlovskaya et al. (1962).

Podocotyle reflexa (Creplin 1825) Odhner 1905. Barents Sea, USSR.
Intestine. Polyanski (1955b).

Podocotyle sinusacca Ching 1960. British Columbia. Intestine.
Arai (1969b) as Neopodocotyloides s.

Podocotyle simplex (Rudolphi 1809) Stafford 1904. Canadian Atlantic.
Intestine. Stafford (1907).

Gasterosteus aculeatus (Continued)

STRIGEIDAE

- Cotylurus pileatus (Rudolphi 1802) Dubois 1937. Larva. USSR.
Internal organs. Bykhovskaya-Pavlovskaya et al. (1962).
Apatemon gracilis (Rudolphi 1819) Szidat 1928. Metacercaria.
British Columbia. Intestine. Lester (1974).

HIRUDINOIDEA

PISCICOLIDAE

- Piscicola geometra (Linnaeus 1761). USSR. Bykhovskaya-Pavlovskaya et al.
(1962).

MONOGENEA

DACTYLOGYRIDAE

- Dactylogyrus sp. British Columbia. Gills. Lester (1974).

DISCOCOTYLIDAE

- Diplozoon paradoxum Nordmann 1832. Europe. Gills. Dawes (1947).

GYRODACTYLIDAE

- Gyrodactylus elegans Nordmann 1832. Washington. Guberlet (1936a);
England. Gills. Dawes (1947).
Gyrodactylus alexanderi Mizelle and Kritsky 1967.
California. Skin. Mizelle and Kritsky (1967d); British Columbia.
Lester (1974).
Gyrodactylus arcuatus Bykhovsky 1933. Barents Sea. Gills, fins,
skin. Polyanski (1955b); Britain. Chubb (1970a).
Gyrodactylus bychowskyi Sproston 1946. Barents Sea, Baltic Sea,
Sea of Japan. Gills. Polyanski (1955b).
Gyrodactylus avalonia Hanek and Threlfall 1969. Ontario, Canada.
Fins. Hanek and Threlfall (1969c).
Gyrodactylus canadensis Hanek and Threlfall 1969. Newfoundland.
Gills. Hanek and Threlfall (1969c).
Gyrodactylus lairdi Hanek and Threlfall 1969. Newfoundland.
Fins. Hanek and Threlfall (1969c).
Gyrodactylus memorialis Hanek and Threlfall 1969. Newfoundland.
Fins. Hanek and Threlfall (1969c).
Gyrodactylus aculeati Malmberg 1956. Sweden. Gills. Yamaguti
(1963b).
Gyrodactylus rarus Wegener 1907. England. Body surface, gills.
Chappell (1969); Baltic Sea. Bykhovsky and Poljansky (1953).
Gyrodactylus pungitii Malmberg 1964. Britain. Chubb (1970a).

GYRODACTYLOIDEA

- Genera and species. British Columbia. Gills, body surface.
Arai (1969b).

Gasterosteus aculeatus (Continued)

MOLLUSCA

UNIONIDAE

Anodonta beringiana Middendorf. Glochidium. Alaska. Gills, mouth body surface. Cope (1959).
Genera and species. USSR. Bykhovskaya-Pavlovskaya et al. (1962);
British Columbia. Lester (1974).

NEMATODA

ACUARIIDAE

Synhimantus brevicaudatus (Dujardin 1845). Larva. Sea of Azov, USSR. Stomach, liver, intestine. Mozgovi et al. (1965).

ANISAKIDAE

Raphidascaris cristata (Linstow 1872). Juvenile. Britain. Chubb (1970a).
Raphidascaris gracillima (Linstow 1890). Baltic, Britain. Yamaguti (1961).
Raphidascaris acus (Bloch 1779) Railliet and Henry 1915. USSR. Intestine. Bykhovskaya-Pavlovskaya et al. (1962).
Raphidascaris sp.? Juvenile. England. Chappell and Owen (1969).
* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Adult, larva. Barents Sea, USSR. Intestine, body cavity, mesentery. Polyanski (1955b) as Contracecum a.
Contracecum sp. Newfoundland, Labrador. Hanek and Threlfall (1970).
Anisakis sp. Larva. Barents Sea, USSR. Body cavity and mesentery. Polyanski (1955b); British Columbia. Arai (1969b).

CAMALLANIDAE

Camallanus lacustris (Zoega 1776) Railliet and Henry 1915. USSR. Intestine. Bykhovskaya-Pavlovskaya et al. (1962).
Camallanus truncatus (Rudolphi 1814) Railliet and Henry 1915. USSR. Intestine. Bykhovskaya-Pavlovskaya et al. (1962).

CAPILLARIIDAE

Hepaticola petruschewskii Schulman 1948. USSR. Liver. Getsevichiute (1958).

CYSTIDICOLIDAE

Ascarophis morrhuae Van Beneden 1871. Newfoundland, Labrador. Hanek and Threlfall (1970).
Cystidicoloides tenuissima (Zeder 1800) Rasheed 1966. Poland. Wierzbicki (1962) as Sterliadochona t.
Cystidicola farionis? Fischer 1798. USSR. Swimbladder. Bykhovskaya-Pavlovskaya et al. (1962).

Gasterosteus aculeatus (Continued)

DIOCTOPHYMATIDAE

Eustrongylides sp. Larva. British Columbia. Bangham and Adams (1954).

PHILOMETRIDAE

Philonema agubernaculum Simon and Simon 1936. Quebec. Viscera. Hanek and Molnar (1974).

PROTOZOA (CILIOPHORA)

AMPHILEPTIDAE

Litonotus branchiarum (Weinrich 1925). USSR. Gills, skin. Bykhovskaya-Pavlovskaya et al. (1962) as Hemiophrys b.

DENDROSOMATIDAE

Trichophyra intermedia Prost 1952. Neva Gulf, USSR. Gills. Bykhovskaya-Pavlovskaya et al. (1962).

EPISTYLIDAE

Epistylis lwoffii Faure-Fremiet 1943. British Columbia. Lester (1974); Europe. On Apiosoma [on gills, body surface]. Lom (1966).

OPHRYOGLENIDAE

Ichthyophthirius multifillis Fouquet 1876. Ireland. Body surface. Kane (1966); British Columbia. Lester (1974). "May be lab infected."
Ichthyophthirius sp. Newfoundland. Threlfall (1968).

SCYPHIDIIDAE

Glossatella amebae (Grenfell 1887). Neva Gulf, USSR. Body surface, gills. Bykhovskaya-Pavlovskaya et al. (1962).
Apiosoma sp. British Columbia. Gills, body surface. Lester (1974).

URCEOLARIIDAE

Trichodina tenuidens Faure-Fremiet 1943. Newfoundland. Gills. Lom and Laird (1969); British Columbia. Gill chamber walls. Lester (1974); England. Chubb (1970b).
Trichodina domergei subsp. domergei Haider 1964. USSR. Poland. Gills, skin. Bykhovskaya-Pavlovskaya et al. (1962); British Columbia. Fins, body surface. Lester (1974).
Trichodina gracilis Polyanski 1955. Barents Sea, USSR. Body surface, gills. Polyanski (1955b).
Trichodina megamicronucleata Dogiel 1950. Ireland. Body surface. Kane (1966).
Trichodina sp. England. Body surface. Chappell (1969).

Gasterosteus aculeatus (Continued)

PROTOZOA (HAPLOSPORIDA)

Dermocystidium gasterostei Elkan 1962. England. Cysts on fins. Elkan (1962).

PROTOZOA (MICROSPORIDA)

NOSEMATIDAE

Glugea anomala (Moniez 1887) Gurley 1893. Europe. Tissues. Putz et al. (1965); Alaska. Cope (1959); British Columbia. Lester (1974).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa sp. British Columbia. Intestine. Lester (1974).

MYXIDIIDAE

Myxidium gasterostei Noble 1943. California. Gallbladder. Noble (1943); USSR. Bykhovskaya-Pavlovskaya et al. (1962); British Columbia. Lester (1974).

MYXOBILATIDAE

Myxobilatus gasterostei (Parisi 1912) Davis 1944. USSR. Bykhovskaya-Pavlovskaya et al. (1962); British Columbia. Lester (1974).
Myxobilatus medius (Thélohan 1892) Gurley 1894. USSR. Bykhovskaya-Pavlovskaya et al. (1962).
Myxobilatus sp. British Columbia. Kidney tubules Lester (1974).

MYXOBOLIDAE

Myxobolus physophilus Reuss 1906. USSR. Body cavity. Getsevichiute (1958).
Henneguya sp. Great Britain. Kennedy (1974).

SPHAEROSPORIDAE

Sphaerospora elegans Thélohan 1892. USSR. Kidneys, Urinary bladder. Bykhovskaya-Pavlovskaya et al. (1962); British Columbia. Urinary tubules. Lester (1974).
Unicauda brevis (Thélohan 1892). France. Renal tubules, kidneys, ovaries. Kudo and Meglitsch⁶.

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia branchialis (Nie in Chen 1956). USSR. Bykhovskaya-Pavlovskaya et al. (1962).

Gasterosteus aculeatus (Continued)

Cryptobia salmositica Katz 1951. Washington. Blood. Becker and Katz (1965b).

HEXAMITIDAE

Hexamita salmonis (Moore 1922). British Columbia. Intestine. Lester (1974).

TETRAMITIDAE

Ichthyobodo necatrix (Henneguy 1884). British Columbia. Gills. Lester (1974).

TRYPANOSOMATIDAE

Trypanosoma occidentalis Becker 1967. Washington. Blood. Becker (1967b).

PROTOZOA (SPOROZOA)

EIMERIIDAE

Eimeria gasterostei (Thélohan 1890) Doflein 1909. USSR. Liver. Bykhovskaya-Pavlovskaya et al. (1962); British Columbia. Lester (1974).

SYNGNATHIDAE -- Pipefishes and Seahorses

Syngnathus leptorhynchus - Bay Pipefish

SYNONYM - S. griseolineatus

CESTODA

PHYLLOBOTHRIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

COPEPODA

PENNELLIDAE

Haemobaphes sp. Juvenile. British Columbia. Gills. Arai (1969b).

DIGENEA

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia. Intestine. Arai (1969b).

Syngnathus leptorhynchus (Continued)

Parahemiuris merus (Linton 1910) Woolcock 1935. British Columbia.
Intestine. Arai (1969b).
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. British
Columbia. Stomach. Arai (1969b).

LEPOCREADIIDAE

Opechona occidentalis Montgomery 1957. British Columbia.
Intestine. Arai (1969b).

OPECOELIDAE

Podocotyle atomon (Rudolphi 1802) Odhner 1905. British Columbia.
Intestine. McFarlane (1936).
Podocotyle reflexa (Creplin 1825) Odhner 1905. British Columbia.
Intestine. McFarlane (1936).
Podocotyle enophrysi Park 1937. British Columbia. Intestine.
Arai (1969b).
Podocotyle sinusacca Ching 1960. British Columbia. Intestine.
Arai (1969b) as Neopodocotyloides s.

MONOGENEA

GYRODACTYLOIDEA

Genera and species. British Columbia. Gills. Arai (1969b).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).
Contracaecum sp. Larva. British Columbia. Body cavity. Arai
(1969b).

PERCICHTHYIDAE -- Temperate Basses

Morone saxatilis - Striped Bass

SYNONYMS - Labrax lineatus, Roccus lineatus, Roccus saxatilis

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Raney (1952).

LEPTORHYNCHOIDIDAE

Leptorhynchoides thecatus (Linton 1891) Kostylew 1924. Hoffman (1967).

Morone saxatilis (Continued)

POMPHORHYNCHIDAE

Pomphorhynchus rocci Cordonnier and Ward 1967. North Carolina.
Intestine. Cordonnier and Ward (1967).

Pomphorhynchus laevis (Zoega in Muller 1776) Van Cleave 1924. Raney (1952).

BRANCHIURA

ARGULIDAE

Argulus bicolor Bere 1936. Chesapeake Bay. Skin and gills. Paperna
and Zwerner (1976).

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931. Cysts in
viscera. Raney (1952) as Rhynchobothrium speciosum.

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Larva. Massachusetts.
Intestine. Linton (1924) as Rhynchobothrium bulbifer.

PROTEOCEPHALIDAE

Genera and species. Larva. Chesapeake Bay. Mesenteries and liver.
Paperna and Zwerner (1976).

TETRAPHYLLIDEA

Scolex pleuronectis Rudolphi 1819. Chesapeake Bay. Intestine.
Paperna and Zwerner (1976).

TRYPANORHYNCHA

Genera and species. Larva. Chesapeake Bay. Mesenteries. Paperna
and Zwerner (1976).

COPEPODA

CALIGIDAE

Caligus sp. Chesapeake Bay. Gills. Paperna and Zwerner (1976).

ERGASILIDAE

Ergasilus labracis Krøyer 1863. Virginia. Roberts (1970); Massachusetts.
Gills. Wilson (1917).

Ergasilus lizae Krøyer 1863. Chesapeake Bay. Gills. Paperna and
Zwerner (1976).

LERNAEOPODIDAE

Achtheres lacae Krøyer 1863. Virginia. Wilson (1915).

Morone saxatilis (Continued)

DIGenea

ACANTHOCOLPIDAE

Stephanostomum tenue (Linton 1898) Martin 1938. Massachusetts.
Linton (1940).

CLINOSTOMATIDAE

Clinostomum marginatum (Rudolphi 1819). Metacercariae. Chesapeake Bay.
Connective tissue and muscle. Paperna and Zwerner (1976).

CRYPTOGONIMIDAE

Neochasmus sogandaresi Overstreet 1971. Mississippi. Intestine,
pyloric caeca. Overstreet (1971a).

DIPLOSTOMATIDAE

Diplostomum sp. Metacercariae. Chesapeake Bay. Spleen. Paperna
and Zwerner (1976).

Neascus sp. Metacercaria. Chesapeake Bay. Skin. Paperna and
Zwerner (1976).

LEPOCREADIIDAE

Lepocreadium californianum Edwards and Nahhas 1968. Northern
California. Intestine. Edwards and Nahhas (1968).

Lepocreadium setiferoides (Miller and Northup 1926) Martin 1938.
Chesapeake Bay. Intestine. Paperna and Zwerner (1976).

Lepocreadium areolatum (Linton 1900) Stunkard 1969. Tentative
identification. Chesapeake Bay. Intestine. Paperna and Zwerner
(1976).

HIRUDINOIDEA

PISCICOLIDAE

Myzobdella lugubris Leidy 1851. Chesapeake Bay. Paperna and
Zwerner (1976).

ISOPODA

CYMOTHOIDAE

Aegathoa cf. oculata (Sey 1818). Chesapeake Bay. Skin. Paperna
and Zwerner (1976).

Lironeca ovalis (Sey 1818). New York. Inside of operculums.
Alperin (1966).

MOLLUSCA

Genera and Species. Glochidia. Chesapeake Bay. Gills. Paperna and
and Zwerner (1976).

Morone saxatilis (Continued)

MONOGENEA

CAPSALIDAE

Benedenia mellani (MacCallum 1927) Johnston 1929. Raney
(1952) as Epibdella m.

DACTYLOGYRIDAE

Aristocleidus hastatus Mueller 1936. Florida. Gills. Yamaguti
(1963b).

Cleidodiscus pricei Mueller 1936. Northern California. Gills.
Hensley and Nahhas (1975).

DIPLECTANIDAE

Diplectanum collinsi (Mueller 1936) Price 1937. Florida. Yamaguti
(1963b).

GASTROCOTYLIDAE

Lithidocotyle acanthophallus (MacCallum and MacCallum 1913)
Sproston 1946. New York. Hargis (1956c).

GYRODACTYLIDAE

Gyrodactylus sp. Chesapeake Bay. Gills. Paperna and Zwermer (1976).

MICROCOTYLIDAE

Microcotyle eueides MacCallum and MacCallum 1913. Atlantic (USA).
Yamaguti (1963b).

Microcotyle macroura MacCallum and MacCallum 1913. Chesapeake Bay.
Gills. Paperna and Zwermer (1976).

NEMATODA

ANISAKIDAE

Contracaecum brachyurum (Ward and Magath 1917). Northern California.
Intestine, caeca. Hensley and Nahhas (1975).

Goezia sp. Larva. Chesapeake Bay. Intestine. Paperna and Zwermer
(1976).

Goezia annulata (Molin 1859). Raney (1952).

CYSTIDICOLIDAE

Benedenia melleni (MacCallum 1927) Johnston 1929. Raney (1952)
as Epibdella m.

CUCULLANIDAE

Cucullanus sp. Chesapeake Bay. Intestine. Paperna and Zwermer (1976).

Morone saxatilis (Continued)

GNATHOSTOMATIDAE

Spiroxys sp. Larva. Northern California. Intestine, stomach, caeca, mesentery. Hensley and Nahhas (1975).

PHILOMETRIDAE

Philometra sp. Chesapeake Bay. Body cavity. Bier et al. (1974).
Philometra rubra (Leidy 1856). Chesapeake Bay. Intestine. Paperna and Zwerner (1976).

PROTOZOA (CILIOPHORA)

DENDROSOMATIDAE

Trichophyra sp. Chesapeake Bay. Gills. Paperna and Zwerner (1976).

EPISTYLIDAE

Epistylis sp. Chesapeake Bay. Gills. Paperna and Zwerner (1976).

SCYPHIDIIDAE

Glossatella sp. Chesapeake Bay. Gills. Paperna and Zwerner (1976).
Scyphidia sp. Chesapeake Bay. Gills. Paperna and Zwerner (1976).

URCEOLARIIDAE

Trichodina davisi Wellborn 1967. North Carolina. Fins, body surface, gills. Wellborn (1967).
Trichodinella sp. Chesapeake Bay. Skin and gills. Paperna and Zwerner (1976).

PROTOZOA (MICROSPORIDIA)

NOSEMATIIDAE

Nosema sp. Chesapeake Bay. Gills. Paperna and Zwerner (1976).

PROTOZOA (MYXOSPORIDA)

MYXOSOMATIDAE

Myxosoma sp. Chesapeake Bay. Cartilage, bones. Paperna and Zwerner (1976).

TETRACAPSULIDAE

Kudoa cerebralis Paperna and Zwerner 1974. Chesapeake Bay. Connective tissue of nervous tissue. Paperna and Zwerner (1974).

Morone saxatilis (Continued)

PROTOZOA (SARCOMASTIGOPHORA)

BLASTODINIIDAE

Oodinium sp. Chesapeake Bay. Gills. Paperna and Zwerner (1976).

BODINIDAE

Colponema sp. Chesapeake Bay. Gills. Paperna and Zwerner (1976).

Stereolepis gigas - Giant Sea Bass

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931. Larva.
Southern California. Viscera. Jensen¹⁸.

COPEPODA

CALIGIDAE

Lepeophtheirus longipes Wilson 1905. Southern California. Exterior.
Wilson (1921).

ISOPODA

CYMOTHOIDAE

Nerocila californica Schioedte and Meinert 1881. Baja California.
Gills. Brusca (1977). Speculative host.

MONOGENEA

DIPLECTANIDAE

Diplectanum americanum Price 1937. West coast of Mexico. Gills.
Caballero and Bravo-Hollis (1961).

SERRANIDAE -- Sea Basses

Epinephelus analogus - Spotted Cabrilla

Epinephelus analogus (Continued)

DIGENEA

BUCEPHALIDAE

- Prosorhynchus gonoderus Manter 1940. Pacific Panama. Intestine.
Sogandares-Bernal (1959).
Prosorhynchus ozakii Manter 1934. Pacific Panama. Intestine.
Sogandares-Bernal (1959).

LEPOCREADIIDAE

- Lepidapedon epinepheli Bravo-Hollis and Manter 1957. West coast of
Mexico. Pyloric caeca, intestine. Bravo-Hollis and Manter (1957).
Lepidapedon hancocki Manter 1940. West coast of Mexico. Intestine.
Yamaguti (1971).

OPECOELIDAE

- Helicometrina nimia Linton 1910. Pacific Panama. Pyloric caeca.
Sogandares-Bernal (1959).

MONOGENEA

CAPSALIDAE

- Trochopus pseudomarginatus Bravo-Hollis 1957. West coast of Mexico.
Gills. Bravo-Hollis (1957).

Epinephelus niveatus - Snowy Grouper

DIGENEA

ACANTHOCOLPIDAE

- Stephanostomum microstephanum Manter 1934. Florida. Intestine.
Manter (1934).

BUCEPHALIDAE

- Prosorhynchus ozakii Manter 1934. Tortugas; Florida. Intestine.
Manter (1934).

LEPOCREADIIDAE

- Lepidapedon nicolli Manter 1934. Florida. Intestine. Yamaguti
(1971).

Hemanthias peruanus - Splittail Bass

COPEPODA

CHONDRACANTHIDAE

Blias prionoti Krøyer 1863. Gills. Ho (1970).

Mycteroperca sp.

Manter and Van Cleave (1951) reported examining Mycteroperca pardalis from La Jolla, California. Except for this record, M. pardalis has not been recorded from California, and we feel this record is in question. We therefore designate the fish Mycteroperca sp. for the time being.

DIGENEA

LEPOCREADIIDAE

Lepidapedon sp. Southern California. Manter and Van Cleave (1951).

Mycteroperca xenarcha - Broomtail Grouper

COPEPODA

CALIGIDAE

Lepeophtheirus dissimulatus Wilson 1905. Albermarle Islands. Skin.
Wilson (1937a).

DIGENEA

BUCEPHALIDAE

Bucephalus heterotentaculatus Bravo-Hollis and Sogandares-Bernal
1956. Baja California. Intestine. Arai (1962).

Prosorhynchus ozakii Manter 1934. Galapagos Islands. Caeca.
Manter (1940a).

Prosorhynchus pacificum Manter 1940. Galapagos Islands. Caeca.
Manter (1940a).

LEPOCREADIIDAE

Lepidapedon hancocki Manter 1940. Galapagos Islands. Intestine.
Manter (1940a).

OPECOELIDAE

Hamacreadium mutabile Linton 1910. Galapagos Islands. Intestine.
Yamaguti (1971).

Mycteroperca xenarcha (Continued)

ISOPODA

CYMOTHOIDAE

Nerocila californica Schioedte and Meinert 1881. Baja California.
Gills. Brusca (1977). Speculative host.

Paralabrax clathratus - Kelp Bass

COPEPODA

BOMOLOCHIDAE

*Bomolochus solae Claus 1864. Baja California. Causey (1960).
Holobomolochus longicaudus (Cressey 1969) Kabata 1971. Southern
California. Gill cavity. Cressey (1969b).
Taeniastrotos californiensis Cressey 1969. Southern California.
Schultze²⁵.

CALIGIDAE

Lepeophtheirus constrictus Wilson 1908. Southern California.
Schultze²⁵.
Lepeophtheirus longipes Wilson 1905. Southern California. Body
surface. Wilson (1921).
Caligus productus Dana 1853. Baja California. Causey (1960).
Caligus mutabilis Wilson 1905. Gulf of California. Causey (1960);
Southern California. Schultze²⁵.

HATSCHEKIIDAE

Hatschekia albirubra Wilson 1913. Baja California. Causey (1960).
Hatschekia pacifica Cressey 1970. Southern California. Schultze²⁵.

LERNAEPOPODIDAE

Clavella parva Wilson 1912. Southern California. Schultze²⁵.

PENNELLIDAE

Peniculus fissipes Wilson 1917. Southern California. Schultze²⁵.

DIGENEA

HEMIURIDAE

Elytrophallus mexicanus Manter 1940. Southern California. Intestine.
Manter and Van Cleave (1951).

MONORCHIIDAE

Monorcheides alexanderi Arai 1962. Guadalupe Island, Mexico.
Pyloric caeca. Arai (1962).

Paralabrax clathratus (Continued)

OPECOELIDAE

Helicometrina nimia Linton 1910. Intestine. Arai (1962).
Plagioporus issaitschikowi (Layman 1930) Yamaguti 1938. Southern California. Intestine. Manter and Van Cleave (1951).

ISOPODA

CYMOTHOIDAE

Nerocila californica Schioedte and Meinert 1881. California. Brusca (1977). Speculative host.

MONOGENEA

MACROVALVITREMATIDAE

Pseudotagia clathratus Crane 1972. Southern California. Gills. Crane (1972).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Viscera. Dailey et al. (in press).
Phocanema sp. Larva. Southern California. Viscera. Dailey et al. (in press).

SPIRURIDAE

Dollfusnema piscicola Caballero 1974. Baja California. Caballero (1974).

Paralabrax maculatofasciatus - Spotted Sand Bass

COPEPODA

BOMOLOCHIDAE

Holobomolochus longicaudus (Cressey 1969) Kabata 1971. Southern California. Schultze²⁵.
Taeniastrotos californiensis Cressey 1969. Southern California. Schultze²⁵.

CALIGIDAE

Sciaenophilus bennetti (Causey 1953) Yamaguti 1963. Baja California. Mouth. Causey (1960) as Caligus b.
Lepeophtheirus constrictus Wilson 1908. Southern California. Body surface. Wilson (1908a).

Paralabrax maculatofasciatus (Continued)

Caligus productus Dana 1853. Gulf of California. Causey (1960).
Caligus mutabilis Wilson 1905. Gulf of California. Causey (1960);
Southern California. Schultze²⁵.

HATSCHEKIIDAE

Hatschekia pacifica Cressey 1970. Southern California. Schultze²⁵.

LERNAEOPODIDAE

Clavella parva Wilson 1912. Southern California. Schultze²⁵.

PSEUDOCYCNIDAE

Pseudocycnus appendiculatus Heller 1865. Gulf of California.
Causey (1960).

DIGENEA

HEMIURIDAE

Dinurus barbatus (Cohn 1902) Looss 1907. Baja California.
Intestine. Arai (1962).

Magniscyphus taboganus (Sogandares-Bernal 1959) Reid, Coil and
Kuntz 1965. Baja California. Intestine. Arai (1962) as
Sterrhurus taboganus.

OPECOELIDAE

Opecoelus mexicanus Manter 1940. Baja California. Intestine.
Arai (1962).

Helicometrina nimia Linton 1910. Intestine. Arai (1962).

Helicometrina fasciata (Rudolphi 1819) Odhner 1902. Baja California.
Intestine. Arai (1962).

Helicometra pretiosa Bravo-Hollis and Manter 1957. West coast of
Mexico. Intestine. Bravo-Hollis and Manter (1957).

Dactylostomum winteri Caballero and Caballero 1971. Baja California.
Intestine. Caballero and Caballero (1971a).

Hamacreadium bolivari Caballero and Caballero 1970. Gulf of
California. Intestine. Caballero and Caballero (1970).

MONOGENEA

CAPSALIDAE

Benedenia melleni (MacCallum 1927) Johnston 1929. New York
Aquarium. Eyes, skin. Sproston (1946).

DIPLECTANIDAE

Diplectanum amplidiscatum Bravo-Hollis 1954. West coast of Mexico.
Gills. Bravo-Hollis (1954a).

Paralabrax nebulifer - Barred Sand Bass

COPEPODA

BOMOLOCHIDAE

Taeniastrotos californiensis Cressey 1969. Southern California.
Body surface. Cressey (1969b).

Holobomolochus longicaudus (Cressey 1969) Kabata 1971. Southern
California. Gill cavity. Cressey (1969b).

* Bomolochus solae Claus 1864. Baja California. Causey (1960).

CALIGIDAE

Lepeophtheirus constrictus Wilson 1908. Southern California.
Schultzze²⁵.

Lepeophtheirus dissimulatus Wilson 1905. Baja California.
Causey (1960).

Caligus mutabilis Wilson 1905. Gulf of California. Causey (1960);
Southern California. Schultzze²⁵.

HATSCHEKIIDAE

Hatschekia pacifica Cressey 1970. Southern California. Schultzze²⁵.

LERNAEOPODIDAE

Clavella parva Wilson 1912. Southern California. Schultzze²⁵.

PENNELIDAE

Peniculus fissipes Wilson 1917. Pacific coast of Baja California.
Fins. Schultzze²⁵.

DIGENEA

OPECOELIDAE

Opecoelus inimici Yamaguti 1934. Cerros Island, Mexico. Intestine.
Manter (1940a).

Helicometrina nimia Linton 1910. Cerros Island, Mexico. Intestine.
Manter (1940a).

ISOPODA

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. Southern California. Turner
et al. (1969).

NEMATODA

ANISAKIDAE

Anisakis sp. Southern California. Dailey et al. (in press).

Phocanema sp. Southern California. Dailey et al. (in press).

Paralabrax nebulifer (Continued)

PROTOZOA (CILIOPHORA)

OPHRYOGLLENIDAE

Cryptocaryon irritans Brown 1951. New York Aquarium. Skin, gills, and eyes. Nigrelli and Ruggieri (1966).

BRANCHIOSTEGIDAE -- Tilefishes

Caulolatilus princeps - Ocean Whitefish

COPEPODA

LERNAEOPODIDAE

Neobrachiella gracilis (Wilson 1908) Kabata 1978. Baja California. Causey (1960) as Brachiella g.

DIGENEA

HOMALOMETRIDAE

Myzotus vitellosus Manter 1940. Galapagos Islands. Intestine. Manter (1940a) probably from C. princeps.

MONOGENEA

DICLIDOPHORIDAE

Choricotyle caulolatali (Meserve 1938) Sproston 1946. Galapagos Islands. Gills. Meserve (1938) as Diclidophora c.

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa sp. Southern California. Gallbladder. Jensen¹⁸.

ECHENEIDAE -- Remoras

Echeneis naucrates - Sharksucker

ACANTHOCEPHALA

RHADINORHYNCHIDAE

Rhadinorhynchus tenuicornis (Linton 1891) Van Cleave 1918. Massachusetts. Cable and Linderoth (1963).

Echeneis naucrates (Continued)

Gorgorhynchus medius (Linton 1908) Chandler 1934. Parukhin (1970)
as G. gibberum.

Serrasentis sagittifer (Linton 1889) Linton 1932. South China Sea.
Parukhin (1967) as S. socialis.

BRANCHIURA

ARGULIDAE

Argulus varians Bere 1936. Gulf of Mexico. Bere (1936).

CESTODA

TENTACULARIIDAE

Nybelinia robusta (Linton 1891) Dollfus 1930. Larva. Massachusetts.
Stomach. Linton (1924) as Tetrarhynchus r.

Tentacularia coryphaenae Bosc 1802. Postlarva. Massachusetts.
Encapsulated in stomach, mesentery. Linton (1924) as
Tetrarhynchus bicolor.

COPEPODA

CALIGIDAE

Lepeophtheirus longipes Wilson 1905. Africa. Barnard (1955).

Tuxophorus caligodes Wilson 1908. North Carolina. Wilson (1908b);
Gulf of Mexico. Exterior. Bere (1936).

Caligus praetextus Bere 1936. Gulf of Mexico. Mouth, branchial
cavity, outer surface. Bere (1936) from "Sucking fish", likely
E. naucrates.

DIGENEA

ACANTHOCOLPIDAE

Tormopsolus echenei Parukhin 1966. Gulf of Tonkin. Intestine.
Parukhin (1966).

Stephanostomum imparispine (Linton 1905) Manter 1940. South
China Sea. Parukhin (1967).

DIDYMOZOIDAE

Didymozoides sp. Larva. Red Sea. Gill cavity. Nikolaeva (1965).

HEMIURIDAE

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. South
China Sea. Parukhin (1967).

Sterrurus floridensis Manter 1934. Tortugas; Florida. Stomach.
Manter (1934).

Lecithochirium monticellii (Linton 1898) Crowcroft 1946.
Massachusetts. Stomach. Linton (1940) as Sterrurus m.

Echeneis naucrates (Continued)

Parahemiurus merus (Linton 1910) Woolcock 1935. Jamaica. Stomach.
Nahas and Cable (1964).

LEPOCREADIIDAE

Echeneidocoelium indicum Simha and Pershad 1964. India. Intestine.
Madhavi (1970).

MONOGENEA

DIONCIDAE

Dioncus remorae (MacCallum 1916) Price 1938. New York Aquarium.
Gills. MacCallum (1916) as Acanthodiscus remorae; West Indies.
Johnston and Tiegs (1922) as Dionchotrema r.; Australia. Young
(1970); South Atlantic. Parukhin (1968).
Dioncus agassizi Goto 1899. India. Gills. Rao and
Madhavi (1967).

NEMATODA

ANISAKIDAE

Raphidascaris sp. South China Sea. Parukhin (1967).

CAMALLANIDAE

Spirocamallanus olseni Campana-Rouget and Razarihelissoa 1965.
Sea of Nossi-Bé. Stomach. Campana-Rouget and Razarihelissoa
(1965).

CAPILLARIIDAE

Capillaria echenei Parukhin 1967. South China Sea. Parukhin (1967).

CYSTIDICOLIDAE

Ascarophis sp. South China Sea. Parukhin (1967).

Spinitectus echenei Parukhin 1967. South China Sea. Parukhin
(1967).

Remora australis - Whalesucker

COPEPODA

CALIGIDAE

Lepeophtheirus crassus (Wilson and Bere 1936) Shiino 1960.
Pacific. Skin. Shiino (1963a).

Remora brachyptera - Spearfish remora

MONOGENEA

DIONCIDAEE

Dioncus agassizi Goto 1899. Rhode Island, Massachusetts. Gills.
Yamaguti (1963b).

Remora remora - Remora

SYNONYM - Echeneis remora

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Plerocercoid. Massachusetts. Linton (1941).

DASYRHYNCHIDAE

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931.
Plerocercoid. Massachusetts. Peritoneum. Dollfus (1942).

TENTACULARIIDAE

Nybelinia robusta (Linton 1891) Dollfus 1930. Larva. France.
Linton (1891) as Tettrahynchus robustum.
Nybelinia bisulcata (Linton 1889) Dollfus 1929. Larva. Massachusetts.
Linton (1924) as Tettrahynchus b.

TETRAPHYLLIDEA

Scolex polymorphus Rudolphi 1819. Massachusetts. Linton (1924).

COPEPODA

CALIGIDAE

Caligus elongatus Nordmann 1832. New England. External surface.
Wilson (1905b) as C. rapax.
Lepeophtheirus crassus (Wilson and Bere 1936) Shiino 1960.
Indian Ocean. External surface. Lewis et al. (1969).

PANDARIDAE

*Perissopus oblongatus (Wilson 1908) Cressey 1967. Atlantic.
Wilson (1911) as Achtheinus dentatus.

PENNELIDAE

Pennella remorae Murray 1856. New Zealand. Heegaard (1962);
Atlantic, Mediterranean. In flesh. Brian (1906).

Remora remora (Continued)

DIGENEA

DIDYMOZOIDAE

Genera and species. Larva. Massachusetts. Linton (1940) as
Distoma fenestratum.

HEMIURIDAE

Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Massachusetts.
Linton (1940).

Lecithochirium monticellii (Linton 1898) Crowcroft 1946.
Massachusetts. Stomachs. Linton (1940) as Sterrurus monticelli.

LEPOCREADIIDAE

Echeneidocoelium indicum Simha and Pershad 1964. India. Intestine.
Simha and Pershad (1964).

MONOGENEA

DIONCIDAE

Dionchus agassizi Goto 1899. Massachusetts. Gills. Linton
(1940).

CARANGIDAE -- Jacks and Pompanos

Caranx caballus - Green Jack

SYNONYM - Paratractus caballus

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum filiforme Linton 1940. Massachusetts. Linton (1940).

FELLODISTOMATIDAE

Tergestia laticollis (Rudolphi 1819) Stossich 1899. Costa Rica.
Intestine. Manter (1940a).

MONOGENEA

HETERAXINIDAE

Cemocotyle borinquensis Price 1962. Puerto Rico. Yamaguti (1963b).

Caranx hippos - Crevalle Jack

ACANTHOCEPHALA

RHADINORHYNCHIDAE

Gorgorhynchoides sp. Florida. Cable and Linderoth (1963).

CESTODA

TENTACULARIIDAE

Nybelinia bisulcata (Linton 1889) Dollfus 1929. Larva. North Carolina. Cysts on sides of stomach. Dollfus (1942).

TRYPANORHYNCHA

Rhynchobothrius carangis MacCallum 1921. USA. Yamaguti (1959b).
[Species Incertae sedis - Yamaguti (1959b).]

COPEPODA

CALIGIDAE

Caligus coryphaenae Steenstrup and Lütken 1861. Texas. Gills. Causey (1953b) as C. aliuncus.

Caligus constrictus Heller 1865. Panama. Exterior. Wilson (1937a); Mexico. Causey (1960).

Caligus praetextus Bere 1936. Louisiana. Causey (1953a).

Caligus rectus Pearse 1952. Texas. Exterior. Pearse (1952).

Caligus spinosurculus Pearse 1951. Bahama Islands. Exterior. Pearse (1951).

Caligus tenax Heller 1865. Texas. Gills. Causey (1953b).

Caligus diaphanus Nordmann 1832. Panama Bay. Exterior. Wilson (1937a).

Caligus elongatus Nordmann 1832. Texas. Gills. Causey (1953b) as C. rapax.

Caligus confusus Pillai 1961. Panama. Wilson (1937a) as C. constrictus.

Caligus robustus Bassett-Smith 1898. Gulf of Mexico. Body surface, branchial cavity. Bere (1936).

Lepeophtheirus edwardsi Wilson 1905. Massachusetts. External surface. Wilson (1905a).

Anuretes heckelii (Kollar in Krøyer 1863) Heller 1865. North America. Yamaguti (1963a).

Dentigryps longicauda Cressey 1966. Madagascar. Body surface. Cressey (1966).

HATSCHEKIIDAE

Hatschekia oblonga Wilson 1913. Panama. Gills. Wilson (1937a).

Caranx hippos (Continued)

LERNANTHROPIDAE

Lernanthropus giganteus Krøyer 1863. Texas. Pearse (1952);
West Africa. Delamare - Deboutteville and Nunes - Ruivo (1954).

PANDARIDAE

Pandarus sinuatus Say 1817. Texas. Body surface. Causey (1953b).

PENNELLIDAE

Lernaenicus longiventris Wilson 1917. Western North Atlantic.
Flesh. Wilson (1917); Texas. Causey (1953b); Panama Bay.
Wilson (1937a).

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum ditrematis (Yamaguti 1939) Manter 1947. Florida.
Intestine. Nahhas and Short (1965); Linton (1940) as S. filiforme.
Stephanostomum longisomum Manter 1940. Ecuador, Mexico. Intestine.
Manter (1940a).
Stephanostomum megacephalum Manter 1940. Panama, Ecuador, Mexico.
Gills, intestine. Manter (1940a); Louisiana. Sparks (1958).
Stephanostomum hispidum (Yamaguti 1934) Manter 1940. Colima,
Mexico. Intestine. Bravo-Hollis (1954b).
Manteria brachyderus (Manter 1940) Caballero 1950. Ecuador.
Intestine. Caballero (1950).

BUCEPHALIDAE

Prosorhynchoides gracilescens (Rudolphi 1819) n. comb. North Carolina.
Linton (1905) as Gasterostomum g.
Prosorhynchoides arcuata (Linton 1900) n. comb. North Carolina.
Linton (1905) as Gasterostomum arcuatum.
Bucephalus introverus Manter 1940. Columbia. Stomach. Manter
(1940a).
Bucephalus varicus Manter 1940. West coast of Mexico. Intestine.
Bravo-Hollis and Sogandares-Bernal (1956); Florida. Sogandares-
Bernal and Hutton (1959).

FELLODISTOMATIDAE

Tergestia pectinata (Linton 1905) Manter 1940. Jamaica-Curacao.
Nahhas and Cable (1964); Florida. Intestine. Nahhas and Short
(1965).
Monascus typicus (Odhner 1911) Yamaguti 1954. West coast of
Mexico. Intestine. Lamothe-Argumedo (1969a).

Caranx hippos (Continued)

HEMIURIDAE

Sterrhurus zeloticus (Travassos, Freitas and Bührnheim 1966) Yamaguti 1971. Brazil. Stomach. Travassos et al. (1966) as Separogermiductus z.

Sterrhurus musculus Looss 1907. Florida. Stomach. Overstreet (1969).

Ectenurus virgulus Linton 1910. Jamaica- Curacao. Intestine. Nahhas and Cable (1964); Florida. Overstreet (1969).

Ectenurus americanus (Manter 1947) Manter and Pritchard 1960. Jamaica-Curacao. Stomach. Nahhas and Cable (1964).

Ectenurus yamagutii Nahhas and Powell 1971. Florida. Stomach. Nahhas and Powell (1971).

Parahemiurus merus (Linton 1910) Woolcock 1935. Jamaica-Curacao. Stomach. Nahhas and Cable (1964); Florida. Overstreet (1969).

Lecithochirium parvum Manter 1947. Curacao-Jamaica. Stomach. Nahhas and Cable (1964).

OPECOELIDAE

Pseudopecoeloides carangis (Yamaguti 1938) Yamaguti 1940. Mexican Pacific. Intestine. Yamaguti (1938b) as Cymbephallus carangi; West coast of Mexico. Bravo-Hollis (1954b).

Alloanomalotrema ghanensis (Fischthal and Thomas 1970) Yamaguti 1971. Ghana. Small intestine. Fischthal and Thomas (1970b) as Poracanthium g.

ISOPODA

CYMOTHOIDAE

Lironeca ovalis (Sey 1818). Long Island Sound, USA. Gills. Briggs (1970).

MONOGENEA

ALLOPYRAGRAPHORIDAE

Allopyragraphorus hippos (Hargis 1956) Yamaguti 1963. Gulf of Mexico. Gills. Hargis (1956a) as Pyragraphorus h.

DIONCIDAE

Dioncus remorae (MacCallum 1916) Price 1938. New York Aquarium. Gills. Hargis (1955c).

DISCOCOTYLIDAE

Allodiscocotyla mexicana Caballero and Bravo-Hollis 1963. West coast of Mexico. Gills. Caballero and Bravo-Hollis (1963). [In Allodiscotylidae - Caballero and Bravo-Hollis (1963).]

Caranx hippos (Continued)

Vallisia riojai Caballero and Bravo-Hollis 1963. West coast of Mexico. Gills. Caballero and Bravo-Hollis (1963). [In Anthocotylidae - Caballero and Bravo-Hollis (1963).]

GASTROCOTYLIDAE

Pseudomazocraes monsvaisae Caballero and Bravo-Hollis 1955. West coast of Mexico. Caballero and Bravo-Hollis (1955).

HETERAXINIDAE

Helixaxine winteri Caballero and Bravo-Hollis 1965. Caribbean Mexico. Gills. Caballero and Bravo-Hollis (1967).

Zeuxapta seriolae (Meserve 1938) Price 1962. Mexico. Lamothe-Argumedo (1970).

Cemocotyle noveboracensis Price 1962. New York. Gills. Price (1962b); Caribbean Mexico. Caballero and Bravo-Hollis (1967).

MICROCOTYLIDAE

Pyragraphorus caballeroi Zerecero 1960. Mexico. Gills. Zerecero (1960).

PROTOMICROCOTYLIDAE

Abortipedia indica Unnithan 1962. India. Gills. Unnithan (1962).

Protomicrocotyle manteri Bravo-Hollis 1967. Mexican Gulf of Mexico. Gills. Caballero and Bravo-Hollis (1967).

Protomicrocotyle mirabilis (MacCallum 1918) Johnston and Tieg 1922. Florida. Hargis (1957).

NEMATODA

CUCULLANIDAE

Cucullanus carangis (MacCallum 1921) Tornquist 1931. New York Aquarium. Intestine. Yamaguti (1961).

PROTOZOA (SPOROZOA)

HAEMOGREGARINIDAE

Haemogregarina bigemina Laveran and Mesnil 1901. Puerto Rico. Blood. Saunders (1966).

Chloroscombrus orqueta - Pacific Bumper

ISOPODA

CYMOTHOIDAE

Lironeca convexa Richardson 1905. Pacific. Mouth, gill chambers. Menzies et al. (1955).

Naucrates ductor - Pilotfish

ACANTHOCEPHALA

RHADINORHYNCHIDAE

Serrasentis lamelliger (Diesing 1854) Meyer 1932. Yamaguti (1963c).

CESTODA

TENTACULARIIDAE

Nybelinia lingualis (Cuvier 1817) Dollfus 1929. France. Joyeux and Baer (1936).

COPEPODA

CALIGIDAE

Caligus productus Dana 1853. Indian Ocean. Lewis et al. (1969); Puerto Rico. Exterior, gills. Wilson (1935a) as C. lobatus.

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum naucrotis Nagaty 1957. Red Sea. Nagaty (1957).

ACCACOELIIDAE

Genera and species. Metacercaria. Mediterranean. Nikolaeva (1968a).

HIRUDINELLIDAE

Hirudinella ventricosa (Pallas 1774) Baird 1853. Canary Islands. Gibson (1976).

MONOGENEA

CAPSALIDAE

Ancyrocotyle vallei (Parona and Perugia 1895) Parona and Monticelli 1903. Mediterranean. Gills. Dawes (1947).

Ancyrocotyle bartschi Price 1934. Puerto Rico Deep. Gills. Price (1934).

Benedenia melleni (MacCallum 1927) Johnston 1929. New York Aquarium. Eyes, skin. Sproston (1946).

Nematistius pectoralis - Roosterfish

COPEPODA

CALIGIDAE

Caligus tenuifurcatus Wilson 1937. Panama Bay. Gill cavity. Wilson (1937a).

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. Massachusetts.
Linton (1941).

COPEPODA

CALIGIDAE

Caligus bonito Wilson 1905. Gulf of Mexico. Body surface.
Bere (1936).

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum sp. Massachusetts. Linton (1940).
Manteria brachydera (Manter 1940) Caballero 1950. Florida.
Hutton (1964); Ecuador. Intestine. Manter (1940a) as
Dihemistephanus b.

FELLODISTOMATIDAE

Tergestia pectinata (Linton 1905) Manter 1940.
Jamaica. Intestine. Nahhas and Cable (1964).

HEMIURIDAE

Lecithochirium monticelli (Linton 1898) Crowcroft 1946.
Massachusetts. Stomach. Linton (1940) as Sterrhurus m.
Lecithochirium microstomum Chandler 1935. Florida. Stomach.
Overstreet (1969).
Mecoderus oligoplites Manter 1940. Ecuador. Stomach. Manter
(1940a).
Ectenurus lepidus Looss 1907. Brazil. Intestine. Travassos
et al. (1969).

MONOGENEA

DISCOTYLIDAE

Vallisia oligoplites Hargis 1957. Florida. Gills. Hargis (1957).

HETERAXINIDAE

Heteraxinoides oligoplitis (Meserve 1938) Price 1962. Ecuador.
Gills. Meserve (1938) as Axine o.

Seriola dorsalis - Yellowtail

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931. Larva.
Southern California. Viscera. Jensen¹⁸.

COPEPODA

CALIGIDAE

Caligus productus Dana 1853. Baja California. Causey (1960).
Caligus chorinemi Kollar in Krøyer 1863. Columbia; Costa Rica.
Wilson (1937a).
Caligus tenuicaudatus Shiino 1959. Baja California. Exterior.
Shiino (1959a).
Caligus lunatus Wilson 1928. Panama. Gills. Wilson (1937a).
Caligus coryphaenae Steenstrup and Lütken 1861. Albamarle Island.
Skin. Wilson (1937a) as C. aliuncus.

PENNELLIDAE

Lernaenicus longiventris Wilson 1917. West coast of Mexico.
Causey (1960).

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum hispidum (Yamaguti 1934) Manter 1940. Mexico;
Panama. Intestine. Manter (1940a).

BUCEPHALIDAE

Bucephalus introversus Manter 1940. Columbia; Mexico. Stomach.
Manter (1940a).

HEMIURIDAE

Lecithochirium magnaporum Manter 1940. Galapagos. Stomach.
Manter (1940a).

MONOGENEA

HETERAXINIDAE

Zeuxapta seriolae (Meserve 1938) Price 1962. Galapagos Island.
Gills. Meserve (1938) as Axine seriolae.

Trachinotus rhodopus - Gafftopsail Pompano

DIGenea

ACCACOELIIDAE

Tetrochetus proctocolus Manter 1940. Galapagos Islands. Rectum.
Manter (1940a).

HEMIURIDAE

Gonocercella pacifica Manter 1940. Columbia. Stomach. Manter
(1940a).

Lecithophyllum trachinoti (Manter 1940) Yamaguti 1971. Mexico.
Manter (1940a) as Aponurus t.

LEPOCREADIIDAE

Opechona pharyngodactyla Manter 1940. Mexico. Intestine. Manter
(1940a).

OPECOELIDAE

Opegaster parapristsipomatis Yamaguti 1938. Galapagos Islands.
Digestive tract. Yamaguti (1938).

Trachurus symmetricus - Jack Mackerel

ACANTHOCEPHALA

RHADINORHYNCHIDAE

Rhadinorhynchus sp. California. Intestine. Dailey (1969a).

CESTODA

DASYRHYNCHIDAE

Dasyrhynchus sp. Plerocercus. California. Abdominal wall tissue.
Dailey (1969a).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. California. Intestine, caeca,
body cavity. Dailey (1969a).

Scolex polymorphus Rudolphi 1819. California. Intestine, caeca,
body cavity. Dailey (1969a).

COPEPODA

CALIGIDAE

Caligus pelamydis Krøyer 1863. Southern California. Body surface.
Shiino (1965b).

Trachurus symmetricus (Continued)

DIGenea

HEMIURIDAE

Lecithochirum magnaporum Manter 1940. California. Body cavity.
Dailey (1969a).

OPECOELIDAE

Opegaster sp. California. Intestine. Dailey (1969a).

ISOPODA

CYMOTHOIDAE

Lironeca ovalis Stimpson 1857. California. Turner et al. (1969).

NEMATODA

ANISAKIDAE

Contracecum sp. Larva. California. Mesenteric fat surrounding
stomach. Dailey (1969a).

Phocanema sp. Larva. California. Wall of stomach. Dailey (1969a)
as Porrocaecum sp.

Anisakis sp. Larva. California. Body cavity, stomach wall.
Dailey (1969a).

CORYPHAENIDAE -- Dolphins

Coryphaena hippurus - Dolphinfish

ACANTHOCEPHALA

RHADINORHYNCHIDAE

Serrasentis sagittifer (Linton 1889) Linton 1932. Atlantic.
Yamaguti (1963c) as Serrasentis socialis.

Rhadinorhynchus pristis (Rudolphi 1802) Lühe 1911. Curacao.
Cable and Linderoth (1963); Japan. Yamaguti (1963c) as
R. katsuwonis.

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931.
Plerocercoid. North Carolina. Stomach. Dollfus (1942).

Coryphaena hippurus (Continued)

OPECOELIDAE

Helicometrina nimia Linton 1910. Intestine. Arai (1962).
Opecoeloides sp. Brazil. Intestine. Travassos et al. (1969).

MONOGENEA

CAPSALIDAE

Capsala laevis (Verrill 1874) Johnston 1929. Brazil. Price (1938b).
Benedenia hendorffi (Linstow 1889) Odhner 1905. Chile. Price (1938b).

GASTROCOTYLIDAE

Neothroacocotyle coryphaenae (Yamaguti 1938) Hargis 1956. Japan.
Gills. Yamaguti (1938) as Thoracocotyle c.

NEMATODA

ANISAKIDAE

Contraecaecum sp. Larva. Formosa. Myers and Kuntz (1962).

PROTOZOA (MYXOSPORIDA)

TETRACAPSALIDAE

Kudoa sp. Muscle. Lom (1970a).

PROTOZOA (SPOROZOA)

HAEMOGREGARINIDAE

Haemogregarina bigemina Laveran and Mesnil 1901. Bermuda; Florida
Keys. Blood. Saunders (1966).

MELAMPHAIDAE -- Bigscales

Melamphaes acanthomus - Shoulderspine Bigscales

DIGENEA

HEMIURIDAE

Genera and species. Collard^g.

NEMATODA

ANISAKIDAE

Contraecaecum sp. Larva. Southern California. Coelom. Collard^g.

Scopelogadus mizolepis bispinosus - Twospine Bigscale

DIGenea

HEMIURIDAE

Genera and species. Southern California. Mouth, heart, stomach.
Collard⁹.

BRAMIDAE -- Pomfrets

Brama japonica - Pacific Pomfret

DIGenea

LAMPITREMATIDAE

Lampitrema miescheri (Zschokke 1890) Margolis 1962. Gulf of Alaska. Gills.
Margolis (1962).

SYNCOELIDAE

Capiatestes thyrstae Crowcroft 1948. Pacific Ocean. Gills,
esophagus. Lebedev (1968). Uncertain host.
Syncoelium sp. Gulf of Alaska. Gills. Margolis (1962).

POMADASYIDAE -- Grunts

Anisotremus davidsoni - Sargo

DIGenea

HEMIURIDAE

Brachadena pyriformis Linton 1910. Southern California. Stomach.
Manter and Van Cleave (1951).

MONORCHIDAE

Lasiotocus longicaecum (Manter 1940) Yamaguti 1954. Southern
California. Intestine. Manter and Van Cleave (1951) as
Proctotrema 1.; Panama. Bravo-Hollis (1956).

Xenistius californiensis - Salema

DIGenea

HEMIURIDAE

Lecithophyllum intermedium (Manter 1934) Margolis 1958. Baja
California. Intestine. Arai (1962).

Xenistius californiensis (Continued)

OPECOELIDAE

Opecoelus xenistii Manter 1940. Galapagos Islands. Intestine.
Manter (1940a).
Helicometrina nimia Linton 1910. Intestine. Arai (1962).

SPARIDAE -- Porgies

Calamus brachysomus - Pacific Porgy

COPEPODA

CALIGIDAE

Caligus productus Dana 1853. West coast of Mexico. Causey (1960).
Caligus mutabilis Wilson 1905. Gulf of California. Causey (1960).

DIGenea

HEMIURIDAE

Lecithochirium microstomum Chandler 1935. Galapagos Islands.
Stomach. Manter (1940b).

OPISTHOLEBETIDAE

Pachycreadium gastrocotylum (Manter 1940) Manter 1954. Galapagos
Islands. Intestine. Manter (1940b) as Plagioporus g.

SCIAENIDAE -- Drums

Cheilotrema saturnum - Black Croaker

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Cynoscion nobilis - White Seabass

COPEPODA

CALIGIDAE

Lepeophtheirus abdominis Shiino 1960. Southern California.
Exterior. Shiino (1960c).

Cynoscion nobilis (Continued)

Lepeophtheirus thompsoni Baird 1950. Southern California. Exterior.
Wilson (1908a); many places in Mexico. Causey (1960).

LERNAEOPODIDAE

Neobrachiella gracilis (Wilson 1908) Kabata 1978. Southern California.
Mouth. Wilson (1908a) as Brachiella g.

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931. Larva.
Southern California. Viscera. Jensen¹⁸.

LACISTORHYNCHIDAE

Grillotia smarigora (Wagener 1854) Dollfus 1947. Larva. Southern
California. Mesentery. Jensen¹⁸.

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Larva.
Southern California. Viscera. Jensen¹⁸.

DIGENEA

ACANTHOCOLPIDAE

Pleorchis magniporus Arai 1962. Baja California. Intestine. Arai (1962).
Pleorchis californiensis Manter and Van Cleave 1951. Southern California.
Intestine. Manter and Van Cleave (1951).

MONOGENEA

Genera and species. Eastern Pacific. Kunnenkeri and Martin (1963).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa venusta Jameson 1931. Southern California. Gallbladder.
Jameson (1931).

TETRACAPSULIDAE

Kudoa clupeidae (Hahn 1917) Meglitsch 1947. Southern California.
Muscle. Jensen¹⁸.

Cynoscion parvipinnis - Shortfin Corvina

DIGenea

ACANTHOCOLPIDAE

Pleorchis magniporus Arai 1962. Baja California. Intestine.
Arai (1962).

DIPLANGIDAE

Diplangus mexicanus Bravo-Hollis and Manter 1957. Baja California.
Intestine and pyloric caeca. Arai (1962).

Genyonemus lineatus - White Croaker

CESTODA

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Larva.
Southern California. Viscera. Jensen¹⁸.

COPEPODA

BOMOLOCHIDAE

Holobomolochus attenuatus (Wilson 1913) Vervoort 1969. Baja
California. Causey (1960) as Bomolochus a.

CALIGIDAE

Lepeophtheirus sp. Southern California. Jensen¹⁸.

LERNAEOPODIDAE

Neobrachiella gracilis (Wilson 1908) Kabata 1979. Mexico. Causey
(1960) as Brachiella g.

DIGenea

ACANTHOCOLPIDAE

Stephanostomum californicum Manter and Van Cleave 1951. California.
Intestine, stomach. Manter and Van Cleave (1951).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Menticirrhus undulatus - California Corbina

ACANTHOCEPHALA

RHADINORHYNCHIDAE

Illiosentis cetratus Van Cleave 1945. Southern California.
Intestine. Van Cleave (1945).

COPEPODA

BOMOLOCHIDAE

*Bomolochus solae Claus 1864. Baja California. Causey (1960).

CALIGIDAE

Caligus mutabilis Wilson 1905. Baja California. Causey (1960).
Lepeophtheirus sp. Southern California. Jensen¹⁸.

HATSCHEKIIDAE

Hatschekia albirubra Wilson 1913. Baja California. Causey (1960).

DIGenea

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Baja
California. Intestine. Arai (1962).

DIPLANGIDAE

Diplangus triradiatus Manter and Van Cleave 1951. Southern
California. Intestine. Manter and Van Cleave (1951).

MONORCHIIDAE

Postmonorchis donacis Young 1953. Southern California. Intestine.
Young (1953).

OPECOELIDAE

Helicometrina nimia Linton 1910. Intestine. Arai (1962).

Roncador stearnsi - Spotfin Croaker

ACANTHOCEPHALA

RHADINORHYNCHIDAE

Illiosentis cetratus Van Cleave 1945. Southern California.
Intestine. Van Cleave (1945).

Roncador stearnsi (Continued)

CESTODA

TETRAPHYLLIDEA

Genera and species. Red pigmented plerocercoid. Southern California. Intestine, pyloric caeca. Kunnenkeri (1962).

COPEPODA

BOMOLOCHIDAE

Holobomolochus attenuatus (Wilson 1913) Vervoort 1969. Baja California. Causey (1960) as Bomolochus a.

LERNAEOPODIDAE

Neobrachiella gulosa (Wilson 1915) Kabata 1979. Baja California. Causey (1960) as Brachiella g.

Neobrachiella sciaenophila (Heller 1865) Kabata 1979. Baja California. Causey (1960) as Brachiella s. ("Host not well identified")

DIGenea

DIPLANGIDAE

Diplangus triradiatus Manter and Van Cleave 1951. Southern California. Intestine. Manter and Van Cleave (1951).

MONORCHIIDAE

Postmonorchis donacis Young 1953. Southern California. Intestine. Young (1953).

OPECOELIDAE

Pseudopecoelus umbrinae Manter and Van Cleave 1951. Southern California. Intestine. Manter and Van Cleave (1951).

Seriphus politus - Queenfish

NEMATODA

ANISAKIDAE

Anisakis sp. Southern California. Dailey et al. (in press).

Umbrina roncador - Yellowfin Croaker

ACANTHOCEPHALA

POLYMORPHIDAE

- Arhythmorhynchus macracanthus Ward and Winter 1952. Juvenile.
California. Mesentery. Ward and Winter (1952).
Corynosoma obtuscens Lincicome 1943. Juvenile. Southern
California. Mesentery. Ward and Winter (1952).
Corynosoma osmeri Fujita 1921. Juvenile. Southern California.
Mesentery. Ward and Winter (1952).

RHADINORHYNCHIDAE

- Illiosentis cetratus Van Cleave 1945. Southern California.
Intestine. Van Cleave (1945).

DIGENEA

ACANTHOCOLPIDAE

- Stephanostomum californicum Manter and Van Cleave 1951. Southern
California. Intestine. Manter and Van Cleave (1951).

DIPLANGIDAE

- Diplangus triradiatus Manter and Van Cleave 1951. Southern
California. Intestine. Manter and Van Cleave (1951).

OPECOELIDAE

- Pseudopecoelus umbrinae Manter and Van Cleave 1951. Southern
California. Intestine. Manter and Van Cleave (1951).
Genitocotyle acirra Park 1937. Southern California. Intestine.
Manter and Van Cleave (1951).

ISOPODA

CYMOTHOIDAE

- Nerocila californica Schioedte and Meinert 1881. Southern California.
Gills. Brusca (1977). Speculative host.

MONOGENEA

DIPLECTANIDAE

- Rhamnocereus rhamnocereus Monaco, Wood and Miselle 1954. Southern
California. Gills. Monaco et al. (1954).

KYPHOSIDAE -- Sea Chubs

Girella nigricans - Opaleye

COPEPODA

CALIGIDAE

Caligus hobsoni Cressey 1969. Southern California. Hobson (1971).

PENNELLIDAE

Peniculus fissipes Wilson 1917. Southern California. External, fins.
Wilson (1935b).

DIGENEA

HAPLOPORIDAE

Vitellibaculum girellicola Martin 1978. Southern California.
Intestine. Martin (1978).

Vitellibaculum girellae Montgomery 1957. Southern California.
Intestine. Montgomery (1957).

HAPLOSPLANCHNIDAE

Schikhobalotrema girellae (Manter and Van Cleave 1951) Skrjabin and
Guschanskaia 1955. Southern California. Intestine. Manter and
Van Cleave (1951) as Haplospianchus g.

HEMIURIDAE

Opisthadena cheni Martin 1978. Southern California. Stomach.
Martin (1978).

LEPOCREADIIDAE

Opechona orientalis (Layman 1930) Ward and Fillingham 1934.
Southern California. Intestine. Manter and Van Cleave (1951).

OPECOELIDAE

Opegaster cameroni Caballero and Caballero 1969. Southern California.
Intestine. Caballero and Caballero (1969b).

Opecoelus adsphaericus Manter and Van Cleave 1951. Southern
California. Intestine. Manter and Van Cleave (1951).

MONOGENEA

CAPSALIDAE

Neobenedenia girellae (Hargis 1955) Yamaguti 1963. Southern California.
Skin. Hargis (1955a); Baja California. Bravo-Hollis (1957) as
Benedenia g.

Girella nigricans (Continued)

NEMATODA

CAMALLANIDAE

Spirocamallanus pereirai (Annereaux 1946) Olsen 1952. Southern California. Intestine. Noble and King (1960).

PSEUDALIIDAE

Parafilaroides decorus Dougherty and Herman 1947. Larva. Southern California. In mesentery, fat, under intestinal serosa. Dailey (1970).

PROTOZOA (CILIOPHORA)

OPHRYOGLLENIDAE

Cryptocaryon irritans Brown 1951. Southern California. Tissues. Wilkie and Gordin (1969).

Kyphosus analogus - Striped Sea Chub

DIGenea

Waretrematidae

Megasolena kyphosi Sogandares-Bernal 1959. Gulf of Panama. Intestine. Sogandares-Bernal (1959).

Medialuna californiensis - Halfmoon

COPEPODA

CALIGIDAE

Caligus hobsoni Cressey 1969. Southern California. Cressey (1969a); body surface. Hobson (1971).
Lepeophtheirus sp. Southern California. Body surface. Hobson (1971).

Pennellidae

Peniculus fissipes Wilson 1917. Southern California. Embedded in fins. Hobson (1971).

DIGenea

Hemiuridae

Genolinea tanyopa Montgomery 1957. Southern California. Stomach. Montgomery (1957).

Medialuna californiensis (Continued)

LEPOCREADIIDAE

Neolepidapedon medialunae Montgomery 1957. California. Intestine.
Montgomery (1957).

WARETREMATIDAE

Scorpidicola californiensis Montgomery 1957. Southern California.
Intestine. Montgomery (1957).

Myodera medialunae Montgomery 1957. Southern California. Intestine.
Montgomery (1957).

EMBIOTOCIDAE -- Surfperches

Amphistichus argenteus - Barred Surfperch

COPEPODA

PHILICHTHYIDAE

Colobomatus embiotocae Noble, Collard and Wilkes 1969. Southern
California. Under skin of cheek ridges, around eyes, in
cephalic sensory canal system. Noble et al. (1969).

DIGenea

DIPLANGIDAE

Diplangus triradiatus Manter and Van Cleave 1951. California.
Arai (1967).

MONORCHIIDAE

Lasiotocus sp. California. Arai (1967).

Monorchis sp. California. Arai (1967).

Telolecithus pugetensis Lloyd and Guberlet 1932. Northern
California. Rodella and Nahhas (1969).

OPECOELIDAE

Genitocotyle acirra Park 1937. California. Arai (1967).

Pseudopecoelus umbrinae Manter and Van Cleave 1951. California.
Arai (1967).

Helicometrina elongata Noble and Park 1937. Southern California.
Intestine. Montgomery (1957).

Helicometrina nimia Linton 1910. Intestine. Arai (1962).

ISOPODA

CYMOTHOIDAE

Nerocila californica Schioedte and Meinert 1884. Southern California.
Caudal fin. Valentine and Phelps (1977).

Amphistichus argenteus (Continued)

MONOGENEA

CAPSALIDAE

Encotyllabe embiotocae Noble 1966. Southern California. Tongue.
Noble (1966b).

Amphistichus koelzi - Calico Surfperch

SYNONYM - Crossochir koelzi

COPEPODA

PHILICHTHYIDAE

Colobomatus embiotocae Noble, Collard and Wilkes 1969. Southern California. Under the skin covering cheek ridge; around eyes, in cephalic sensory canal system. Noble et al. (1969).

Amphistichus rhodoterus - Redtail Surfperch

DIGENEA

OPECOELIDAE

Genitocotyle acirra Park 1937. Northern California. Stomach, intestine. Park (1937a) as G. acirrus.

MONOGENEA

DICLIDOPHORIDAE

Diclidophora sp. Oregon. Gills. Hanson²⁶.

Brachyistius frenatus - Kelp Perch

DIGENEA

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia. Digestive tract. Arai (1969b).

Cymatogaster aggregata - Shiner Perch

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. British Columbia. Intestine. Arai (1969b).

Cymatogaster aggregata (Continued)

POLYMORPHIDAE

Corynosoma sp. Juvenile. British Columbia. Body cavity. Arai
(1969b).

BRANCHIURA

ARGULIDAE

Argulus pugettensis Dana 1852. California. Wilson (1924); British
Columbia. Bere²⁷.

CESTODA

AMPHICOTYLIDAE

Eubothrium sp. Larva. British Columbia. Arai (1967).

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Plerocercoid.
Southern California. Young (1954).

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Digestive tract.
Arai (1969b).

TETRAPHYLLIDEA

Genera and species. Red pigmented pleurocercoid. Southern California.
Intestine, pyloric caeca. Kunnenkeri (1962).

COPEPODA

BOMOLOCHIDAE

Bomolochus cuneatus Fraser 1920. British Columbia. Gills.
Vervoort and Arai (1966) as Parabomolochus c.; Southern California.
Hanan (1976).

Holobomolochus embiotocae Hanan 1976. Southern California.
Nasal cavities. Hanan (1976).

Taeniacanthodes haakeri Ho 1972. Southern California. Hanan²⁷.

CALIGIDAE

Caligus quadratus Shiino 1954. Southern California. Mouth. Hanan²⁷.
Lepeophtheirus bifurcatus Wilson 1905. Southern California. External
surface. Hanan²⁷.

Lepeophtheirus parvus Wilson 1908. Southern California. External
surface. Hanan²⁷.

Cymatogaster aggregata (Continued)

ERGASILIDAE

Ergasilus turgidus Fraser 1920. British Columbia. Gills. Arai (1969b); British Columbia. Gill filaments. Fraser (1920).
Ergasilus lizae Krøyer 1863. Southern California. Hanan (1976).

PENNELLIDAE

Peniculus fissipes Wilson 1917. Southern California. Pectoral fin. Hanan 27.
Haemobaphes diceraus Wilson 1917. British Columbia. Gill arches. Kabata (1967b).

PHILICHTHYIDAE

Colobomatus embiotocae Noble, Collard and Wilkes 1969. Southern California. Under skin covering cheek ridges, around eyes, in cephalic sensory canal system. Noble et al. (1969).

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum sp. Immature. Northern California. Rodella and Nahhas (1969).

DIPLANGIDAE

Diplangus macrovitellus (Winter 1954) Winter 1960. Southern California. Intestine. Yamaguti (1971).

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia. Digestive tract. Arai (1969b); Washington. Ching (1960a) as L. salmonis.
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. British Columbia. Digestive tract. Arai (1969b).

HETEROPHYIDAE

Galactosomum sp. Larva. British Columbia. Gills (encysted). Arai (1969b).

MONORCHIDAE

Telolecithus pugetensis Lloyd and Guberlet 1932. British Columbia. McFarlane (1936); Washington. Lloyd and Guberlet (1932); Northern California. Rodella and Nahhas (1969).
Postmonorchis donacis Young 1953. Southern California. Guts. Young (1953).

Cymatogaster aggregata (Continued)

OPECOELIDAE

Genitocotyle acirra Park 1937. California. Arai (1967) as
G. acirrus; Rodella and Nahhas (1969) as G. acirrata.
Pseudopecoelus umbrinae Manter and Van Cleave 1951. California.
Arai (1967).

ZOOGONIDAE

Neozoogonus californicus Arai 1954. California. Intestine. Arai
(1954); British Columbia. Digestive tract. Arai (1969b).

ISOPODA

CYMOTHOIDAE

Lironeca californica Schioedte and Meinart 1884. Southern California.
Gill cavity. Hanan²⁷; British Columbia. Arai (1969b).
Lironeca vulgaris Stimpson 1857. Southern California. Gill cavity.
Hanan²⁷.
Nerocila californica Schioedte and Meinert 1881. Southern California.
Caudal peduncle. Hanan²⁷.

MONOGENEA

CAPSALIDAE

Encotyllabe embiotocae Noble 1966. Southern California. Tongue.
Noble (1966b).

GYRODACTYLIDAE

Gyrodactylus aggregata Mizelle and Kritsky 1967. Northern California.
Skin. Mizelle and Kritsky (1967b).
Gyrodactylus sp. British Columbia. Arai (1967).
Archigyrodactylus archigyrodactylus Mizelle and Kritsky 1967.
Northern California. Gills. Mizelle and Kritsky (1967b).

GYRODACTYLOIDEA

Genera and species. British Columbia. Gills, body surface.
Arai (1969b).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Arai (1967).
Contracecum sp. Larva. British Columbia. Body cavity. Arai
(1969b).

CUCULLANIDAE

Cucullanellus kanabus Walder and Arai 1974. British Columbia.
Intestine. Walder and Arai (1974).

Cymatogaster aggregata (Continued)

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Myxidium oviforme Parisi 1912. Central California. Gallbladder.
Jameson (1929).

Damalichthys vacca - Pile Perch

SYNONYMS - Damalichthys argyrosomus, Rhacochilus vacca

BRANCHIURA

ARGULIDAE

Argulus pugettensis Dana 1852. Southern California. Caudal fin.
Hanan 27.

COPEPODA

BOMOLOCHIDAE

Bomolochus cuneatus Fraser 1920. British Columbia. Kabata (1971).
Holobomolochus embiotocae Hanan 1976. Southern California. Nasal
cavity. Hanan (1976).

CALIGIDAE

Lepeophtheirus parvus Wilson 1908. Southern California. External
surface. Hanan 27.
Lepeophtheirus sp. Oregon. Wares (1971).
Caligus hobsoni Cressey 1969. Southern California. Hobson (1971).

LERNAEOPODIDAE

Clavella sp. California. Gills. Hanan²⁷ ; Oregon. Gill
filaments. Wares (1971).

PHILICHTHYIDAE

Colobomatus embiotocae Noble, Collard and Wilkes 1969. Southern
California. Under skin covering cheek ridge, around eyes, in
cephalic sensory canal system. Noble et al. (1969).

DIGENEA

BUCEPHALIDAE

Prosorhynchus sp. Metacercaria. Oregon. Internal organs. Wares
(1971).
Rhipidocotyle sp. Metacercaria. Oregon. Internal organs. Wares
(1971).
Prosorhynchoides sp. Metacercaria. Oregon. Internal organs. Wares (1971)
as Bucephalopsis.

Damalichthys vacca (Continued)

DIPLANGIDAE

Diplangus macrovitellus (Winter 1956) Winter 1960. California.
Arai (1967) as Proctoeces m.

HEMIURIDAE

Derogenoides sp. Immature. Oregon. Liver. Wares (1971).

MONORCHIIDAE

Telolecithus pugetensis Lloyd and Guberlet 1932. California.
Arai (1967); Oregon. Digestive tract. Wares (1971).

OPECOELIDAE

Genitocotyle acirra Park 1937. Southern California. Intestine.
Manter and Van Cleave (1951) as G. acirrus.

ZOOGONIDAE

Neozoogonus californicus Arai 1954. Intestine. Arai (1962).

ISOPODA

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. Southern California. Gill cavity.
Turner et al. (1969).
Nerocila californica Schioedte and Meinert 1881. Southern California.
Caudal peduncle. Hanan²⁷.

MONOGENEA

HETERAXINIDAE

Allencotyle pricei Kritsky, Noble and Moser 1978. Southern
California. Gills. Kritsky et al. (1978).

NEMATODA

CUCULLANIDAE

Cucullanus sp. Oregon. Digestive tract. Wares (1971).

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Myxidium oviforme Parisi 1912. Central California. Gallbladder.
Jameson (1929).
Zschokkella embiotocidis Moser and Halderson 1976. Central California.
Gallbladder. Moser and Halderson (1976).

Damalichthys vacca (Continued)

MYXOBOLIDAE

Henneguya sp. British Columbia. Hoskins et al.¹³

SINUOLINEIDAE

Davisia reginae Love and Moser 1976. Central California. Urinary bladder. Love and Moser (1976).

Embiotoca jacksoni - Black Perch

COPEPODA

BOMOLOCHIDAE

Holobomolochus embioticae Hanan 1976. Southern California. Nasal cavity. Hanan (1976).

Bomolochus cuneatus Fraser 1920. California. Hanan (1976).

LERNAEPODIDAE

Clavella sp. Southern California. Gills. Hanan²⁷.

PENNELLIDAE

Peniculus fissipes Wilson 1917. Southern California. Robinson²⁸.

PHILICHTHYIDAE

Colobomatus embiotocae Noble, Collard and Wilkes 1969. Southern California. Cephalic canal. Hanan²⁷.

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum dentatum (Linton 1900) Linton 1940. Southern and Central California; Baja California. Intestine. Arai (1962).

DIPLANGIDAE

Diplangus paxillus Linton 1910. California. Arai (1967).

Diplangus macrovitellus (Winter 1954) Winter 1960. California. Arai (1967) as Proctoeces m.

MONORCHIIDAE

Postmonorchis donacis Young 1953. Southern California. Intestine. Young (1953).

Telolecithus pugetensis Lloyd and Guberlet 1932. California. Arai (1967).

Embiotoca jacksoni (Continued)

OPECOELIDAE

Helicometrina nimia Linton 1910. Southern California. Intestine.
Montgomery (1957).

ZOOGONIDAE

Neozoogonus californicus Arai 1954. Southern and Central California.
Intestine. Arai (1954); Northern California. Rodella and
Nahhas (1969).

ISOPODA

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. Southern California. Gill cavity.
Hanan²⁷.
Nerocila californica Schioedte and Meinert 1881. Southern California.
Caudal peduncle. Hanan²⁷.

Embiotoca lateralis - Striped Seaperch

SYNONYM - Taeniotoca lateralis

BRANCHIURA

ARGULIDAE

Argulus pugettensis Dana 1852. British Columbia. External.
Wilson (1912b).

COPEPODA

LERNAEPOPODIDAE

Clavella parva Wilson 1912. British Columbia. Wilson (1912b).

PHILICHTHYIDAE

Colobomatus embiotocae Noble, Collard and Wilkes 1969. Central
California. Under skin covering cheek ridges, around eyes, in
cephalic sensory canal system. Noble et al. (1969).

DIGENEA

DIPLANGIDAE

Diplangus macrovitellus (Winter 1954) Winter 1960. Northern
California. Rodella and Nahhas (1969).

HEMIURIDAE

Sterrhurus exodicus (McFarlane 1936) Yamaguti 1958. Northern
California. Stomach. Chapa²³as Separogermiductus e.

Embiotoca lateralis (Continued)

MONORCHIIDAE

Telolecithus pugetensis Lloyd and Guberlet 1932. Oregon. Pratt and McCauley (1961); California. Arai (1967).

OPECOELIDAE

Genitocotyle acirra Park 1937. Oregon. Pratt (1970).
Helicometrina nimia Linton 1910. Northern California. Intestine. Chapa ²³.

ZOOGONIDAE

Neozoogonus californicus Arai 1954. Intestine. Arai (1962); Northern California. Rodella and Nahhas (1969).

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Zschokkella embiotocidis Moser and Haldorson 1976. Central California. Gallbladder. Moser and Haldorson (1976).

SINUOLINEIDAE

Davisia reginae Love and Moser 1976. Central California. Urinary bladder. Love and Moser (1976).

Hyperprosopon anale - Spotfin Surfperch

COPEPODA

PHILICHTHYIDAE

Colobomatus embiotocae Noble, Collard and Wilkes (1969). Northern California. Preopercular-mandibular canal. Iverson (1972).

DIGENEA

MONORCHIIDAE

Telolecithus pugetensis Lloyd and Guberlet 1932. California. Arai (1967).

OPECOELIDAE

Genitocotyle acirra Park 1937. California. Arai (1967).

MONOGENEA

GYRODACTYLIDAE

Archigyrodactylus leibyi Mizelle and Kritsky 1967. Northern California. Skin. Mizelle and Kritsky (1967b).

Hyperprosopon argenteum - Walleye Surfperch

BRANCHIURA

ARGULIDAE

Argulus pugettensis Dana 1852. California. Wilson (1924).

COPEPODA

PHILICHTHYIDAE

Colobomatus embiotocae Noble, Collard and Wilkes 1969. Southern California. Under skin covering cheekridge, around eyes, in cephalic sensory canal system. Noble et al. (1969).

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum sp. Immature. Northern California. Rodella and Nahhas (1969).

CRYPTOGONIMIDAE

Neochasmus sp. California. Arai (1967).

HAPLOSPLANCHNIDAE

Schikhobalotrema girellae (Manter and Van Cleave 1951) Skrjabin and Guschanskaja 1955. California. Arai (1967).

MONORCHIIDAE

Lasiotocus sp. California. Arai (1967).
Telotēcithus pugetensis Lloyd and Guberlet 1932. Northern California. Rodella and Nahhas (1969).

OPECOELIDAE

Genitocotyle acirra Park 1937. California. Arai (1967).

ISOPODA

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. California. Gills. Richardson (1905).

MONOGENEA

DICLIDOPHORIDAE

Diclidophora sp. Oregon. Gills. Hanson²⁶.

Hyperprosopon argenteum (Continued)

GYRODACTYLIDAE

Archigyrodactylus leibyi Mizelle and Kritsky 1967. Northern California. Skin. Mizelle and Kritsky (1967b).

Hyperprosopon ellipticum - Silver Surfperch

DIGENEA

HEMIURIDAE

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Northern California. Rodella and Nahhas (1969).

OPECOELIDAE

Genitocotyle acirra Park 1937. Northern California. Rodella and Nahhas (1969) as G. acirrata.

MONOGENEA

DICLIDOPHORIDAE

Diclidophora sp. Oregon. Gills. Hanson²⁶.

GYRODACTYLIDAE

Archigyrodactylus leibyi Mizelle and Kritsky 1967. Northern California. Skin. Mizelle and Kritsky (1967b).

Hypsurus caryi - Rainbow Seaperch

COPEPODA

PENNELLIDAE

Peniculus fissipes Wilson 1917. Southern California. Embedded in fin. Hobson (1971).

PHILICHTHYIDAE

Colobomatus embiotocae Noble, Collard and Wilkes 1969. Southern California. Under skin covering cheek ridge, around eyes, in the cephalic sensory canal system. Noble et al. (1969).

DIGENEA

ZOOGONIDAE

Neozoogonus californicus Arai 1954. California and Mexican Pacific. Intestine. Arai (1962).

Hypsurus caryi (Continued)

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Myxidium oviforme Parisi 1912. Central California. Gallbladder.
Jameson (1929).

Micrometrus minimus - Dwarf Perch

COPEPODA

PHILICHTHYIDAE

Colobomatus embiotocae Noble, Collard and Wilkes 1969. Southern California. Under skin covering cheek ridges, around eyes, in the cephalic sensory canal system. Noble et al. (1969).

DIGenea

HAPLOSPLANCHNIDAE

Schikhobalotrema girellae (Manter and Van Cleave 1951) Skrjabin and Guschanskaja 1955. California. Arai (1967).

MONORCHIIDAE

Postmonorchis donacis Young 1953. Southern California. Intestine. Young (1953).

OPECOELIDAE

Genitocotyle acirra Park 1937. California. Arai (1967).

ZOOGONIDAE

Neozoogonus californicus Arai 1954. California. Intestine. Arai (1954).

ISOPODA

CYMOTHOIDAE

Lironeca californica Schioedte and Meinert 1884. Baja California. Gills. Iverson (1974).

Nerocila californica Schioedte and Meinert 1881. Southern California. Brusca (1977).

Phanerodon atripes - Sharpnose Seaperch

COPEPODA

CALIGIDAE

Caligus hobsoni Cressey 1969. Southern California. Hobson (1971).

Phanerodon furcatus - White Seaperch

BRANCHIURA

ARGULIDAE

Argulus pugettensis Dana 1852. Southern California. Montgomery (1957); British Columbia. Fraser (1920).

COPEPODA

BOMOLOCHIDAE

Holobomolochus embiotocae Hanan 1976. Southern California. Nasal cavities. Hanan (1976).
Bomolochus cuneatus Fraser 1920. Southern California. Hanan (1976).

CALIGIDAE

Lepeophtheirus bifurcatus Wilson 1905. Southern California. External. Hanan²⁷.

LERNAEOPODIDAE

Clavella parva Wilson 1912. British Columbia. Bere⁵.

PENNELIDAE

Peniculus fissipes Wilson 1917. Southern California. Embedded in fins. Hobson (1971).

DIGENEA

DIPLANGIDAE

Diplangus paxillus Linton 1910. California. Arai (1967).
Diplangus macrovitellus (Winter 1954) Winter 1960. Arai (1967).
as Proctoeces macrovitellosus.

MONORCHIIDAE

Telolecithus pugetensis Lloyd and Guberlet 1932. California. Arai (1967).

OPECOELIDAE

Genitocotyle acirra Park 1937. California. Arai (1967).

Phanerodon furcatus (Continued)

ZOOGONIDAE

Neozoogonus californicus Arai 1954. California. Intestine.
Arai (1962).

ISOPODA

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. California. Gill cavity.
Turner et al. (1969).

Nerocila californica Schioedte and Meinert 1881. Southern California.
Caudal peduncle. Hanan²⁷.

MONOGENEA

DICLIDOPHORIDAE

Diclidophora sp. Oregon. Gills. Hanson²⁶.

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Myxidium oviforme Parisi 1912. Central California. Gallbladder.
Jameson (1929).

Rhacochilus toxotes - Rubberlip Seaperch

COPEPODA

CALIGIDAE

Caligus hobsoni Cressey 1969. Southern California. Cressey (1969a).

PHILICHTHYIDAE

Colobomatus embiotocae Noble, Collard and Wilkes 1969. California.
Under skin covering cheek ridges, around eyes, in the cephalic
sensory canal system. Noble et al. (1969).

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum sp. Immature. Central California. Chapa²³.

MONORCHIIDAE

Telolecithus pugetensis Lloyd and Guberlet 1932. California.
Arai (1967).

Rhacochilus toxotes (Continued)

ZOOGONIDAE

- Zoogonus dextrocirrus Aldrich 1961. Central California. Intestine.
Chapa²³.
Neozoogonus californicus Arai 1954. California. Intestine.
Arai (1962).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

- Leptotheca fisheri (Jameson 1929) Kudo 1933. California.
Gallbladder. Jameson (1931) as Ceratomyxa f.

Zalembeius rosaceus - Pink Seaperch

COPEPODA

PHILICHTHYIDAE

- Colobomatus embiotocae Noble, Collard and Wilkes 1969. Central and
Northern California. Preopercular-mandibular canals. Iverson
(1972).

DIGENEA

LEPOCREADIIDAE

- Labrifer balli Arai 1971. Southern California. Intestine. Arai (1971).

ZOOGONIDAE

- Neozoogonus californicus Arai 1954. California and Mexico.
Intestine. Arai (1962).

MONOGENEA

CAPSALIDAE

- Entobdella rosaceus Crane 1972. Southern California. Skin.
Crane (1972).

MICROCOTYLIDAE

- Microcotyle zalembeius Crane 1972. Southern California. Skin.
Crane (1972).

POMACENTRIDAE - Damselfishes

Chromis punctipinnis - Blacksmith

COPEPODA

CALIGIDAE

Caligus hobsoni Cressey 1969. Southern California. Cressey (1969a).

LERNAEOPODIDAE

Clavellopsis flexicervica Shiino 1956. Southern California. Gill arches. Hobson (1971).

ISOPODA

Genera and species. Gnathiid larva. Southern California. Body surface. Hobson (1971).

MONOGENEA

MICROCOTYLIDAE

Bivagina punctipinnis Crane 1972. Southern California. Gills. Crane (1972).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca fisheri (Jameson 1929) Kudo 1933. Southern California. Gallbladder. Jameson (1929) as Ceratomyxa f.

Hypsypops rubicunda - Garibaldi

COPEPODA

BOMOLOCHIDAE

Holobomolochus ardeole (Krøyer 1864) Vervoort 1969. Southern California. Branchial cavity. Hobson (1971) as Bomolochus a; gill filaments. Wilson (1908a) as Artacolax a.

CALIGIDAE

Caligus hobsoni Cressey 1969. Southern California. Cressey (1969a). Lepeophtheirus sp. Southern California. Body surface. Hobson (1971).

PENNELLIDAE

Peniculus fissipes Wilson 1917. Southern California. External on fins. Wilson (1935b).

Hypsypops rubicunda (Continued)

DIGenea

HEMIURIDAE

Genolinea tanyopa Montgomery 1957. Southern California. Stomach.
Montgomery (1957).

ISOPODA

Genera and species. Gnathiid larva. Southern California. On body.
Hobson (1971).

LABRIDAE -- Wrasses

Halichoeres semicinctus - Rock Wrasse

COPEPODA

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. California. Kabata (1973);
exterior. Wilson (1924).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca fisheri (Jameson 1929) Kudo 1933. California. Gallbladder.
Jameson (1931) as Ceratomyxa f.

Oxyjulis californica - Senorita

COPEPODA

CALIGIDAE

Caligus hobsoni Cressey 1969. Southern California. Body surface.
Hobson (1971).

Caligus serratus Shiino 1965. Southern California. Body surface.
Hobson (1971).

Lepeophtheirus sp. Southern California. Body surface. Hobson
(1971).

CHONDRACANTHIDAE

Heterochondria atypica Ho 1972. Southern California. Gill
filaments. Ho (1972b).

Pimelometopon pulchrum - California Sheephead

SYNONYM - Pimelometopon pulcher

COPEPODA

CALIGIDAE

Caligus hobsoni Cressey 1969. Southern California. Hobson (1971).
Lepeophtheirus parvus Wilson 1908. Baja California. Shiino (1959c);
Southern California. Wilson (1908a).

DIGENEA

GORGODERIDAE

Phyllodistomum scrippsi Brooks and Mayes 1975. Southern California.
Urinary bladder. Brooks and Mayes (1975).

LEPOCREADIIDAE

Lepocreadium bimarinum Manter 1940. California; Pacific Mexico.
Intestine. Manter (1940a).
Labrifer secundus Manter 1940. Mexico; California. Intestine.
Manter (1940a).
Neolabrifer bravoae Pritchard 1972. Southern California; Mexico.
Intestine. Pritchard (1972).

ISOPODA

Genera and species. Gnathiid larva. Southern California. Body
surface. Hobson (1971).

MONOGENEA

CAPSALIDAE

Neobenedenia girellae (Hargis 1955) Yamaguti 1963. Southern
California. Skin. Brooks and Mayes (1975).

MUGILIDAE -- Mulletts

Mugil cephalus - Striped Mullet

ACANTHOCEPHALA

DIPLOSENTIDAE

Pararhadinorhynchus mugilis Johnston and Edmonds 1947. Australia.
Intestine. Johnston and Edmonds (1947).

Mugil cephalus (Continued)

NEOECHINORHYNCHIDAE

Neoechinorhynchus chilkaense Podder 1937. India. Intestine.
Podder (1937).

Neoechinorhynchus agilis (Rudolphi 1819). Japan. Small intestine.
Yamaguti (1939e); Yugoslavia, USSR. Reshetnikova (1955).

Floridosentis elongatus Ward 1953. Florida. Intestine. Ward
(1953); Gulf of California. Intestine. Bravo-Hollis (1969).

BRANCHIURA

ARGULIDAE

Argulus chesapeakeensis Cressey. Georgia. Skinner (1975).

Argulus funduli Krøyer 1863. Georgia. Rawson (1977).

CESTODA

OTOBOTHRIIDAE

Otobothrium mugilis Hiscock 1954. Larva. Australia. Hiscock (1954).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Israel. Intestine. Pyloric caeca.
Paperna (1964b).

Scolex polymorphus Rudolphi 1819. Massachusetts. Linton (1924).

COPEPODA

BOMOLOCHIDAE

Bomolochus mugilis. Florida. Skinner (1975).

Bomolochus concinnus Wilson 1911. North Carolina. Gills. Wilson
(1911); Mexico. Causey (1960) as B. nitidus.

Bomolochus exilipes Wilson 1911. Gulf of Mexico. Gills. Wilson
(1911).

Nothobomolochus teres (Wilson 1911). Texas. Gills. Causey (1953b)
as Bomolochus teres.

CALIGIDAE

Caligus praetextus Bere 1936. Florida. Skinner (1975).

Caligus schistonyx Wilson 1905. Florida. Skinner (1975).

Caligus irritans Heller 1868. Florida. Mouth. Skinner (1975).

Caligus platytarsis Bassett - Smith 1898. India. Body surface.
Rangnekar (1955) as C. bombayensis.

Caligus orientalis Gussev 1951. China. Body surface. Shen (1957)
as C. communis.

Caligus rufimaculatus Wilson 1905. Massachusetts. Wilson (1905b).

Caligus curtus Müller 1785. North Carolina. Parker et al. (1968).

Caligus epidemicus Hewitt 1971. Australia. Body surface. Hewitt
(1971a).

Mugil cephalus (Continued)

Caligus minimus Otto 1821. Italy. Carli and Bruzzone (1973).

Caligus bonito Wilson 1905. Gulf of Mexico. Body surface. Bere (1936).

Caligus mutabilis Wilson 1905. Mexico. Causey (1960).

Lepeophtheirus hospitalis Fraser 1920. China. Kabata (1973).

*Pseudocaligus apodus Brian 1924. Israel. Paperna and Lahav (1974).

ERGASILIDAE

Dermoergasilus amplexans (Dogiel and Akhmerov 1952). USSR. Gills. Dogiel and Akhmerov (1952).

Ergasilus longimanus Krøyer 1863. Florida. Gills. Skinner (1975).

Ergasilus versicolor Wilson 1911. Georgia. Gills. Rawson (1977).

Ergasilus funduli Krøyer 1863. Georgia. Rawson (1977).

Ergasilus mugilis Vogt 1877. Mexico. Gills. Causey (1960).

Ergasilus lizae Krøyer 1863. Georgia, USA. Roberts (1970); Mexico. Causey (1960); Mediterranean. Gills. Delamare-Deboutteville and Nunes (1952) as E. nanus.

Ergasilus fryeri Paperna 1964. Israel. Gills. Paperna (1964a).

Ergasilus cyanopictus de Paiva Carvalho 1962. Brazil. Gills. de Paiva Carvalho (1962).

Ergasilus sp. Israel. Gills. Paperna (1964b).

Nipergasilus bora (Yamaguti 1939) Yin 1956. Japan. Gills. Yamaguti (1939a) as Ergasilus b.

LERNAEOPODIDAE

*Clavella inversa Wilson 1913. North Carolina. Wilson (1913).

*Neobrachiella oblonga (Valle 1880) Kabata 1979. North Carolina. Pectoral fins. Wilson (1908b) as Brachiella o.

Clavellopsis longimana Bere 1936. Gulf of Mexico. Pectoral fins. Bere (1936).

LERNANTHROPIDAE

Lernanthropus mugili Shishido 1898. Japan. Gills. Yamaguti (1936)

NAOBRANCHIIDAE

Naobranchia lizae (Krøyer 1864). Texas. Gills. Causey (1953b).

PENNELLIDAE

Lernaeenicus longiventris Wilson 1917. Western North Atlantic. Flesh. Wilson (1917).

Lernaeenicus gracilis Heller 1865. Richiardi (1877).

Lernaeenicus vorax Richiardi 1877. Yamaguti (1963a) as L. neglectus.

Mugil cephalus (Continued)

DIGenea

ACANTHOCOLPIDAE

Stephanostomum sp. Metacercaria. Florida. Hutton (1964).

BIVESICULIDAE

Paucivitellosus fragilis Coil, Read and Kuntz 1965. Australia.
Intestine. Pearson (1968).

BUCEPHALIDAE

Rhipidocotyle lepisostei Hopkins 1954. Metacercaria. Texas,
Louisiana, Oklahoma. Hopkins (1954).

CRYPTOGONIMIDAE

Exorchis oviformis Kobayashi 1915. Metacercaria. Japan. Komiya
and Suzuki (1966).

CYATHOCOTYLIDAE

Mesostephanus appendiculatoides (Price 1934) Lutz 1935. Metacercaria.
Florida. Hutton (1964).

DIDYMOZOIDAE

Epithelionematobothrium fragile Skinner 1975. Florida. Body
cavity. Skinner (1975).

HAPLOPORIDAE

Paraunisaccoides lobolectithus Martin 1973. Australia. Intestine.
Martin (1973a).

Dicrogaster fastigatus Thatcher and Sparks 1958. Louisiana. Upper
intestinal tract. Thatcher and Sparks (1958).

Lecithobotrys sprengi Martin 1973. Australia. Small intestine.
Martin (1973d).

Lecithobotrys putrescens Looss 1902. Israel. Intestine. Paperna
(1964b).

Paralecithobotrys brisbanensis Martin 1974. Australia. Small
intestine. Martin (1974).

Isorchis manteri Martin 1973. Australia. Small intestine. Martin
(1973c).

Unisaccoides vitellosus Martin 1973. Australia. Small intestine.
Martin (1973b).

Unisaccus brisbanensis Martin 1973. Australia. Small intestine.
Martin (1973b).

Haploporus benedeni (Stossich 1887) Looss 1902. Gulf of Naples.
Intestine. Looss (1902); Israel. Paperna (1964b).

Haploporus longibollum (Wlassenko 1931). Black Sea. Intestine.
Yamaguti (1971).

Mugil cephalus (Continued)

- Haploporus lateralis Looss 1902. Israel. Intestine. Paperna (1964b).
Carassotrema mugilicola Shireman 1964. Louisiana. Intestine. Shireman (1964).
Saccacoelium tensus Looss 1902. Israel. Intestine. Paperna (1964b); Black Sea. Koval and Otsupok (1964).
Saccacoelium obesum Looss 1902. Adriatic; Black Sea; Egypt. Looss (1902); Egypt. Small intestine. Fischthal and Kuntz (1963).
Saccacoelioides beauforti (Hunter and Thomas 1961) Overstreet 1971. Mississippi, Alabama, Georgia. Intestine. Overstreet (1971b).
Saccacoelioides pearsoni Martin 1973. Australia. Small intestine. Martin (1973d).

HAPLOSPLANCHNIDAE

- Haplospilanchnus pachysomus (Eysenhardt 1829) Looss 1902. Egypt. Fischthal and Kuntz (1963).
Haplospilanchnus mugilis Nahhas and Cable 1964. Florida. Intestine. Skinner (1975).
Schikhobalotrema magnum Skinner 1975. Florida. Intestine. Skinner (1975).
Schikhobalotrema sparismae (Manter 1937) Skrjabin and Guschanskaia 1955. Black Sea. Intestine. Koval and Otsupok (1964).
Schikhobalotrema sp. Florida. Intestine. Nahhas and Short (1965).
Schikhobalotrema elongatum Nahhas and Cable 1964. Curacao. Intestine. Nahhas and Cable (1964); Florida. Skinner (1975).
Hymenocottoides manteri (Overstreet 1969) Yamaguti 1971. Florida, Georgia. Intestine. Overstreet (1969) as Hymenocotta m.
Hymenocotta mulli Manter 1961. New Caledonia; Fiji. Intestine. Durio and Manter (1968).

HEMIURIDAE

- Bunocotyle mugilis Yamaguti 1970. Hawaii. Stomach. Yamaguti (1970).
Saturnius segmentatus Manter 1969. Australia. Stomach. Manter (1969).
Lecithaster helodes Overstreet 1973. Mississippi. Intestine. Overstreet (1973).
Lecithaster mugilis Yamaguti 1970. Hawaii. Intestine. Yamaguti 1970.
Aphanurus sp. Japan. Stomach. Machida et al. (1970).
Aphanurus stossichi (Monticelli 1891) Looss 1907. Japan. Ichihara (1974).
Dichadena galeata (Looss 1907) Skrjabin and Guschanskaja 1954. USSR. Reshetnikova (1955) as Lecithaster galeatus.
Hysterolecitha elongata Manter 1931. Mississippi. Stomach. Overstreet (1973); North Carolina. Manter (1931).

HETEROPHYIDAE

- Stellantchasmus falcatus Onji and Nishio 1915. Metacercaria. Japan. Yamaguti (1971); Hawaii. Pearson (1964).

Mugil cephalus (Continued)

- Adleriella minutissima (Wittenberg 1929) Wittenberg 1930.
Metacercaria. Israel. Paperna (1964b).
- Heterophyes heterophyes (Siebold 1853) Stiles and Hassall 1900.
Metacercaria. Israel. Muscles. Paperna (1964b).
- Heterophyes nocens Onji and Nishio 1915. Metacercaria. Japan.
Komiya and Suzuki (1966).
- Heterophyes katuradai Ozaki and Asada 1926. Metacercaria.
Japan. Komiya and Suzuki (1966).
- Heterophyopsis continua (Onji and Nishio 1916) Price 1940.
Metacercaria. Japan. Komiya and Suzuki (1966).
- Haplorchis yokogawai (Katsuta 1932) Chen 1936. Metacercaria.
Japan. Komiya and Suzuki (1966).
- Haplorchis microrchis (Katsuta 1932) Chen 1936. Metacercaria.
Japan. Komiya and Suzuki (1966).
- Pygidiopsis summa Onji and Nishio 1916. Metacercaria. Japan.
Komiya and Suzuki (1966).
- Procerovum varium Onji and Nishio 1916. Metacercaria. Japan.
Komiya and Suzuki (1966).
- Stictodora perpendiculara (Onji and Nishio 1916) Yamaguti 1958.
Metacercaria. Japan. Komiya and Suzuki (1966).
- Stictodora fuscata (Onji and Nishio 1916). Metacercaria. Japan.
Komiya and Suzuki (1966).
- Pseudogalactosoma macrostoma Yamaguti 1942. Metacercaria. Japan.
Komiya and Suzuki (1966).
- Centrocestus asadai Mishima 1959. Metacercaria. Japan. Komiya
and Suzuki (1966).
- Metagonimus minutus Katsuta 1932. Metacercaria. Japan. Komiya
and Suzuki (1966).
- Metagonimus yokogawai (Katsurada 1912) Katsurada 1912. Metacercaria.
Japan. Komiya and Suzuki (1966).
- Phagicola longa (Ransom 1920) Price 1932. Metacercaria. Florida.
Hutton (1964); Israel. Paperna (1964b) as Parascocotyle 1.
- Galactosomum sanaensis Kobayasi 1942. Metacercaria. China.
Pearson (1973).

MONORCHIIDAE

- Lasiotocus mugilis Overstreet 1969. Hawaii. Yamaguti (1970);
Florida. Intestine. Overstreet (1969).
- Lasiotocus glebulentus Overstreet 1971. Mississippi, Alabama.
Intestine. Overstreet (1971b).

SANGUINICOLIDAE

- Cardicola mugilis Yamaguti 1970. Hawaii. Vascular system.
Yamaguti (1970).
- Plethorchis acanthus Martin 1975. Australia. Coelom, blood vessels
of mesentery, intestine and liver. Martin (1975).

STRIGEIDAE

- Cardiocephalus medioconiger Dubois and Perez-Vigueras 1949. North
Carolina. Skinner (1975).

Mugil cephalus (Continued)

HIRUDINOIDEA

GLOSSIPHONIIDAE

Genera and species. Florida. Gills. Baker²².

PISCICOLIDAE

Myzobdella lugubris Leidy 1851. Georgia, Texas. External surface.
Sawyer et al. (1975).

Piscicola sp. Florida. Body surface, nostrals, mouth. Skinner
(1975).

ISOPODA

CYMOTHOIDAE

Codonophilus gilberti (Richardson 1904) Hale 1926. Baja California. Gills.
Brusca (1977).

Nerocila californica Schioedte and Meinert 1881. Gulf of California.
Gills. Brusca (1977).

MONOGENEA

CAPSALIDAE

Neobenedenia pacifica Bravo-Hollis 1971. Baja California. Gills.
Bravo-Hollis (1971).

DACTYLOGYRIDAE

Pseudohaliotrema mugilinus Hargis 1955. Florida. Gills. Hargis
(1955b).

Ancyrocephalus vanbenedeni (Parona and Perugia 1890) Johnston and
Tiegs 1922. Black Sea. Gills. Pogoreltseva (1964); Israel.
Paperna (1964b); Georgia. Rawson (1973).

Cleidodiscus sp. Florida. Gills. Baker²².

GYRODACTYLIDAE

Gyrodactylus mugilis Rawson 1973. Georgia. Skin. Rawson (1973).

Polyclithrum mugilini Rogers 1967. Georgia. Fins, body. Rogers
(1967).

Micropolyclithrum parvum Skinner 1975. Florida. Skin. Skinner
(1975).

MICROCOTYLIDAE

Solostamenides pseudomugilis (Hargis 1956) Unnithan 1971. Florida.
Gills. Hargis (1956a) as Microcotyle p.

Solostamenides mugilis (Vogt 1878) Unnithan 1971. Japan. Gills.
Yamaguti (1938); France. Euzet and Combes (1969) both as
Microcotyle m.

Mugil cephalus (Continued)

- Metamicrocotyla macracantha (Alexander 1954) Korath 1955.
Baja California. Gills. Alexander (1954) as Microcotyle m.;
Florida. Gills. Hargis (1956a); Australia. Young (1970).
Metamicrocotyla bora Yamaguti 1953. Macassar. Gills. Yamaguti
(1953a).
Metamicrocotyla cephalus (Azim 1939) Hargis 1954. Sète, France.
Gills. Euzet and Combes (1969).
Metamicrocotyla filiformis Yamaguti 1953. Macasser. Yamaguti
(1953a).
Metamicrocotyla mugilis Yamaguti 1968. Hawaii. Gills. Yamaguti
(1968b).

UDONELLIDAE

- Udonella caligorum Johnston 1835. Florida. On Caligus sp. Skinner
(1975).

NEMATODA

ANISAKIDAE

- Contracaecum spiculigerum (Rudolphi 1809) Railliet and Henry 1912.
Larva. Caspian Sea. Petrushevski (1955).
Contracaecum robustum Chandler 1935. Larva. Texas. Kidneys.
Chandler (1935).
Contracaecum sp. Juvenile. Florida. Hutton (1964); Israel.
Intestine. Paperna (1964b).
Raphidascaris? adelinae Cond.-Franc. 1898. Rome. Yamaguti (1961).
Thynnascaris sp. Larva. Florida. Cysts in liver. Skinner (1975).

CAPILLARIIDAE

- Capillaria sp. Georgia. Rawson (1973).

CUCULLANIDAE

- Cucullanus sp. New Zealand. Intestine. Hewitt and Hine (1972).
Cucullanus dodsworthi Barreto 1922. Florida. Intestine. Skinner
(1975).

PHILOMETRIDAE

- Philometra sp. Israel. Intestine. Paperna (1964b).
Philometra cephalus Ramachandran 1975. India. Gonads. Ramachandran
(1975).

PROTOZOA (CILIOPHORA)

EPISTYLIDAE

- Epistylis sp. Florida. Hutton (1964).

Mugil cephalus (Continued)

URCEOLARIIDAE

- Trichodina sp. Florida. Gills. Skinner (1975).
Trichodina puytoraci Lom 1962. Black Sea. Zaika (1968).
Tripartiella obliqua Lom 1962. Black Sea. Zaika (1968).

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

- Zschokkella dogieli Pogorel 1964. Black Sea. Zaika (1968).
Zschokkella nova Klokacawa 1914. USSR. Gallbladder. Reshetnikova (1955).
Myxidium incurvatum Thélohan 1892. Gallbladder. Kudo (1920).

MYXOBOLIDAE

- Myxobolus mülleri Bütschli 1882. Black Sea. Zaika (1968).
Myxobolus exiguus Thélohan 1895. Sea of Azov, Black Sea. Gills. Kudo and Meglitsch⁶.
Myxobolus parvus Shulman 1962. China. Gills. Kudo and Meglitsch⁶.
Myxobolus cheni Shulman 1962. China. Muscles. Kudo and Meglitsch⁶.
Myxobolus achmerovi Shulman 1966. USSR. Gills. fins, mesentery. Shulman (1966).

MYXOSOMATIDAE

- Myxosoma dermatobia (Ishii 1916) Hoshina 1952. Florida. Surface of eyes. Baker²².
Myxosoma cephalis Iverson, Chitty, Van Meter 1971. South Florida. Cysts in brain, gill arches, buccal cavity, jaw bone. Iverson et al. (1971).
Myxosoma branchialis (Markevich 1932) Lom 1961. USSR. Gills, muscles. Shulman (1966).

TETRACAPSULIDAE

- Kudoa bora (Fujita 1930) Meglitsch 1947. Formosa. Muscles. Kudo and Meglitsch⁶.

PROTOZOA (SARCOMASTIGOPHORA)

TRYPANOSOMATIDAE

- Trypanosoma sp. Florida. Blood. Baker²².

PROTOZOA (SPOROZOA)

HAEMOGREGARINIDAE

- Haemogregarina mugili. Florida. Blood. Saunders (1964).

SPHYRAENIDAE -- Barracudas

Sphyraena argentea - California Barracuda

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931. Larva.
Southern California. Viscera. Jensen¹⁸.

TRYPANORHYNCHA

Genera and species. Larva. Southern California. Jensen¹⁸.

COPEPODA

BOMOLOCHIDAE

* Bomolochus solae Claus 1864. Baja California. Causey (1960).

CALIGIDAE

Lepeophtheirus dissimulatus Wilson 1905. Baja California. Causey
(1960).

Caligus productus Dana 1953. West coast of Mexico. Causey (1960).

Caligodes laciniatus (Krøyer 1863) Heller 1865. West coast of
Mexico. Causey (1960).

MONOGENEA

AXINIDAE

Heteraxine argentea (Crane 1972) Crane 1974. Southern California.
Gills. Crane (1972) as Pseudochauhanea a.

POLYNEMIDAE -- Threadfins

Polydactylus approximans - Blue Bobo

SYNONYM - Polynemus approximans

DIGENEA

OPECOELIDAE

Opecoeloides eucinostomi (Manter 1940) Von Wicklen 1946. Columbia,
Panama. Intestine. Manter (1940a) as Anisoporus e.

MONOGENEA

MICROCOTYLIDAE

Microcotyloides impudicus Caballero, Bravo-Hollis, and Grocott
1955. Panama. Gills. Caballero et al. (1955).

Polydactylus opercularis - Yellow Bobo

SYNONYM - Polynemus opercularis

COPEPODA

CALIGIDAE

Caligus coryphaenae Steenstrup and Lütken 1861. East Pacific.
Body surface. Shiino (1959c).

DIGENEA

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Panama.
Kidneys. Caballero et al. (1953).

BATHYMASTERIDAE -- Ronquils

Ronquilus jordani - Northern Ronquil

DIGENEA

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Alaska. Kruse (1977).
Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine. Arai (1969b).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).

CUCULLANIDAE

Cucullanus sp. British Columbia. Intestine. Arai (1969b).

CLINIDAE -- Clinids

Gibbonsia sp.

DIGENEA

HEMIURIDAE

Genolinea laticauda Manter 1925. Northern California. Stomach.
Chapa²³.

Gibbonsia (Continued)

Sterrhurus exodicus (McFarlane 1936) Yamaguti 1958. Northern California. Stomach. Chapa²³ as Separogermiductus e.

OPECOELIDAE

Helicometrina elongata Noble and Park 1937. Northern California. Intestine. Chapa²³.

Podocotyle sp. Northern California. Intestine, caeca. Edmiston²⁹.

Gibbonsia elegans - Spotted Kelpfish

DIGENEA

OPECOELIDAE

Helicometrina elongata Noble and Park 1937. Southern California. Intestine. Manter and Van Cleave (1951).

Helicometrina nimia Linton 1910. Intestine. Arai (1962).

Podocotyle gibbonsiae Johnson 1949. California. Intestine. Johnson (1949).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca sphaerula Noble 1939. Central California. Gallbladder. Noble (1941).

Leptotheca elegans Noble 1938. Southern California. Gallbladder. Noble (1938).

Ceratomyxa blennius Noble 1938. California. Gallbladder. Noble (1941).

MYXIDIIDAE

Sphaeromyxa gibbonsia Noble 1939. Southern California. Gallbladder. Noble (1939).

TRILOSPORIDAE

Trilospora californica Noble 1939. Southern California. Gallbladder. Noble (1939).

Gibbonsia metzi - Striped Kelpfish

SYNONYMS - Gibbonsia evides, G. mitzi

DIGENEA

GORGODERIDAE

Phyllodistomum borisbychowski Caballero and Caballero 1969. Southern California. Intestine. Caballero and Caballero (1969a).

Gibbonsia metzi (Continued)

OPECOELIDAE

- Pseudopecoelus gibbonsiae Manter and Van Cleave 1951. Southern California. Intestine. Manter and Van Cleave (1951).
Helicometrina elongata Noble and Park 1937. Southern California. Intestine. Manter and Van Cleave (1951).
Genitocotyle acirra Park 1937. Central California. Intestine. Chapa²³as G. acirrata.

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

- Leptotheca sphaerula Noble 1939. Southern California. Urinary bladder. Noble (1939).
Leptotheca elegans Noble 1938. Southern California. Gallbladder. Noble (1941).
Ceratomyxa blennius Noble 1938. Central California. Gallbladder. Noble (1941).
Ceratomyxa gracilis Jameson 1929. Central California. Gallbladder. Jameson (1929).

MYXIDIIDAE

- Sphaeromyxa gibbonsia Noble 1939. Southern California. Gallbladder. Noble (1939).

TRILOSPORIDAE

- Trilospora californica Noble 1939. Southern California. Gallbladder. Noble (1941).

Heterostichus rostratus - Giant Kelpfish

COPEPODA

CALIGIDAE

- Lepeophtheirus parviventris Wilson 1905. Southern California. Outer surface. Wilson (1935b).

CHONDRACANTHIDAE

- Chondracanthus heterostichi Ho 1972. Southern California. Gill cavity. Ho (1972b).
Chondracanthus horridus Heller 1865. Central California. Gills. Wilson (1935b).

DIGENEA

OPECOELIDAE

- Genitocotyle heterostichi Montgomery 1957. Southern California. Intestine. Montgomery (1957).

Neoclinus blanchardi - Sarcastic Fringehead

CESTODA

TETRAPHYLLIDEA

Genera and species. Red pigmented plerocercoid. Southern California.
Pyloric caeca, intestine. Kunnenkeri and Martin (1962).

ISOPODA

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. Southern California. Gills.
Turner et al. (1969).

Neoclinus uninotatus - Onespot Fringehead

DIGENEA

OPECOELIDAE

Helicometrina elongata Noble and Park 1937. Southern California.
Intestine. Montgomery (1957).

ZOOGONIDAE

Diphtherostomum macrosaccum Montgomery 1957. Southern California.
Stomach. Montgomery (1957).

Paraclinus integripinnis - Reef Finspot

SYNONYM - Auchenopterus integripinnis

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca elegans Noble 1938. Southern California. Gallbladder.
Noble (1939).

BLENNIIDAE -- Combtooth Blennies

Hypsoblennius gilberti - Rockpool Blenny

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa blennius Noble 1938. Southern California. Gallbladder.
Noble (1938).

STICHAEIDAE -- Pricklebacks

Anoplarchus purpurescens - High Cockscomb

DIGenea

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Robinson et al.²⁰

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Oregon.
Stomach. McCauley (1960).

OPECOELIDAE

Podocotyle californica Park 1937. Northern California. Intestine.
Nahhas and Krupin (1977).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).
Contraecaecum sp. Larva. British Columbia. Body cavity. Arai (1969b).
Phocanema sp. Larva. British Columbia. Body cavity. Arai (1969b)
as Porrocaecum sp.

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. British Columbia. Intestine.
Arai (1969b).

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Zschokkella sp. Washington. Gallbladder. Kuris²⁰.

Cebidichthys sp.

DIGenea

OPECOELIDAE

Opecoelus adsphaericus Manter and Van Cleave 1951. California.
Intestine. Banerjee (1965). Likely C. violaceus

Cebidichthys violaceus - Monkeyface Prickleback

DIGenea

HEMIURIDAE

Opisthadena bodegensis Johnson and Copsey 1953. Northern California.
Gastro-intestinal tract. Johnson and Copsey (1953).

Lumpenus anguillaris - Snake Prickleback

DIGenea

ZOOGONIDAE

Zoogonus dextrocirrus Aldrich 1961. Washington. Intestine.
Aldrich (1961).

Lumpenus sagitta - Snake Prickleback

COPEPODA

CALIGIDAE

Lepeophtheirus cuneifer Kabata 1974. Alaska. Kabata (1974).
Questionable host.

DIGenea

HEMIURIDAE

Genolinea manteri Lloyd 1938. Oregon. McCauley (1960).
Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Robinson et al.¹⁶

Xiphister atropurpureus - Black Prickleback

SYNONYMS - Anoplarchis atropurpureus, Cebidichthys atropurpureus,
Epigeichthys atropurpureus

COPEPODA

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. British Columbia.
Fraser (1920).

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. British Columbia. Wilson (1912b).

DIGenea

OPECOELIDAE

Podocotyle atomon (Rudolphi 1802) Odhner 1905. British Columbia.
Intestine. McFarlane (1936).
Podocotyle californica Park 1937. Northern California. Intestine.
Nahas and Krupin (1977).
Podocotyle reflexa (Creplin 1825) Odhner 1905. British Columbia.
Intestine. McFarlane (1936).

Xiphister atropurpureus (Continued)

NEMATODA

PHILOMETRIDAE

Philometra americana Kuitunen-Ekbaum 1933. British Columbia.
Subcutaneous. Kuitunen-Ekbaum (1933a).

Xiphister mucosus - Rock Prickleback

DIGENEA

OPECOELIDAE

Podocotyle californica Park 1937. Northern California. Intestine.
Nahhas and Krupin (1977).

PHOLIDAE -- Gunnels

Apodichthys flavidus - Penpoint Gunnel

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. British
Columbia. Margolis ♂.

COPEPODA

CHONDRACANTHIDAE

Chondracanthus pusillus Kabata 1968. British Columbia. Gill
cavities. Kabata (1968).

DIGENEA

OPECOELIDAE

Podocotyle apodichthysi Park 1937. California. Intestine. Park (1937b).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).
* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. British Columbia.
Smedley (1934) as Contracaecum magnum.

Apodichthys flavidus (Continued)

CAPILLARIIDAE

Capillaria sp. British Columbia. Stomach. Arai (1969b).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa furcata Fujita 1923. California. Gallbladder. Jameson (1931).

Pholis laeta - Crescent Gunnel

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Larva. British Columbia. Intestine. Arai (1969b).

DIGENEA

OPECOELIDAE

Podocotyle sp. Immature. British Columbia. Intestine. Arai (1969b).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).
Contraeaecum sp. Larva. British Columbia. Body cavity. Arai (1969b).

PHILOMETRIDAE

Philometra americana Kuitunen-Ekbaum 1933. British Columbia. Intestine. Arai (1969b).

Pholis ornata - Saddleback Gunnel

DIGENEA

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia. Intestine. Arai (1969b).

OPECOELIDAE

Podocotyle pacifica Park 1937. British Columbia. Intestine. Arai (1969b) as Neopodocotyloides p.

Pholis ornata (Continued)

MONOGENEA

GYRODACTYLOIDEA

Genera and species. British Columbia. Gills. Arai (1969b).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).

PHILOMETRIDAE

Philometra americana Kuitunen-Ekbaum 1933. British Columbia.
Subcutaneous. Kuitunen-Ekbaum (1933a).

ANARRHICHADIDAE -- Wolffishes

Anarrhichthys ocellatus - Wolf-eel

MONOGENEA

GYRODACTYLIDAE

Gyrodactylus corti Mizelle and Kritsky 1967. Steinhart Aquarium,
California. On skin. Mizelle and Kritsky (1967d).

CRYPTACANTHODIDAE -- Wrymouths

Delolepis gigantea - Giant Wrymouth

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. British
Columbia. Pyloric caeca, intestine. Margolis³.

NEMATODA

ANISAKIDAE

* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. British Columbia.
Stomach, intestine. Margolis³ as Contracaecum a.
Anisakis sp. Larva. British Columbia. Throughout body cavity.
Margolis³.

Lyconectes aleutensis - Dwarf Wrymouth

DIGenea

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Robinson et al. 30

AMMODYTIDAE -- Sand Lances

Ammodytes hexapterus - Pacific Sandlance

SYNONYMS - Ammodytes tobianus personatus, Ammodytes personatus

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. British Columbia.
Intestine. Arai (1969b).

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai
(1969b).

COPEPODA

CALIGIDAE

Lepeophtheirus salmonis (Krøyer 1838). British Columbia. Kabata
(1973).
Lepeophtheirus sp. British Columbia. Body surface. Arai (1969b).

PENNELLIDAE

Haemobaphes sp. British Columbia. Kabata (1967b).

DIGenea

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine. Arai (1969b); Japan. Yamaguti (1951) as L. salmonis.

HETEROPHYIDAE

Galactosomum sp. Larva. British Columbia. Gills (encysted).
Arai (1969b).

Ammodytes hexapterus (Continued)

MONOGENEA

GYRODACTYLOIDEA

Genera and species. British Columbia. Gills. Arai (1969b).

GYRODACTYLIDAE

Gyrodactylus ammodyti Zhukov 1960. Bering Sea. Gills. Zhukov (1960b).

Gyrodactylus harengi MalMBERG 1956. Bering Sea. Gills. Zhukov (1960b).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).

Contracaecum sp. Larva. British Columbia. Mesentery, liver, stomach
Wall. Margolis³.

GOBIIDAE -- Gobies

Acanthogobius flavimanus - Yellowfin Goby

COPEPODA

CALIGIDAE

Caligus punctatus Shiino 1955. Japan. Exterior. Shiino (1955b).

CHONDRACANTHIDAE

Acanthochondria yui Shiino 1964. Japan. Operculums, gill arches,
roof of buccal cavity. Shiino (1964).

ERGASILIDAE

Ergasilus orientalis Yamaguti 1939. Japan. Gills. Yamaguti (1939a).

DIGENEA

BUCEPHALIDAE

Prosorhynchus uniporus Ozaki 1924. Metacercaria. Japan. Cysts
in fins. Yamaguti (1971).

CRYPTOGONIMIDAE

Cryptogonimus sp. Metacercaria. Japan. Cysts in fins.
Yamaguti (1938).

Acanthogobius flavimanus (Continued)

FELLODISTOMATIDAE

Tergestia acanthogobii Yamaguti 1938. Japan. Intestine.
Yamaguti²⁴.

HEMIURIDAE

Lecithaster stellatus Looss 1907. Japan. Intestine. Yamaguti (1940).

HETEROPHYIDAE

Procerovum varium Onji and Nishio 1916. Metacercaria. Pearson
(1964).

Metagonimus yokogawai (Katsurada 1912) Katsurada 1912.
Metacercaria. Japan. Komiya and Suzuki (1966).

Centrocestus asadai Mishima 1959. Metacercaria. Japan. Komiya
and Suzuki (1966).

Heterophyes nocens Onji and Nishio 1915. Metacercaria. Japan.
Komiya and Suzuki (1966).

Stellantchasmus falcatus Onji and Nishio 1915. Metacercaria.
Japan. Komiya and Suzuki (1966).

Pygidiopsis summa Onji and Nishio 1916. Metacercaria. Japan.
Komiya and Suzuki (1966).

Stictodora perpendicula (Onji and Nishio 1916) Yamaguti 1958.
Metacercaria. Japan. Komiya and Suzuki (1966).

Stictodora fuscata (Onji and Nishio 1916). Metacercaria. Japan.
Komiya and Suzuki (1966).

Pseudogalactosoma macrostoma Yamaguti 1942. Metacercaria. Japan.
Komiya and Suzuki (1966).

OPECOELIDAE

Ozakia orthorchis (Ozaki 1926) Wisniewski 1934. Japan. Intestine,
gallbladder. Yamaguti²⁴ as Coitocaecum orthorchis.

ZOOGONIDAE

Zoogonoides acanthogobii Yamaguti 1938. Japan. Intestine. Yamaguti²⁴.

MONOGENEA

MICROCOTYLIDAE

Aspinatrium acanthogobii (Yamaguti 1940) Yamaguti 1963. Japan.
Gills. Yamaguti (1940) as Microcotyle a.

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

Trichodina sp. Japan. Gills. Noble³¹.

Acanthogobius flavimanus (Continued)

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa sp. Japan. Gallbladder. Noble³¹.

MYXIDIIDAE

Myxidium sp. Japan. Gallbladder. Noble³¹.

MYXOBOLIDAE

Myxobolus acanthogobii Hoshina 1952. Japan. Eyes, brain, spinal nerves. Hoshina (1952).

Henneguya tridentigeri Ozaki and Ishizaki 1941. Japan. Gills. Hoshina (1952).

TRIGONOSPORIDAE

Trigonosporus acanthogobii Hoshina 1952. Japan. Gills. Hoshina (1952).

Clevelandia ios - Arrow Goby

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus sp. Larva. Southern California. Brooks and Brothers (1974).

TETRAPHYLLIDEA

Genera and species. Larva. California. Lumen. Martin and Multani (1970).

DIGENEA

HEMIURIDAE

Lecithaster minimus Martin and Multani 1970. Southern California. Brooks and Brothers (1974).

MONOGENEA

GYRODACTYLIDAE

Gyrodactylus perforatus Mizelle and Kritsky 1967. California. Skin. Mizelle and Kritsky (1967c).

Clevelandia ios (Continued)

NEMATODA

CAMALLANIDAE

Spirocamallanus sp. Southern California. Brooks and Brothers (1974).

Coryphopterus nicholsi - Blackeye Goby

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

DIGenea

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine. Arai (1969b).

NEMATODA

ANISAKIDAE

Contracaecum sp. Larva. British Columbia. Body cavity. Arai (1969b).

Gillichthys mirabilis - Longjaw Mudsucker

ACANTHOCEPHALA

NEOECHINORHYNCHIDAE

Microsontis wardae Martin and Multani 1966. Baja California.
Intestine. Martin and Multani (1966).

COPEPODA

ERGASILIDAE

Ergasilus auritus Markevich 1940. Southern California. Gills.
Roberts (1970).

DIGenea

CYATHOCOTYLIDAE

Mesostephanus appendiculatus (Ciurea 1916) Lutz 1935. Metacercaria.
Southern California. Muscles. Martin (1961).

DIDYMOZOIDAE

Genera and species. Larva. Southern California. Gills. Noble et
al. (1963) as Torticaecum fenestratum.

Gillichthys mirabilis (Continued)

HEMIURIDAE

- Hysterolecitha trilocalis King and Noble 1961. Southern California. Gills, stomach, esophagus. King and Noble (1961).
Lecithaster minimus Martin and Multani 1970. Baja California. Intestine (posterior). Martin and Multani (1970).

HETEROPHYIDAE

- Stictodora hancocki (Martin 1950) Witenberg 1953. Metacercaria. Southern California. Muscles, brain case, etc. Martin (1950) as Parastictodora h.
Ascocotyle sexidigita Martin and Steele 1970. Baja California. Intestine. Martin and Multani (1970).
Ascocotyle angrense Travassos 1916. Metacercaria. Southern California. Gills. Baker²².

RENICOLIDAE

- Renicola buchamani (Martin and Gregory 1951). Metacercaria. Southern California. Liver. Martin (1971).

MONOGENEA

GYRODACTYLIDAE

- Gyrodactylus imperialis Mizelle and Kritsky 1967. Southern California. Skin. Mizelle and Kritsky (1967b).
Gyrodactylus olsoni Mizelle and Kritsky 1967. Southern California. Skin. Mizelle and Kritsky (1967b).
Gyrodactylus elegans Nordmann 1832. Southern California. Gills. Noble (1961).

NEMATODA

CAMALLANIDAE

- Spirocamallanus pereirai (Annereaux 1946) Olsen 1952. Southern California. Intestine. Noble and King (1960).

THELAZIIDAE

- Vasorhabdochona cablei Martin and Zam 1967. Baja California. Mesenteric blood vessels near bile duct. Martin and Zam (1967).

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

- Trichodina sp. Southern California. Gills. Noble (1961).

Ilypnus gilberti - Cheekspot Goby

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus sp. Larva. Southern California. Brooks and Brothers (1974).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Southern California. Gallbladder, intestine, mesentery. Brooks and Brothers (1974).

DIGENEA

HEMIURIDAE

Lecithaster minimus Martin and Multani 1970. Southern California. Brooks and Brothers (1974).

NEMATODA

CAMALLANIDAE

Spirocamallanus sp. Southern California. Brooks and Brothers (1974).

Lythrypnus dalli - Bluebanded Goby

DIGENEA

ACANTHOCOLPIDAE

Stephenostomum sp. California. Urethra. Haaker³².

OPECOELIDAE

Manteriella sp. California. Stomach and intestine. Haaker³².

Quietula y-cauda - Shadow Goby

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus sp. Larva. Southern California. Brooks and Brothers (1974).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Southern California. Gallbladder, intestine, mesentery. Brooks and Brothers (1974).

Quietula y-cauda (Continued)

DIGENEA

HEMIURIDAE

Lecithaster minimus Martin and Multani 1970. Southern California.
Brooks and Brothers (1974).

NEMATODA

CAMALLANIDAE

Spirocamallanus sp. Southern California. Brooks and Brothers (1974).

Typhlogobius californiensis - Blind Goby

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca elegans Noble 1938. Southern California. Gallbladder.
Noble (1941).

Ceratomyxa vepallida Meglitsch 1960. Southern California.
Gallbladder. Noble³¹.

TRILOSPORIDAE

Trilospora californica Noble 1939. Southern California. Gallbladder.
Noble (1939).

GEMPYLIDAE -- Snake Mackerels

Gempylus serpens - Snake Mackerel

ACANTHOCEPHALA

RHADINORHYNCHIDAE

Gorgorhynchus robertdollfusi Golvan 1956. Mauritania. Intestine.
Golvan (1956).

Ruvettus pretiosus - Oil Fish

COPEPODA

DISSONIDAE

Dissonus ruveti Nunes-Ruivo and Fourmanoir 1956. Madagascar.
Anal fins. Nunes-Ruivo and Fourmanoir (1956).

Ruvettus pretiosus (Continued)

DIGenea

DIDYMOZOIDAE

Neunitubulotestis orbitarium (Dollfus 1956) Yamaguti 1971.
Morocco. Yamaguti (1971).

SANGUINICOLIDAE

Aporocotyle pacifica Yamaguti 1970. Hawaii. Yamaguti (1970).

SCOMBRIDAE - Mackerels and Tunas

Auxis rochei - Bullet Mackerel

DIGenea

BUCEPHALIDAE

Rhipidocotyle capitata (Linton 1940) Manter 1947. Massachusetts.
Linton (1940).

DIDYMOZOIDAE

Didymozoon auxis Taschenberg 1879. Italy. Gill lamellae.
Yamaguti (1971).
Didymozoon sp. Gills. Linton (1940).

FELLODISTOMATIDAE

Tergestia pectinata (Linton 1905) Manter 1940. Massachusetts.
Intestine. Linton (1940).

GASTEROSTOMIDAE

Gasterostomum capitatum Linton 1940. Massachusetts. Linton (1940).

Auxis thazard - Frigate Mackerel

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Neorhadinorhynchus nudus (Harada 1938) Yamaguti 1939. South China
Sea. Intestine. Mamaev (1968b) as Echinorhynchus n.

RHADINORHYNCHIDAE

Rhadinorhynchus selkirki Van Cleave 1921. Japan. Yamaguti (1963c).

Auxis thazard (Continued)

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931. South China Sea. Intestine, liver. Mamaev (1968b).

TRYPANORHYNCHA

Genera and species. South China Sea. Intestine, liver. Mamaev (1968b).
Scolex sp. South China Sea. Intestine. Mamaev (1968b).

COPEPODA

BOMOLOCHIDAE

Unicolax mycterobius (Vervoort 1965) Cressey and Cressey 1980. Gulf of Guinea. Nasal fossae. Vervoort (1965) as Parabomolochus m.

CALIGIDAE

Caligus productus Dana 1853. Eastern Pacific. Body surface. Shiino (1959d).
Caligus auxisi Pillai 1963. India. Operculums. Pillai (1963).

DIGENEA

BUCEPHALIDAE

Rhipidocotyle capitata (Linton 1940) Manter 1947. Hawaii. Intestine. Manter (1947).
Rhipidocotyle pentagonum (Ozaki 1924) Ekmann 1932. South China Sea. Stomach. Mamaev (1968b).
Prosorhynchus sp. South China Sea. Stomach. Mamaev (1968b).
Prosorhynchoides gracilescens (Rudolphi 1819) n. comb. Adriatic Sea. Intestine. Sey (1970 a) as Bucephalopsis g.

DIDYMOZOIDAE

Didymozoon auxis Taschenberg 1879. Japan. Gills. Yamaguti (1951).
Colocyntotrema auxis Yamaguti 1951. Japan. Pyloric caeca. Yamaguti (1951).
Phacelotrema claviforme Yamaguti 1951. Japan. Pyloric caeca. Yamaguti (1951).
Opepherotrema planum Yamaguti 1951. Japan. Pyloric caeca. Yamaguti (1951).
Oesophagocystis dissimilis (Yamaguti 1938) Yamaguti 1970. Pacific. Mamaev (1968b) as Didymocystis dissimilis. ["Mamaev's description and figures do not agree with mine" - Yamaguti (1971).]
Annulocystis auxis Yamaguti 1970. Hawaii. Gills. Yamaguti (1970).
Metanematobothrium bivitellatum Mamaev 1968. Pacific. Gills. Mamaev (1968b).
Didymosphaera mirabilis Mamaev 1968. Viet Nam Gulf. Mamaev (1968a).
Didymocystis dissimilis Yamaguti 1938. South China Sea. Mamaev (1968b).
Lobatozoum multisacculatum Ishii 1935. South China Sea. Gills. Mamaev (1968b).

Auxis thazard (Continued)

FELLODISTOMATIDAE

Tergestia laticollis (Rudolphi 1819) Stossich 1899. Mediterranean.
Manter (1940b).

Tergestia acanthogobii Yamaguti 1938. Japan. Yamaguti (1971).

GORGODERIDAE

Phyllodistomum lancea Mamaev 1968. South China Sea. Urinary
bladder. Mamaev (1968b).

HEMIURIDAE

Sterrurus imocavus Looss 1907. Stomach. Mamaev (1968b) as
Lecithochirium i.

Plerurus carangi Parukhin 1966. South China Sea. Stomach.
Mamaev (1968b).

Dinurus euthynni Yamaguti 1934. South China Sea. Stomach.
Mamaev (1968b).

Dinurinae. Genera and species. Gulf of Mexico. Nikolaeva and
Parukhin (1968).

Brachyphallus parvus (Manter 1947) Skrjabin and Guschanskaja 1955.
Gulf of Mexico. Nikolaeva and Parukhin (1968).

Lecithochirium keokea Yamaguti 1970. Hawaii. Stomach. Yamaguti
(1970).

HIRUDINELLIDAE

Hirudinella sp. Japan. Stomach. Machida et al. (1970).

MONOGENEA

CAPSALIDAE

Caballerocotyla manteri affinis Mamaev 1968. South China Sea.
Gills. Mamaev (1968b).

GASTROCOTYLIDAE

Pseudaxine sp. South China Sea. Gills. Mamaev (1968b).

Allopseudaxine macrova (Unnithan 1957) Yamaguti 1963. South China Sea.
Gills. Mamaev (1968b).

Metapseudaxine ventrosicula Mamaev 1967. South China Sea. Gills.
Mamaev (1967).

Pseudaxine triangula Mamaev 1967. South China Sea. Gills. Mamaev
(1967).

HEXOSTOMATIDAE

Hexostoma auxisi Palombi 1943. Italy. Gills. Price (1961); South
China Sea. Mamaev (1968b).

Hexostoma keokeo Yamaguti 1968. Hawaii. Gills. Yamaguti (1968b).

Auxis thazard (Continued)

NEMATODA

ANISAKIDAE

Contracecum sp. Larva. South China Sea. Body cavity. Mamaev (1968b).

Anisakis sp. Larva. South China Sea. Body cavity. Mamaev (1968b).

CAMALLANIDAE

Oncophora melanocephala (Rudolphi 1819) Baudin-Laurencin 1970.
Adriatic Sea. Intestine. Sey (1970b) as Camallanus m.

CYSTIDICOLIDAE

Ctenascarophis gastricus Mamaev 1968. South China Sea. Stomach.
Mamaev (1968b).

Spinitectus ? mollis Mamaev 1968. South China Sea. Stomach.
Mamaev (1968b).

Spinitectus sp. South China Sea. Stomach. Mamaev (1968b).

PROTOZOA (SPOROZOA)

HAEMOGREGARINIDAE

Haemogregarina bigemina Laveran and Mesnil 1901. Puerto Rico.
Blood. Saunders (1966).

Euthynnus affinis - Kawakawa

SYNONYMS - Thunnus thynnina, Thynnus thynnina

Three references below, marked by asterisks, refer to references to Thunnus or Thynnus thynnina. Hubbs (pers. comm.) states that T. thynnina is now two species of Euthynnus, E. affinis and E. lineatus. However, the three references are all from the Red Sea, where only E. affinis is found.

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Neorhadinorhynchus nudus (Harada 1938) Yamaguti 1939. South China Sea.
Intestine. Mamaev (1968b) as Echinorhynchus nudus.

RHADINORHYNCHIDAE

Serrasentis sagittifer (Linton 1889) Linton 1932. South China Sea.
Stomach. Mamaev (1968b) as S. socialis.

Euthynnus affinis (Continued)

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931. South China Sea. Intestine, liver. Mamaev (1968b).

COPEPODA

CALIGIDAE

Caligus asymmetricus Kabata 1965. South India. Pillai (1963) as C. thynni.

Caligus productus Dana 1853. Indian Ocean. Lewis (1967).

Caligus bonito Wilson 1905. India. Gills.

Thomas (1967) as C. krishnai.

PSEUDOCYCNIDAE

Pseudocycnus appendiculatus Heller 1865. South India. Gills. Pillai (1964).

DIGENEA

BUCEPHALIDAE

*Rhipidocotyle septpapillata Krull 1934. Red Sea. Nagaty (1958).

*Rhipidocotyle heptathelata Stunkard 1974. Red Sea. Stunkard (1974).

Rhipidocotyle pentagonum (Ozaki 1924) Ekmann 1932. South China Sea. Stomach. Mamaev (1968b).

DIDYMOZOIDAE

Oesophagocystis dissimilis (Yamaguti 1938) Yamaguti 1970. South China Sea. Inner wall of esophagus. Mamaev (1968b). Yamaguti (1971) states that Mamaev's figures of O. dissimilis do not agree with his.

Metanematobothrium bivittellatum Mamaev 1968. South China Sea. Gills. Mamaev (1968b).

Nematobothrium sp. South China Sea. Gills, liver, body cavity. Mamaev (1968b).

GORGODERIDAE

Phyllodistomum lancea Mamaev 1968. South China Sea. Urinary bladder? Mamaev (1968b).

HEMIURIDAE

*Sterrhurus imocavus Looss 1907. Egypt. Looss (1907a); South China Sea. Stomach. Mamaev (1968b) as Lecithochirium i.

Plerurus carangi Parukhin 1966. South China Sea. Stomach. Mamaev (1968b).

Dinurus euthynni Yamaguti 1934. South China Sea. Stomach. Mamaev (1968b).

Euthynnus affinis (Continued)

HIRUDINELLIDAE

Hirudinella spinulosa Yamaguti 1938. South China Sea. Stomach.
Mamaev (1968b).

SANGUINICOLIDAE

Cardicola congruenta Lebedev and Mamaev 1968. South China Sea.
Vascular system. Lebedev and Mamaev (1968).

MONOGENEA

AXINIDAE

Allopseudaxine macrova (Unnithan 1957) Yamaguti 1963. India.
Unnithan (1957) as Uraxine chura m.

CAPSALIDAE

Caballerocotyla paucispinosa Mamaev 1968. South China Sea.
Gills, stomach. Mamaev (1968b).
Caballerocotyla notosinense Mamaev 1968. South China Sea. Gills.
Mamaev (1968b).
Caballerocotyla manteri affinis Mamaev 1968. South China Sea.
Gills. Mamaev (1968b).

GASTROCOTYLIDAE

Metapseudaxine ventrosicula Mamaev 1967. South China Sea. Gills.
Mamaev (1968b).
Churavera macrova Unnithan 1968. India. Gills. Unnithan (1968).

HEXOSTOMATIDAE

Homostoma chura Unnithan 1965. India. Gills. Unnithan (1965).
Neohexostoma euthynni (Meserve 1938) Price 1961. South China Sea.
Gills. Mamaev (1968b).

NEMATODA

ANISAKIDAE

Contracecum sp. Larva. South China Sea. Body cavity. Mamaev
(1968b).
Anisakis sp. Larva. South China Sea. Body cavity. Mamaev (1968b).

CYSTIDICOLIDAE

Ctenascarophis gastricus Mamaev 1968. South China Sea. Stomach.
Mamaev (1968b).

PHILOMETRIDAE

Philometra sp. South China Sea. Mamaev (1968b).

Euthynnus lineatus - Black Skipjack

COPEPODA

CALIGIDAE

Caligus coryphaenae Steenstrup and Lütken 1861. Gulf of California.
Shiino (1959d).
Caligus macarovi Gussev 1951. Mexico. Exterior. Shiino (1959c).

DIGENEA

HIRUDINELLIDAE

Hirudinella ventricosa (Pallas 1774) Baird 1853. Baja California.
Stomach. Caballero and Caballero (1971a) as H. marina.

MONOGENEA

HEXOSTOMATIDAE

Neohexostoma euthynni (Meserve 1938) Price 1961. Baja California.
Gills. Millemann (1956) as Hexostoma e.

Euthynnus pelamis - Skipjack Tuna

SYNONYMS - Gymnosarda pelamys, Katsuwonus pelamys, Thynnus pelamys,
Katsuwonus vagans

ACANTHOCEPHALA

RHADINORHYNCHIDAE

Rhadinorhynchus pristis (Rudolphi 1802) Luhe 1911. Bermuda.
Intestine. Rees (1970) as Nipporhynchus ornatus; Japan.
Yamaguti (1963c) as Nipporhynchus katsuwonis.
Raorhynchus terebra (Rudolphi 1819) Tripathi 1959. Golvan (1969).
Raorhynchus meyeri (Heinze 1934) Golvan 1969. Indian Ocean.
Golvan (1969).

CESTODA

TENTACULARIIDAE

Tentacularia coryphaenae Bosc 1802. Post larva. Atlantic, Japan.
Muscle, abdominal cavity. Dollfus (1942).

COPEPODA

CALIGIDAE

Caligus bonito Wilson 1905. Pacific Cabo San Lucas, Baja California.
Gills. Shiino (1963a); Hawaii. Lewis (1967); Indian Ocean.
Pillai (1963); Massachusetts. Wilson (1905b).

Euthynnus pelamis (Continued)

Caligus productus Dana 1853. Pacific Costa Rica. Mouth. Shiino (1965b); Indian Ocean. Body surface, buccal cavity, gill cavities. Lewis et al. (1969); Hawaii. Lewis (1967).

Caligus coryphaenae Steenstrup and Lütken 1861. Indian Ocean. Lewis et al. (1969); Hawaii. Lewis (1967); Japan. Shiino (1960b).

Caligus pelamydis Krøyer 1863. Massachusetts. Gill cavity. Wilson (1905b); South Africa. Barnard (1955).

Caligus quadratus Shiino 1954. Japan. Inner surface of operculum. Shiino (1959e).

Caligus mutabilis Wilson 1905. West Coast of Mexico. Causey (1960).

Lepeophtheirus dissimulatus Wilson 1905. Bermuda. Heegaard (1943).

Heniochophilus branchialis (Rangnekar 1953) Pillai and Mohan 1965. India. Pillai and Mohan (1965).

Dentigryps curtus. Bermuda. Heegaard (1943) as Homoiotetes bermudensis.

PSEUDOCYCNIDAE

Pseudocycnus appendiculatus Heller 1865. Angola. Gills. Nunes-Ruivo (1956); Mediterranean. Hewitt (1969b).

DIGENEA

DIDYMOZOIDAE

Didymozoon filicolle Ishii 1935. Pacific coast of Japan. Gills. Ishii (1935).

Didymozoon longicolle Ishii 1935. Japan. Gills. Ishii (1935).

Didymozoon minus Yamaguti 1934. Japan. Gills. Yamaguti (1934a) as D. minor.

Didymocylindrus filiformis Ishii 1935. Japan, Hawaii. Gills. Ishii (1935).

Didymocylindrus simplex (Ishii 1935) Yamaguti 1970. Japan, Hawaii. Yamaguti (1970).

Didymocystis bilobata Ishii 1935. Pacific Japan. Gills. Ishii (1935).

Didymocystis ovata Ishii 1935. Japan. Mouths. Ishii (1935).

Didymocystis reniformis Ariola 1902. Japan. Encysted in esophagus and stomach. Yamaguti (1934a).

Didymocystis soleiformis Ishii 1935. Pacific Japan. Gills. Ishii (1935).

Didymocystis wedli Ariola 1902. Japan. Yamaguti (1934a).

Didymoproblema fusiforme Ishii 1935. Pacific Japan, Hawaii. Gills. Ishii (1935).

Lobatozoum multisacculatum Ishii 1935. Pacific Japan, Hawaii. Gills. Ishii (1935).

Koellikeria globosa Ishii 1935. Tokyo Fish Market. Mouth, esophagus. Ishii (1935).

Koellikeria orientalis (Yamaguti 1934) Ishii 1935. Japan. Stomach, esophagus. Ishii (1935).

Koellikeria reniformis Ishii 1935. Tokyo Fish Market. Gills. Ishii (1935).

Euthynnus pelamis (Continued)

- Neodiplotrema pelamydis (Yamaguti 1938) Yamaguti 1938. Pacific Japan. Gill arches. Yamaguti (1938) as Diplotrema p.
- Oesophagocystis dissimilis (Yamaguti 1938) Yamaguti 1970. Hawaii, Pacific Japan. Esophagus, stomach. Yamaguti (1970).
- Coeliodidymocystis kamegaii Yamaguti 1970. Hawaii. Caeca, stomach Yamaguti (1970).
- Coeliodidymocystis abdominalis (Yamaguti 1938) Yamaguti 1970. Japan. Caeca, stomach. Yamaguti (1938) as Didymocystis a.
- Didymocystoides intestinomuscularis Yamaguti 1970. Hawaii. Muscle layer of intestine. Yamaguti (1970).
- Didymocystoides pinnicola Yamaguti 1970. Hawaii. Dorsal fins. Yamaguti (1970).
- Didymocystoides submentalis (Yamaguti 1938) Yamaguti 1970. Japan. Submental region. Yamaguti (1938) as Didymocystis s.
- Lagenocystis katsuoni Yamaguti 1970. Hawaii. Intestinal wall. Yamaguti (1970).
- Adenodidymocystis intestinalis Yamaguti 1970. Hawaii. Intestinal wall. Yamaguti (1970).
- Univitellannulocystis katsuoni Yamaguti 1970. Hawaii. Intestine. Yamaguti (1970).

FELLODISTOMATIDAE

- Tergestia laticollis (Rudolphi 1819) Stossich 1899. Mediterranean. Manter (1940b).

HEMIURIDAE

- Dinurus euthynni Yamaguti 1934. Pacific Coast of Japan. Stomach. Yamaguti (1934a).
- Lecithochirium microstomum Chandler 1935. Mexico. Stomach. Lamothe-Argumedo (1966).

HIRUDINELLIDAE

- Hirudinella ventricosa (Pallas 1774) Baird 1853. Atlantic. Manter (1940b).

SYNCOELIIDAE

- Syncoelium filiferum (Leuckart in Sars 1885) Odhner 1911. Pacific Coast of Japan. Branchial cavity. Yamaguti (1938) as S. katuwo.

MONOGENEA

AXINIDAE

- Allopseudaxine katsuonis (Ishii 1936) Yamaguti 1943. Hawaii. Gills. Yamaguti (1968b).
- Allopseudaxine vagans (Ishii 1936) Price 1962. Japan. Gills. Ishii (1936) as Pseudaxine v. [=Allopseudoaxinoides vagans-Yamaguti (1970).]

Euthynnus pelamis (Continued)

CAPSALIDAE

- Capsala lintoni Price 1939. Massachusetts. Linton (1898) as Tristoma laeve; Massachusetts. Gills. Price (1939).
Capsala interrupta (Monticelli 1891) Price 1938. Mediterranean. Gills. Silas (1967).
Capsala laevis (Verrill 1874) Johnston 1929. Massachusetts. Gills. Silas (1967).
Capsala nozawae (Goto 1894) Price 1938. Japan. Fins. Silas (1967).
Caballerocotyla katsuwoni (Ishii 1936) Price 1960. Pacific. Ishii (1936) as Tristoma katsuwonum.

GASTROCOTYLIDAE

- Pricea minima Chauhan 1945. India. Chauhan (1945).

HEXOSTOMATIDAE

- Hexostoma grossum (Goto 1894) Sproston 1946. Japan. Gills. Silas (1967).

NEMATODA

ANISAKIDAE

- Contracecum sp. Larva. Japan. Kagei et al. (1970).
Anisakis sp. Larva. Japan. Gut. Otsuru et al. (1965); larva. New Zealand. Viscera. Hewitt and Hine (1972).

PHILOMETRIDAE

- Philometra sp. Atlantic. Ovaries. Simmons (1969).

SPIRUROIDEA

- Genera and species. Atlantic. Ovaries. Simmons (1969).

Lepidocybium flavobrunneum - Escolar

CESTODA

AMPHICOTYLIDAE

- Pseudeubothrioides lepidocybii Yamaguti 1968. Hawaii. Intestine. Yamaguti (1968a).

DIGENEA

DIDYMOZOIDAE

- Allometanematobothrioides lepidocybii Yamaguti 1965. Hawaii. Tissues. Yamaguti (1965a).

Lepidocybium flavobrunneum (Continued)

HEMIURIDAE

Ectenurus lepidocybii Yamaguti 1970. Hawaii. Stomach.
Yamaguti (1970).

MONOGENEA

DISCOCOTYLIDAE

Pseudopisthogyne lepidocybii Yamaguti 1965. Hawaii. Gills.
Yamaguti (1968b).
Allopseudopisthogyne constricta Yamaguti 1965. Hawaii. Gills.
Yamaguti (1968b).
Pseudopisthognopsis lepidocybii Yamaguti 1965. Hawaii. Gills.
Yamaguti (1968b).

Sarda chiliensis - Pacific Bonito

SYNONYM - Sarda lineolata

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931. Larva.
Southern California. Viscera. Jensen¹⁸.

DIPHYLLOBOTHRIDAE

Diphyllobothrium sp. Plerocercoid. Peru. Cyst in body cavity.
Baer (1969).

COPEPODA

CALIGIDAE

Caligus bonito Wilson 1905. Panama Bay. Exterior. Wilson (1937a);
Southern California. Shiino (1960c); Mexico. Mouths. Causey
(1960).
Caligus mutabilis Wilson 1905. West Coast of Mexico. Causey (1960).

PSEUDOCYCNIDAE

Pseudocycnus appendiculatus Heller 1865. West Coast of Mexico.
Causey (1960).

DIGENEA

DIDYMOZOIDAE

Unitubulotestis maris Caballero and Caballero 1971. Baja California.
Gills. Caballero and Caballero (1971b).

Sarda chiliensis (Continued)

MONOGENEA

CAPSALIDAE

Caballerocotyla gregalis Wagner and Carter 1967. Southern California.
Gills. Wagner and Carter (1967).

HEXOSTOMATIDAE

Hexostoma sp. Eastern Pacific. Kunnenkeri and Martin (1963).

MAZOCRAEIDAE

Grubea sp. West Coast of Baja California. Gills. Wagner (1975).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Scomber japonicus - Chub Mackerel

SYNONYMS - Pneumatophorus japonicus, Pneumatophorus grex, Scomber colias,
Scomber diego

ACANTHOCEPHALA

POLYMORPHIDAE

Bolbosoma sp. Japan. Intestine. Ichihara et al. (1968).

RHADINORHYNCHIDAE

Rhadinorhynchus lintoni Cable and Linderoth 1963. Europe.
Golvan (1969).

Rhadinorhynchus cadenati (Golvan and Houin 1964) Golvan 1969.
Senegal. Golvan (1969).

Rhadinorhynchus pristis (Rudolphi 1802) Lühe 1911. Sea of Japan.
Intestine. Zhukov (1960a).

Rhadinorhynchus japonicus Fujita 1920. Japan. Intestine. Fujita
(1920).

Rhadinorhynchus seriolae (Yamaguti 1963) Golvan 1969. Japan.
Intestine. Ichihara et al. (1968) as Nipporhynchus s.

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Plerocercoid. Massachusetts. Intestine.
Linton (1941).

Scomber japonicus (Continued)

DASYRHYNCHIDAE

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931. Larva.
Southern California. Viscera. Jensen¹⁸.

PHYLLOBOTHRIIDAE

Rhinebothrium flexile Linton 1891. Larva. Massachusetts.
Viscera. Linton (1924).

PSEUDOPHYLLIDEA

Genera and species. Plerocercoid larva. California. Mesentery.
Dailey (1969a).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Sea of Japan.
Mesentery. Zhukov (1960a).

Nybelinia sp. Larva. South Atlantic. Body cavity. Solonchenko
(1968).

Tentacularia corphaenae Bosc 1802. Postlarva. Japan. Muscles,
sides of stomach. Dollfus (1942)

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. South Atlantic. Intestinal tract.
Solonchenko (1968); Sea of Japan. Zhukov (1960a).

TRYPANORHYNCHA

Genera and species. Plerocercus larva. California. Stomach,
intestine, caeca, mesentery, abdominal cavity. Dailey (1969a);
South Atlantic. Intestine. Solonchenko (1968).

COPEPODA

CALIGIDAE

Caligus pelamydis Krøyer 1863. Pacific. Gills, Kazachenko et al.
(1972).

LERNAEOPODIDAE

Clavellopsis saba Yamaguti 1939. Japan. Gills. Yamaguti (1939c).
Clavellisa scombri (Kurz 1877) Wilson 1915. Japan. Gills.
Yamaguti (1939c); South Atlantic. Gills. Solonchenko (1968) as
Clavella s.

PENNELLIDAE

Sarcotretes inflexus (Steenstrup and Lütken 1861) Richiardi
(1877) as Lernaeanicus.

Lernaeocera branchialis (Linnaeus 1767) Wilson 1917. Juvenile.
Pacific. Kabata (1960).

Scomber japonicus (Continued)

DIGenea

ACANTHOCOLPIDAE

Stephanostomum tristephanum McFarlane 1936. Sea of Japan.
Intestine. Zhukov (1960a).

Acanthocolpoides pauloi Travassos, Freitas and Bührnheim 1965.
Brazil. Intestine. Travassos et al. (1967).

COITOCAECIDAE

Nicolla extrema Travassos, Freitas and Bührnheim 1965. Brazil.
Intestine. Travassos et al. (1969).

DIDYMOZOIDAE

Didymozoon longicolle Ishii 1935. Pacific Coast of Japan. Gills.
Ishii (1935).

Didymozoon sp. Massachusetts. Gills. Linton (1940).

Nematobothrium filliforme Yamaguti 1934. Japan, Hawaii. Gills.
Yamaguti (1934a); South Atlantic. Solonchenko (1968).

Nematobothrium robustum Yamaguti 1970. Hawaii. Inner surface of
operculum. Yamaguti (1970).

Nematobothrium scombri (Taschenberg 1879) Ishii 1935. Japan.
Gills. Ishii (1935).

Allonematobothrioides scombri Yamaguti 1970. Hawaii. Esophagus,
gill arches. Yamaguti (1970).

FELLODISTOMATIDAE

Tergestia laticollis (Rudolphi 1819) Stossich 1899. Florida.
Yamaguti (1971); Japan. Small intestine. Yamaguti (1934a).

Tergestia acanthocephala (Stossich 1887) Stossich 1899. Yamaguti
(1971).

HEMIURIDAE

Lecithocladium excisum (Rudolphi 1819) Lühe 1901. Japan. Stomach.
Yamaguti (1934a); Italy. Looss (1907a); South Atlantic.
Solonchenko (1968).

Ectenurus lepidus Looss 1907. Mediterranean. Looss (1907a).

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Sea of Japan.
Intestine. Zhukov (1960a).

Dinurus scombri Yamaguti 1934. Japan. Stomach. Yamaguti (1934a).

Lecithochirium magnaporum Manter 1940. Southern California.
Stomach. Montgomery (1957).

Lecithocladium harpodontis Srivastava 1937. Brazil. Stomach,
intestine. Travassos et al. (1969).

Genera and species. California. Intestine. Dailey (1969a).

LEPOCREADIIDAE

Lepocreadium scombri (Yamaguti 1938) Ching 1960. Japan. Intestine.
Yamaguti²⁴ as Opechona s.

Scomber japonicus (Continued)

- Lepocreadium ghanensis Fischthal and Thomas 1970. Ghana. Small intestine. Fischthal and Thomas (1970a).
Neolepidapedon retrusum (Linton 1940) Sogandares-Bernal and Hutton 1960. Massachusetts. Linton (1940) as Lepocreadium r.
Cephalolepidapedon saba Yamaguti 1970. Hawaii. Intestine. Yamaguti (1970).
Opechona olssoni (Yamaguti 1934) Yamaguti 1938. Japan. Stomach, pyloric caeca, intestine. Ichihara et al. (1968).
Opechona orientalis (Layman 1930) Ward and Fillingham 1934. Central California. Chapa²³; South Atlantic. Solonchenko (1968); Immature. Japan. Stomach, intestine, pyloric caeca. Ichihara et al. (1968).
Opechona bacillaris (Molin 1859) Looss 1907. Ghana. Small intestine. Fischthal and Thomas (1970a); Sea of Japan. Zhukov (1960a).

MONOGENEA

DACTYLOGYRIDAE

- Microncotrematoides inversum (Goto and Kikuchi 1917) Yamaguti 1963. Japan. Gills. Ishii and Sawada (1938) as Dactylogyrus i.

GASTROCOTYLIDAE

- Gastrocotyle japonica Ishii and Sawada 1938. Japan. Ishii and Sawada (1938).

MAZOCRAEIDAE

- Kuhnia minor (Goto 1894) Sproston 1946. Mediterranean, Massachusetts, Japan, USSR. Gills. Sproston (1946).
Kuhnia scombri (Kuhn 1829) Sproston 1945. Japan. Gills. Ichihara et al. (1968); Hawaii. Yamaguti (1968b); South Atlantic. Solonchenko (1968).
Grubea pneumatophori Price 1961. Massachusetts. Gills. Linton (1940) as Pleurocotyle scombri.
Grubea cochlear Diesing 1858. South Atlantic. Gills. Solonchenko (1968).

NEMATODA

ANISAKIDAE

- *Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Sea of Japan. Intestine. Zhukov (1960a) as Contraecaecum a.
*Contraecaecum fabri (Rudolphi 1819). Sea of Japan. Intestine. Zhukov (1960a)
*Contraecaecum saba Yamaguti 1941. Japan. Yamaguti (1941).
Contraecaecum sp. Larva. California. Mesentery. Dailey (1969b); Japan. Kagei et al. (1970); South Atlantic. Solonchenko (1968).
Anisakis sp. Larva. California. All parts of body. Dailey (1969a); Japan. Saito et al. (1970); Mediterranean. Nikolaeva and Naidenova (1964); South Atlantic. Solonchenko (1968).

Scomber japonicus (Continued)

Phocanema sp. Larva. California. Intestinal wall, abdominal cavity.
Dailey (1969a); South Atlantic. Solonchenko (1968) as Porrocaecum
sp.

Raphidascaris sp. Immature. California. Mesenteric tissue surrounding
stomach. Dailey (1969a).

CAMALLANIDAE

Oncophora melanocephala (Rudolphi 1819) Baudin-Laurencin 1970. South
Atlantic. Intestine. Solonchenko (1968) as Camallanus m.

CAPILLARIIDAE

Capillaria sp. Eggs. Japan. Liver. Margolis (1970a).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa inconstans Jameson 1929. Central California. Gallbladder.
Jameson (1929).

PROTOZOA (SPOROZOA)

EIMERIIDAE

Eimeria pneumatophori Dogiel 1948. Peter the Great Gulf, USSR.
Liver. Pellerdy (1965).

Scomberomorus sierra - Sierra

COPEPODA

CALIGIDAE

Caligus mutabilis Wilson 1905. West Coast of Mexico. Causey (1960).
Caligus productus Dana 1853. Gulf of California. Causey (1960).

PSEUDOCYCNIDAE

Pseudocycnus buccata Wilson 1922. Gulf of California. Causey (1960).

DIGENEA

BUCEPHALIDAE

Bucephalus heterotentaculatus Bravo-Hollis and Sogandares-Bernal
1956. Mexico. Intestine. Bravo-Hollis and Sogandares-Bernal (1956).
Prosrhynchoides cybii (Park 1939) n. comb. Mexico. Intestine. Yamaguti
(1971).

Scomberomorus sierra (Continued)

HEMIURIDAE

Lecithochirium microstomum Chandler 1935. Mexico. Stomach.
Lamothe-Argumedo (1966).

Thunnus alalunga - Albacore

SYNONYMS - Germo alalunga, Orcynncus alalunga, Thynnus alalunga

ACANTHOCEPHALA

GORGORHYNCHIDAE

Gorgorhynchus sp. California-Oregon. Intestine. Margolis³.

POLYMORPHIDAE

Bolbosoma vasculosum (Rudolphi 1819). Larva. Muscles. Dollfus
(1952).

RHADINORHYNCHIDAE

Rhadinorhynchus pristis (Rudolphi 1802) Lühe 1911. Stomach.
Dollfus (1952).

CESTODA

HEPATOXYLIDAE

Hepatoxylon trichiuri (Holten 1802) Dollfus 1942. Postlarva.
Mediterranean. Sides of outside and inside of stomach. Dollfus
(1942).

SPHYRIOCEPHALIDAE

Sphyriocephalus tergestinus Pintner 1913. Postlarva. Stomach.
Dollfus (1952).

COPEPODA

CALIGIDAE

Caligus productus Dana 1853. Indian Ocean. Buccal cavity, external
surface. Lewis et al. (1969); Japan. Shiino (1959e).

Caligus germoi Pearse 1951. Bahama Island. Pearse (1951).

EURYPHORIDAE

Euryphorus brachypterus (Gerstaecker 1853) Heegaard 1972. Indian
Ocean. Gill cavity, external surface. Lewis et al. (1969);
California, Oregon. Margolis³ both as Elytrophora b.; Pacific
Ocean. Shiino (1965c) as E. hemiptera.

Thunnus alalunga (Continued)

Euryphorus nordmanni Edwards 1840. Japan. Inner surface of operculums. Shiino (1959e); New Zealand. Hewitt (1968b) both as E. nympha.

LERNAEPODIDAE

Brachiella thynni Cuvier 1829. Indian Ocean. External surface. Lewis et al. (1969).

LERNANTHROPIDAE

Lernanthropus hiatus Pearse 1951. Bahama Islands. Pearse (1951).

PENNELLIDAE

Pennella filosa (Linnaeus 1758). Brittany. Embedded in skin. Leigh-Sharpe (1931) as P. germonia.

Pennella orthagorisci Wright 1870. Southern California. Flesh. Wilson (1924); South Africa. Barnard (1955).

PSEUDOCYCNIDAE

Pseudocycnus appendiculatus Heller 1865. Indian Ocean. Gill cavity. Lewis et al. (1969); Massachusetts. Wilson (1922); New Zealand. Gills. Hewitt (1969b).

DIGENEA

DIDYMOZOIDAE

Didymocystis lanceolata Guiart 1938. Atlantic. Wide spread infection. Guiart (1938a).

Didymocystis macrorchis Guiart 1938. Atlantic. Wide spread infection. Guiart (1938a).

Didymocystis thynni (Taschenberg 1879) Dollfus 1926. Gills. Dollfus (1952).

Didymocystis wedli Ariola 1902. Gills. Dollfus (1952).

Didymocystis philobranchia Yamaguti 1970. Hawaii. Gills. Yamaguti (1970).

Platocystis alalongae Yamaguti 1938. Pacific, Japan. Skin. Yamaguti (1938); Oregon-California. Margolis³.

Nematobothrium latum Guiart 1938. Atlantic. Stomachal peritoneum. Guiart (1938a).

Metanematobothrium guernei (Moniez 1891) Yamaguti 1938. France, Japan. Gills, muscles. Yamaguti (1938); California-Oregon. Muscles. Margolis³.

Didymocystoides alalongae (Yamaguti 1938) Yamaguti 1970. Pacific Japan. Gill arches. Yamaguti (1938) as Didymocystis a.

Didymocystoides buccalis Yamaguti 1970. Hawaii. Oral cavities. Yamaguti (1970).

Didymocystoides opercularis (Yamaguti 1938) Yamaguti 1970. Japan. Operculums. Yamaguti (1938) as Didymocystis o.

Koellikeria bipartita (Wedl 1855) Ishii 1935. Stomach. Dollfus (1952).

Koellikeria orientalis (Yamaguti 1934) Ishii 1935. Yamaguti (1971).

Thunnus alalunga (Continued)

HIRUDINELLIDAE

- Hirudinella fusca (Bosc 1802) Manter 1926. Stomach. Dollfus (1952).
Hirudinella oxysoma Guiart 1938. Atlantic. Stomach. Guiart (1938a).
Hirudinella poirieri (Moniez 1891) Dollfus 1935. Atlantic. Stomach.
Dollfus (1935b).
Hirudinella spinulosa Yamaguti 1938. Japan. Stomach. Yamaguti
(1938); Gulf of Mexico. Nikolaeva and Parukhin (1968) as
Uroproctinella s.

SYNCOELIDAE

- Syncoelium filiferum (Leuckart in Sars 1885) Odhner 1911. California-
Oregon. Branchial chambers. Margolis³.

ISOPODA

AEGIIDAE

- Rocinela signata Schioedte and Meinert 1905. Gills. Richardson
(1905).

MONOGENEA

CAPSALIDAE

- Capsala thynni (Guiart 1938) Sproston 1946. Atlantic. Yamaguti
(1963b).
Capsala nozawae (Goto 1894) Price 1938. Hawaii. Gills.
Yamaguti (1968b).

GASTROCOTYLIDAE

- Areotestis sibi Yamaguti 1965. Hawaii. Gills. Yamaguti (1965b).

HEXOSTOMATIDAE

- Hexostoma sibi Yamaguti 1968. Hawaii. Gills. Yamaguti (1968b).

NEMATODA

ANISAKIDAE

- Anisakis sp. Larva. California-Oregon. Many parts of body infected.
Margolis³.
*Thynnascaris legendrei Dollfus 1933. Atlantic. Dollfus (1933);
Pacific. Stomach. Yamaguti (1941).
Contracaecum sp. Larva. New Zealand. Body cavity. Hewitt and
Hine (1972).

Thunnus albacares - Yellowfin Tuna

SYNONYMS - Neothunnus albacores, Neothunnus macropterus, Neothynnus albacores, Thynnus macropterus, Thunnus macropterus, Thynnus albacora

ACANTHOCEPHALA

POLYMORPHIDAE

Bolbosoma vasculosum (Rudolphi 1819). Larva. Gulf of Guinea. Visceral wall. Baudin-Laurencin (1971a).

RHADINORHYNCHIDAE

Rhadinorhynchus pristis (Rudolphi 1802) Lühe 1901. Gulf of Mexico. Intestine. Nikolaeva (1968b) as Nipporhynchus k.
Rhadinorhynchus cadenati (Golvan and Houin 1964) Golvan 1969. Senegal. Golvan (1969).

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus gracilis? (Rudolphi 1819) Pintner 1931. Ghana. Stomach. Bane (1969) "Bladder-like cysts similar to C. gracilis". Genera and species. Gulf of Mexico. Viscera. Ward (1962).
Dasyrhynchus talismani Dollfus 1935. Postlarva. Gulf of Guinea. Branchial vessels, hepatic mesenteries. Baudin-Laurencin (1971a).

GYMNORHYNCHIDAE

Gymnorhynchus gigas (Cuvier 1817). Larva. Gulf of Mexico. Blood vessels. Nikolaeva (1968b).

HEPATOXYLIDAE

Hepatoxylon sp. Gulf of Mexico. Viscera. Ward (1962).

LACISTORHYNCHIDAE

Grillotia sp. Larva. Gulf of Mexico. Intestine. Nikolaeva (1968b).

PHYLLOBOTHRIDAE

Echeneibothrium sp. Larva. Gulf of Mexico. Intestine. Nikolaeva (1968b).

Phyllobothrium caudatum (Zshokke and Heitz 1914). Larva. Gulf of Mexico. Viscera. Ward (1962) as Pelichnibothrium speciosum.

SPHYRIOCEPHALIDAE

Sphyriocephalus sp. Larva. Gulf of Mexico. Viscera. Ward (1962).

Thunnus albacares (Continued)

TENTACULARIIDAE

- Tentacularia coryphaenae Bosc 1802. Post larva. Gulf of Guinea.
Abdominal cavity. Baudin-Laurencin (1971a).
Tentacularia sp. Gulf of Mexico. Viscera. Ward (1962).
Nybelinia sp. Larva. Gulf of Mexico. Intestine. Nikolaeva
(1968b).

TETRAPHYLLIDEA

- Scolex pleuronectis Müller 1788. Gulf of Mexico. Intestine.
Nikolaeva (1968b).

TRYPANORHYNCA

- Genera and species. Larva. Gulf of Mexico. Stomach. Nikolaeva
(1968b).

COPEPODA

CALIGIDAE

- Caligus productus Dana 1853. Indian Ocean. Body surface, gill
cavity, buccal cavity. Lewis et al. (1969); East Pacific.
Shiino (1959d); Angola. Gills. Nunes-Ruivo (1956) as C. katuwo.
Caligus coryphaenae Steenstrup and Lütken 1861. Indian Ocean.
Body surface. Lewis et al. (1969); Japan. Shiino (1959d).
Caligus quadratus Shiino 1954. Japan. Inner surface of operculums.
Shiino (1954f).

EURYPHORIDAE

- Euryphorus nordmanni Edwards 1840. Japan. Inner surface of gill
operculums, body surface. Shiino (1954c) as E. nympa.
Euryphorus brachypterus (Gerstaecker 1853) Heegaard 1972. Indian
Ocean. Lewis et al. (1969); Japan. Inside gill operculums.
Shiino (1959e) as E. hemiptera.

LERNAEOPODIDAE

- Brachiella thynni Cuvier 1829. Hawaii. Axis of pectoral fins.
Shiino (1963a); Indian Ocean. Kirtisinghe (1935).

PENNELLIDAE

- Pennella sp. Hawaii. Stomach. Lewis (1967); Gulf of Guinea.
Branchial arches. Bane (1969).
Pennella crassicornis Steenstrup and Lütken 1861. Gulf of Guinea.
External surface. Baudin-Laurencin (1971a).
Pennella filosa (Linnaeus 1758). South Africa.
External surface. Baudin-Laurencin (1971a).

Thunnus albacares (Continued)

PSEUDOCYCNIDAE

Pseudocycnus appendiculatus Heller 1865. Pacific. Gill filaments. Shiino (1963a); Massachusetts, Mediterranean, Aden, Spain, etc. Wilson (1932); Indian Ocean. Gill cavity. Lewis et al. (1969); Angola. Nunes-Ruivo (1956).

DIGENEA

DIDYMOZOIDAE

Didymozoon longicolle Ishii 1935. Gulf of Mexico. Skin. Nikolaeva (1968b); Hawaii. Yamaguti (1971).
Didymocystis coatesi Nigrelli 1939. Gulf of Mexico. Nikolaeva (1968b) [=D. acanthocybii - Yamaguti (1971)].
Didymocystis wedli Ariola 1902. Gulf of Mexico. Nikolaeva (1968b).
Didymocystis sp. Central Pacific. Gills. Iverson and Hoven (1958).
Platocystis sp. Gulf of Mexico. Connective tissues. Nikolaeva (1968b).
Koellikeria globosa? Ishii 1935. Gulf of Guinea. Caecal mass. Bane (1969); Gulf of Mexico. Intestine. Nikolaeva (1968b).
Koellikeria abdominalis Yamaguti 1970. Hawaii. Body cavity. Yamaguti (1970).
Koellikeria bipartita (Wedl 1855) Ishii 1935. Gulf of Mexico. Nikolaeva (1968b) as Wedlia bipartita.
Koellikeria orientalis (Yamaguti 1934) Ishii 1935. Gulf of Mexico. Gills. Nikolaeva (1968b) as Wedlia o.
Atalostrophion sardae MacCallum 1915. Gulf of Mexico. Connective tissue. Nikolaeva (1968b).

GORGODERIDAE

Phyllodistomum thunni Baudin-Laurencin 1971. Gulf of Guinea. Kidneys, ureters, urinary bladder. Baudin-Laurencin (1971a).

HEMIURIDAE

Brachyphallus parvus (Manter 1947) Skrjabin and Guschanskaja 1955. Gulf of Mexico. Stomach. Nikolaeva (1968b).
Gonocerca sp. Gulf of Mexico. Nikolaeva (1968b).

HIRUDINELLIDAE

Hirudinella ventricosa (Pallas 1774) Baird 1853. Atlantic Ocean. Stomach. Watertor (1973); India. Raju (1962); Central Pacific. Iverson and Hoven (1958) all as H. marina.
Hirudinella fusca (Bosc 1802) Manter 1926. Gulf of Mexico. Stomach. Nikolaeva (1968b).
Hirudinella spinulosa Yamaguti 1938. Gulf of Mexico. Stomach. Nikolaeva (1968b) as Uroproctinella s.
Uroproctinella attenuata Hafeezullah 1971. Arabian Sea. Stomach. Hafeezullah (1971).

Thunnus albacares (Continued)

MONOGENEA

CAPSALIDAE

- Capsala thynni (Guiart 1938) Sproston 1946. Atlantic. Gulf of Mexico. Gills. Nikolaeva (1968b).
Capsala gotoi Yamaguti 1968. On carapace of caligoid copepod. Hawaii. Buccal cavity. Yamaguti (1968b).
Capsala neothynni Yamaguti 1968. Hawaii. Gills. Yamaguti (1968b).
Capsala nozawae (Goto 1894) Price 1938. Hawaii. On caligoid copepod. Buccal cavity. Yamaguti (1968b).
Caballerocotyla klawei Stunkard 1962. Mexico. Nasal capsules. Stunkard (1962); Gulf of Guinea, Peru, New York, Venezuela. Bane (1969); Hawaii. Yamaguti (1968b) as Nasicola k.
Caballerocotyla abidjani Bussieras and Baudin-Laurencin 1970. Gulf of Guinea. Inside branchial gill covers. Bussieras and Baudin-Laurencin (1970).
Caballerocotyla biparasitica (Goto 1894) Price 1960. Christmas Island; Japan. Copepod carapaces. Lamothe-Argumedo (1968); Hawaii. Yamaguti (1968b) as Capsala b.
Caballerocotyla verrucosa Bussieras 1972. Tropical eastern Atlantic. Tongues and palates. Bussieras (1972).

GASTROCOTYLIDAE

- Areotestis sibi Yamaguti 1965. Hawaii. Gills. Yamaguti (1968b).

HEXOSTOMATIDAE

- Hexostoma sibi Yamaguti 1968. Hawaii. Gills. Yamaguti (1968b).
Neohexostoma kawakawa Yamaguti 1968. Hawaii. Gills. Yamaguti (1968b).

NEMATODA

ANISAKIDAE

- Contracaecum sp. Larva. Gulf of Mexico. Stomach, intestine. Nikolaeva (1968b).

CAMALLANIDAE

- Oncophora melanocephala (Rudolphi 1819) Baudin-Laurencin 1970. Gulf of Mexico. Intestine. Nikolaeva (1968b) as Camallanus m.
Oncophora albacarensis Baudin-Laurencin 1972. Atlantic. Baudin-Laurencin (1972).

ICHTHYOSTRONGYLIDAE

- Ichthyostrongylus thynni Nikolaeva 1968. Gulf of Mexico. Nikolaeva (1968b).

Thunnus obesus - Bigeye Tuna

SYNONYMS - Parathunnus sibi, Parathunnus obesus

CESTODA

SPHYRIOCEPHALIDAE

Sphyriocephalus dollfusi Bussieras and Aldrin 1968. Atlantic.
Bussieras and Aldrin (1968).

COPEPODA

CALIGIDAE

Caligus coryphaenae Steenstrup and Lütken 1861. Indian Ocean.
Body surface. Lewis et al. (1969).

Caligus productus Dana 1853. Indian Ocean. Buccal cavity.
Lewis et al. (1969); Hawaii. Lewis (1967).

EURYPHORIDAE

Euryphorus brachypterus (Gerstaecker 1853) Heegaard 1972. Indian
Ocean. Body surface. Lewis et al. (1969); Japan. Inner surface
of gill operculums. Shiino (1954c) all as Elytrophora b.
Gloiopotes huttoni (Thomson 1890) Bassett-Smith 1899. Western
Pacific. Lewis (1967).

LERNAEOPODIDAE

Brachiella thynni Cuvier 1829. Hawaii. Axis of pectoral fins.
Shiino (1963a); Angola. Nunes-Ruivo (1956); Indian Ocean.
Lewis et al. (1969).

PSEUDOCYCNIDAE

Pseudocycnus appendiculatus Heller 1865. Indian Ocean. Gill
cavity. Lewis et al. (1969); Angola. Nunes-Ruivo (1956).

DIGenea

DIDYMOZOIDAE

Didymozoon longicolle Ishii 1935. Hawaii. Gills. Yamaguti (1970).

Dermatodidymocystis viviparoides Yamaguti 1970. Hawaii. Skin.
Yamaguti (1970).

Dermatodidymocystis vivipara Yamaguti 1970. Hawaii. Skin.
Yamaguti (1970).

Didymocystis bifurcata Yamaguti 1970. Hawaii. Gills. Yamaguti
(1970).

Didymocystis nasalis Yamaguti 1970. Hawaii. Nasal cavities.
Yamaguti (1970).

Didymocystis orbitalis Yamaguti 1970. Hawaii. Orbits. Yamaguti (1970).

Didymocystis philobranchia Yamaguti 1970. Hawaii. Forebody.
Yamaguti (1970).

Didymocystis philobranchiarca Yamaguti 1970. Hawaii. Gill arches.
Yamaguti (1970).

Thunnus obesus (Continued)

- Didymocystis poonui Yamaguti 1970. Hawaii. Palatal teeth.
Yamaguti (1970).
Didymocystoides bifasciatus Yamaguti 1970. Hawaii. Forebody.
Yamaguti (1970).
Didymocystoides pectoralis Yamaguti 1970. Hawaii. Pectoral fins.
Yamaguti (1970).
Univitellodidymocystis neothunni Yamaguti 1970. Hawaii. Forebody.
Yamaguti (1970).
Koellikeria pylorica Yamaguti 1970. Hawaii. Pyloric caeca.
Yamaguti (1970).
Koellikeria retrorbitalis Yamaguti 1970. Hawaii. Retroorbital
adipose tissues. Yamaguti (1970).
Koellikeria submaxillaris Yamaguti 1970. Hawaii. Submaxillary
region. Yamaguti (1970).
Koellikerioides internogastricus Yamaguti 1970. Hawaii. Muscular
layer of stomach. Yamaguti (1970).
Koellikerioides apicalis Yamaguti 1970. Hawaii. Gill rakers.
Yamaguti (1970).
Koellikerioides externogastricus Yamaguti 1970. Hawaii. Muscle
layers of stomach. Yamaguti (1970).
Koellikerioides intestinalis Yamaguti 1970. Hawaii. Surface
of small intestine. Yamaguti (1970).
Neonematobothrioides poonui Yamaguti 1970. Hawaii. Connective
tissues. Yamaguti (1970).
Opisthorchinematobothrium parathunni Yamaguti 1970. Hawaii.
Connective tissues. Yamaguti (1970).
Orbitonematobothrium perioculare Yamaguti 1970. Hawaii. Eyes.
Yamaguti (1970).

SANGUINICOLIDAE

- Cardicola ahi Yamaguti 1970. Hawaii. Vascular system. Yamaguti
(1970).

MONOGENEA

AXINIDAE

- Sibitrema poonui Yamaguti 1966. Hawaii. Gills. Yamaguti (1966).

CAPSALIDAE

- Capsala onchidiocotyle (Setti 1899) Price 1938. Angola. Silas (1967).
Capsala gotoi Yamaguti 1968. Hawaii. Gills. Yamaguti (1968b).
Capsala nozawae (Goto 1894) Price 1938. Hawaii. Gills. Yamaguti
(1968b).
Caballerocotyla biparasitica (Goto 1894) Price 1960. Hawaii.
On caligoid copepod. Yamaguti (1968b) as Capsala b.
Caballerocotyla klawei Stunkard 1962. Hawaii. Nasal cavities.
Yamaguti (1968b) as Nasicola k.; Tropical east Atlantic.
Bussieras (1972).
Caballerocotyla verrucosa Bussieras 1972. Eastern tropical
Atlantic. Buccal cavity, tongue, gills, etc. Bussieras (1972).

Thunnus obesus (Continued)

Caballerocotyla pseudomagronum Bussieras 1972. Tropical eastern Atlantic. Buccal cavity. Bussieras (1972).

GASTROCOTYLIDAE

Areotestis sibi Yamaguti 1965. Hawaii. Gills. Yamaguti (1968b).

HEXOSTOMATIDAE

Hexostoma grossum (Goto 1894) Sproston 1946. Central Pacific. Gills. Iverson and Hoven (1958); Japan. Ishii and Sawada (1938).
Hexostoma acutum (Goto 1894) Sproston 1946. Japan. Gills. Price (1961a).
Hexostoma sibi Yamaguti 1968. Hawaii. Yamaguti (1968b).
Neohexostoma robustum Price 1961. Tropical Pacific. Gills. Price (1961a).

Thunnus thynnus - Bluefin Tuna

SYNONYMS - Orcynchus thunnus, Scomber thunnus,
Thunnus orientalis, Thunnus saliens

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Neorhadinorhynchus nudus (Harada 1938) Yamaguti 1939. South China Sea. Intestine. Mamaev (1968b) as Echinorhynchus n.

POLYMORPHIDAE

Bolbosoma thunni Harada 1935. Japan. Intestine. Harada (1935).

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931. Plerocercoid. South China Sea. Intestine, liver. Mamaev (1968b); Mediterranean. Dollfus (1942); Massachusetts. Linton (1924) as Rhynchobothrium speciosum.

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Larva. Massachusetts. Intestine. Linton (1924) as Rhynchobothrium b.

PHYLLOBOTHRIIDAE

Phyllobothrium caudatum (Zschokke and Heitz 1914). Larva. Pacific coast of Japan. Yamaguti (1959b) as Pelichnibothrium speciosum.

Thunnus thynnus (Continued)

TENTACULARIIDAE

Tentacularia coryphaenae Bosc 1802. Post larvae. Gulf of Guinea.
Abdominal cavity. Baudin-Laurencin (1971a).

COPEPODA

CALIGIDAE

Caligus bonito Wilson 1905. Japan. Exterior. Shiino (1959a)
as C. kuroshio.
Caligus corphaenae Steenstrup and Lütken 1861. Japan. Exterior.
Shiino (1959e).
Caligus productus Dana 1853. Japan. Exterior. Shiino (1959e)

CECROPIDAE

Cecrops latreillii Leach 1816. Mediterranean. Hewitt (1968a).

EURYPHORIDAE

Euryphorus brachypterus (Gerstaecker 1853) Heegaard 1972. North
Sea. Gills. Mann (1970) as Elytrophora b.;
Japan. Shiino (1959e)
as Elytrophora hemiptera; Massachusetts. Gills. Wilson (1932)
as Elytrophora atlantica.

LERNAEOPODIDAE

Brachiella thynni Cuvier 1829. North Atlantic. Lewis (1967);
Gills. England. Wilson (1915).

PENNELLIDAE

Pennella filosa (Linneus 1758) Africa. Barnard
(1955).

PSEUDOCYCNIDAE

Pseudocycnus appendiculatus Heller 1865. Mediterranean. Delamare-
Deboutteville and Nunes-Ruivo (1958); North Sea. Gills. Brandes
(1955) as Pseudocycnus thynnus.

DIGENEA

BUCEPHALIDAE

Prosorhynchoides sibi (Yamaguti 1940) n. comb. Japan. Intestine. Fischthal
and Kuntz (1964) as Bucephaloides s.
Rhipidocotyle pentagonum (Ozaki 1924) Ekmann 1932. Japan.
Intestine. Yamaguti²⁴.

Thunnus thynnus (Continued)

DIDYMOZOIDAE

- Koellikeria bipartita (Wedl 1855) Ishii 1935. Atlantic. Wide spread infection in body. Ishii (1935).
Koellikeria orientalis (Yamaguti 1934) Ishii 1935. Japan. Gills, stomach. Yamaguti (1971).
Koellikeria globosa Ishii 1935. Japan. Gills. Ishii (1935).
Koellikeria reniformis Ishii 1935. Japan. Gills. Ishii (1935).
Coeliotrema thynni Yamaguti 1938. Japan. Outside pyloric caeca. Yamaguti (1938).
Didymocystis reniformis Ariola 1902. Yamaguti (1971).
Didymocystis wedli (Ariola 1902). Japan. Gills. Yamaguti (1934a); Mediterranean. Dollfus (1935b).
Didymocystis soleiformis Ishii 1935. Japan. Gills. Ishii (1935).
Didymocystis ovata Ishii 1935. Japan. Gills. Ishii (1935).
Didymocystis crassa Ishii 1935. Japan. Gills. Ishii (1935).
Didymozoon pretiosus Ariola 1902. Mediterranean. Gills, gill arches, skins. Dawes (1947).
Didymozoon filicolle Ishii 1935. Japan. Gills. Ishii (1935).
Didymozoon longicolle Ishii 1935. Japan. Gills. Ishii (1935).
Didymocylindrus filiformis Ishii 1935. Japan. Gills. Ishii (1935).
Didymoproblema fusiforme Ishii 1935. Japan. Gills. Ishii (1935).
Lobatozoum multisacculatum Ishii 1935. Japan. Gills. Ishii (1935).
Didymocystoides semiglobularis (Ishii 1935) Yamaguti 1970. Japan. Gills. Ishii (1935).
Nematobothrium sp. South China Sea. Gills, liver, body cavity. Mamaev (1968b).
Oesophagocystis dissimilis (Yamaguti 1938) Yamaguti 1970. South China Sea. Stomach. Mamaev (1968b) as Didymocystis d. "[Mamaev's] description and figures do not agree with mine" Yamaguti (1971).

HEMIURIDAE

- Aponurus lagunculus Looss 1907. South China Sea. Digestive tract. Mamaev (1968b).
Sterrhurus imocavus Looss 1907. South China Sea. Stomach. Mamaev (1968b) as Lecithochirium i.

HIRUDINELLIDAE

- Hirudinella spinulosa Yamaguti 1938. South China Sea. Stomach. Mamaev (1968b).
Hirudinella ventricosa (Pallas 1774) Baird 1853. Atlantic. Stomach. Watertor (1973) as H. marina.

MONOGENEA

CAPSALIDAE

- Capsala onchidiocotyle (Setti 1899) Price 1938. Dawes (1947).
Capsala interrupta (Monticelli 1891) Price 1938. Mediterranean. Yamaguti (1963b).
Capsala nozawae (Goto 1894) Price 1938. North Sea. British Isles. Yamaguti (1963b).

Thunnus thynnus (Continued)

Caballerocotyla albsmithi Dollfus 1962. California. Gills.
Dollfus (1962).

Caballerocotyla paucispinosa Mamaev 1968. South China Sea.
Gills, stomach. Mamaev (1968b).

Caballerocotyla magronum (Ishii 1936) Price 1960. Japan. Gills.
Ishii and Sawada (1938) as Tristoma m.

GASTROCOTYLIDAE

Metapseudaxine ventrosicula Mamaev 1967. South China Sea. Gills.
Mamaev (1968b).

HEXOSTOMATIDAE

Hexostoma grossum (Goto 1894) Sproston 1946. Japan. Gills.
Ishii and Sawada (1938) as Hexacotyle g.

Hexostoma albsmithi Dollfus 1962. California. Gills. Dollfus (1962).

Hexostoma thynni (Delaroche 1811) Rafinesque 1815. Naples, North
American Atlantic. Gills. Dawes (1947).

Hexostoma acutum (Goto 1894) Sproston 1946. Japan. Yamaguti
(1963b).

Hexostoma dissimile (Yamaguti 1937) Sproston 1946. Japan.
Gills. Yamaguti³³ as Hexacotyle d.

Neohexostoma thunninas (Parona and Perugia 1889) Price 1961.
Genoa. Gills. Dawes (1947) as Hexostoma t.

Neohexostoma extensicaudum (Dawes 1940) Price 1961. North Sea.
Gills. Dawes (1940) as Hexostoma e.

MAZOCRAEIDAE

Kuhnia thunni (Ishii, in Ishii and Sawada 1936) Sproston 1946.
Japan. Gills. Ishii and Sawada (1938) as Dactylocotyle t.

NEMATODA

ANISAKIDAE

*Contracecum cornutum (Stossich 1904). Norway. Berland (1961)

Contracecum sp. Larva. South China Sea. Intestine. Mamaev
(1968b).

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Adult,
juvenile. Norway. Berland (1961) as Contracecum a.

Anisakis sp. Larva. South China Sea. Intestine. Mamaev (1968b).

CAMALLANIDAE

Oncophora melanocephala (Rudolphi 1819) Baudin-Laurencin 1970.
Yamaguti (1961) as Camallanus m.

THELAZIIDAE

Heptachona caudata (Mamaev 1968) Chabaud 1975. South China Sea.
Intestine. Mamaev (1968c) as Pontochona c.

Thunnus thynnus (Continued)

PROTOZOA (MYXOSPORIDA)

TETRACAPSULIDAE

Kudoa clupei (Hahn 1917) Meglitsch 1947. Morocco. Muscles.
Dollfus (1955).

XIPHIIDAE -- Swordfishes

Xiphias gladius - Swordfish

SYNONYMS - Histiophorus gladius, Xiphias zeugopteri,
Istiophorus gladius

CESTODA

AMPHICOTYLIDAE

Pseudeubothrium xiphiados Yamaguti 1968. Hawaii. Intestine.
Yamaguti (1968a).

BOTHRIOCEPHALIDAE

Bothriocephalus manubriiformis (Linton 1889) Ariola 1900. Hawaii.
Intestine. Yamaguti (1968a); Rhode Island. Linton (1890) as
Dibothrium m.

DASYRHYNCHIDAE

Floriceps saccatus Cuvier 1817. Larva. France. Joyeux and Baer
(1936).

GYMNORHYNCHIDAE

Molicola uncinatus (Linton 1924). Larva. Massachusetts. Linton
(1924) as Rhynchobothrium u.

HEPATOXYLIDAE

Hepatoxylon trichuri (Holten 1802) Dollfus 1942. Postlarva.
Baltic and Mediterranean Sea, Atlantic Ocean. Gills. Dollfus
(1942).

LACISTORHYNCHIDAE

Grillotia erinacea (Van Beneden 1858) Guiart 1927. Larva.
Massachusetts. Viscera, peritoneum. Linton (1924) as
Rhynchobothrium imparispine.

Xiphias gladius (Continued)

OTOBOTHRIIDAE

Otobothrium dipsacum Linton 1897. Larva. Massachusetts. Viscera.
Linton (1924).

Otobothrium crenacolle Linton 1891. Larva. Massachusetts. On
pyloric caeca. Linton (1924).

TENTACULARIIDAE

Tentacularia coryphaenae Bosc 1802. Nova Scotia. Nigrelli (1938).

Nybelinia bisulcata (Linton 1889) Dollfus 1929. Larva.
Massachusetts. Viscera. Dollfus (1942).

Nybelinia lingualis (Cuvier 1817) Dollfus 1929. Larva.
Massachusetts. Viscera. Linton (1889) as Tetrarhynchus bisulcatus;
Mediterranean. Dollfus (1935b).

Nybelinia lamonteeae Nigrelli 1938. Nova Scotia. Nigrelli (1938).

TETRAPHYLLIDEA

Scolex polymorphus Rudolphi 1819. Massachusetts. Linton (1924).

TRIAENOPHORIDAE

Fistulicola plicatus (Rudolphi 1819) Lühe 1899. Massachusetts.
Rectum. Linton (1941).

TRYPANORHYNCHA

Dibothriorhynchus xiphiae MacCallum 1921. Massachusetts.
Yamaguti (1959b) [= D. attenuatus - Nigrelli (1938)]; [Species
Incertae sedis - Yamaguti (1959b)].

COPEPODA

CALIGIDAE

Caligus elongatus Nordmann 1832. New England. Exterior. Wilson
(1905b) as C. rapax.

Caligus chelifer Wilson 1905. Massachusetts. External surface.
Wilson (1905b).

Caligus coryphaenae Steenstrup and Lütkin 1861. Massachusetts. Gills.
Wilson (1924) as C. thynni.

EURYPHORIDAE

Gloiopotes watsoni Kirtisinghe 1934. India. Body surface.
Kurian (1955); Ceylon. Kirtisinghe (1934).

Gloiopotes huttoni (Thomson 1890) Bassett-Smith 1899. Peru.
Skin. Shiino (1963a) as G. longicaudatus; India. Body surface.
Rao (1951) as G. zeugopteri; Southern California. Wilson (1919)
as G. costatus.

Gloiopotes ornatus Wilson 1905. Massachusetts. Exterior.
Wilson (1905a).

Xiphias gladius (Continued)

LERNAEOPODIDAE

Thysanote ramosa (Richiardi 1880) Yamaguti 1963. Mediterranean.
Yamaguti (1963a).

PENNELLIDAE

Lernaeolophus sultanus (Edwards 1840) Heller 1865. Ceylon.
Kirtisinghe (1935).

Pennella sp. Balakrishnan (1969).

Pennella instructa Wilson 1917. Massachusetts. In flesh. Wilson
(1932); Japan. Yamaguti (1939b); Massachusetts. Wilson (1917).

Pennella filosa (Linnaeus 1758). Massachusetts.
Wilson (1917); Africa. Barnard (1955).

*Pennella costai Richiardi 1880. Mediterranean. Yamaguti (1963a).

Pennella crassicornis Steenstrup and Lütken 1861. Africa. Barnard
(1955).

PHILICHTHYIDAE

Philichthys xiphae Steenstrup 1864. Massachusetts. Canals of
head. Wilson (1932); New Zealand. Hewitt and Hine (1972).
Southern California. Schultze²⁵.

CRUSTACEA

LEPADIDAE

Conchoderma virgatum. On Pennella sp. Balakrishnan (1969).

DIGENEA

DIDYMOZOIDAE

MacCallumtrema xiphiados (MacCallum and MacCallum 1916) Yamaguti
1970. Massachusetts. Linton (1940) as Wedlia xiphiados;
Atlantic and Pacific. Abdominal muscle. Yamaguti (1970).

Reniforma multilobularis Yamaguti 1970. Hawaii. Gills. Yamaguti
(1970).

HIRUDINELLIDAE

Hirudinella ventricosa (Pallas 1774) Baird 1853. Atlantic. Manter
(1940b) as H. clavata.

Hirudinella fusca (Bosc 1802) Manter 1926. Massachusetts. Linton
(1940).

MONOGENEA

CAPSALIDAE

Tristoma coccineum Cuvier 1817. Northwest Atlantic. Gill arches,
inner surfaces of operculums, between filaments. Iles (1971);
Norway. Brinkman (1952); France. Euzet and Quignard (1961).

Xiphias gladius (Continued)

Tristoma integrum Diesing 1850. Northwest Atlantic. Between gill filaments. Iles (1971); Norway. Brinkman (1952); France. Euzet and Quignard (1961); Massachusetts. Linton (1940) as T. coccineum.

Tristoma papillosum Diesing 1836. Massachusetts. Gills. Linton (1940). [=T. coccineum - Price (1939)].

Tristoma adcooccineum Yamaguti 1968. Hawaii. Gills. Yamaguti (1968b).

Tristoma adintegrum Yamaguti 1968. Hawaii. Gills and buccal cavity. Yamaguti (1968b).

Capsala laevis (Verrill 1874) Johnston 1929. Massachusetts. Gills. Linton (1940).

NEMATODA

ANISAKIDAE

*Thynnascaris incurva (Rudolphi 1819) Hartwich 1957. Norway. Berland (1961); Japan. Machida (1971) both as Contracecaecum i.

PROTOZOA (MYXOSPORIDA)

TETRACAPSALIDAE

Kudoa maculoliquificiens (Matsumoto 1954) Kudo and Meglitsch in preparation. Japan. Muscles. Matsumoto (1954) as Chloromyxum m.

LUVARIDAE -- Louvars

Luvarus imperialis - Louvar

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium caudatum (Zschokke and Heitz 1914). Plerocercoid. Norway. Intestine. Brinkman (1962) as Pelichnibothrium speciosum.

COPEPODA

CECROPIDAE

Luetkenia elongata Shiino 1963. Baja California and California. Body surface. Shiino (1963b).

Luetkenia asterodermi Claus 1864. Gulf of Mexico. Gills. Topp and Girardin (1971)

DIGENEA

ACCACOELIIDAE

Tetrochetus rayneri (Nardo 1833) Looss 1912. Mediterranean. Intestine. Dollfus (1935b).

ISTIOPHORIDAE

Istiophorus platypterus - Sailfish

SYNONYMS - Histiophorus americanus, Histiophorus orientalis, Istiophorus americanus, Istiophorus greyi, Istiophorus orientalis

ACANTHOCEPHALA

RHADINORHYNCHIDAE

Rhadinorhynchus pristis (Rudolphi 1802) Lühe 1911. Gulf of Mexico. Nikolaeva (1968b) as Nipporhynchus katsuwonus.

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus manubriiformis (Linton 1889) Ariola 1900. Gulf of Mexico. Nikolaeva (1968b); Hawaii. Intestine. Yamaguti (1968a); Massachusetts. Linton (1941).

TENTACULARIIDAE

Tentacularia sp. Larva. Gulf of Mexico. Nikolaeva (1968b).

COPEPODA

CALIGIDAE

Caligus quadratus Shiino 1954. Japan. Body surface. Shiino (1959d).

EURYPHORIDAE

Gloiopotes huttoni (Thompson 1890) Bassett-Smith 1899. Indian Ocean. Cressey (1967b); Panama Bay. Wilson (1937a); Mexico. Causey (1960) previous two as G. costatus.

Gloiopotes watsoni Kirtisinghe 1934. Pacific coast of Mexico. Cressey (1967b).

Gloiopotes americanus Cressey 1967. Gulf of Mexico. Cressey (1967b).

PENNELLIDAE

Pennella filosa (Linnaeus 1758). Guaymas, Mexico. Causey (1960).

DIGenea

DIDYMOZOIDAE

Colocyntotrema sp. Gulf of Mexico. Nikolaeva (1968b).

HEMIURIDAE

Parahemiurus sardiniae Yamaguti 1934. Japan. Stomach. Yamaguti (1934a). Dinurus scombri Yamaguti 1934. Gulf of Mexico. Nikolaeva (1968b).

Istiophorus platypterus (Continued)

HIRUDINELLIDAE

Hirudinella ampullacea (Buttel-Reepen 1900) Skrjabin and Guschanska
1957. Gulf of Mexico. Nikolaeva (1968b).

Hirudinella spinulosa Yamaguti 1938. Gulf of Mexico. Nikolaeva
(1968b) as Uroproctinella s.

Hirudinella ventricosa (Pallas 1774) Baird 1853. Florida. Stomach.
Ward (1954) as H. marina.

ISOPODA

CYMOTHOIDAE

Nerocila californica Schioedte and Meinert 1881. West coast of
Mexico. Gills. Brusca (1977). Speculative host.

MONOGENEA

CAPSALIDAE

Tristomella pricei (Hidalgo 1959) Price 1960. Panama Bay. Pritchard
(1961).

Caballerocotyla marielenae Lamothe-Argumedo 1968. Oaxaca, Mexico.
Gills. Lamothe-Argumedo (1968).

Capsala ovalis (Goto 1894) Price 1938. Hawaii. Gill plates.
Yamaguti (1968b).

Capsala sp. Gulf of Mexico. Nikolaeva (1968b).

Benedenia sp. Gulf of Mexico. Nikolaeva (1968b).

Capsaloides istiophori Yamaguti 1968. Hawaii. Gills. Yamaguti
(1968b).

Capsaloides sinuatus (Goto 1894) Price 1938. Japan. Gills.
Silas (1967).

NEMATODA

ANISAKIDAE

* Thynnascaris histiophori (Yamaguti 1935). Miami, Florida. Stomach.
Ward (1954); Japan. Yamaguti (1961).

* Thynnascaris incurva (Rudolphi 1819) Hartwich 1957. Gulf of Mexico.
Nikolaeva (1968b) as Contracecum i.

Makaira indica - Black Marlin

COPEPODA

EURYPHORIDAE

Gloiopotes huttoni (Thomson 1890) Bassett-Smith 1899. Socorro
Island, Mexico. Skin. Shiino (1963a) as G. longicaudatus; Indian
Ocean. Cressey (1967b).

Makaira indica (Continued)

MONOGENEA

CAPSALIDAE

Capsala laevis (Verrill 1874) Johnston 1929. India. Silas (1967).

Makaira nigricans - Blue Marlin

SYNONYMS - Makaira ampla, Makaira ampla marlina, Makaira marlina

CESTODA

TENTACULARIIDAE

Nybelinia sp. Larva. Gulf of Mexico. Nikolaeva (1968b).

Tentacularia sp. Larva. Gulf of Mexico. Nikolaeva (1968b).

TRYPANORHYNCHA

Genera and species. Larva. Gulf of Mexico. Nikolaeva (1968b).

COPEPODA

CALIGIDAE

Lepeophtheirus eminens Wilson 1944. Baja California. Exterior.
Wilson (1944).

EURYPHORIDAE

Gloiopotes ornatus Wilson 1905. Western North Atlantic, Caribbean.
Cressey (1967b).

Gloiopotes watsoni Kirtisinghe 1934. Indian Ocean, Peru, Hawaii.
Cressey (1967b).

Gloiopotes huttoni (Thomson 1890) Bassett-Smith 1899. New Zealand.
Body surface. Hewitt (1964b).

DIGENEA

DIDYMOZOIDAE

Colocyntotrema sp. Gulf of Mexico. Nikolaeva (1968b).

HIRUDINELLIDAE

Hirudinella fusca (Bosc 1802) Manter 1926. Gulf of Mexico.
Nikolaeva (1968b).

Hirudinella spinulosa Yamaguti 1938. Gulf of Mexico. Nikolaeva
(1968b) as Uroproctinella s.

Makaira nigricans (Continued)

MONOGENEA

CAPSALIDAE

Capsala poeyi (Vigueras 1935) Price 1938. Gulf of Mexico.

Nikolaeva (1968b); Central Pacific - external surface.

Iverson and Hoven (1958).

Capsala ovalis (Goto 1894) Price 1938. Hawaii. Gill operculums.

Yamaguti (1968b).

Capsaloides sinuatus (Goto 1894) Price 1938. Hawaii. Gills.

Yamaguti (1968b).

Tetrapturus angustirostris - Shortbill Spearfish

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus manubriformis (Linton 1889) Ariola 1900. Hawaii.

Intestine. Yamaguti (1968a).

MONOGENEA

CAPSALIDAE

Capsala ovalis (Goto 1894) Price 1938. Hawaii. Gill plates.

Yamaguti (1968b).

Capsaloides cristatus Yamaguti 1968. Hawaii. Gills. Yamaguti (1968b).

Capsaloides nairagi Yamaguti 1968. Hawaii. Gills. Yamaguti (1968b).

Capsaloides tetrapteri Yamaguti 1968. Hawaii. Gills. Yamaguti (1968b).

Tetrapturus audax - Striped Marlin

SYNONYMS - Makaira audax, Makaira mitsukurii

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus manubriformis (Linton 1899) Ariola 1900. Hawaii.

Intestine. Yamaguti (1968a).

COPEPODA

EURYPHORIDAE

Gloiopotes huttoni (Thomson 1890) Bassett-Smith 1899. Indian Ocean,
Peru. Cressey (1967b).

Gloiopotes watsoni Kirtisinghe 1934. Indian Ocean. Cressey (1967b).

Gloiopotes ornatus Wilson 1905. Brazil. Yamaguti (1963a).

Tetrapturus audax (Continued)

PENNELLIDAE

Pennella sp. Balakrishnan (1969).

CRUSTACEA

LEPADIDAE

Conchoderma virgatum. Balakrishnan (1969).

MONOGENEA

CAPSALIDAE

Capsala ovalis (Goto 1894) Price 1938. Hawaii. Gill plates.
Yamaguti (1968b).

Capsala pricei Hidalgo Escalante 1958. West coast of Mexico.
Exterior. Hidalgo Escalante (1958).

Capsaloides istiophori Yamaguti 1968. Hawaii. Gills. Yamaguti
(1968b).

Capsaloides sinuatus (Goto 1894) Price 1938. Hawaii. Gills.
Yamaguti (1968b).

NEMATODA

ANISAKIDAE

Contracaecum sp. Central Pacific. Yoshihara and Nagasaki (1973).

ICOSTEIDAE -- Ragfishes

Icosteus aegnigmaticus - Ragfish

SYNONYM - Acrotus willoughbyi

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Margolis³.

SCORPAENIDAE -- Scorpionfishes

Scorpaena guttata - California Scorpionfish

COPEPODA

BOMOLOCHIDAE

Holobomolochus spinulus (Cressey 1969) Kabata 1971. Southern
California. Gill cavity. Cressey (1969b) as Bomolochus s.

Scorpaena guttata (Continued)

Holobomolochus attenuatus (Wilson 1913) Vervoort 1969. Puerto Penasco, Mexico. Causey (1960) as Bomolochus a.

CALIGIDAE

Lepeophtheirus pravipes Wilson 1912. Central California. Exterior. Wilson (1935b).

Lepeophtheirus brachyurus Heller 1865. Southern California. Exterior. Wilson (1908a).

CHONDRACANTHIDAE

Pseudodiocus scorpaenus Ho 1972. Southern California. Gill cavity. Ho (1972b).

Chondracanthus gracilis Fraser 1920. Central California. Gills. Wilson (1935b).

DIGENEA

OPECOELIDAE

Helicometrina elongata Noble and Park 1937. Southern California. Intestine. Montgomery (1957).

HIRUDINOIDEA

PISCICOLIDAE

Australobdella californiana Bureson 1977. Southern California. Body surface. Bureson (1977a).

ISOPODA

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. California. Turner et al. (1969).

Nerocila californica Schioedte and Meinert 1881. California. Fins. Richardson (1905).

MONOGENEA

CAPSALIDAE

Trochopus sprostoni Arai and Koski 1964. Southern California. Gills. Arai and Koski (1964).

TROCHOPODINAE

Genera and species. Eastern Pacific Ocean. Kunnenkeri and Martin (1963).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Scorpaena guttata (Continued)

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa hopkinsi Jameson 1929. Southern California. Gallbladder.
Jensen¹⁸.

MYXIDIIDAE

Myxidium incurvatum Thélohan 1892. Southern California. Gallbladder.
Jensen¹⁸.

Sebastes sp.

SYNONYMS - Sebastodes sp., Sebastodis sp.

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus occidentalis (Linton 1898) Lühe 1899. British
Columbia. Pyloric caeca. Wardle (1932).

COPEPODA

CALIGIDAE

Caligus clemensi Parker and Margolis 1964. British Columbia.
Fraser (1920) as C. gurnardi.

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum casum (Linton 1910) McFarlane 1934. British Columbia.
McFarlane (1936). [Likely S. californicum - Sekerak and Arai
(1977)].

HEMIURIDAE

Sterrhurus monticelli (Linton 1898) Linton 1910. Central California.
Stomach. Nahhas¹⁰.

LEPOCREADIIDAE

Opechona orientalis (Layman 1930) Ward and Fillingham 1934. Central
California. Intestine. Chapa²³.

Opechona bacillaris (Molin 1859) Looss 1907. British Columbia.
McFarlane (1936) as Pharyngora b.

Opechona occidentalis Montgomery 1957. British Columbia. Intestine.
McFarlane (1936); Central California. Chapa²³.

Sebastes sp. (Continued)

MONORCHIIDAE

Telolecithus pugetensis Lloyd and Guberlet 1932. Northern California.
Intestine. Chapa²³.

OPECOELIDAE

Podocotyle abitionis McFarlane 1936. British Columbia. Intestine.
McFarlane (1936).

Opecoelus noblei Banerjee 1965. Central California. Intestine.
Banerjee (1965)

SANGUINICOLIDAE

Aporocotyle macfarloni Holmes 1971. British Columbia. McFarlane
(1936) as A. simplex.

ZOOGONIDAE

Deretrema pooli Annereaux 1947. Southern California. Intestine,
bile duct. Chapa²³.

Deretrema cholaeum McFarlane 1936. British Columbia. Gallbladder.
McFarlane (1936).

Sebastes aleutianus - Rougheye Rockfish

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Bering Sea. Mamaev
(1965); Northeastern Pacific. Sekerak and Arai (1977).

POLYMORPHIDAE

Corynosoma reductum (Von Lindstow 1905) Railliet and Henry 1907.
Larva. Bering Sea. Mamaev (1965).

Corynosoma sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

CESTODA

LACISTORHYNCHIDAE

Grillotia erinacea (van Beneden 1858) Guiart 1927. Larva. Bering Sea.
Mamaev (1965)

PSEUDOPHYLLIDEA

Genera and species. Larva. Bering Sea. Mamaev (1965).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific.
Sekerak and Arai (1977).

Sebastes aleutianus (Continued)

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Larva. Bering Sea. Mamaev (1965).

COPEPODA

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. Northeastern Pacific.
Sekerak and Arai (1977).

Chondracanthus triventricosus Sekerak 1970. Northeastern Pacific.
Sekerak and Arai (1977).

LERNAEOPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. Northeastern
Pacific. Sekerak and Arai (1977) as Brachiella r.

Clavella parva Wilson 1912. Northeastern Pacific. Sekerak and
Arai (1977).

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. Northeastern Pacific. Sekerak
and Arai (1977).

PHILICHTHYIDAE

Sarcotaces arcticus Collett 1874. Northeastern Pacific. Sekerak
and Arai (1977).

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak
and Arai (1977).

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum dentatum (Linton 1900) Linton 1940. Northeastern
Pacific. Sekerak and Arai (1977).

ALLOCREADIIDAE

Anisorchis opisthorchis Polyansky 1955. Bering Sea. Mamaev (1965).

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Northeastern
Pacific. Sekerak and Arai (1977).

FELLODISTOMATIDAE

Fellodistomum furcigerum (Olsson 1867) Yamaguti 1954. Bering Sea.
Mamaev (1965) as Steringophorus f.

Sebastes aleutianus (Continued)

HEMIURIDAE

- Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific. Stomach. Sekerak and Arai (1977).
Lecithophyllum botryophorum (Olsson 1886) Odhner 1905. Northeastern Pacific. Stomach. Sekerak and Arai (1977).
Lecithophyllum sphaerolecithum (Manter 1925) Odhner 1927. Bering Sea. Mamaev (1965).
Dinosoma tortum Yamaguti 1938. Bering Sea. Mamaev (1965).
Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Bering Sea. Mamaev (1965).
Lecithochirium platessae Mamaev, Parukhin and Baeva. 1963. Bering Sea. Mamaev (1965).

LEPOCREADIIDAE

- Opechona alaskensis Ward and Fillingham 1934. Bering Sea. Mamaev (1965).
Neolepidapedon sebastisci (Yamaguti 1938) Manter 1954. Northeastern Pacific. Sekerak and Arai (1977).

OPECOELIDAE

- Neohelicometra sebastis Sekerak and Arai 1974. Northeastern Pacific. Pyloric caeca, intestine. Sekerak and Arai (1974).
Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).
Podocotyle reflexa (Creplin 1825) Odhner 1905. Bering Sea. Mamaev (1965).
Podocotyle atomon (Rudolphi 1802) Odhner 1905. Bering Sea. Mamaev (1965).

SANGUINICOLIDAE

- Psettarium sebastodorum Holmes 1971. Northeastern Pacific. Sekerak and Arai (1977).

ZOOGONIDAE

- Steganoderma formosum Stafford 1904. Northeastern Pacific. Sekerak and Arai (1977).

MONOGENEA

CAPSALIDAE

- Trochopus spp. Northeast Pacific. Gills. Sekerak and Arai (1977).
Benedenia derzhavini (Layman 1930) Meserve 1938. Northeast Pacific. Gills. Sekerak and Arai (1977)

NEMATODA

ANISAKIDAE

- Contracaecum sp. Larva. Northeast Pacific. Digestive tract. Sekerak and Arai (1977).

Sebastes aleutianus (Continued)

- *Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeast Pacific. Sekerak and Arai (1977).
Anisakis sp. Larva. Bering Sea. Mamaev (1965).

CUCULLANIDAE

- Cucullanus sp. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes alutus - Pacific Ocean Perch

SYNONYM - Sebastodes alutus

ACANTHOCEPHALA

ECHINORHYNCHIDAE

- Echinorhynchus gadi Zoega in Müller 1776. Northeastern Pacific. Sekerak and Arai (1977).

POLYMORPHIDAE

- Corynosoma villosum Van Cleave 1953. Cystacanth. Northeastern Pacific. Mesentery. Sekerak and Arai (1973).
Corynosoma reductum (Von Lindstow 1905) Railliet and Henry 1907. Bering Sea. Mamaev (1965).

CESTODA

BOTHRIOCEPHALIDAE

- Bothriocephalus sp. Larva. British Columbia. Arai (1969b).
Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. Northeastern Pacific. Pyloric caeca. Sekerak and Arai (1973).

PHYLLOBOTHRIDAE

- Phyllobothrium sp. Larva. Northeastern Pacific. Gallbladder, intestine. Sekerak and Arai (1973).

TENTACULARIIDAE

- Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific. Stomach wall, mesentery. Sekerak and Arai (1973).

TETRAPHYLLIDEA

- Scolex pleuronectis Müller 1788. Bering Sea. Mamaev (1965).

COPEPODA

CALIGIDAE

- Lepeophtheirus oblitus Kabata 1973. British Columbia. External surface. Lee (1975).

Sebastes alutus (Continued)

CHONDRACANTHIDAE

- Chondracanthus pinguis Wilson 1912. British Columbia. Gill cavity. Kabata (1968); Oregon. Sekerak (1970).
Chondracanthus triventricosus Sekerak 1970. British Columbia. Nasal cavities. Sekerak (1970).
Chondracanthus sp. Oregon. Gill cavity, nostrils. Millemann³⁴.

LERNAEOPODIDAE

- Clavella parva Wilson 1912. British Columbia. Fins. Sekerak (1970).
Neobrachiella robusta (Wilson 1912) Kabata 1979. British Columbia. Kabata (1970c) as Brachiella r.
Clavellopsis sp. Oregon. Gills. Millemann³⁴.

NAOBRANCHIIDAE

- Naobranchia occidentalis Wilson 1915. Northeastern Pacific. Sekerak and Arai (1977).

PENNELLIDAE

- Peniculus sp. Northeastern Pacific. Sekerak and Arai (1977).
*Haemobaphes theragrae Yamaguti 1939. Northeastern Pacific. Gills. Sekerak and Arai (1977).

PHILICHTHYIDAE

- Colobomatus kyphosus Sekerak 1970. British Columbia. Cephalic sensory canal systems. Sekerak (1970).
Sarcotaces arcticus Collett 1874. British Columbia. Cysts in anal region of abdominal cavity. Sekerak (1970).

DIGenea

BUCEPHALIDAE

- Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Metacercaria. Northeastern Pacific. Pyloric caeca, intestine. Sekerak and Arai (1973).
Prosorhynchus sp. Larva. Northeastern Pacific. Cyst in muscles. Liston et al. (1960).

FELLODISTOMATIDAE

- Fellodistomum sebastodis Yamaguti and Matumara 1942. Northeastern Pacific. Gallbladder. Sekerak and Arai (1973).

HEMIURIDAE

- Lecithophyllum sphaerolecithum (Manter 1925) Odhner 1927. Bering Sea. Mamaev (1965).
Lecithophyllum botryophorum (Olsson 1886) Odhner 1905. Northeastern Pacific. Stomach. Sekerak and Arai (1973).

Sebastes alutus (Continued)

- Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Northeastern Pacific. Sekerak and Arai (1977).
Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific. Stomach. Sekerak and Arai (1973).
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Northeastern Pacific. Stomach. Sekerak and Arai (1973).

LEPOCREADIIDAE

- Opechona alaskensis Ward and Fillingham 1934. Northeastern Pacific. Pyloric caeca, intestine. Sekerak and Arai (1973).
Opechona occidentalis Montgomery 1957. Northeastern Pacific. Intestine. Sekerak and Arai (1977).
Neolepidapedon sebastisci (Yamaguti 1938) Manter 1954. Northeastern Pacific. Sekerak and Arai (1977).
Lepidapedon gadi (Yamaguti 1934) Acena 1947. Bering Sea. Mamaev (1965).

OPECOELIDAE

- Neohelicometra sebastis Sekerak and Arai 1974. Northeastern Pacific. Pyloric caeca, intestine. Sekerak and Arai (1974).
Podocotyle sp. Immature. British Columbia. Arai (1969b).
Helicometrina sp. Northeastern Pacific. Pyloric caeca, intestine. Sekerak and Arai (1973).
Podocotyle atomon (Rudolphi 1802) Odhner 1905. Bering Sea. Mamaev (1965).
Podocotyle reflexa (Creplin 1825) Odhner 1905. Bering Sea. Mamaev (1965).

SANGUINICOLIDAE

- Psettarium sebastodorum Holmes 1971. Northeast Pacific. Heart. Sekerak and Arai (1973).

SYNCOELIDAE

- Syncoelium filiferum (Leuckart in Sars 1885) Odhner 1911. Northeastern Pacific. Sekerak and Arai (1977).

ZOOGONIDAE

- Steganoderma formosum Stafford 1904. Bering Sea. Mamaev (1965).

MONOGENEA

ACANTHOCOTYLIDAE

- Pseudacanthocotyla williamsi (Price 1938) Yamaguti 1963. Northeastern Pacific. Gills. Sekerak and Arai (1973).

CAPSALIDAE

- Trochopus trituba (Pratt and Aldrich 1953) Bravo-Hollis 1958. Oregon. Pratt and Aldrich (1953) as Megalocotyle t.

Sebastes alutus (Continued)

Trochopus marginata (Folda 1928) Price 1936. Northeastern Pacific.
Gills. Sekerak and Arai (1973).
Trochopus sp. Northeastern Pacific. Sekerak and Arai (1977).

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Northeastern Pacific. Gills.
Sekerak and Arai (1973).
Microcotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).
*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeastern
Pacific. Sekerak and Arai (1977).
Contracecum sp. Northeastern Pacific. Stomach wall, mesentery.
Sekerak and Arai (1973).
Phocanema decipiens (Krabbe 1878) Myers 1959. Larva. Pacific
Northwest. Flesh. Liston et al. (1960) as Porrocaecum d.

CAPILLARIIDAE

Capillaria sp. Northeastern Pacific. Stomach. Sekerak and Arai
(1977).

CUCULLANIDAE

Cucullanus sp. Northeastern Pacific. Intestine. Sekerak and
Arai (1977).
Cucullanus heterochrous (Von Lindstow 1905) Lühe 1904. Kamchatka,
USSR. Mamaev (1965).

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. Northeastern Pacific. Stomach.
Sekerak and Arai (1977).

Sebastes atrovirens - Kelp Rockfish

SYNONYM - Sebastodes atrovirens

COPEPODA

CALIGIDAE

Caligus hobsoni Cressey 1969. Southern California. Hobson (1971).

Sebastes atrovirens (Continued)

DIGenea

HEMIURIDAE

Sterrhurus exodicus (McFarlane 1936) Yamaguti 1958. Northern California. Stomach. Chapa²³ as Separogermiductus e.

LEPOCREADIIDAE

Opechona occidentalis Montgomery 1957. Southern California. Intestine. Montgomery (1957).

OPECOELIDAE

Opecoelus minor Yamaguti 1934. Southern California. Intestine. Yamaguti (1971).

Pellamyzon sebastodis Montgomery 1957. Southern California. Intestine. Montgomery (1957).

Helicometrina nimia Linton 1910. Southern California. Intestine. Montgomery (1957); Northern California. Chapa²³.

SANGUINICOLIDAE

Psettarium sebastodorum Holmes 1971. Southern California. Holmes³⁵.
Aporocotyle macfarlani Holmes 1971. Southern California. Holmes³⁵.

ISOPODA

Genera and species. Gnathiid larva. Southern California. Body surface. Hobson (1971).

MONOGENEA

CAPSALIDAE

Trochopus marginata (Folda 1928) Price 1936. Southern California. Holmes³⁵.

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Southern California. Gills. Crane (1972).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Sebastes auriculatus - Brown Rockfish

SYNONYM - Sebastodes auriculatus

COPEPODA

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. British Columbia. Gill cavity.
Kabata (1968).

LERNAEOPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979 . British Columbia.
Kabata (1970c); Fraser (1920) as

Clavellopsis r.

Clavella parva Wilson 1912. British Columbia. Dorsal fin.
Wilson (1912b).

DIGENEA

SANGUINICOLIDAE

Psettarium Sebastodorum Holmes 1971. Southern California. Holmes³⁵.

MONOGENEA

CAPSALIDAE

Trochopus marginata (Folda 1928) Price 1936. Southern California.
Holmes³⁵.

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Northern California. Gills.
Crane (1972); Southern California. Holmes³⁵.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).
Phocanema sp. Larva. Southern California. Dailey et al. (in press).

Sebastes aurora - Aurora Rockfish

SYNONYM - Sebastodes aurora

COPEPODA

LERNAEOPODIDAE

Brachiella robusta (Wilson 1912) Kabata 1970. British Columbia.
Kabata (1970c).

Sebastes aurora (Continued)

DIGenea

Sanguinicolidae

Psettarium sebastodorum Holmes 1971. Washington, British Columbia.
Heart, bulbus arteriosus, ventral aorta. Holmes (1971b).

Sebastes babcocki - Redbanded Rockfish

ACANTHOCEPHALA

Echinorhynchidae

Echinorhynchus gadi Zoega in Müller 1776. Northeastern Pacific.
Sekerak and Arai (1977).

CESTODA

Bothriocephalidae

Bothriocephalus sp. Northeastern Pacific. Sekerak and Arai (1977).

COPEPODA

Chondracanthidae

Chondracanthus pinguis Wilson 1912. Northeastern Pacific. Sekerak
and Arai (1977).
Chondracanthus triventricosus Sekerak 1970. Northeastern Pacific.
Sekerak and Arai (1977).

Lernaeopodidae

Neobrachiella robusta (Wilson 1912) Kabata 1979. Northeastern
Pacific. Sekerak and Arai (1977) as Brachiella r.
Clavella parva Wilson 1912. Northeastern Pacific. Fins. Sekerak
and Arai (1977).

Pennellidae

Peniculus sp. Northeastern Pacific. Sekerak and Arai (1977).

Philichthyidae

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak
and Arai (1977).

DIGenea

Acanthocolpidae

Stephanostomum dentatum (Linton 1900) Linton 1940. Northeastern
Pacific. Sekerak and Arai (1977).

Sebastes babcocki (Continued)

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Northeastern Pacific. Sekerak and Arai (1977).

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific. Sekerak and Arai (1977).

LEPOCREADIIDAE

Neolepidapedon sebastisci (Yamaguti 1938) Manter 1954. Northeastern Pacific. Sekerak and Arai (1977).

OPECOELIDAE

Neohelicometra sebastis Sekerak and Arai 1974. Northeastern Pacific. Sekerak and Arai (1977).
Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

SANGUINICOLIDAE

Psettarium sebastodorum Holmes 1971. Northeastern Pacific. Sekerak and Arai (1977).

MONOGENEA

CAPSALIDAE

Trochopus sp. Northeastern Pacific. Sekerak and Arai (1977).

NEMATODA

ANISAKIDAE

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeastern Pacific. Sekerak and Arai (1977).
Contracaecum spp. Larva. Northeastern Pacific. Sekerak and Arai (1977).
Anisakis sp. Larva. Southern California. Viscera. Jensen¹⁸.

CAPILLARIIDAE

Capillaria sp. Northeastern Pacific. Sekerak and Arai (1977).

CUCULLANIDAE

Cucullanus sp. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes borealis - Shortraker Rockfish

SYNONYM - Sebastes introniger

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zøega in Müller 1776. Bering Sea. Mamaev (1965);
Northeastern Pacific. Sekerak and Arai (1977).

POLYMORPHIDAE

Corynosoma sp. Northeastern Pacific. Sekerak and Arai (1977).
Corynosoma reductum (Von Lindstow 1905) Railliet and Henry 1907. Larva.
Bering Sea. Mamaev (1965).

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Northeastern Pacific. Sekerak and Arai (1977).
Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. Bering Sea.
Mamaev (1965).

LACISTORHYNCHIDAE

Grillotia erinacea (Van Beneden 1858) Guiart 1927. Larva. Bering
Sea. Mamaev (1965).

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Northeastern Pacific. Sekerak and Arai (1977).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Bering Sea. Mamaev (1965);
Northeastern Pacific. Sekerak and Arai (1977).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Bering Sea. Mamaev (1965).

COPEPODA

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. Northeastern Pacific. Sekerak
and Arai (1977).

LERNAEOPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. Northeastern Pacific.
Sekerak and Arai (1977) as Brachiella r.

Sebastes borealis (Continued)

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. Northeastern Pacific.
Sekerak and Arai (1977).

PHILICHTHYIDAE

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak
and Arai (1977).

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum baccatum (Nicolli 1907) Manter 1934. Bering Sea.
Mamaev (1965).

Stephanostomum dentatum (Linton 1900) Linton 1940. Northeastern
Pacific. Sekerak and Arai (1977).

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Bering Sea.
Mamaev (1965); Northeastern Pacific. Sekerak and Arai (1977).

FELLODISTOMATIDAE

Fellodistomum furcigerum (Olsson 1867) Yamaguti 1954. Bering Sea.
Mamaev (1965) as Stringophorus e.

HEMIURIDAE

Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Bering Sea.
Mamaev (1965).

Derogenes varicus (Müller 1784) Looss 1901. Bering Sea. Mamaev
(1965); Northeastern Pacific. Sekerak and Arai (1977).

Dinosoma tortum Yamaguti 1938. Bering Sea. Mamaev (1965).

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Bering Sea. Mamaev (1965).

Lecithophyllum botryophorum (Olson 1886) Odhner 1905. Northeastern
Pacific. Sekerak and Arai (1977).

Lecithophyllum sphaerolecithum (Manter 1925) Odhner 1927. Bering
Sea. Mamaev (1965).

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Northeastern
Pacific. Sekerak and Arai (1977).

LEPOCREADIIDAE

Lepidapedon gadi (Yamaguti 1934) Acena 1947. Bering Sea. Mamaev
(1965).

Neolepidapedon sebastisci (Yamaguti 1938) Manter 1954. Northeastern
Pacific. Sekerak and Arai (1977).

Opechona alaskensis Ward and Fillingham 1934. Bering Sea. Mamaev
(1965).

Sebastes borealis (Continued)

OPECOELIDAE

- Podocotyle atomon (Rudolphi 1802) Odhner 1905. Bering Sea.
Mamaev (1965).
Podocotyle reflexa (Creplin 1825) Odhner 1905. Bering Sea.
Mamaev (1965).

HIRUDINOIDEA

PISCICOLIDAE

- Piscicola sp. Northeastern Pacific. Sekerak and Arai (1977).

MONOGENEA

CAPSALIDAE

- Benedenia derzhavini (Layman 1930) Meserve 1938. Bering Sea.
Mamaev (1965).
Trochopus spp. Northeastern Pacific. Sekerak and Arai (1977).

NEMATODA

ANISAKIDAE

- Anisakis sp. Larva. Bering Sea. Mamaev (1965).
Contracaecum sp. Northeastern Pacific. Sekerak and Arai (1977).
Phocanema decipiens (Krabbe 1878) Myers 1959. Larva. Bering Sea.
Mamaev (1965) as Terranova d.

CAPILLARIIDAE

- Capillaria sp. Northeastern Pacific. Sekerak and Arai (1977).

CUCULLANIDAE

- Cucullanus sp. Northeastern Pacific. Sekerak and Arai (1977).
Cucullanus heterochrous Rudolphi 1802. Bering Sea. Mamaev (1965).

CYSTIDICOLIDAE

- Ascarophis sebastodis Olsen 1952. Northeastern Pacific. Sekerak
and Arai (1977).

Sebastes brevispinis - Silvergray Rockfish

SYNONYM - Sebastodes brevispinis

ACANTHOCEPHALA

POLYMORPHIDAE

- Corynosoma sp. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes brevispinis (Continued)

CESTODA

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific.
Sekerak and Arai (1977).

COPEPODA

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. Northeastern Pacific.
Sekerak and Arai (1977).

Chondracanthus triventricosus Sekerak 1970. Northeastern Pacific.
Sekerak and Arai (1977).

LERNAEOPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. Northeastern Pacific.
Sekerak and Arai (1977) as Brachiella r.

PENNELIDAE

Peniculus sp. Northeastern Pacific. Sekerak and Arai (1977).
Peniculus asinus Kabata and Wilkes 1977. British Columbia. Caudal
fin. Kabata and Wilkes (1977).

PHILICHTHYIDAE

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific.
Sekerak and Arai (1977).

Sarcotaces arcticus Collett 1874. Northeastern Pacific. Sekerak
and Arai (1977).

DIGenea

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Northeastern
Pacific. Sekerak and Arai (1977).

HEMIURIDAE

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Northeastern
Pacific. Sekerak and Arai (1977).

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific.
Sekerak and Arai (1977).

OPECOELIDAE

Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes brevispinis (Continued)

SANGUINICOLIDAE

Psettarium Sebastodorum Holmes 1971. British Columbia. Heart.
Holmes (1971a).

SYNCOELIIDAE

Syncoelium filiferum (Leuckart in Sars 1885) Odhner 1911.
Northeastern Pacific. Sekerak and Arai (1977).

MONOGENEA

CAPSALIDAE

Trochopus spp. Northeastern Pacific. Sekerak and Arai (1977).

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Northeastern Pacific. Sekerak
and Arai (1977).

NEMATODA

ANISAKIDAE

Contracaecum spp. Larva. Northeastern Pacific. Sekerak and Arai
(1977).

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeastern
Pacific. Sekerak and Arai (1977).

Anisakis sp. Larva. British Columbia. Throughout body.
Margolis³.

Sebastes carnatus - Gopher Rockfish

SYNONYM - Sebastodes carnatus

COPEPODA

CALIGIDAE

Caligus hobsoni Cressey 1969. Southern California. Hobson (1971).

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. Southern California. Gills.
Moser¹⁹.

DIGENEA

SANGUINICOLIDAE

Psettarium sebastodorum Holmes 1971. Southern California. Holmes³⁵.

Sebastes carnatus (Continued)

ISOPODA

Genera and species. Gnathiid larva. Southern California. Body surface. Hobson (1971).

MONOGENEA

CAPSALIDAE

Trochopus marginata (Folda 1928) Price 1936. Southern California. Holmes³⁵.

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Southern California. Holmes³⁵.

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa sebasta Moser, Love and Jensen 1976. Central California. Gallbladder. Moser et al. (1976).

Ceratomyxa vepallida Meglitsch 1960. Northern California. Gallbladder. Moser et al. (1976).

MYXIDIIDAE

Myxidium incurvatum Theohani 1892. Southern California. Gallbladder. Jameson (1931).

Myxidium calcariferi Chakravarty 1943. Southern California. Jensen¹⁸.

Sebastes caurinus - Copper Rockfish

SYNONYM - Sebastodes caurinus

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Northeastern Pacific. Sekerak and Arai (1977).

POLYMORPHIDAE

Corynosoma sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

BRANCHIURA

ARGULIDAE

Argulus pugettensis Dana 1852. British Columbia. Bere⁵.
Argulus borealis Wilson 1912. British Columbia. Bere⁵.

Sebastes caurinus (Continued)

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Northeastern Pacific. Sekerak and Arai (1977).

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific. Sekerak and Arai (1977).

COPEPODA

BOMOLOCHIDAE

Holobomolochus venustus Kabata 1971. British Columbia. Nasal cavities. Kabata (1971).

CALIGIDAE

Caligus clemensi Parker and Margolis 1964. Northeastern Pacific. Sekerak and Arai (1977).

Lepeophtheirus oblitus Kabata 1973. British Columbia. Kabata (1973).

CHONDRACANTHIDAE

Chondracanthus triventricosus Sekerak 1970. Northeastern Pacific. Sekerak and Arai (1977).

Chondracanthus pinguis Wilson 1912. British Columbia. Bere⁵.

LERNAEOPODIDAE

Clavella parva Wilson 1912. Northeastern Pacific. Sekerak and Arai (1977).

Neobrachiella robusta (Wilson 1912) Kabata 1979. British Columbia. Kabata (1970c) as Brachiella r.

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. British Columbia. Bere⁵.

PHILICHTHYIDAE

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes caurinus (Continued)

DIGenea

ACANTHOCOLPIDAE

Stephanostomum californicum Manter and Van Cleave 1951. Northeastern Pacific. Sekerak and Arai (1977).

GORGODERIDAE

Phyllodistomum sp. Northern Pacific. Sekerak and Arai (1977).

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Northeastern Pacific. Sekerak and Arai (1977).

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Northeastern Pacific. Sekerak and Arai (1977).

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific. Sekerak and Arai (1977).

Sterrhurus exodicus (McFarlane 1936) Yamaguti 1958. Northeastern Pacific. Sekerak and Arai (1977).

Hemiurus levinseni Odhner 1905. Washington. Lloyd (1938).

LEPOCREADIIDAE

Neolepidapedon pugetense (Acena 1947) Yamaguti 1971. Northeastern Pacific. Sekerak and Arai (1977).

Opechona occidentalis Montgomery 1957. British Columbia. Intestine. Arai (1969b).

OPECOELIDAE

Neohelicometra sebastis Sekerak and Arai 1974. Northeastern Pacific. Pyloric caeca and intestine. Sekerak and Arai (1974).

SANGUINICOLIDAE

Aporocotyle macfarlani Holmes 1971. Washington, British Columbia. Afferent branchial artery, ventral aorta, ventricle, bulbus arteriosus. Holmes (1971b).

Psettarium sebastodorum Holmes 1971. Washington, British Columbia. Heart, bulbus arteriosus, ventral aorta. Holmes (1971b).

ZOOGONIDAE

Deretrema cholaeum McFarlane 1936. Northeastern Pacific. Sekerak and Arai (1977).

HIRUDINOIDEA

PISCICOLIDAE

Piscicola sp. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes caurinus (Continued)

MONOGENEA

CAPSALIDAE

Trochopus marginata (Folda 1928) Price 1936. Washington. Gills. Bonham (1950); British Columbia. Arai (1969b) as Megalocotyle m.
Trochopus trituba (Pratt and Aldrich 1953) Bravo-Hollis 1958. British Columbia. Gills. Hoskins et al.¹³

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Washington. Guberlet (1936a); British Columbia. Gills. Arai (1969b).

NEMATODA

ANISAKIDAE

Contracaecum sp. Larva. British Columbia. Body cavity. Arai (1969b).
Phocanema sp. Larva. Southern California. Dailey et al. (in press).
* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Washington. Olsen (1952) as Contracaecum a.

CAPILLARIIDAE

Capillaria sp. Northeastern Pacific. Sekerak and Arai (1977).

CUCULLANIDAE

Cucullanus elongatus Smedley 1933. Northeastern Pacific. Sekerak and Arai (1977).

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. Washington. Stomach. Olsen (1952); British Columbia. Intestine. Arai (1969b).

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Myxidium incurvatum Thélohan 1892. Central California. Gallbladder. Jameson (1929).

Sebastes chlorostictus - Greenspotted Rockfish

SYNONYM - Sebastodes chlorostictus

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. Southern California. Jensen¹⁸.

Sebastes chlorostictus (Continued)

COPEPODA

PHILICHTHYIDAE

Sarcotaces sp. Southern California. Abdominal cavity. Schultze²⁵.

MONOGENEA

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Southern California. Gills.
Crane (1972).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).
Phocanema sp. Larva. Southern California. Dailey et al. (in press).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca informis Auerbach 1910. Southern California. Gallbladder.
Moser et al. (1976).

MYXOBOLIDAE

Henneguya sebasta Moser and Love 1975. Central California.
Bulbus, truncus arteriosus. Moser and Love (1975); Southern
California. Gallbladder, urinary bladder. Moser et al. (1976).

Sebastes chrysomelas - Black and Yellow Rockfish

SYNONYM - Sebastodes chrysomelas

DIGENEA

LEPOCREADIIDAE

Opechona occidentalis Montgomery 1957. Central California.
Intestine. Chapa²³.

OPECOELIDAE

Helicometrina nimia Linton 1910. Central California. Intestine.
Chapa²³.
Opecoelus noblei Banerjee 1965. Central California. Intestine.
Chapa²³.

Sebastes chrysomelas (Continued)

SANGUINICOLIDAE

Psettarium sebastodorum Holmes 1971. Southern California. Holmes³⁵.
Aporocotyle macfarlani Holmes 1971. Southern California. Holmes³⁵.

ISOPODA

Genera and species. Gnathiid larva. Southern California. Body surface. Hobson (1971).

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. Southern California. Gills.
Robinson²⁸.

Sebastes constellatus - Starry Rockfish

SYNONYM - Sebastodes constellatus

DIGENEA

HEMIURIDAE

Sterrhurus exodicus (McFarlane 1936) Yamaguti 1958. Central California. Stomach. Nahhas¹⁰.

ISOPODA

Genera and species. Gnathiid larva. Southern California. Body surface. Hobson (1971).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Sebastes crameri - Darkblotched Rockfish

SYNONYM - Sebastodes crameri

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes crameri (Continued)

COPEPODA

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. Northeastern Pacific. Sekerak and Arai (1977).

Chondracanthus triventricosus Sekerak 1970. Northeastern Pacific. Sekerak and Arai (1977).

LERNAEOPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. British Columbia. Kabata (1970c) as Brachiella r.

PENNELLIDAE

Peniculus sp. Northeastern Pacific. Sekerak and Arai (1977).

PHILICHTHYIDAE

Sarcotaces arcticus Collett 1874. British Columbia. Body cavity. Kabata (1970a).

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak and Arai (1977).

DIGENEA

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Northeastern Pacific. Sekerak and Arai (1977).

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific. Sekerak and Arai (1977).

Lecithophyllum botryophorum (Olsson 1886) Odhner 1905. Northeastern Pacific. Sekerak and Arai (1977).

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Northeastern Pacific. Sekerak and Arai (1977).

SANGUINICOLIDAE

Psettarium Sebastodorum Holmes 1971. Washington. British Columbia. Heart, bulbus arteriosus, ventral aorta. Holmes (1971b).

MONOGENEA

CAPSALIDAE

Benedenia derzhavini (Layman 1930) Meserve 1938. Northeastern Pacific. Sekerak and Arai (1977).

Trochopus sp. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes crameri (Continued)

NEMATODA

ANISAKIDAE

Contraecaecum spp. Larva. Northeastern Pacific. Sekerak and Arai (1977).
*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Sekerak and Arai (1977).

CUCULLANIDAE

Cucullanus sp. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes dalli - Calico Rockfish

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Viscera. Jensen¹⁸.

Sebastes diploproa - Splitnose Rockfish

SYNONYM - Sebastodes diploproa

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Northeastern Pacific.
Sekerak and Arai (1977).

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific.
Sekerak and Arai (1977).

COPEPODA

CALIGIDAE

Lepeophtheirus paulus Cressey 1969. Northeastern Pacific.
Sekerak and Arai (1977).

Sebastes diploproa (Continued)

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. Northeastern Pacific. Sekerak and Arai (1977).

Chondracanthus triventricosus Sekerak 1970. Northeastern Pacific. Sekerak and Arai (1977).

LERNAEPOPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. Northeastern Pacific. Sekerak and Arai (1977) as Brachiella r.

Clavella parva Wilson 1912. British Columbia. Fin rays. Kabata (1970c).

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. Northeastern Pacific. Sekerak and Arai (1977).

PHILICHTHYIDAE

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak and Arai (1977).

DIGENEA

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Northeastern Pacific. Sekerak and Arai (1977).

GORGODERIDAE

Phyllodistomum sp. Northeastern Pacific. Sekerak and Arai (1977).

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific. Sekerak and Arai (1977).

OPECOELIDAE

Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

Neohelicometra sebastis Sekerak and Arai 1974. Northeastern Pacific. Pyloric caeca, intestine. Sekerak and Arai (1974).

SANGUINICOLIDAE

Psettarium sebastodorum Holmes 1971. Washington, British Columbia. Heart, bulbus arteriosus, ventral aorta. Holmes (1971b).

Sebastes diploproa (Continued)

MONOGENEA

CAPSALIDAE

Trochopus trituba (Pratt and Aldrich 1953) Bravo-Hollis 1958.
Oregon. Pratt and Aldrich (1953) as Megalocotyle t.
Trochopus sp. Northeastern Pacific. Sekerak and Arai (1977).

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Southern California. Gills.
Crane (1972); British Columbia. Arai (1969b).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).
Contraecaecum spp. Larva. Northeastern Pacific. Sekerak and Arai (1977).
*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeastern
Pacific. Sekerak and Arai (1977).

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. Northeastern Pacific. Sekerak
and Arai (1977).

PROTOZOA (MYXOSPORIDA)

MYXOBOLIDAE

Henneguya sebasta Moser and Love 1975. Southern California. Bulbus,
truncus arteriosus. Moser and Love (1975).

Sebastes elongatus - Greenstriped Rockfish

SYNONYM - Sebastodes elongatus

ACANTHOCEPHALA

POLYMORPHIDAE

Corynosoma sp. Northeastern Pacific. Sekerak and Arai (1977).

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Northeastern Pacific. Sekerak and Arai (1977).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific.
Sekerak and Arai (1977).

Sebastes elongatus (Continued)

COPEPODA

BOMOLOCHIDAE

Holobomolochus venustus Kabata 1971. Northeastern Pacific. Sekerak and Arai (1977).

LERNAEOPODIDAE

Clavella parva Wilson 1912. Northeastern Pacific. Sekerak and Arai (1977).

PHILICHTHYIDAE

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak and Arai (1977).

DIGenea

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Northeastern Pacific. Sekerak and Arai (1977).

FELLODISTOMATIDAE

Fellodistomum sebastodis Yamaguti and Matumura 1942. Northeastern Pacific. Sekerak and Arai (1977).

HEMIURIDAE

Sterrhurus exodicus (McFarlane 1936) Yamaguti 1958. Northeastern Pacific. Sekerak and Arai (1977).

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific. Sekerak and Arai (1977).

LEPOCREADIIDAE

Opechona occidentalis Montgomery 1957. British Columbia. Intestine. Arai (1969b).

OPECOELIDAE

Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

Opecoelina radifistuli (Acena 1941) Manter 1947. Washington. Intestine. Acena (1941) as Dideutosaccus r.

ZOOGONIDAE

Deretrema cholaeum McFarlane 1936. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes elongatus (Continued)

MONOGENEA

CAPSALIDAE

Trochopus sp. Northeastern Pacific. Sekerak and Arai (1977).

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. California. Gills.
Crane (1972); British Columbia. Gills. Arai (1969b).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).
Contracaecum sp. Larva. Northeastern Pacific. Sekerak and
Arai (1977).

* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeastern
Pacific. Sekerak and Arai (1977).

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. British Columbia. Intestine.
Arai (1969b).

PROTOZOA (MYXOSPORIDA)

TETRACAPSULIDAE

Kudoa clupeiidae (Hahn 1917) Meglitsch 1947. Southern California.
Muscles. Moser et al. (1976).

Sebastes ensifer - Swordspine Rockfish

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa vepallida Meglitsch 1960. Southern California. Gallbladder.
Moser et al. (1976).

Ceratomyxa sebasta Moser, Love and Jensen 1976. Southern California.
Gallbladder. Moser et al. (1976).

MYXIDIIDAE

Myxidium incurvatum Thélohan 1892. Southern California. Gallbladder.
Moser et al. (1976).

Sebastes entomelas - Widow Rockfish

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific. Sekerak and Arai (1977).

COPEPODA

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. Northeastern Pacific. Sekerak and Arai (1977).

LERNAEOPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. Northeastern Pacific. Sekerak and Arai (1977) as Brachiella r.

PHILICHTHYIDAE

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak and Arai (1977).

DIGENEA

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Northeastern Pacific. Sekerak and Arai (1977).

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific. Sekerak and Arai (1977).

MONOGENEA

CAPSALIDAE

Trochopus sp. Northeastern Pacific. Sekerak and Arai (1977).

NEMATODA

ANISAKIDAE

Contracaecum sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).
*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Sekerak and Arai (1977).

Sebastes eos - Pink Rockfish

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus sp. Southern California. Jensen¹⁸.

Sebastes flavidus - Yellowtail Rockfish

SYNONYM - Sebastodes flavidus

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Northeastern Pacific.
Sekerak and Arai (1977).

CESTODA

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific.
Sekerak and Arai (1977).

COPEPODA

CALIGIDAE

Lepeophtheirus paulus Cressey 1969. British Columbia. Kabata (1973).

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. Northeastern Pacific. Sekerak
and Arai (1977).

Chondracanthus triventricosus Sekerak 1970. Northeastern Pacific.
Sekerak and Arai (1977).

LERNAEOPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. British Columbia.
Kabata (1970c) as Brachiella r.

Clavella parva Wilson 1912. Northeastern Pacific. Sekerak and
Arai (1977).

PENNELLIDAE

Peniculus asinus Kabata and Wilkes 1977. British Columbia. Caudal
fin. Kabata and Wilkes (1977).

PHILICHTHYIDAE

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak
and Arai (1977).

Sarcotaces arcticus Collett 1874. Alaska. Internal. Avdeev and
Avdeev (1975).

Sebastes flavidus (Continued)

DIGENEA

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Northeastern Pacific. Sekerak and Arai (1977).

HEMIURIDAE

Sterrhurus exodicus (McFarlane 1936) Yamaguti 1958. Northeastern Pacific. Sekerak and Arai (1977).

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific. Sekerak and Arai (1977).

Lecithophyllum botryophorum (Olsson 1886) Odhner 1905. Northeastern Pacific. Sekerak and Arai (1977).

LEPOCREADIIDAE

Opechona alaskensis Ward and Fillingham 1934. Northeastern Pacific. Sekerak and Arai (1977).

Opechona occidentalis Montgomery 1957. Northeastern Pacific. Sekerak and Arai (1977).

OPECOELIDAE

Neohelicometra sebastis Sekerak and Arai 1974. Northeastern Pacific. Pyloric caeca, intestine. Sekerak and Arai (1974).

Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

SANGUINICOLIDAE

Aporocotyle macfarlani Holmes 1971. Washington. British Columbia. Branchial arteries, ventral aorta, bulbus arteriosus, ventricle. Holmes (1971b).

Psettarium sebastodorum Holmes 1971. Washington, British Columbia. Heart, bulbus arteriosus, ventral aorta. Holmes (1971b).

SYNCOELIDAE

Syncoelium filiferum (Leuckart in Sars 1885) Odhner 1911. Northeastern Pacific. Sekerak and Arai (1977).

MONOGENEA

CAPSALIDAE

Trochopus sp. Northeastern Pacific. Sekerak and Arai (1977).

NEMATODA

ANISAKIDAE

Contracaecum spp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Sekerak and Arai (1977).

Sebastes flavidus (Continued)

CAPILLARIIDAE

Capillaria sp. Northeastern Pacific. Sekerak and Arai (1977).

CUCULLANIDAE

Cucullanus sp. Northeastern Pacific. Sekerak and Arai (1977).

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. Northeastern Pacific. Sekerak and Arai (1977).

PROTOZOA (MYXOSPORIDA)

MYXOBOLIDAE

Henneguya sebasta Moser and Love 1975. Northern California. Heart, gallbladder. Moser et al. (1976).

Sebastes gilli - Bronzespotted Rockfish

NEMATODA

ANISAKIDAE

Phocanema sp. Larva. Southern California. Dailey et al. (In press).
Anisakis sp. Larva. Southern California. Dailey et al. (In press).

Sebastes goodei - Chilipepper

DIGENEA

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific.
Sekerak and Arai (1977).

OPECOELIDAE

Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

MONOGENEA

CAPSALIDAE

Trochopus sp. Northeastern Pacific. Sekerak and Arai (1977).

NEMATODA

ANISAKIDAE

Contracaecum sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes goodei (Continued)

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa hopkinsi Jameson 1929. Northern California. Gallbladder.
Moser et al. (1976).

Leptotheca informis Auerbach 1910. Northern California. Gallbladder.
Moser et al. (1976).

MYXOBOLIDAE

Henneguya sebasta Moser and Love 1975. Southern California. Heart,
urinary bladder. Moser et al. (1976).

Sebastes helvomaculatus - Rosethorn Rockfish

SYNONYM - Sebastodes helvomaculatus

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Northeastern Pacific.
Sekerak and Arai (1977).

POLYMORPHIDAE

Corynosoma sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

COPEPODA

CALIGIDAE

Lepeophtheirus oblitus Kabata 1973. Northeastern Pacific. Sekerak
and Arai (1977).

CHONDRACANTHIDAE

Chondracanthus triventricosus Sekerak 1970. Northeastern Pacific.
Sekerak and Arai (1977).

DIGENEA

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific.
Sekerak and Arai (1977).

LEPOCREADIIDAE

Neolepidapedon sebastisci (Yamaguti 1938) Manter 1954. Northeastern
Pacific. Sekerak and Arai (1977).

Sebastes helvomaculatus (Continued)

OPECOELIDAE

Neohelicometra sebastis Sekerak and Arai 1974. Northeastern Pacific. Pyloric caeca, intestine. Sekerak and Arai (1974).
Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

SANGUINICOLIDAE

Psettarium sebastodorum Holmes 1971. Washington, British Columbia. Heart region. Holmes (1971b).

MONOGENEA

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Northeastern Pacific. Sekerak and Arai (1977).

NEMATODA

ANISAKIDAE

Contraecaecum spp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Larva. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes hopkinsi - Squarespot Rockfish

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Sebastes jordani - Shortbelly Rockfish

PROTOZOA (MYXOSPORIDA)

MYXOBOLIDAE

Henneguya sebasta Moser and Love 1975. Southern California. Bulbus, truncus arteriosus. Moser and Love (1975).

Sebastes levis - Cow Rockfish

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus sp. Southern California. Jensen¹⁸.

Sebastes levis (Continued)

CESTODA

TRYPANORHYNCHA

Genera and species. Larva. Southern California. Jensen¹⁸.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

PROTOZOA (MYXOSPORIDA)

MYXOBOLIDAE

Henneguya sebasta Moser and Love 1975. Southern California. Heart.
Moser et al. (1976).

PROTOZOA (SPOROZOA)

EIMERIIDAE

Genera and species. Southern California. Jensen¹⁸.

Sebastes macdonaldi - Mexican Rockfish

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Sebastes maliger - Quillback Rockfish

SYNONYM - Sebastodes maliger

ACANTHOCEPHALA

POLYMORPHIDAE

Corynosoma sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific.
Sekerak and Arai (1977).

Sebastes maliger (Continued)

COPEPODA

BOMOLOCHIDAE

Holobomolochus venustus Kabata 1971. Northeastern Pacific.
Sekerak and Arai (1977).

CALIGIDAE

Lepeophtheirus paulus Cressey 1969. British Columbia. Kabata (1973).
Lepeophtheirus oblitus Kabata 1973. British Columbia. Kabata (1973).
Lepeophtheirus longipes Wilson 1915. Washington. Skin. Nichols
(1975).

CHONDRACANTHIDAE

Chondracanthus triventricosus Sekerak 1970. Northeastern Pacific.
Sekerak and Arai (1977).
Chondracanthus pinguis Wilson 1912. Northeastern Pacific. Sekerak
and Arai (1977).

LERNAEOPODIDAE

Clavella parva Wilson 1912. British Columbia. Bere⁵.
Neobrachiella robusta (Wilson 1912) Kabata 1979. British Columbia.
Kabata (1970c) as Bracheilla r.

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. British Columbia. Bere⁵.

PHILICHTHYIDAE

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific.
Sekerak and Arai (1977).

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum californicum Manter and Van Cleave 1961. Northeastern
Pacific. Sekerak and Arai (1977).

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Washington. Lloyd
(1938).
Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Washington.
Ching (1960a) as L. salmonis.
Sterrhurus exodicus (McFarlane 1936) Yamaguti 1958. Washington.
Stomach. Lloyd (1938) as Lecithochirium e.
Tubulovesicula lindergi (Layman 1930) Yamaguti 1934. Northeastern
Pacific. Sekerak and Arai (1977).

Sebastes maliger (Continued)

LEPOCREADIIDAE

- Opechona occidentalis Montgomery 1957. Washington. Ching (1960a).
Opechona theragrae Lloyd 1938. Washington. Ching (1960a).
Opechona alaskensis Ward and Fillingham 1934. Northeastern Pacific.
Sekerak and Arai (1977).

OPECOELIDAE

- Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).
Podocotyle abitionis McFarlane 1936. Washington. Ching (1960a).
Podocotyle sinusacca Ching 1960. British Columbia. Intestine.
Arai (1969b) as Neopodocotylodes s.
Neohelicometra sebastis Sekerak and Arai 1974. Northeastern Pacific.
Pyloric caeca, intestine. Sekerak and Arai (1974).
Helicometra sp. British Columbia. Intestine. Arai (1969b).

SANGUINICOLIDAE

- Aporocotyle macfarlani Holmes 1971. Washington. Ching (1960a)
as A. simplex; British Columbia. Afferent branchial arteries,
ventral aorta, bulbus arteriosus, ventricle. Holmes (1971b).
Psettarium sebastodorum Holmes 1971. Washington, British Columbia.
Hearts bulbus arteriosus, ventral aorta. Holmes (1971b).

ZOOGONIDAE

- Deretrema cholaeum McFarlane 1936. British Columbia. Gallbladder.
Arai (1969b).

ISOPODA

AEGIIDAE

- Rocinela belliceps (Stimpson 1864) Richardson 1899. British Columbia.
Gill cavity. Fee (1927).
Rocinela propodialis Richardson 1905. British Columbia. Gill cavity.
Fee (1927).

MONOGENEA

CAPSALIDAE

- Trochopus marginata (Folda 1928) Price 1936. Washington. Gills.
Bonham (1950) as Megalocotyle m.

MICROCOTYLIDAE

- Microcotyle sebastis Goto 1894. Washington. Bonham and Guberlet
(1937).

Sebastes maliger (Continued)

NEMATODA

ANISAKIDAE

Contracaecum spp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeastern Pacific. Sekerak and Arai (1977).

CAPILLARIIDAE

Capillaria sp. Northeastern Pacific. Sekerak and Arai (1977).

CUCULLANIDAE

Cucullanus elongatus Smedley 1933. Northeastern Pacific. Sekerak and Arai (1977).

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. Northeastern Pacific. Sekerak and Arai (1977).

PROTOZOA (MYXOSPORIDA)

SINUOLINEIDAE

Davisia reginae Love and Moser 1976. Northern California. Urinary bladder. Love and Moser (1976).

Sebastes melanops - Black Rockfish

SYNONYM - Sebastodes melanops

COPEPODA

CHONDRACANTHIDAE

Acanthochondria deltoideus (Fraser 1920). British Columbia. Bere⁵ as Chondracanthus d.

Chondracanthus sp. Oregon. Gill cavity. Millemann³⁴.

Chondracanthus pinguis Wilson 1912. British Columbia. Bere⁵.

LERNAEOPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. British Columbia. Kabata (1970c) as Brachiella r.; Fraser (1920) as Clavellopsis r.

Clavella parva Wilson 1912. Alaska. Dorsal, caudal fins. Wilson (1915) as C. recta.

DIGenea

BUCEPHALIDAE

Prosorhynchus sp. Metacercaria. Northeast Pacific. Liston et al. (1960).

Sebastes melanops (Continued)

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Washington. Ching (1960a) as L. salmonis.

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Washington. Ching (1960a).

LEPOCREADIIDAE

Opechona parvasoma Ching 1960. Washington. Intestine. Ching (1960a).

SANGUINICOLIDAE

Aporocotyle macfarlani Holmes 1971. Washington, British Columbia. Afferent branchial arteries, ventral aorta, bulbus arteriosus, ventricle. Holmes (1971b).

Psettarium Sebastodorum Holmes 1971. Washington, British Columbia. Heart, bulbus arteriosus, ventral aorta. Holmes (1971b).

HIRUDINOIDEA

PISCICOLIDAE

Malmiana diminuta Burreson 1977. Oregon. Skin, fins. Burreson (1977c).
Ostreobdella papillata Burreson 1977. Oregon. Burreson (1977b).

MONOGENEA

CAPSALIDAE

Trochopus marginata (Folda 1928) Price 1936. Washington. Gills. Bonham (1950) as Megalocotyle m.

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Washington. Bonham and Guberlet (1937); Oregon. Gills. Pratt and McCauley (1961).

PROTOZOA (MYXOSPORIDA)

MYXOBOLIDAE

Henneguya sebastis Moser and Love 1975. Central California. Heart. Moser et al. (1976).

Sebastes miniatus - Vermilion Rockfish

SYNONYM - Sebastodes minatus

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. Southern California. Jensen¹⁸.

Sebastes miniatus (Continued)

TRYPANORHYNCHA

Genera and species. Larva. Southern California. Jensen¹⁸.

COPEPODA

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. Southern California. Gills.
Jensen¹⁸.

MONOGENEA

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. California. Crane (1972).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Viscera. Dailey et al.
(in press).

Phocanema sp. Larva. Southern California. Viscera. Dailey et al.
(in press).

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Myxidium calcariferi Chakravarty 1943. Southern California.
Gallbladder. Moser et al. (1976).

MYXOBOLIDAE

Henneguya sebastis Moser and Love 1975. Central California.
Bulbus, truncus arteriosus. Moser and Love (1975).

Sebastes mystinus - Blue Rockfish

SYNONYM - Sebastodes mystinus

COPEPODA

BOMOLOCHIDAE

Holobomolochus spinulus (Cressey 1969) Kabata 1971. Southern
California. Gill cavity. Cressey (1969b).

CALIGIDAE

Caligus hobsoni Cressey 1969. Southern California. Hobson (1971).

Sebastes mystinus (Continued)

DIGenea

HEMIURIDAE

Sterrhurus exodicus (McFarlane 1936) Yamaguti 1958. Northern California.
Stomach. Chapa²³ as Separogermiductus e.

LEPOCREADIIDAE

Lepidapedon elongatum (Lebour 1908) Nicoll 1915. Northern California.
Intestine. Chapa²³.

ISOPODA

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. Southern California. Gills.
Robinson²⁸.

Sebastes nebulosus - China Rockfish

SYNONYM - Sebastodes nebulosus

DIGenea

HEMIURIDAE

Sterrhurus exodicus (McFarlane 1936) Yamaguti 1958. Northern
California. Stomach. Chapa²⁵ as Separogermiductus e.

LEPOCREADIIDAE

Opechona occidentalis Montgomery 1957. Northeastern Pacific.
Sekerak and Arai (1977).
Lepidapedon elongatum (Lebour 1908) Nicoll 1915. Washington.
Intestine. Ching (1961).
Neolepidapedon pugetense (Acena 1947) Yamaguti 1971. Washington.
Intestine. Acena (1947) as Lepidapedon p.

OPECOELIDAE

Opecoelina pharynmagna Annereaux 1943. Northern California.
Stomach, intestine. Annereaux (1943).
Neohelicometra sebastis Sekerak and Arai 1974. Northeastern Pacific.
Sekerak and Arai (1977).

MONOGENEA

CAPSALIDAE

Trochopus marginata (Folda 1928) Price 1936. Washington. Gills.
Folda (1928); Southern California. Gills. Crane (1972) both as
Megalocotyle m.

Sebastes nebulosus (Continued)

NEMATODA

ANISAKIDAE

Contracaecum sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes nigrocinctus - Tiger Rockfish

SYNONYM - Sebastodes nigrocinctus

CESTODA

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific. Sekerak and Arai (1977).

COPEPODA

CALIGIDAE

Lepeophtheirus paulus Cressey 1969. British Columbia. Kabata (1973).

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. Northeastern Pacific. Sekerak and Arai (1977).

PHILICHTHYIDAE

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak and Arai (1977).

DIGenea

HEMIURIDAE

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Washington. Ching (1960a).

OPECOELIDAE

Neohelicometra sebastis Sekerak and Arai 1974. Northeastern Pacific. Pyloric caeca, intestine. Sekerak and Arai (1974).

SANGUINICOLIDAE

Psettarium sebastodorum Holmes 1971. Many sites. Washington. British Columbia. Heart, bulbus arteriosus, ventral aorta. Holmes (1971b).

Sebastes nigrocinctus (Continued)

ZOOGONIDAE

Deretrema cholaeum McFarlane 1936. Northeastern Pacific.
Sekerak and Arai (1977).

MONOGENEA

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Northeastern Pacific. Sekerak
and Arai (1977).

NEMATODA

ANISAKIDAE

Contracecum sp. Larva. Northeastern Pacific. Sekerak and Arai
(1977).

CAPILLARIIDAE

Capillaria sp. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes ovalis - Speckled Rockfish

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Sebastes paucispinis - Boccacio

SYNONYMS - Sebastodes paucispinis, Sebastodes paucispirius

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus sp. Southern California. Jensen and Heckmann (1977b).

POLYMORPHIDAE

Corynosoma sp. Southern California. Jensen and Heckmann (1977b).

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes paucispinis (Continued)

LACISTORHYNCHIDAE

- Lacistorhynchus tenuis (van Beneden 1858) Dollfus 1929. Larva.
Southern California. Jensen and Heckmann (1977b).
Grillotia smarisgora (Wagener 1854) Dollfus 1946. Larva.
Southern California. Mesentery. Jensen¹⁸.
Grillotia sp. Larva. Southern California. Jensen¹⁸.

ONCOBOTHRIIDAE

- Acanthobothrium sp. Larva. Southern California. Intestine.
Jensen¹⁸.

PARABOTHRIOCEPHALIDAE

- Parabothriocephalus sagitticeps (Sleggs 1927) Jensen 1976.
Southern California. Intestine. Jensen (1976).

TETRAPHYLLIDEA

- Genera and species. Larva. Southern California. Jensen¹⁸.

COPEPODA

CALIGIDAE

- Lepeophtheirus sp. Southern California. Jensen and Heckmann (1977b).

NAOBRANCHIIDAE

- Naobranchia occidentalis Wilson 1915. Northeastern Pacific. Gill
filaments. Sekerak and Arai (1977); Southern California. Jensen
and Heckmann (1977b).

DIGENEA

BUCEPHALIDAE

- Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Northeastern
Pacific. Sekerak and Arai (1977).

HEMIURIDAE

- Derogenes varicus (Muller 1784) Looss 1901. Northeastern Pacific.
Sekerak and Arai (1977); Southern California. Jensen and Heckmann
(1977b).
Derogenes crassus Manter 1934. Oregon. McCauley (1960).
Lecithophyllum botryophorum (Olsson 1886) Odhner 1905. Northeastern
Pacific. Sekerak and Arai (1977).
Sterrhurus exodicus (McFarlane 1936) Yamaguti 1958. Northeastern
Pacific. Sekerak and Arai (1977); Southern California. Jensen
and Heckmann (1977b).
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934.
Northeastern Pacific. Sekerak and Arai (1977).

Sebastes paucispinis (Continued)

LEPOCREADIIDAE

Neolepidapedon sebastisci (Yamaguti 1938) Manter 1954. Northeastern Pacific. Sekerak and Arai (1977).

OPECOELIDAE

Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

SANGUINICOLIDAE

Psettarium sebastodorum Holmes 1971. British Columbia. Heart. Holmes (1971a); Southern California. Jensen and Heckmann (1977b).

ZOOGONIDAE

Deretrema cholaeum McFarlane 1936. Southern California. Gallbladder. Jensen¹⁸.

MONOGENEA

CAPSALIDAE

Trochopus trituba (Pratt and Aldrich 1953) Bravo-Hollis 1958. Oregon. Gills. Pratt and Aldrich (1953) as Megalocotyle t. Pseudobenedenia noblei (Menzies 1946) Yamaguti 1963. Central California. Gills. Menzies (1946) as Benedenia noblei.

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Southern California. Gills. Crane (1972); Northeastern Pacific. Sekerak and Arai (1977).

NEMATODA

ANISAKIDAE

Contracaecum spp. Larva. Northeastern Pacific. Sekerak and Arai (1977); Southern California. Jensen and Heckmann (1977b). Anisakis sp. Larva. British Columbia. Many places in body. Margo¹⁵; Southern California.

* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeastern Pacific. Sekerak and Arai (1977); Southern California. Jensen and Heckmann (1977b).

Phocanema sp. Larva. Southern California. Viscera. Dailey et al. (in press).

CAPILLARIIDAE

Capillaria sp. Northeastern Pacific. Sekerak and Arai (1977).

CUCULLANIDAE

Cucullanus sp. Northeastern Pacific. Sekerak and Arai (1977); Southern California. Jensen and Heckmann (1977b).

Sebastes paucispinis (Continued)

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

- Leptotheca informis Auerbach 1910. Southern California.
Gallbladder. Moser et al. (1976).
Ceratomyxa vepallida Meglitsch 1960. Southern California.
Gallbladder. Moser et al. (1976).
Ceratomyxa californica Jameson 1929. Southern California.
Gallbladder. Moser et al. (1976).
Ceratomyxa sebasta Moser, Love and Jensen 1976. Northern
California. Gallbladder. Moser et al. (1976).
Ceratomyxa elegans Jameson 1929. Southern California. Jensen and
Heckmann (1977b).
Ceratomyxa hopkinsi Jameson 1929. Southern California. Jensen
and Heckman (1977b).

MYXIDIIDAE

- Myxidium incurvatum Thélohan 1892. Southern California. Gallbladder.
Moser et al. (1976).
Myxidium calcariferi Chakravarty 1943. Southern California.
Gallbladder. Moser et al. (1976).

MYXOBOLIDAE

- Henneguya sebasta Moser and Love 1975. Central and Southern
California. Bulbus, truncus arteriosus. Moser and Love (1975).

TETRACAPSULIDAE

- Kudoa clupeiidae (Hahn 1917) Meglitsch 1947. Southern California.
Muscles. Moser et al. (1976).

Sebastes phillipsi - Chameleon Rockfish

NEMATODA

ANISAKIDAE

- Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Sebastes pinniger - Canary Rockfish

SYNONYM - Sebastodes pinniger

CESTODA

BOTHRIOCEPHALIDAE

- Bothriocephalus sp. Immature. Northeastern Pacific. Sekerak
and Arai (1977).

Sebastes pinniger (Continued)

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific.
Sekerak and Arai (1977).

COPEPODA

BOMOLOCHIDAE

Homobomolochus venustus Kabata 1971. Northeastern Pacific. Sekerak and
Arai (1977).

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. British Columbia. Kabata (1973).

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. British Columbia. Gill cavity.
Kabata (1968).

LERNAEPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. British Columbia.
Kabata (1970c) as Brachiella r.
Clavella parva Wilson 1912. Northeastern Pacific. Sekerak and Arai (1977).

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. Northeastern Pacific. Sekerak and
Arai (1977).

PHILICHTHYIDAE

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak and
Arai (1977).

DIGENEA

BUCEPHALIDAE

Prosorhynchus sp. Pacific Northwest. Liston et al. (1960).
Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Northeastern Pacific.
Sekerak and Arai (1977)

HEMIURIDAE

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Northeastern Pacific.
Sekerak and Arai (1977).

Sebastes pinniger (Continued)

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific.
Sekerak and Arai (1977).

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Northeastern Pacific.
Sekerak and Arai (1977).

LEPOCREADIIDAE

Neolepidapedon sebastisci (Yamaguti 1938) Manter 1954. Northeastern Pacific.
Sekerak and Arai (1977).

Opechona alaskensis Ward and Fillingham 1934. Northeastern Pacific.
Sekerak and Arai (1977).

OPECOELIDAE

Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

SANGUINICOLIDAE

Aporocotyle macfarlani Holmes 1971. Washington, British Columbia.
Heart region and branchial arteries. Holmes (1971b).

Psettarium sebastodorum Holmes 1971. Washington, British Columbia.
Heart region. Holmes (1971b).

SYNCOELIDAE

Syncoelium filiferum (Leuckart, in Sars 1885) Odhner 1911. Northeastern Pacific.
Sekerak and Arai (1977).

MONOGENEA

CAPSALIDAE

Trochopus trituba (Pratt and Aldrich 1953) Bravo-Hollis 1958. Oregon.
Pratt and Aldrich (1953) as Megalocotyle t.

Trochopus sp. Northeastern Pacific. Sekerak and Arai (1977).

NEMATODA

ANISAKIDAE

Contracecum sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeastern Pacific.
Sekerak and Arai (1977).

Phocanema decipiens (Krabbe 1878) Myers 1959. Pacific northwest. Liston
et al. (1960) as Porrocaecum d.

Anisakis sp. Larva. Southern California. Liver. Jensen¹⁸.

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa elegans Jameson 1929. Southern California. Gallbladder.
Moser et al. (1976).

Ceratomyxa sebasta Moser, Love and Jensen 1976. Northern California.
Gallbladder. Moser et al. (1976).

Sebastes proriger - Redstripe Rockfish

SYNONYM - Sebastodes proriger

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Northeastern Pacific.
Sekerak and Arai (1977).

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Northeastern Pacific. Sekerak and Arai (1977).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific. Sekerak
and Arai (1977).

COPEPODA

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. Northeastern Pacific. Sekerak and
Arai (1977).

Chondracanthus triventricosus Sekerak 1970. Northeastern Pacific.
Sekerak and Arai (1977).

LERNAEPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. British Columbia.
Kabata (1970c) as Brachiella r.

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. Northeastern Pacific. Sekerak and
Arai (1977).

PENNELLIDAE

Peniculus sp. Northeastern Pacific. Sekerak and Arai (1977).
Peniculus asinus Kabata and Wilkes 1977. British Columbia. Caudal fin.
Kabata and Wilkes (1977).

PHILICHTHYIDAE

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak and
Arai (1977).

Sebastes proriger (Continued)

DIGENEA

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific. Sekerak and Arai (1977).

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Northeastern Pacific. Sekerak and Arai (1977).

OPECOELIDAE

Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

SANGUINICOLIDAE

Psettarium Sebastodorum Holmes 1971. British Columbia. Heart. Holmes (1971a).

SYNCOELIDAE

Syncoelium filiferum (Leuckart, in Sars 1885) Odhner 1911. Northeastern Pacific. Sekerak and Arai (1977).

MONOGENEA

CAPSALIDAE

Benedenia derzhavini (Layman 1930) Meserve 1938. Northeastern Pacific. Sekerak and Arai (1977).

Trochopus spp. Northeastern Pacific. Sekerak and Arai (1977).

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Northeastern Pacific. Sekerak and Arai (1977).

NEMATODA

ANISAKIDAE

Contracaecum sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeastern Pacific. Sekerak and Arai (1977).

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes rastrelliger - Grass Rockfish

SYNONYM - Sebastodes rastrelliger

CESTODA

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Larva. Southern California. Viscera. Jensen¹⁸.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Phocanema sp. Larva. Southern California. Dailey et al. (in press).

Sebastes reedi - Yellowmouth Rockfish

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Immature. Northeastern Pacific. Sekerak and Arai (1977).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific. Sekerak and Arai (1977).

COPEPODA

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. Northeastern Pacific. Sekerak and Arai (1977).

Chondracanthus triventricosus Sekerak 1970. Northeastern Pacific. Sekerak and Arai (1977).

LERNAEOPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. Northeastern Pacific. Sekerak and Arai (1977) as Brachiella r.

PENNELLIDAE

Peniculus sp. Northeastern Pacific. Sekerak and Arai (1977).

PHILICHTHYIDAE

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes reedi (Continued)

DIGenea

Bucephalidae

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Northeastern Pacific. Sekerak and Arai (1977).

Hemiuridae

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific. Sekerak and Arai (1977).

Lecithophyllum botryophorum (Olsson 1886) Odhner 1905. Northeastern Pacific. Sekerak and Arai (1977).

Opecoelidae

Neohelicometra sebastis Sekerak and Arai 1974. Northeastern Pacific. Pyloric caeca, intestine. Sekerak and Arai (1974).

Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

Sanguinicolidae

Psettarium sebastodorum Holmes 1971. Northeastern Pacific. Sekerak and Arai (1977).

Monogenea

Capsalidae

Benedenia derzhavini (Layman 1930) Meserve 1938. Northeastern Pacific. Sekerak and Arai (1977).

Trochopus sp. Northeastern Pacific. Sekerak and Arai (1977).

Microcotylidae

Microcotyle sebastis Goto 1894. Northeastern Pacific. Sekerak and Arai (1977).

Nematoda

Anisakidae

Contracaecum spp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes rosaceus - Rosy Rockfish

SYNONYM - Sebastodes rosaceus

Nematoda

Anisakidae

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Sebastes rosaceus (Continued)

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa starksi Jameson 1929. Central California. Gallbladder.
Jameson (1929).

Ceratomyxa elegans Jameson 1929. Southern California. Gallbladder.
Moser et al. (1976).

Leptotheca informis Auerbach 1910. Southern California. Gallbladder.
Moser et al. (1976).

Sebastes rosenblatti - Greenblotched Rockfish

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Sebastes ruberrimus - Yelloweye Rockfish

SYNONYM - Sebastodes ruberrimus

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Northeastern Pacific. Sekerak
and Arai (1977).

POLYMORPHIDAE

Corynosoma sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Immature. Northeastern Pacific. Sekerak and Arai (1977).

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific. Sekerak
and Arai (1977).

Sebastes ruberrimus (Continued)

COPEPODA

BOMOLOCHIDAE

Holobomolochus venustus Kabata 1971. Northeastern Pacific. Sekerak and Arai (1977).

CALIGIDAE

Lepeophtheirus paulus Cressey 1969. British Columbia. Kabata (1973).

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. Northeastern Pacific. Sekerak and Arai (1977).

Chondracanthus triventricosus Sekerak 1970. Northeastern Pacific. Sekerak and Arai (1977).

LERNAEPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. British Columbia. Kabata (1970c) as Brachiella r.

PHILICHTHYIDAE

Sarcotaces arcticus Collett 1874. British Columbia. Cysts in abdominal cavity, muscles. Kuitunen-Ekbaum (1949).

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak and Arai (1977).

DIGENEA

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Northeastern Pacific. Sekerak and Arai (1977).

FELLODISTOMATIDAE

Fellodistomum sebastodis Yamaguti and Matumura 1942. Northeastern Pacific. Sekerak and Arai (1977).

GORGODERIDAE

Phyllodistomum sp. Northeastern Pacific. Sekerak and Arai (1977).

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific. Sekerak and Arai (1977).

Hemiurus levinseni Odhner 1905. Washington. Lloyd (1938).

Lecithochirium medium Acena 1941. Washington. Acena (1941).

Sebastes ruberrimus (Continued)

LEPOCREADIIDAE

Opechona alaskensis Ward and Fillingham 1934. Washington. Ching (1960a).
Neolepidapedon sebastisci (Yamaguti 1938) Manter 1954. Northeastern Pacific. Sekerak and Arai (1977).

OPECOELIDAE

Neohelicometra sebastis Sekerak and Arai 1974. Northeastern Pacific.
Pyloric caeca, intestine. Sekerak and Arai (1974).
Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

ZOOGONIDAE

Deretrema cholaeum McFarlane 1936. Northeastern Pacific. Sekerak and Arai (1977).

MONOGENEA

CAPSALIDAE

Trochopus trituba (Pratt and Aldrich 1953) Bravo-Hollis 1958. Oregon.
Pratt and Aldrich (1953) as Megacotyle t.
Trochopus marginata (Folda 1928) Price 1936. Alaska. Gills. Yamaguti (1963b) as Megalocotyle m.
Trochopus sp. Northeastern Pacific. Sekerak and Arai (1977).

NEMATODA

ANISAKIDAE

Contracecum spp. Larva. Northeastern Pacific. Sekerak and Arai (1977).
* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeastern Pacific.
Sekerak and Arai (1977).

CAPILLARIIDAE

Capillaria sp. Northeastern Pacific. Sekerak and Arai (1977).

CUCULLANIDAE

Cucullanus elongatus Smedley 1933. Northeastern Pacific. Sekerak and Arai (1977).

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes rubrivinctus - Flag Rockfish

SYNONYM - Sebastodes rubrivinctus

COPEPODA

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. California. Wilson (1908a).
Lepeophtheirus salmonis (Krøyer 1838) Pacific coast, United States.
Kazachenko et al. (1972).

LERNAEOPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. British Columbia.
Kabata (1970c) as Brachiella r.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).
* Thynnascaris sp. Southern California. Stomach, intestine. Jensen¹⁸.

PROTOZOA (MYXOSPORIDA)

MYXOBOLIDAE

Henneguya sebasta Moser and Love 1975. California. Heart. Jensen¹⁸.

Sebastes rufus - Bank Rockfish

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

PROTOZOA (MYXOSPORIDA)

MYXOBOLIDAE

Henneguya sebasta Moser and Love 1975. Southern California. Heart.
Moser et al. (1976).

Sebastes saxicola - Stripetail Rockfish

MONOGENEA

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Southern California. Gills. Crane (1972).

Sebastes serranoides - Olive Rockfish

SYNONYM - Sebastodes serranoides

COPEPODA

BOMOLOCHIDAE

Holobomolochus spinulus (Cressey 1969) Kabata 1971. Southern California.
Gill cavity. Cressey (1969b).

CALIGIDAE

Caligus hobsoni Cressey 1969. Southern California. Hobson (1971).

ISOPODA

Genera and species. Gnathiid larva. Southern California. Body surface.
Hobson (1971).

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. Southern California. Turner et al. (1969).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).
Phocanema sp. Larva. Southern California. Dailey et al. (in press).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa laxa Meglitsch 1960. Southern California. Gallbladder.
Moser et al. (1976).
Ceratomyxa sebasta Moser, Love and Jensen 1976. Central California.
Gallbladder. Moser et al. (1976).
Ceratomyxa vepallida Meglitsch 1960. Southern California. Gallbladder.
Moser et al. (1976).
Leptotheca informis Auerbach 1910. Northern, Central, Southern California.
Gallbladder. Moser et al. (1976).
Leptotheca longipes Auerbach 1910. Central California. Gallbladder.
Moser et al. (1976).
Leptotheca macrospora Auerbach 1909. Southern, Central California.
Gallbladder. Moser et al. (1976).
Leptotheca sebasta Moser, Love and Jensen 1976. Southern California.
Gallbladder. Moser et al. (1976).

MYXIDIIDAE

Myxidium incurvatum Thélohan 1892. Central California. Gallbladder.
Moser et al. (1976).
Zschokkella ilishae Chakravarty 1941. Central California. Gallbladder.
Moser et al. (1976).

Sebastes serranoides (Continued)

MYXOBOLIDAE

Henneguya sebasta Moser and Love 1975. Northern, Central, and Southern California. Bulbus, truncus arteriosus. Moser and Love (1975).

SINUOLINEIDAE

Davisia reginae Love and Moser 1976. Central California. Urinary bladder. Love and Moser (1976).

Sebastes serriceps - Treefish

SYNONYM - Sebastodes serriceps

COPEPODA

CALIGIDAE

Lepeophtheirus paulus Cressey 1969. Southern California. Roof of mouth. Cressey (1969b).

Lepeophtheirus longipes Wilson 1905. Southern California. Body surface. Hobson (1971).

DIGENEA

OPECOELIDAE

Pellamyzon Sebastodis Montgomery 1957. Southern California. Intestine. Montgomery (1957).

Helicometrinia nimia Linton 1910. Southern California. Intestine. Montgomery (1957).

SANGUINICOLIDAE

Psettarium Sebastodorum Holmes 1971. Southern California. Holmes³⁵.

ISOPODA

Genera and species. Gnathiid larva. Southern California. Body surface. Hobson (1971).

MONOGENEA

CAPSALIDAE

Trochopus marginata (Folda 1928) Price 1936. Southern California. Holmes³⁵.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Sebastes umbrosus - Honeycomb Rockfish

SYNONYM - Sebastodes umbrosus

MONOGENEA

CAPSALIDAE

Trochopus marginata (Folda 1928) Price 1936. Southern California. Holmes³⁵.

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Northern California. Gills. Crane (1972).

Sebastes vexillaris - Whitebelly Rockfish

SYNONYM - Sebastodes vexillaris

DIGENEA

OPECOELIDAE

Helicometrina nimia Linton 1910. Intestine. Arai (1962).

PROTOZOA (MYXOSPORIDA)

MYXOBOLIDAE

Henneguya sebasta Moser and Love 1975. Central California. Bulbus, truncus arteriosus. Moser and Love (1975).

Sebastes wilsoni - Pygmy Rockfish

SYNONYM - Sebastodes wilsoni

DIGENEA

OPECOELIDAE

Podocotyle atomon (Rudolphi 1802) Odhner 1905. Washington. Aldrich⁷².

Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

MONOGENEA

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Northeastern Pacific. Sekerak and Arai (1977).

NEMATODA

ANISAKIDAE

Contracaecum sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes zacentrus - Sharpchin Rockfish

SYNONYM - Sebastodes zacentrus

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Northeastern Pacific.
Sekerak and Arai (1977).

POLYMORPHIDAE

Corynosoma sp. Larva. Northeastern Pacific. Sekerak and Arai (1977).

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Immature. Northeastern Pacific. Sekerak and Arai
(1977).

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. Northeastern Pacific. Gallbladder. Sekerak
and Arai (1977).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Northeastern Pacific.
Sekerak and Arai (1977).

COPEPODA

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. Northeastern Pacific. Sekerak and
Arai (1977).
Chondracanthus triventricosus Sekerak 1970. Northeastern Pacific.
Sekerak and Arai (1977).

LERNAEOPODIDAE

Neobrachiella robusta (Wilson 1912) Kabata 1979. British Columbia.
Kabata (1970c) as Brachiella r.

PENNELLIDAE

* Haemobaphes theragrae Yamaguti 1939. Northeastern Pacific. Sekerak and
Arai (1977).

PHILICHTHYIDAE

Colobomatus kyphosus Sekerak 1970. Northeastern Pacific. Sekerak and
Arai (1977).

Sebastes zacentrus (Continued)

DIGENEA

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Northeastern Pacific. Sekerak and Arai (1977).

FELLODISTOMATIDAE

Fellodistomum sebastodis Yamaguti and Matumura 1942. Northeastern Pacific. Sekerak and Arai (1977).

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Northeastern Pacific. Sekerak and Arai (1977).

Derogenes varicus (Müller 1784) Looss 1901. Northeastern Pacific. Sekerak and Arai (1977).

LEPOCREADIIDAE

Opechona alaskensis Ward and Fillingham 1934. Northeastern Pacific. Sekerak and Arai (1977).

Neolepidapedon sebastisci (Yamaguti 1938) Manter 1954. Northeastern Pacific. Sekerak and Arai (1977).

OPECOELIDAE

Podocotyle sp. Northeastern Pacific. Sekerak and Arai (1977).

Neohelicometra sebastis Sekerak and Arai 1974. Northeastern Pacific. Pyloric caeca, intestine. Sekerak and Arai (1974).

SANGUINICOLIDAE

Psettarium sebastodorum Holmes 1971. Washington and British Columbia. Heart, bulbus arteriosus, ventral aorta. Holmes (1971b).

MONOGENEA

CAPSALIDAE

Trochopus spp. Northeastern Pacific. Sekerak and Arai (1977).

Benedenia derzhavini (Layman 1930) Meserve 1938. Northeastern Pacific. Sekerak and Arai (1977).

MICROCOTYLIDAE

Microcotyle sebastis Goto 1894. Northeastern Pacific. Sekerak and Arai (1977).

Sebastes zacentrus (Continued)

NEMATODA

ANISAKIDAE

Contracaecum spp. Larva. Northeastern Pacific. Sekerak and Arai (1977).
*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Northeastern Pacific.
Sekerak and Arai (1977).

CYSTIDICOLIDAE

Ascarophis Sebastodis Olsen 1952. Northeastern Pacific. Sekerak and
Arai (1977).

Sebastolobus sp. - Thornyhead

PROTOZOA (MYXOSPORIDA)

Genera and species. Southern California. Gallbladder. Noble (1966a).

ANOPLPOMATIDAE -- Sablefishes

Anoplopoma fimbria - Sablefish

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Bering Sea. Mamaev (1965).

POLYMORPHIDAE

Corynosoma reductum (Von Lindstow 1905) Railliet and Henry 1907.
Larva. Bering Sea. Mamaev (1965).
Corynosoma sp. Larva. Northeast Pacific. Kovalenko (1970).

CESTODA

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Northeast Pacific. Kovalenko (1970).

TETRAPHYLLIDEA

Scolex sp. Northeast Pacific. Kovalenko (1970).
Scolex pleuronectis Müller 1788. Bering Sea. Mamaev (1965).

TRYPANORHYNCHA

Genera and species. Larva. Northeast Pacific. Kovalenko (1970);
Southern California. Jensen¹⁸.

Anoplopoma fimbria (Continued)

COPEPODA

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. British Columbia, Pacific coast of United States. Kabata (1973).

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. Southern California. Gills. Moser¹⁹.

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum baccatum (Nicol 1907) Manter 1934. Bering Sea. Mamaev (1965).

Stephanostomum californicum Manter and Van Cleave 1951. Northeast Pacific. Kovalenko (1970).

FELLODISTOMATIDAE

Fellodistomum furcigerum (Olsson 1867) Yamaguti 1954. Bering Sea. Mamaev (1965) as Sterinogophorus f.

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Bering Sea. Mamaev (1965).
Dinosoma tortum Yamaguti 1938. Bering Sea. Mamaev (1965).

OPECOELIDAE

Podocotyle reflexa (Creplin 1825) Odhner 1905. Bering Sea. Mamaev (1965).
Pseudopecoelus vulgaris (Manter 1934) Von Wicklen 1946. Central California. Intestine. Chapa²³.

ISOPODA

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. Southern California. Gills. Jensen¹⁸.

NEMATODA

ANISAKIDAE

Phoconema decipiens (Krabbe 1878) Myers 1959. Larva. British Columbia. Musculature. Hoskins et al.¹².

Phocanema sp. Larva. British Columbia. Cysts in musculature. Margolis³ as Porrocaecum sp.; Southern California. Dailey et al. (in press).

Anisakis sp. Larva. British Columbia. Many places in body. Margolis³; Southern California. Dailey et al. (in press).

Contracaecum sp. Larva. Northeast Pacific. Kovalenko (1970).

Anoplopoma fimbria (Continued)

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa anoplopoma Moser 1976. Southern California. Gallbladder.
Moser (1976).

Leptotheca informis Auerbach 1910. Southern California. Gallbladder.
Moser and Noble (1976b).

MYXIDIIDAE

Myxidium sp. Noble and Collard (1970).

SINUOLINEIDAE

Davisia anoplopoma Moser and Noble 1975. Southern and Central California.
Urinary bladder, kidney tubules. Moser and Noble (1975).

HEXAGRAMMIDAE -- Greenlings

Hexagrammos sp.

COPEPODA

CALIGIDAE

Caligus clemensi Parker and Margolis 1964. British Columbia. Parker
and Margolis (1964).

Hexagrammos decagrammus - Kelp Greenling

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. British Columbia.
Pyloric caeca. Wardle (1932).

COPEPODA

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. British Columbia. Fraser (1920).
Lepeophtheirus oblitus Kabata 1973. British Columbia. Kabata (1973).

CHONDRACANTHIDAE

Acanthochondria deltoideus (Fraser 1920). British Columbia.
Gill cavity. Fraser (1920) as Chondracanthus deltoideus.

Hexagrammos decagrammus (Continued)

Chondracanthus pinguis Wilson 1912. British Columbia. Wilson (1912b).
Chondracanthus gracilis Fraser 1920. British Columbia. Bere⁵.

PENNELLIDAE

Haemobaphes sp. Juvenile. British Columbia. Gills. Arai (1969b).

DIGENEA

FELLODISTOMATIDAE

Hexagrammia longitestis Schell 1973. Washington. Gastric caeca.
Schell (1973b).

HEMIURIDAE

Genolinea laticauda Manter 1925. Central California. Stomach. Chapa²³.

OPECOELIDAE

Neohelicometra pleurogrammi (Baeva 1968) Sekerak and Arai 1974.
Washington. Intestine. Schell (1973b) as Helicometra p.

MONOGENEA

MICROCOTYLIDAE

Microcotyle chiri Goto 1894. Washington. Bonham (1950).

TURBELLARIA

HYPOTRICHINIDAE

Ichthyophaga subcutanea Syromjatnikova. Sea of Japan. Gill filaments.
Menitskii (1963).

Hexagrammos lagocephalus and Hexagrammos superciliosus - Rock Greenling

SYNONYM - Lebius superciliosus

Quast (1964) synonymized Hexagrammos lagocephalus and H. superciliosus under the name H. lagocephalus. Miller and Lea (1972) rejected this synonymy, listing H. superciliosus as the California species. We have included both species, primarily because if, in the future, the species are generally recognized as synonymous, the pertinent parasite information will be available. Listings with an asterisk were listed as H. superciliosus in the original papers.

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Sea of Japan. Intestine.
Zhukov (1960a).

Hexagrammos lagocephalus (Continued)

POLYMORPHIDAE

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Larva. Sea of Japan. Mesentery. Zhukov (1960a).
Corynosoma sp. Alaska. Schiller (1954).

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. Larva. British Columbia. Intestine.* Arai (1969b); adult. Sea of Japan. Intestine. Zhukov (1960a).

PHYLLOBOTHRIIDAE

*Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Sea of Japan. Intestine. Zhukov (1960a).

COPEPODA

CALIGIDAE

Lepeophtheirus cuneifer Kabata 1974. Alaska. Kabata (1974). Questionable host.
Lepeophtheirus hexagrammi Gussev 1951. Japan. Body surface. Shiino (1959e).

CHONDRACANTHIDAE

Acanthochondria solida Gussev 1951. Japan. Yamaguti (1963b).

DIGENEA

ALLOCREADIIDAE

Neophasis oculata (Levinsen 1881) Miller 1941. Japan. Small intestine. Machida et al. (1972).
*Anisorchis opisthorchis Polyanski 1955. British Columbia. Intestine. Arai (1969b).
Anisorchis zhukovi nom. nov. Sakhalin. Yamaguti (1971).

BUCEPHALIDAE

Prosorhynchus sp. Immature. Japan. Muscles. Machida et al. (1972).

FELLODISTOMATIDAE

Pseudopentagramma petrowi (Layman 1930) Yamaguti 1971. USSR Pacific. Margolis and Ching (1965) as Pentagramma p.

Hexagrammos lagocephalus (Continued)

HEMIURIDAE

- Genolinea anura (Layman 1930) Yamaguti 1954. Sea of Japan. Stomach.
Zhukov (1960a).
Genolinea laticauda Manter 1925. British Columbia. Stomach. Arai (1969b).
Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine. Arai (1969b).
Lecithophyllum botryophorum (Olsson 1868) Odhner 1905. British Columbia.
Intestine. Arai (1969b) as L. anteroporum.
Derogenes varicus (Müller 1786) Looss 1901. Sea of Japan. Stomach.
Zhukov (1960a).
Genarchopsis muelleri (Levinsen 1881) Yamaguti 1954. Japan. Stomach.
Machida et al. (1972).

HETEROPHYIDAE

- *Galactosomum sp. Larva. British Columbia. Gills (encysted). Arai
(1969b).

OPECOELIDAE

- *Podocotyle sp. Northern California. Intestine, caeca. Edmiston²⁹.
Podocotyle atomon (Rudolphi 1802) Odhner 1905. Sea of Japan. Intestine.
Zhukov (1960a).
Podocotyle reflexa (Creplin 1825) Odhner 1905. Sea of Japan. Zhukov (1960a).
Podocotyle sinusacca Ching 1960. British Columbia. Intestine. Arai
(1969b) as Neopodocotyloides s.

ZOOGONIDAE

- Urinatrema hirudinaceum Zhukov 1957. Sea of Japan. Urinary bladder.
Zhukov (1960a).
Urinatrema aspinosum Schiller 1956. Alaska. Urinary bladder. Schiller
(1956).

MONOGENA

GYRODACTYLIDAE

- *Gyrodactylus vancleavi Mizelle and Kritsky 1967. Northern California.
Skin. Mizelle and Kritsky (1967d).

MICROCOTYLIDAE

- Microcotyle sebastis Goto 1894. British Columbia. Gills. Arai (1969b).
Prosomicrocotyla gotoi (Yamaguti 1934) Yamaguti 1958. USSR. Bykhovsky
(1957) as Microcotyle g.

Hexagrammos lagocephalus (Continued)

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity.* Arai (1969b);
Sea of Japan. Mesentery. Zhukov (1960a).

Phocanema decipiens (Krabbe 1878) Myers 1959. Larva. Alaska. Schiller
(1954) as Porrocaecum d.

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Sea of Japan.
Stomach, intestine. Zhukov (1960a) as Contracecum a.

Contracecum sp. Larva. British Columbia. Body cavity, stomach.
Arai (1969b).

CYSTIDICOLIDAE

*Ascarophis Sebastodis Olsen 1952. British Columbia. Intestine.
Arai (1969b).

Ascarophis curvicauda Zhukov 1960. Sea of Japan. Stomach. Zhukov (1960a).

Hexagrammos stelleri - Whitespotted Greenling

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Kamchatka, USSR. Zhukov (1963).

POLYMORPHIDAE

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Kamchatka, USSR.
Zhukov (1963).

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. British Columbia.
Intestine. Boyce (1976); Kamchatka, USSR. Zhukov (1963).

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Kamchatka, USSR. Strelkov
(1960).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Kamchatka, USSR. Zhukov (1963).

Hexagrammos stelleri (Continued)

COPEPODA

CALIGIDAE

Lepeophtheirus oblitus Kabata 1973. British Columbia. Kabata (1973).

DIGENEA

ALLOCREADIIDAE

Anisorchis opisthorchis Polyanski 1955. British Columbia. Intestine.
Arai (1969b).

Neophasis oculata (Levinsen 1881) Miller 1941. Kamchatka, USSR.
Zhukov (1963).

BUCEPHALIDAE

Prosorhynchus sp. Japan. Muscles. Machida et al. (1972).

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Kamchatka, USSR. Zhukov (1963).
Genarchopsis muelleri (Levinsen 1881) Yamaguti 1954. Kamchatka, USSR.
Zhukov (1963).

Genolinea anura (Layman 1930) Yamaguti 1954. Kamchatka, USSR.
Zhukov (1963).

Hemiurus levinseni Odhner 1905. Kamchatka, USSR. Zhukov (1963).

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine. Arai (1969b).

Lecithophyllum botryophorum (Olsson 1868) Odhner 1905. British Columbia.
Intestine. Arai (1969b) as L. anteroporum.

Parahemiurus merus (Linton 1910) Woolcock 1935. British Columbia.
Intestine. Arai (1969b).

OPECOELIDAE

Anomalotrema putjatini Zhukov 1957. Kamchatka, USSR. Zhukov (1963).

Podocotyle sp. Immature. British Columbia. Intestine. Arai (1969b).

Podocotyle atomon (Rudolphi 1802) Odhner 1905. British Columbia.

Intestine. McFarlane (1936); Kamchatka, USSR. Zhukov (1963).

Podocotyle reflexa (Creplin 1825) Odhner 1925. Kamchatka, USSR.
Zhukov (1963).

Podocotyle sinusacca Ching 1960. British Columbia. Intestine. Arai
(1969b) as Neopodocotyloides s.

MONOGENEA

MICROCOTYLIDAE

Prosomicrocotyla chiri (Goto 1894) Yamaguti 1958. Washington. Robinson
(1961).

Hexagrammos stelleri (Continued)

NEMATODA

ANISAKIDAE

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Kamchatka, USSR.
Strelkov (1960) as Contracaecum a.

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

Trichodina hexagrammi Zhukov 1964. Kamchatka, USSR. Zhukov (1964).

Ophiodon elongatus - Lingcod

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. British Columbia. Intestine, stomach.
Arai (1969b).

Tentacularia sp. Larva. Washington. Region of vertebra. Hart (1936a).

COPEPODA

CALIGIDAE

Lepeophtheirus breviventris Fraser 1920. British Columbia. Buccal
cavity. Fraser (1920).

Lepeophtheirus pravipes Wilson 1912. British Columbia. Wilson (1912b);
California. Shiino (1965d) as L. trifidus.

Lepeophtheirus salmonis (Krøyer 1838). British Columbia. Bere⁵.

CHONDRACANTHIDAE

Chondracanthus narium Kabata 1969. British Columbia. Nasal cavity.
Kabata (1969a).

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum casum (Linton 1910) McFarlane 1934. British Columbia.

McFarlane (1936) [Likely S. californicum - Sekerak and Arai (1977)].

Stephanostomum tristephanum McFarlane 1936. McFarlane (1936); Northern
and Central California. Chapa²³.

Ophiodon elongatus (Continued)

BUCEPHALIDAE

- Rhipidocotyle elongata McFarlane 1936. British Columbia. McFarlane (1936); Washington. Ching (1960a).
Prosorhynchus facilis (Ozaki 1924) Ekmann 1933. British Columbia. McFarlane (1936); Washington. Ching (1960a).
Prosorhynchus apertus McFarlane 1936. Washington. Ching (1960a); British Columbia. McFarlane (1936).
Bucephalus sp. California. Giles (1962).

HEMIURIDAE

- Derogenes crassus Manter 1934. Oregon. McCauley (1960).
Derogenes varicus (Müller 1784) Looss 1901. Washington. Lloyd (1938).
Genolinea laticauda Manter 1925. Washington. Lloyd (1938).
Hemiurus levinseni Odhner 1905. Washington. Lloyd (1938).
Sterrhurus exodicus (McFarlane 1936) Yamaguti 1958. Central California. Stomach. Nahhas¹⁰, British Columbia. McFarlane (1936); Washington. Lloyd (1938); Oregon. McCauley (1960) all as Lecithochirium e.
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Oregon. Stomach. McCauley (1960); Central California. Nahhas¹⁰; Washington. Ching (1960a); British Columbia. Arai (1969b).
Parahemiurus merus (Linton 1910) Woolcock 1935. British Columbia. Intestine. Arai (1969b).
Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia. Intestine. Arai (1969b).

HIRUDINOIDEA

PISCICOLIDAE

- Malmiana sp. Oregon. Exterior. Bureson⁷.

ISOPODA

CYMOTHOIDAE

- Lironeca vulgaris Stimpson 1857. California. Gills. Richardson (1905).

MONOGENEA

GYRODACTYLIDAE

- Gyrodactylus elegans Nordmann 1832. Washington. Guberlet (1936a).

MICROCOTYLIDAE

- Microcotyle sebastis Goto 1894. Washington. Guberlet (1936a).

UDONELLIDAE

- Udonella ophiodontis (Kay 1945) Winter 1955. Washington. On Lepeophtheirus sp. attached to oral cavity. Kay (1945).

Ophiodon elongatus (Continued)

NEMATODA

ANISAKIDAE

- * Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. British Columbia. Stomach, intestine. Margolis ³ as Contracecum a.
Anisakis sp. Larva. British Columbia. Stomach. Arai (1969b); Southern California. Dailey et al. (in press).
Phocanema sp. Larva. British Columbia. Body cavity, stomach. Arai (1969b).
Phocanema decipiens (Krabbe 1878) Myers 1959. Larva. British Columbia. Margolis (1956b) as Terranova d.

CUCULLANIDAE

- Cucullanus elongatus Smedley 1933. British Columbia. Intestine. Smedley (1933).

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

- Genera and species. British Columbia. Gills. Bell (1962).

Oxylebius pictus - Painted Greenling

COPEPODA

BOMOLOCHIDAE

- Holobomolochus spinulus (Cressey 1969) Kabata 1971. Southern California. Gill cavity. Cressey (1969b).

CHONDRACANTHIDAE

- Heterochondria atypica Ho 1972. Southern California. Gills. Ho (1972b).

ISOPODA

- Genera and species. Gnathiid larva. Southern California. Body surface. Hobson (1971).

Pleurogrammus monoptygius - Atka Mackerel

ACANTHOCEPHALA

ECHINORHYNCHIDAE

- Echinorhynchus gadi Zoega in Müller 1776. Kamchatka, USSR. Intestine. Streikov (1960).

Pleurogrammus monopterygius (Continued)

POLYMORPHIDAE

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. USSR. Baeva (1965b).

CESTODA

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Kamchatka, USSR.
Strelkov (1960).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Kamchatka, USSR. Intestine.
Strelkov (1960).

COPEPODA

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. Alaska. Exterior.
Kabata (1973); Siberia. Wilson (1905b).

DIGENEA

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. USSR.
Baeva (1965b).

FELLODISTOMATIDAE

Hexagrammia zhukovi Baeva 1965. USSR. Intestine. Baeva (1965b).

HEMIURIDAE

Genolinea aburame Yamaguti 1934. USSR. Baeva (1965b).

OPECOELIDAE

Podocotyle reflexa (Creplin 1825) Odhner 1905. USSR. Baeva (1965b).

NEMATODA

ANISAKIDAE

Phocanema sp. Larva. USSR. Baeva (1965b) as Terranova sp.
Anisakis sp. Larva. Kamchatka, USSR. Strelkov (1960).

COTTIDAE -- Sculpins

Artedius fenestralis - Padded Sculpin

DIGenea

HEMIURIDAE

Genolinea laticauda Manter 1925. British Columbia. Stomach.
Arai (1969b).

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

Trichodina vancouverense Laird 1961. British Columbia. Gills.
Laird (1961).

Trichodina lairdi Lom 1970. British Columbia. Gills. Laird (1961)
as T. decipiens.

Trichodina rectuncinata Raabe 1958. British Columbia. Gills.
Lom (1970b).

PROTOZOA (SPOROZOA)

HAEMOGREGARINIDAE

Haemogregarina bigemina Laveran and Mesnil 1901. British Columbia.
Blood. Laird (1961).

Artedius harringtoni - Scalyhead Sculpin

SYNONYM - Axyrias harringtoni

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. Larva.
British Columbia. Intestine. Arai (1969b).

COPEPODA

LERNAEOPODIDAE

Clavella parva Wilson 1912. British Columbia. Fraser (1920).

PENNELLIDAE

Haemobaphes intermedius Kabata 1967. British Columbia. Gill arches.
Kabata (1967b).

Artedius harringtoni (Continued)

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum californicum Manter and Van Cleave 1951. British Columbia. Intestine. Arai (1969b) as S. casum.

NEMATODA

ANISAKIDAE

Contracaecum sp. Larva. British Columbia. Body cavity. Arai (1969b).

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. British Columbia. Intestine. Arai (1969b).

Artedius lateralis - Smoothhead Sculpin

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Leptotheca elegans Noble 1938. Southern California. Gallbladder. Noble (1941).

MYXIDIIDAE

Sphaeromyxa lateralis Noble 1941. Southern California. Gallbladder. Noble (1941).

Artedius notospilotus - Bonyhead Sculpin

DIGENEA

OPECOELIDAE

Podocotyle enophrysi Park 1937. Northern California. Intestine. Nahhas and Krupin (1977).

Ascelichthys rhodorus - Rosylip Sculpin

DIGENEA

OPECOELIDAE

Podocotyle sp. Northern California. Intestine. Edmiston²⁹.
Podocotyle californica Park 1937. Northern California. Intestine. Nahhas and Krupin (1977).
Podocotyle enophrysi Park 1937. Northern California. Intestine. Nahhas and Krupin (1977).

Ascelichthys rhodorus (Continued)

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Myxidium incurvatum Thélohan 1892. Washington. Gallbladder. Kuris²⁰.

Blepsias cirrhosus - Silverspotted Sculpin

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Sea of Japan. Intestine.
Zhukov (1960a).

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. Sea of Japan.
Intestine. Zhukov (1960a).

PHYLLOBOTHRIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai
(1969b); Sea of Japan. Mesentery. Zhukov (1960a).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Sea of Japan. Intestine.
Zhukov (1960a).

COPEPODA

PENNELLIDAE

Haemobaphes sp. Immature. British Columbia. Kabata (1967b).

DIGENEA

ALLOCREADIIDAE

Liliatrema skrjabini Gubanov 1954. Larva. Sea of Japan. Muscle.
Zhukov (1960a).

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine. Arai (1969b); Sea of Japan. Zhukov (1960a).
Genolinea laticauda Manter 1925. Oregon. McCauley (1960); British
Columbia. Stomach. Arai (1969b); Kamchatka, USSR. Skryabina (1963).
Genolinea anura (Layman 1930) Yamaguti 1954. Sea of Japan. Stomach.
Zhukov (1960a).

Blepsias cirrhosus (Continued)

Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Sea of Japan.
Intestine. Zhukov (1960a).

Derogenes varicus (Müller 1784) Looss 1901. Sea of Japan. Stomach.
Zhukov (1960a).

OPECOELIDAE

Podocotyle sinusacca Ching 1960. British Columbia. Intestine.
Arai (1969b) as Neopodocotyloides s.

Podocotyle sp. Immature. British Columbia. Intestine. Arai (1969b).

Podocotyle atomon (Rudolphi 1802) Odhner 1905. Sea of Japan.
Intestine. Zhukov (1960a).

Podocotyle reflexa (Creplin 1825) Odhner 1905. Sea of Japan.
Intestine. Zhukov (1960a).

MONOGENEA

GYRODACTYLIDAE

Gyrodactylus gröenlandicus pacificus Bykhovsky and Polyanski 1953.
Sea of Japan. Gills. Bykhovsky and Polyanski (1953).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).
*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Sea of Japan.
Intestine. Zhukov (1960a) as Contraeaecum a.

Chitonotus pugetensis - Roughback Sculpin

COPEPODA

ERGASILIDAE

Ergasilus turgidus Fraser 1920. British Columbia. Bere⁵.

LERNAEOPODIDAE

Clavella parva Wilson 1912. British Columbia. Bere⁵.

NEMATODA

ANISAKIDAE

Contraeaecum sp. Larva. British Columbia. Body cavity. Arai
(1969b).

CAPILLARIIDAE

Capillaria sp. British Columbia. Stomach. Arai (1969b).

Clinocottus acuticeps - Sharpnose Sculpin

DIGENEA

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Oregon. Hall and Pratt (1969) as L. salmonis.

MONOGENEA

GYRODACTYLIDAE

Gyrodactylus bodegensis Mizelle and Kritsky 1967. Northern California. Skin. Mizelle and Kritsky (1967d).

Clinocottus analis - Woolly Sculpin

DIGENEA

HEMIURIDAE

Genolinea montereyensis Annereaux 1947. California. Stomach. Annereaux (1947).

Genolinea laticauda Manter 1925. Central California. Stomach. Nahhas¹⁰.

OPECOELIDAE

Helicometrina elongata Noble and Park 1937. Southern California. Intestine. Yamaguti (1971).

Helicometrina nimia Linton 1910. Intestine. Arai (1962); Central California. Chapa²³.

Opecoelus adsphaericus Manter and Van Cleave 1951. Southern California and Baja California. Intestine. Manter and Van Cleave (1951).

Opegaster cameroni Caballero and Caballero 1969. Southern California. Intestine. Caballero and Caballero (1969b).

Podocotyle sp. Northern California. Intestine, caeca. Edmiston²⁹.

Podocotyle californica Park 1937. Northern California. Intestine. Nahhas and Krupin (1977).

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa obesa Jameson 1929. Central California. Gallbladder. Jameson (1929).

Clinocottus embryum - Calico Sculpin

DIGENEA

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Washington. Ching (1960a).

Clinocottus embryum (Continued)

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Oregon. Hall and Pratt (1969); Washington. Ching (1960a) as L. salmonis.

Clinocottus globiceps - Mosshead Sculpin

SYNONYM - Blennicottus globiceps

DIGenea

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Oregon. Hall and Pratt (1969) as L. salmonis.

Genolinea laticauda Manter 1925. Oregon. Hall and Pratt (1969).

OPECOELIDAE

Podocotyle atomon (Rudolphi 1802) Odhner 1905. Oregon. Hall and Pratt (1969).

Podocotyle californica Park 1937. Northern California. Lower intestine. Park (1937b) as P. elongata and P. kofoidi.

Podocotyle enophrysi Park 1937. Oregon. Hall and Pratt (1969); Northern California. Intestine. Park (1937b) as P. blennicottusi and P. pacifica.

Podocotyle reflexa (Creplin 1825) Odhner 1905. Oregon. Hall and Pratt (1969).

ZOOGONIDAE

Zoogonoides viviparus (Olsson 1868) Odhner 1902. Oregon. Hall and Pratt (1969).

Dasycottus setiger - Spinyhead Sculpin

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

DIGenea

ACANTHOCOLPIDAE

Stephanostomum dentatum (Linton 1900) Linton 1940. British Columbia. Intestine. Arai (1969b).

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia. Intestine. Arai (1969b).

Lecithophyllum botryophorum (Olsson 1868) Odhner 1905. British Columbia. Intestine. Arai (1969b) as L. anteroporum.

Genolinea manteri Lloyd 1938. Washington. Ching (1960a).

Dasycottus setiger (Continued)

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

Trichodina ovonucleata Raabe 1958. Washington. Gills. Lom (1970b).
Trichodina parvula Lom 1970. Washington. Gills. Lom (1970b).

Enophrys bison - Buffalo Sculpin

SYNONYM - Aspicottus bison, Endophrys bison

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. British
Columbia. Pyloric caeca. Wardle (1932).

COPEPODA

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. British Columbia.
Fraser (1920).

CHONDRACANTHIDAE

Chondracanthus irregularis Fraser 1920. British Columbia. Gill
cavity. Fraser (1920).

DIGENEA

BUCEPHALIDAE

Prosorhynchus squamatus Odhner 1905. Oregon. Pratt and McCauley
(1961).

HEMIURIDAE

Genolinea laticauda Manter 1925. Oregon. McCauley (1960).
Genolinea manteri Lloyd 1938. Oregon. McCauley (1960).
Intuscirrus aspicotti Acena 1947. Washington. Stomach. Acena (1947).
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Oregon.
Stomach. McCauley (1960); California. Park (1936) as T. californica.

OPECOELIDAE

Podocotyle enophrysi Park 1937. Northern California. Intestine,
stomach. Park (1937b) as P. endophrysi.
Podocotyle californica Park 1937. Northern California. Intestine,
caeca. Edmiston²⁹.

Enophrys bison (Continued)

HIRUDINOIDEA

PISCICOLIDAE

Malmiana virida Burreson 1977. Oregon. Pectoral fin. Burreson (1977c).

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

Trichodina domerguei subsp. domerguei Haider 1964. Washington. Gill's. Lom (1970b).

Gilbertidia sigalutes - Soft Sculpin

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).

Hemilepidotus hemilepidotus - Red Irish Lord

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. British Columbia. Intestine. Arai (1969b).

POLYMORPHIDAE

Corynosoma sp. Juvenile. Schiller (1954).

COPEPODA

CHONDRACANTHIDAE

Chondracanthus sp. Oregon. Gill cavity. Millemann³⁴.

DIGENEA

ALLOCREADIIDAE

Anisorchis opisthorchis Polyansky 1955. British Columbia. Intestine. Arai (1969b).

HEMIURIDAE

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Washington. Ching (1960a).

Hemilepidotus hemilepidotus (Continued)

Derogenes varicus (Muller 1784) Looss 1901. British Columbia.

Intestine. Arai (1969b).

Genolinea laticauda Manter 1925. British Columbia. Stomach.

Arai (1969a).

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.

Intestine. Arai (1969b).

OPECOELIDAE

Podocotyle sinusacca Ching 1960. British Columbia. Intestine.

Arai (1969b) as Neopodocotyloides s.

ZOOGONIDAE

Lepidophyllum cameroni Arai 1969. British Columbia. Urinary bladder,
rectal gland. Arai (1969b).

Steganoderma formosum Stafford 1904. British Columbia. Intestine.

Arai (1969b).

NEMATODA

ANISAKIDAE

Phocanema decipiens (Krabbe 1878) Myers 1959. Larva. Alaska.

Schiller (1954) as Porrocaecum d.

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. British Columbia. Intestine.

Arai (1969b).

Hemilepidotus spinosus - Brown Irish Lord

DIGenea

OPECOELIDAE

Podocotyle sp. Northern California. Intestine. Edmiston²⁹.

Podocotyle californica Park 1937. Northern California. Intestine.

Nahas and Krupin (1977).

Icelinus filamentosus - Threadfin Sculpin

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. British Columbia.

Intestine. Arai (1969b).

Icelinus filamentosus (Continued)

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai
(1969b).

NEMATODA

ANISAKIDAE

Contracaecum sp. Larva. British Columbia. Body cavity. Arai
(1969b).

Icelinus tenuis - Spotfin Sculpin

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

DIGenea

HEMIURIDAE

Genera and species. Immature. British Columbia. Stomach.
Arai (1969b).

Jordania zonope - Longfin Sculpin

NEMATODA

ANISAKIDAE

Contracaecum sp. Larva. British Columbia. Body cavity. Arai
(1969b).

Leptocottus armatus - Pacific Staghorn Sculpin

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Ziega in Müller 1776. British Columbia.
Intestine. Arai (1969b).

POLYMORPHIDAE

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Larva. Washington.
Van Cleave (1953).

Corynosoma sp. Juvenile. British Columbia. Intestine. Arai (1969b).

Leptocottus armatus (Continued)

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. British Columbia. Pyloric caeca. Wardle (1932).

Bothriocephalus occidentalis (Linton 1898) Lühe 1899. British Columbia. Pyloric caeca. Wardle (1932).

COPEPODA

BOMOLOCHIDAE

Holobomolochus spinulus (Cressey 1969) Kabata 1971. British Columbia. Gills. Kabata (1971).

Holobomolochus prolixus (Cressey 1969) Kabata 1971. Southern California. Gill cavity. Ho (1975).

CALIGIDAE

Lepeophtheirus cuneifer Kabata 1974. Alaska. Kabata (1974) possible host.

CHONDRACANTHIDAE

Acanthochondria rectangularis (Fraser 1920) Markevich 1957. Oregon. Gill cavity. Millemann⁵⁴.

ERGASILIDAE

Ergasilus sp. Southern California. Body surface. Baker²².

DIGenea

ACANTHOCOLPIDAE

Stephanostomum sp. Northern California. Intestine. Chapa²³ as S. casum.

BUCEPHALIDAE

Prosorhynchoides ozakii (Ozaki 1928) Margolis and Arthur 1979. Oregon. Pratt and McCauley (1961) as Bucephalopsis o.

Rhipidocotyle elongata McFarland 1936. British Columbia. Intestine. Arai (1969b).

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Washington. Lloyd (1938).

Genolinea laticauda Manter 1925. Oregon. McCauley (1960); British Columbia. Stomach. Arai (1969b); Northern California. Chapa²³.

Genolinea manteri Lloyd 1938. Washington. Stomach. Lloyd (1938).

Genolinea montereyensis Annereaux 1947. Oregon. McCauley (1960).

Leptocottus armatus (Continued)

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Washington.
Ching (1960a) as L. salmonis.
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Oregon.
Stomachs. McCauley (1960); Washington. Ching (1960a);
British Columbia. Arai (1969b); Northern California. Chapa²³;
Baja California. King (1962).

OPECOELIDAE

Podocotyle atomon (Rudolphi 1802) Odhner 1905. British Columbia.
Intestine. McFarlane (1936).
Podocotyle olssoni Odhner 1905. Oregon. Pratt and McCauley (1961).
Podocotyle reflexa (Creplin 1825) Odhner 1905. British Columbia.
McFarlane (1936); Oregon. Pratt and McCauley (1961).
Podocotyle enophrysi Park 1937. Washington. Intestine. Aldrich¹²
as P. pacifica.
Podocotyle sp. Northern California. Intestine. Edmiston²⁹.
Podocotyle californica Park 1937. Washington. Intestine. Ching
(1960a) as P. pedunculata.
Podocotyle sinusacca Ching 1960. British Columbia. Intestine.
Arai (1969b); Washington. Intestine. Ching (1960a).
Helicometrina nimia Linton 1910. Southern California. Intestine.
Montgomery (1957).

HIRUDINOIDEA

GLOSSIPHONIIDAE

Genera and species. Southern California. External surface. Tasto
(1975).

PISCICOLIDAE

Aetabdella abditovesiculata (Moore 1952) Burreson 1976. Oregon,
California. External surface. Burreson (1976a).

ISOPODA

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. Oregon. Gill cavity. Burreson⁷.

MONOGENEA

CAPSALIDAE

Neobenedenia girellae (Hargis 1955) Yamaguti 1963. California.
Hargis (1955a) as Benedenia g.

GYRODACTYLIDAE

Gyrodactylus armatus Crane and Mizelle 1967. Northern California.
Skin. Crane and Mizelle (1967).

Leptocottus armatus (Continued)

Gyrodactylus sculpinus Crane and Mizelle 1967. Northern California.
Skin. Crane and Mizelle (1967).
Gyrodactylus sp. Southern California. Gills. Baker ²².

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).
Contraecaecum sp. Larva. British Columbia. Body cavity. Arai (1969b).
*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. British Columbia.
Smedley (1934) as Contraecaecum magnum.

CAMALLANIDAE

Spirocamallanus pereirai (Annereaux 1946) Olsen 1952. California.
Intestine. Noble and King (1960).

PROTOZOA (CILIOPHORA)

SCYPHIDIIDAE

Scyphidia sp. Oregon. Gills. Burreson⁷.
Ambipherya sp. Southern California. Gills. Baker ²².

URCEOLARIIDAE

Trichodina sp. Southern California. Gills. Baker ²².

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa tenuis Fujita 1923. Central California. Gallbladder.
Jameson (1929).
Ceratomyxa crassa Jameson 1929. Central California. Gallbladder.
Jameson (1929).

Malacottus kincaidii - Blackfin Sculpin

NEMATODA

ANISAKIDAE

Contraecaecum sp. Larva. British Columbia. Body cavity. Arai
(1969b).

CAPILLARIIDAE

Capillaria sp. British Columbia. Stomach. Arai (1969b).

Myoxocephalus polyacanthocephalus - Great Sculpin

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. British Columbia.
Intestine. Arai (1969b); Kamchatka, USSR. Zhukov (1963).

POLYMORPHIDAE

Corynosoma sp. Juvenile. British Columbia. Intestine. Arai (1969b).
Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Larva. Kamchatka,
USSR. Zhukov (1963).

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. British
Columbia. Intestine. Arai (1969b).

PHYLLOBOTHRIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai
(1969b).

TETRAPHYLLIDAE

Scolex pleuronectis Müller 1788. Kamchatka, USSR. Zhukov (1963).

COPEPODA

CALIGIDAE

Lepeophtheirus sp. British Columbia. Body surface. Arai (1969b).
Lepeophtheirus parviventris Wilson 1905. British Columbia. Kabata
(1973).

CHONDRACANTHIDAE

Chondracanthus irregularis Fraser 1920. British Columbia. Gills.
Arai (1969b).
Chondracanthus lotellae Wilson 1935. Alaska. Gills. Wilson (1935b).

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. British Columbia. Gills.
Arai (1969b).

DIGENEA

ALLOCREADIIDAE

Neophasis oculata (Levinsen 1881) Miller 1941. Kamchatka, USSR.
Zhukov (1963).

Myoxocephalus polyacanthocephalus (Continued)

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Kamchatka, USSR. Zhukov (1963).

FELLODISTOMATIDAE

Stenakron problematicum (Issaitschikov 1928) Yamaguti 1971. Kamchatka, USSR. Zhukov (1963) as Rhodotrema p.

HEMIURIDAE

Genolinea laticauda Manter 1925. British Columbia. Stomach. Arai (1969b).

Genolinea anura (Layman 1930) Yamaguti 1954. Kamchatka, USSR. Stomach. Zhukov (1963).

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. British Columbia. Stomach. Arai (1969b).

Hemiurus levinseni Odhner 1905. Kamchatka, USSR. Zhukov (1963).

Derogenes varicus (Müller 1784) Looss 1901. Kamchatka, USSR. Zhukov (1963).

Genarchopsis muelleri (Levinsen 1881) Yamaguti 1954. Kamchatka, USSR. Zhukov (1963).

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Kamchatka, USSR. Zhukov (1963).

OPECOELIDAE

Podocotyle enophrysi Park 1937. British Columbia. Intestine. Arai (1969b).

Podocotyle atomon (Rudolphi 1802) Odhner 1905. Kamchatka, USSR. Zhukov (1963).

Podocotyle reflexa (Creplin 1825) Odhner 1905. Kamchatka, USSR. Zhukov (1963).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Intestine. Arai (1969b).

Contraecum sp. Larva. British Columbia. Intestine, body cavity. Arai (1969b).

Phocanema sp. Larva. British Columbia. Intestine. Arai (1969b).

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. British Columbia. Intestine. Arai (1969b).

Ascarophis pacificus Zhukov 1960. Kamchatka, USSR. Zhukov (1963).

Myoxocephalus polyacanthocephalus (Continued)

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa porrecta Dogiel 1948. Kamchatka, USSR. Zhukov (1964).

MYXIDIIDAE

Myxidium japonicum Dogiel 1948. Kamchatka, USSR. Zhukov (1964).

PROTOZOA (SPOROZOA)

EIMERIIDAE

Eimeria myoxocephali Fitzgerald 1975. Washington. Fitzgerald (1975).

Nautichthys oculofasciatus - Sailfin Sculpin

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. British Columbia. Intestine. Arai (1969b).

DIGENEA

HEMIURIDAE

Genolinea laticauda Manter 1925. British Columbia. Stomach. Arai (1969b).

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia. Intestine. Arai (1969b).

NEMATODA

CYSTIDICOLIDAE

Ascarophis Sebastodis Olsen 1952. British Columbia. Intestine. Arai (1969b).

Oligocottus maculosus - Tidepool Sculpin

COPEPODA

BOMOLOCHIDAE

Holobomolochus spinulus (Cressey 1969) Kabata 1971. British Columbia. Gills. Kabata (1971).

Oligocottus maculosus (Continued)

PENNELLIDAE

Haemobaphes intermedius Kabata 1967. British Columbia. Gill arches.
Kabata (1967b).
Haemobaphes sp. Juvenile. British Columbia. Gills. Arai (1969b).

DIGENEA

HEMIURIDAE

Genolinea laticauda Manter 1925. Oregon. Hall and Pratt (1969);
British Columbia. Stomach. Arai (1969b).
Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine. Arai (1969b); Oregon. Hall and Pratt (1969) as
L. salmonis.
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. British
Columbia. Stomach. Arai (1969b).

OPECOELIDAE

Podocotyle californica Park 1937. Northern California. Intestine.
Park (1937b) as P. pedunculata; Oregon. Hall and Pratt (1969).

MONOGENEA

GYRODACTYLOIDEA

Genera and species. British Columbia. Gills. Arai (1969b).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).
Contracaecum sp. Larva. British Columbia. Body cavity. Arai (1969b).

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

Trichodina lairdi Lom 1970. Washington. Gills. Lom (1970b).
Trichodina cottidarum subsp. cottidarum Lom 1970. Washington.
Gills. Lom (1970b).

Oligocottus snyderi - Fluffy Sculpin

SYNONYM - Dialarchus snyderi

DIGENEA

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1902. Oregon. Hall and
Pratt (1969) as L. salmonis.

Oligocottus snyderi (Continued)

OPECOELIDAE

Podocotyle californica Park 1937. Oregon. Hall and Pratt (1969);
Northern California. Intestine, caeca. Nahhas and Krupin (1977).

ZOOGONIDAE

Zoogonoides viviparous (Olsson 1868) Odhner 1902. Oregon. Hall
and Pratt (1969).

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Myxidium incurvatum Thélohan 1892. Southern California. Gallbladder.
Noble (1941).

Radulinus asprellus - Slim Sculpin

MONOGENEA

MICROCOTYLIDAE

Microcotyle sp. Washington. Bonham (1950).

PROTOZOA (CILIOPHORA)

SCYPHIDIIDAE

Scyphidia arctica Zhukov 1960. Washington. Gills. Lom and Laird
(1969).

URCEOLARIIDAE

Trichondina ovonucleata Raabe 1958. Washington. Lom (1970b).

Rhamphocottus richardsoni - Grunt Sculpin

NEMATODA

ANISAKIDAE

Phocanema sp. Larva. British Columbia. Body cavity. Arai (1969b)
as Porrocaecum sp.

CYSTIDICOLIDAE

Ascarophis sebastodis Olsen 1952. British Columbia. Intestine.
Arai (1969b).

Scorpaenichthys marmoratus - Cabezon

COPEPODA

BOMOLOCHIDAE

Holobomolochus venustus Kabata 1971. British Columbia. Nasal cavities. Kabata (1971).

CALIGIDAE

Caligus hobsoni Cressey 1969. Southern California. Hobson (1971).
Lepeophtheirus parviventris Wilson 1905. British Columbia. Fraser (1920).

CHONDRACANTHIDAE

Chondracanthus pinguis Wilson 1912. British Columbia. Fraser (1920).
Chondracanthus gracilis Fraser 1920. British Columbia. Inner surface of operculums. Kabata (1968).

DIGenea

BUCEPHALIDAE

Prosorhynchus scapellus McFarlane 1936. British Columbia. Pyloric caeca. McFarlane (1936); Central California. Stomach, intestine. Chapa ²³.

HEMIURIDAE

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. British Columbia. Intestine. McFarlane (1936) as Dinurus nanaimoensis.
Genolinea laticauda Manter 1925. British Columbia. McFarlane (1936); Washington. Stomach. Lloyd (1938) as G. robusta; Central California. Nahhas ¹⁰.

OPECOELIDAE

Podocotyle enophrysi Park 1937. Northern California. Intestine. Nahhas and Krupin (1977).
Podocotyle sp. Northern California. Intestine. Edmiston ²⁹.
Podocotyle californica Park 1937. Northern California. Intestine. Nahhas and Krupin (1977).
Genitocotyle acirra Park 1937. Oregon. Pratt (1970).

HIRUDINOIDEA

PISCICOLIDAE

Trachelobdella oregonensis Burreson 1976. Oregon. Fins. Burreson (1976b).
Malmiana diminuta Burreson 1977. Oregon. Skin, fins. Burreson (1977c).

Scorpaenichthys marmoratus (Continued)

ISOPODA

Genera and species. Gnathiid larva. Southern California. Body surface. Hobson (1971).

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. Central California. Gill cavity. Moser¹⁹.

NEMATODA

CYSTIDICOLIDAE

Caballeronema wardlei (Smedley 1934) Margolis 1977. Canada. Intestine. Smedley (1934) as Metabronema w.

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia sp. Oregon. Blood. Burreson⁷.

PROTOZOA (SPOROZOA)

EIMERIIDAE

Eimeria sp. Central California. Intestine. Moser¹⁹.

Synchirus gilli - Manacled Sculpin

DIGenea

HEMIURIDAE

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Washington. Ching (1960a).

Triglops pingeli - Ribbed Sculpin

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. British Columbia. Intestine. Arai (1969b).

Triglops pingeli (Continued)

COPEPODA

PENNELLIDAE

Haemobaphes sp. Juvenile. British Columbia. Gills. Arai (1969b).
Peniculus clavatus (Müller 1779) Nordman 1832. Atlantic.
Prefontaine and Brunel (1962).

DIGenea

OPECOELIDAE

Podocotyle enophrysi Park 1937. British Columbia. Intestine.
Arai (1969b) as P. blennicottusi.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).
Contracaecum sp. Larva. British Columbia. Body cavity. Arai (1969b).

AGONIDAE -- Poachers and Alligatorfishes

Agonopsis emmelane - Northern Spearnose Poacher

SYNONYM - Agonopsis averuncus

DIGenea

OPECOELIDAE

Podocotyle gibbonsiae Johnson 1949. Washington. Intestine.
Aldrich¹².
Podocotyle enophrysi Park 1937. Washington. Intestine. Aldrich¹²
as P. pacifica.

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Myxidium sp. Washington. Gallbladder. Kuris²⁰.
Sphaeromyxa balbianii Thélohan 1895. Washington. Gallbladder. Kuris²⁰.

Agonus acipenserinus - Sturgeon Poacher

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. British Columbia.
Intestine. Arai (1969b).

Agonus acipenserinus (Continued)

CESTODA

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

COPEPODA

PENNELLIDAE

Haemobaphes sp. Immature. British Columbia. Kabata (1967b);
British Columbia. Gills. Arai (1969b).

DIGENEA

OPECOELIDAE

Podocotyle reflexa (Creplin 1825) Odhner 1905. Washington.
Intestine. Aldrich¹².

Podocotyle sp. Immature. British Columbia. Intestine. Arai (1969b).

NEMATODA

ANISAKIDAE

* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Larva.
British Columbia. Intestine. Arai (1969b) as Contracaecum a.

Asterotheca infraspinata - Spinycheek Starsnout

PROTOZOA (CILIOPHORA)

SCYPHIDIIDAE

Scyphidia arctica Zhukov 1960. Washington. Gills. Lom and Laird
(1969).

URCEOLARIIDAE

Trichodina ovonucleata Raabe 1958. Washington. Lom (1970b).

Pallasina barbata - Tubenose Poacher

MONOGENEA

GYRODACTYLIDAE

Gyrodactylus grøenlandicus Levinsen 1881. Okhotsk Sea, USSR.
Anal, pectoral fins. Bykhovsky and Polyanski (1953).

Gyrodactylus proximus Bykhovsky and Polyanski 1953. USSR.
Bykhovsky (1957).

Xeneretmus latifrons - Blacktip Poacher

CESTODA

PHYLLOBOTHRIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

CYCLOPTERIDAE - Lumpfishes and Snailfishes

Liparis callyodon - Spotted Snailfish

CESTODA

SPATHEBOTHRIDAE

Spathebothrium simplex Linton 1922. Northern California. Intestine. Nahhas and Krupin (1977).

DIGenea

BUCEPHALIDAE

Prosorhynchus scalpelus McFarlane 1936. Northern California. Intestine. Nahhas and Krupin (1977).

CRYPTOGONOMIDAE

Metadena caballeroi Nahhas and Krupin 1977. Northern California. Intestine. Nahhas and Krupin (1977).

HEMIURIDAE

Genolinea laticauda Manter 1925. Northern California. Intestine. Nahhas and Krupin (1977).

OPECOELIDAE

Podocotyle sinusacca Ching 1960. Northern California. Intestine. Nahhas and Krupin (1977).

Liparis cyclopus - Ribbon Snailfish

PROTOZOA (MYXOSPORIDA)

MYXIDIIDAE

Sphaeromyxa magna Zhukov 1964. Washington. Gallbladder. Lom (1969).

Liparis fucensis - Slipskin Snailfish

CESTODA

SPATHEBOTHRIIDAE

Spathebothrium simplex Linton 1922. Washington. Hart and Guberlet (1936).

DIGenea

OPECOELIDAE

Allopodocotyle leptomis (Dobrovolny 1939) Pritchard 1966. Washington. Intestine. Aldrich¹².

Podocotyle atomon (Rudolphi 1802) Odhner 1905. Washington. Intestine. Aldrich¹².

Podocotyle enophrysi Park 1937. Washington. Intestine. Aldrich¹² also as P. pacifica and P. blennicotusi.

Podocotyle levenseni Isaitschikov 1928. Washington. Intestine. Aldrich¹².

Liparis pulchellus - Showy Snailfish

DIGenea

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia. Robinson et al.¹⁶

OPECOELIDAE

Podocotyle enophrysi Park 1937. Washington. Intestine. Aldrich¹² as P. pacifica.

BOTHIDAE -- Lefteye Flounders

Citharichthys sordidus - Pacific Sanddab

SYNONYM - Orthopsetta sordida

COPEPODA

LERNAEOPODIDAE

Neobrachiella nitida (Wilson 1915) Kabata 1978. Central California. Buccal cavity. Wilson (1935b) as Brachiella n.

PENNELIDAE

Phrixecephalus cincinnatus Wilson 1908. Central California. Eyes. Wilson (1935b).

Citharichthys sordidus (Continued)

DIGenea

Azygiidae

Otodistomum veliporum (Criplin 1837) Stafford 1904. Metacercaria.
British Columbia. Margolis³.

Hemiuridae

Sterrhurus magnatestis Park 1936. Northern California. Stomach.
Park (1936).

Derogenes varicus (Müller 1784) Looss 1901. British Columbia.
Stomach. Margolis³.

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Oregon.
Stomach. McCauley (1960); British Columbia. Arai (1969b).

Nematoda

Anisakidae

Anisakis sp. Larva. British Columbia. Many places in body.
Margolis³; Southern California. Dailey et al. (in press).

Protozoa (Sarcostigophora)

Trypanosomatidae

Trypanosoma pacifica Burreson and Pratt 1972. Oregon. Blood.
Burreson⁷.

Citharichthys stigmaeus - Speckled Sanddab

Cestoda

Gilquiniidae

Gilquinia squali (Fabricius 1794) Dollfus 1930. Larva. British
Columbia. Yamaguti (1959b).

DIGenea

Hemiuridae

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Oregon.
Stomach. McCauley (1960); British Columbia. Stomach. Arai (1969b).

Sterrhurus magnatestis Park 1936. Northern California. Chapa²³as
Separogermiductus m.

Nematoda

Anisakidae

Anisakis sp. Larva. British Columbia. Body cavity. Arai (1969b).

Citharichthys xanthostigma - Longfin Sanddab

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa hopkinsi Jameson 1929. Southern California. Gallbladder.
Jameson (1929).

Hippoglossina stomata - Bigmouth Sole

HIRUDINOIDEA

PISCICOLIDAE

Australobdella californiana Burreson 1977. Southern California.
Body surface. Burreson (1977a).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Paralichthys californicus - California Halibut

CESTODA

DASYRHYNCHIDAE

Callitetrarhynchus gracilis (Rudolphi 1819) Pintner 1931. Larva.
Southern California. Viscera. Jensen¹⁸.

ECHENEIBOTHRIDAE

Echeneibothrium sp. Larva. Southern California. Mesentery. Haaker
(1975).

LACISTORHYNCHIDAE

Lacistorhynchus tenuis (Van Beneden 1858) Dollfus 1929. Larva. Southern
California. Viscera. Jensen¹⁸.

TRYPANORHYNCHA

Genera and species. Larva. Southern California. Jensen¹⁸.

COPEPODA

BOMOLOCHIDAE

Holobomolochus prolixus (Cressey 1969) Kabata 1971. Southern
California. Inner surfaces of operculums. Ho (1972a).
Taeniacanthodes haakeri Ho 1972. Southern California. Between rays
of dorsal and anal fins. Ho (1972a).

Paralichthys californicus (Continued)

*Bomolochus solae Claus 1864. Baja California. Causey (1960).

CALIGIDAE

Lepeophtheirus bifidus Fraser 1920. Southern California. Ho (1972a).
Lepeophtheirus dissimulatus Wilson 1905. Baja California. Causey (1960).

CHONDRACANTHIDAE

Acanthochondria sp. California. Ho (1972a).

TREBIIDAE

Trebius latifurcatus Wilson 1921. Southern California. Exterior.
Wilson (1921).

DIGENEA

ACANTHOCOLIDAE

Stephanostomum dentatum (Linton 1900) Linton 1940. California.
Intestine. Manter and Van Cleave (1951).

BUCEPHALIDAE

Bucephalus heterotentaculatus Bravo-Hollis and Sogandares-Bernal
1956. Baja California. Intestine. Arai (1962).
Prosorhynchoides labiatus (Manter and Van Cleave 1951), n. comb. Southern
California. Intestine. Manter and Van Cleave (1951) as Bucephalopsis 1.

CRYPTOGONIMIDAE

Metadena magdalенаe Arai 1962. Baja California. Intestine. Arai
(1962).

HEMIURIDAE

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Baja California.
Stomach. King (1962); Southern California. Digestive tract.
Haaker (1975).

ISOPODA

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. California. Gill cavity. Ho (1975).

MONOGENEA

CAPSALIDAE

Entobdella squamula (Heath 1902) Johnston 1929. Central California.
Body surface, gill chamber. Price (1939).

Paralichthys californicus (Continued)

NEMATODA

ANISAKIDAE

Contracaecum sp. Larva. Southern California. Dailey et al. (in press).

Anisakis sp. Larva. Southern California. Dailey et al. (in press).

Phocanema sp. Larva. Southern California. Dailey et al. (in press).

CAMALLANIDAE

Spirocamallanus pereirai (Annereaux 1946) Olsen 1952. Southern California. Stomach. Haaker (1975).

PLEURONECTIDAE - Righteye Flounders

Atheresthes stomias - Arrowtooth Flounder

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Bering Sea, USSR.
Mamaev (1965).

POLYMORPHIDAE

Corynosoma reductum (Von Lindstow 1905) Railliet and Henry 1907.
Larva. Bering Sea. Intestine. Mamaev (1965).

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Larva. Bering Sea,
USSR. Mamaev (1965).

CESTODA

LACISTORHYNCHIDAE

Grillotia erinacea (Van Beneden 1858) Guiart 1927. Larva. Bering
Sea, USSR. Body cavity, stomach wall. Mamaev (1965).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Bering Sea, USSR. Body
cavity, stomach wall, intestine. Mamaev (1965).

TETRAPHYLLEIDA

Scolex pleuronectis Müller 1788. Bering Sea, USSR. Intestine,
gallbladder. Mamaev (1965).

COPEPODA

PENNELLIDAE

Phrioxcephalus cincinnatus Wilson 1908. Northern California. Eyes.
Wilson (1935b); British Columbia. Eyes. Kabata (1969b).

Atheresthes stomias (Continued)

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum sp. Metacercaria. Alaska. Kovalenko (1969).

BUCEPHALIDAE

Prosorhynchus crucibulum (Rudolphi 1819) Odhner 1905. Bering Sea, USSR. Mamaev (1965).

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Bering Sea, USSR. Intestine. Mamaev (1965).

ZOOGONIDAE

Steganoderma formosum Stafford 1904. Bering Sea, USSR. Intestine. Mamaev (1965).

Brachyenteron doderleiniae Yamaguti 1938. Alaska to California. Kovalenko (1969).

MONOGENEA

CAPSALIDAE

Entobdella pugetensis Robinson 1961. Washington. Gills. Robinson (1961).

Entobdella hippoglossi (Müller 1776) Johnston 1856. Bering Sea, USSR. Gills. Mamaev (1965).

DICLIDOPHORIDAE

Diclidophora pugetensis Robinson 1961. Washington. Gills. Robinson (1961).

Heterobothrium affinis (Linton 1898) Price 1936. Bering Sea, USSR. Mamaev (1965).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Many places in body. Margolis³; Bering Sea. Mamaev (1965).

Phocanema decipiens (Krabbe 1878) Myers 1959. Larva. Bering Sea, USSR. Musculature, body cavity. Mamaev (1965).

* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Bering Sea, USSR. Mamaev (1965).

PROTOZOA (MYXOSPORIDA)

TETRACAPSULIDAE

Kudoa sp. British Columbia. Muscle. Hoskins et al.¹³

Eopsetta jordani - Petrale Sole

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoeqa in Müller 1776. British Columbia.
Intestine. Margolis³.

POLYMORPHIDAE

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Juvenile.
British Columbia. Encysted in liver. Margolis³.

CESTODA

PHYLLOBOTHRIDAE

Phyllobothrium caudatum (Zschokke and Heitz 1914). Larva.
British Columbia. Liver. Margolis³ as P. ketae.

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Postlarve. British Columbia.
Stomach wall. Margolis³.

COPEPODA

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. British Columbia.
Kabata (1973).
Caligus pectinatus Shiino 1965. Southern California. External
body surface. Shiino (1965b).

DIGENEA

AZYGIIDAE

Otodistomum veliporum (Creplin 1837) Stafford 1904. Metacercaria.
British Columbia. Cysts in connective tissue of stomach wall.
Margolis³.

HEMIURIDAE

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. British
Columbia. Stomach. Margolis and Boyce (1969).
Sterrurus exodicus (McFarlane 1936) Yamaguti 1958. Central
California. Stomach. Nahhas¹⁰; British Columbia. Margolis³
as Lecithochirium exodicum; Oregon. Gregoire and Pratt (1952).

OPECOELIDAE

Podocotyle gibbonsiae Johnson 1949. Washington. Intestine.
Aldrich¹².
Podocotyle sp. British Columbia. Pyloric caeca. Margolis³ as
P. wilsoni.

Eopsetta jordani

MONOGENEA

CAPSALIDAE

Entobdella squamula (Heath 1902) Johnston 1929. British Columbia.
Fin, skin. Margolis³.

NEMATODA

ANISAKIDAE

* Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. British Columbia.
Stomach, intestine. Margolis³.
Contracecum sp. Larva. British Columbia. Mesentery, liver,
stomach. Margolis³.
Anisakis sp. Larva. British Columbia. Many places in body.
Margolis³; Southern California. Dailey et al. (in press).

PROTOZOA (MYXOSPORIDA)

TETRACAPSULIDAE

Kudoa sp. Washington. Muscle. Patashnik and Groninger (1964).

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia sp. Oregon. Blood. Burreson⁷.

TRYPANOSOMATIDAE

Trypanosoma sp. Oregon. Blood. Burreson⁷.

Glyptocephalus zachirus - Rex Sole

CESTODA

TETRAPHYLLIDEA

Genera and species. Red pigmented plerocercoid. Southern California.
Intestine, pyloric caeca. Kunnenkeri and Martin (1962).

DIGENEA

HEMIURIDAE

Dissosaccus laevis (Linton 1898) Manter 1947. Central California.
Stomach. Nahhas¹⁰.

Glyptocephalus zachirus (Continued)

NEMATODA

ANISAKIDAE

- *Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. British Columbia. Stomach, intestine. Margolis³.
Anisakis sp. Larva. British Columbia. In mesentery, muscles, etc. Margolis³.

PROTOZOA (SARCOMASTIGOPHORA)

TRYPANOSOMATIDAE

- Trypanosoma sp. Oregon. Blood. Burreson⁷.

Hippoglossoides elassodon - Flathead Sole

ACANTHOCEPHALA

ECHINORHYNCHIDAE

- Echinorhynchus gadi Zoega in Müller 1776. Kamchatka, USSR. Skryabina (1963).

POLYMORPHIDAE

- Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Larva. Kamchatka, USSR. Strelkov (1960); Sea of Japan. Intestine. Zhukov (1960a).
Corynosoma reductum (Von Lindstow 1905) Railliet and Henry 1907. Bering Sea. Intestine. Mamaev (1965).

BRANCHIURA

ARGULIDAE

- Argulus borealis Wilson 1912. British Columbia. Fraser (1920).

CESTODA

AMPHICOTYLIDAE

- Eubothrium sp. Okhotsk Sea, USSR. Intestine. Mamaev et al. (1963).

BOTHRIOCEPHALIDAE

- Bothriocephalus sp. Okhotsk Sea, USSR. Mamaev et al. (1963).

DIPHYLLOBOTHRIIDAE

- Diphyllobothrium sp. Larva. Kamchatka, USSR. On digestive tract. Tsimbalyuk and Semeshko (1971).
Pyramicocephalus phocarum (Fabricius 1780). Larva. Pacific Ocean, Okhotsk Sea, USSR. Mamaev et al. (1963).

Hippoglossoides elassodon (Continued)

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Margolis³.

PSEUDOPHYLLIDEA

Genera and species. Pacific Ocean, Okhotsk Sea, USSR. Stomach, intestine. Mamaev et al. (1963).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Kamchatka, USSR. Body cavity, abdominal walls. Skryabina (1963); postlarva. British Columbia. Margolis³.

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Sea of Japan. Intestine. Zhukov (1960a).

COPEPODA

BOMOLOCHIDAE

Holobomolochus occultus Kabata 1971. British Columbia. Gills and gill cavity. Kabata (1971).

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. Washington. Gills. Villadolid (1927).

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum baccatum (Nicol 1907) Manter 1934. Sea of Japan. Intestine. Zhukov (1960a).

ALLOCREADIIDAE

Pseudozoogonoides microacetabulum (Schulman-Albowa 1952) Zhukov 1957. Kamchatka, USSR. Intestine. Skryabina (1963).

BUCEPHALIDAE

Prosrhynchoides gracilescens (Rudolphi 1819) n. comb. Sea of Japan. Intestine. Zhukov (1960a).

FELLODISTOMATIDAE

Stenakron quinquelobatum (Layman 1930) Mamaev, Parukhin and Baeva. 1963. Sea of Japan. Intestine. Zhukov (1960a) as Rhodotrema q.

Hippoglossoides elassodon (Continued)

Stenakron vestustum Stafford 1904. Kamchatka, USSR. Intestine.
Strelkov (1960).

Steringotrema ovacutum (Lebour 1908) Odhner 1911. Sea of Japan.
Intestine. Zhukov (1960a) as Rhodotrema o.

Fellodistomum furcigerum (Olsson 1867) Yamaguti 1954. Kamchatka,
USSR. Strelkov (1960) as Steringophorus f.

HEMIURIDAE

Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Sea of Japan.
Intestine. Zhukov (1960a).

Genarchopsis mulleri (Levinson 1881) Yamaguti 1954. Kamchatka,
USSR. Intestine. Strelkov (1960) as Genarches m.

Hemiurus levinseni Odhner 1905. Kamchatka, USSR. Stomach, pyloric
caeca. Skryabina (1963).

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Sea of Japan.
Intestine. Zhukov (1960a).

Derogenes varicus (Müller 1784) Looss 1901. Sea of Japan.
Stomach. Zhukov (1960a).

Parahemiurus merus (Linton 1910) Woolcock 1935. Sea of Okhotsk,
USSR. Mamaev et al. (1963).

OPECOELIDAE

Decemtestis azumae (Layman 1930) Yamaguti 1934. Sea of Japan.
Intestine. Zhukov (1960a) as Helicometrina a.

Podocotyle atomon (Rudolphi 1802) Odhner 1905. Pacific Ocean.
Mamaev et al. (1963).

SANGUINCOLIDAE

Aporocotyle simplex Odhner 1900. Bering Sea. Mamaev (1965).

ZOOGONIDAE

Diphtherostomum microacetabulum Schulman-Albova 1952. Sea of
Okhotsk, USSR. Intestine. Mamaev et al. (1963).

Lepidophyllum pleuronectini Zhukov 1957. Sea of Japan. Urinary
bladder. Zhukov (1960a).

Steganoderma formosum Stafford 1904. Kamchatka, USSR. Intestine.
Skryabina (1963).

Zoogonoides viviparus (Olsson 1868) Odhner 1902. Sea of Japan.
Intestine. Zhukov (1960a).

NEMATODA

ANISAKIDAE

Phocanema sp. Larva. Kamchatka, USSR. Muscles, body cavity.
Skryabina (1963) as Porrocaecum sp.

Contraecum sp. Larva. Kamchatka, USSR. Kidneys, intestine,
liver, body cavity. Skryabina (1963).

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Bering Sea.
Mamaev (1965); British Columbia. Stomach, intestine. Margolis³
both as Contraecum a.

Hippoglossoides elassodon (Continued)

Anisakis sp. Larva. Sea of Japan. Mesentery. Zhukov (1960a);
British Columbia. Margolis³.

CUCULLANIDAE

Cucullanus heterochrous Rudolphi 1802. Pacific Ocean. Intestine.
Mamaev et al. (1963).

Hippoglossus stenolepis - Pacific Halibut

SYNONYM - Hippoglossus hippoglossus stenolepis

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Kamchatka, USSR.
Skryabina (1963).

POLYMORPHIDAE

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Kamchatka, USSR.
Intestine. Strelkov (1960).

Corynosoma reductum (Von Lindstow 1905) Railliet and Henry 1907.
Larva. Bering Sea. Intestine. Mamaev (1965).

CESTODA

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Kamchatka, USSR.
Strelkov (1960).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Kamchatka, USSR. Gallbladder,
intestine. Skryabina (1963).

COPEPODA

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. Alaska. Kabata (1973);
Body surface. Wilson (1905b) from "Halibut".

Lepeophtheirus pravipes Wilson 1912. British Columbia. Bere⁵.

Lepeophtheirus appendiculatus Krøyer 1863. Alaska. Gills.
Wilson (1935b).

Lepeophtheirus cuneifer Kabata 1974. Alaska. Kabata (1974).
Questionable host.

Hippoglossus stenolepis (Continued)

CHONDRACANTHIDAE

Acanthochondria cornuta (Müller 1777) Oakley 1927. Alaska. Gill cavity. Wilson (1935b).

DIGENEA

FELLODISTOMATIDAE

Stenakron vetustum Stafford 1904. Kamchatka, USSR. Strelkov (1960).

HEMIURIDAE

Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Japan.

Stomach. Machida et al. (1972).

Hemiurus levinseni Odhner 1905. Japan. Stomach. Machida et al. (1972).

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Japan.

Stomach. Machida et al. (1972).

Derogenes varicus (Müller 1784) Looss 1901. Kamchatka, USSR.

Stomach, intestine. Skryabina (1963).

Genarchopsis muelleri (Levinsen 1881) Yamaguti 1954. Kamchatka, USSR.

Intestine. Strelkov (1960) as Genarches m.

Parahemiurus merus (Linton 1910) Wollcock 1935. Bering Sea. Stomach. Mamaev (1965).

LEPOCREADIIDAE

Lepidapedon gadi (Yamaguti 1934) Acena 1947. Kamchatka, USSR.

Intestine. Skryabina (1963).

OPECOELIDAE

Podocotyle reflexa (Creplin 1825) Odhner 1905. Kamchatka, USSR.

Stomach, intestine, caeca. Skryabina (1963).

Podocotyle atomon (Rudolphi 1802) Odhner 1905. Kamchatka, USSR.

Intestine. Strelkov (1960).

Pseudopecoelus nossamani Kruse 1977. Alaska. Kruse (1977).

ZOOGONIDAE

Steganoderma formosum Stafford 1904. Kamchatka, USSR. Intestine.

Skryabina (1963).

MONOGENEA

CAPSALIDAE

Entobdella squamula (Heath 1902) Johnson 1929. Alaska to California.

Guberlet (1936a); Bering Sea. Gills. Mamaev (1965).

Entobdella hippoglossi (Müller 1776) Johnston 1856. British Columbia.

Skin. Margolis³.

Hippoglossus stenolepis (Continued)

DICLIDOPHORIDAE

Heterobothrium affinis (Linton 1898) Price 1936. Bering Sea.
Mamaev (1965).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. Kamchatka, USSR. Strelkov (1960).
Contraecaecum sp. Larva. Kamchatka, USSR. Liver, kidneys, body
cavity, intestine. Skryabina (1963).
Phocanema decipiens (Krabbe 1878) Myers 1959. Larva. British Columbia.
Margolis (1956b); Bering Sea. Mamaev (1965) as Terranova d.

CUCULLANIDAE

Cucullanus heterochrous Rudolphi 1802. Kamchatka, USSR.
Strelkov (1960).

PROTOZOA (MYXOSPORIDA)

SPHAEROSPORIDAE

Unicapsula muscularis Davis 1924. Muscles. Guberlet (1933).

TETRACAPSULIDAE

Kudoa sp. Washington to Alaska. Muscles. Patashnik and Groninger
(1964).

Hypsoopsetta guttulata - Diamond Turbot

COPEPODA

CALIGIDAE

Lepeophtheirus dissimulatus Wilson 1905. Baja California. Causey (1960).
Lepeophtheirus bifidus Fraser 1920. Southern California. Body
surface. Ho (1975).

DIGENEA

HEMIURIDAE

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Baja
California. Stomach. King (1962).

HIRUDINOIDEA

PISCICOLIDAE

Aestabdella abditovesiculata (Moore 1952) Burreson 1976. California.
Burreson (1976a).

Hypsopsetta guttulata (Continued)

ISOPODA

CYMOTHOIDAE

Braga sp. Southern California. Gill cavity. Ho (1975).

Isopsetta isolepis - Butter Sole

COPEPODA

CALIGIDAE

Lepeophtheirus cuneifer Kabata 1974. Alaska. Kabata (1974).
Questionable host.

DIGENEA

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Washington. Ching (1960a).
Genolinea laticauda Manter 1925. Central California. Intestine.
Nahhas¹⁰.
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Washington.
Ching (1960a).

ZOOGONIDAE

Zoogonus dextrocirrus Aldrich 1961. Washington. Intestine. Aldrich
(1961).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Mesentery, muscle, etc.
Margolis³.

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

Genera and species. British Columbia. Gills. Bell (1962).

Lepidopsetta bilineata - Rock Sole

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Metechinorhynchus lageniformis (Ekbaum 1938) Petrotchenko 1956.
British Columbia. Intestine. Ekbaum (1938) as Echinorhynchus 1.

Lepidopsetta bilineata (Continued)

Echinorhynchus gadi Zoega in Müller 1776. British Columbia.
Intestine. Margolis³; Kamchatka, USSR. Strelkov (1960).

POLYMORPHIDAE

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Juveniles.
British Columbia. Liver, mesentery, intestinal walls. Ekbaum (1938);
Kamchatka, USSR. Strelkov (1960).

BRANCHIURA

ARGULIDAE

Argulus borealis Wilson 1912. British Columbia. Beneath pectoral
fins. Wilson (1912b).

CESTODA

AMPHICOTYLIDAE

Eubothrium sp. Pacific Ocean. Intestine. Mamaev et al. (1963).

BOTHRIOCEPHALIDAE

Bothriocephalus sp. Larva. British Columbia. Intestine. Arai (1969b).

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

PSEUDOPHYLLIDEA

Genera and species. Plerocercoid. British Columbia. Cyst in
stomach wall. Margolis³.

Genera and species. Pacific Ocean. Stomach, intestine. Mamaev et
al. (1963).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Postlarval. British Columbia.
Stomach wall. Margolis³.

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Sea of Japan. Zhukov (1960a).

COPEPODA

CALIGIDAE

Lepeophtheirus bifidus Fraser 1920. British Columbia. Body surfaces.
Fraser (1920).

Lepeophtheirus hospitalis Fraser 1920. British Columbia. Kabata
(1973).

Lepidopsetta bilineata (Continued)

Lepeophtheirus parviventris Wilson 1905. British Columbia. Kabata (1973).

LERNAEOPODIDAE

Nectobranchia indivisa Fraser 1920. British Columbia. Gills. Kabata (1970c).

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. British Columbia. Bere⁵.

PENNELLIDAE

Haemobaphes sp. Juveniles. British Columbia. Gills. Arai (1969b).

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum baccatum (Nicol 1907) Manter 1934. Kamchatka, USSR. Intestine. Strelkov (1960).

AZYGIIDAE

Otodistomum veliporum (Creplin 1837) Stafford 1904. Metacercaria. British Columbia. Cysts in connective tissue of stomach wall. Margolis³.

BUCEPHALIDAE

Prosorhynchoides gracilescens (Rudolphi 1819) n. comb, Kamchatka, USSR. Intestine. Strelkov (1960) as Bucephalopsis g.

FELLODISTOMATIDAE

Fellodistomum furcigerum (Olsson 1867) Yamaguti 1954. Sea of Japan. Intestine. Zhukov (1960a) as Steringophorus f.
Stenakron vetustum Stafford 1904. Kamchatka, USSR. Strelkov (1960); Sea of Japan. Zhukov (1960a) as Rhodotrema quinquelobota.
Steringotrema ovacutum (LeBour 1908) Odhner 1911. Pacific Ocean. Mamaev et al. (1963) as Rhodotrema o.

HEMIURIDAE

Derogenes varicus (Müller 1784) Looss 1901. Alaska. Kruse (1977).
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Oregon. Stomach. McCauley (1960).

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia. Intestine. Arai (1969b); Kamchatka, USSR. Strelkov (1960).

Hemiurus levinseni Odhner 1905. Kamchatka, USSR. Intestine. Strelkov (1960).

Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Kamchatka, USSR. Strelkov (1960).

Genarchopsis muelleri (Levinsen 1881) Yamaguti 1954. Kamchatka, USSR. Intestine. Strelkov (1960) as Genarches m.

Lepidopsetta bilineata (Continued)

LEPOCREADIIDAE

Lepidapedon gadi (Yamaguti 1934) Acena 1947. Kamchatka, USSR.
Strelkov (1960).

OPECOELIDAE

Podocotyle atomon (Rudolphi 1802) Odhner 1905. Kamchatka, USSR.
Intestine. Strelkov (1960).
Podocotyle gibbonsiae Johnson 1949. Washington. Intestine.
Aldrich¹².

ZOOGONIDAE

Pseudozoogonoides microacetabulum (Schulman-Albova 1952) Zhukov
1957. Kamchatka, USSR. Intestine. Strelkov (1960).
Zoogonus dextrocirrus Aldrich 1961. Washington. Intestine.
Aldrich (1961)
Zoogonoides viviparus (Olsson 1868) Odhner 1902. Sea of Japan.
Zhukov (1960a).
Lepidophyllum pleuronectini Zhukov 1958. Pacific Ocean. Urinary
bladder. Mamaev et al. (1963).
Diphtherostomum microacetabulum Schulman-Albova 1952. Pacific Ocean.
Mamaev et al. (1963).
Steganoderma formosum Stafford 1904. Kamchatka, USSR. Intestine.
Strelkov (1960).

NEMATODA

ANISAKIDAE

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Kamchatka, USSR.
Intestine. Strelkov (1960) as Contracaecum a.
Phocanema sp. Larva. Kamchatka, USSR. Strelkov (1960) as Porrocaecum
sp.
Anisakis sp. Larva. British Columbia. Muscles, mesentery. Margolis³,
Kamchatka, USSR. Strelkov (1960).

CAPILLARIIDAE

Capillaria sp. British Columbia. Stomachs. Arai (1969b).

CUCULLANIDAE

Cucullanus heterochous Rudolphi 1802. Sea of Japan. Intestine.
Zhukov (1960a).
Cucullanus sp. British Columbia. Intestine. Arai (1969b).

CYSTIDICOLIDAE

Ascarophis pacificus Zhukov 1960. Pacific Ocean. Mamaev et al.
(1963).

Lepidopsetta bilineata (Continued)

PHILOMETRIDAE

Philometra americana Kuitunen-Ekbaum 1933. British Columbia.
Tissues, body cavity. Kuitunen-Ekbaum (1933a).

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

Genera and species. British Columbia. Gills. Bell (1962).
Trichodina borealis Shulman and Shulman-Albova 1953. Sea of Japan.
Lom and Laird (1969).

PROTOZOA (MYXOSPORIDA)

TETRACAPSULIDAE

Kudoa sp. British Columbia. Muscles. Hoskins et al.¹³

Lyopsetta exilis - Slender Sole

CESTODA

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. British Columbia. Stomach wall.
Margolis ♂.

COPEPODA

BOMOLOCHIDAE

Holobomolochus occultus Kabata 1971. British Columbia. Gills,
gill cavity. Kabata (1971).

DIGENEA

HEMIURIDAE

Parahemiurus merus (Linton 1910) Woolcock 1935. British Columbia.
Stomach. Margolis ♂.
Derogenes varicus (Müller 1784) Looss 1901. British Columbia.
Stomach. Margolis ♂.

MONOGENEA

DICLIDOPHORIDAE

Choricotyle exilis Crane 1972. Southern California. Mouth. Crane
(1972).

Lyopsetta exilis (Continued)

NEMATODA

ANISAKIDAE

Contracaecum sp. Larva. British Columbia. Stomachs, mesentery,
Liver. Margolis³.

Anisakis sp. Larva. British Columbia. Many places in body.
Margolis³.

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia sp. Oregon. Blood. Burreson⁷.

TRYPANOSOMATIDAE

Trypanosoma pacifica Burreson and Pratt 1972. Oregon. Blood.
Burreson⁷.

Microstomus pacificus - Dover Sole

CESTODA

PSEUDOPHYLLIDEA

Genera and species. Plerocercoid. British Columbia. Body cavity.
Margolis³.

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Post larvae. British Columbia.
Stomach wall. Margolis³.

DIGenea

FELLODISTOMATIDAE

Fellodistomum brevum Ching 1960. Washington. Intestine. Ching
(1960a).

LEPOCREADIIDAE

Lepidapedon calli Acena 1947. Washington. Acena (1947).

OPECOELIDAE

Eurycreadium vitellosum Manter 1934. Washington. Intestine.
Ching (1961).

Microstomus pacificus (Continued)

ZOOGONIDAE

Zoogonoides viviparus (Olsson 1868) Odhner 1902. Washington.
Intestine. Ching (1960a).
Zoogonus dextrocirrus Aldrich 1961. Washington. Intestine.
Aldrich (1961).

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Muscles, mesentery, etc.
Margolis³.

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa hopkinsi Jameson 1929. Central California. Gallbladder.
Jameson (1929).

TETRACAPSULIDAE

Kudoa sp. Washington. Muscles. Patashnik and Groninger (1964).

PROTOZOA (SARCOMASTIGOPHORA)

TRYPANOSOMATIDAE

Trypanosoma sp. Oregon. Blood. Burreson⁷.

Parophrys vetulus - English Sole

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Metechinorhynchus lageniformis (Ekbaum 1938) Petrotchenko 1956.
Oregon. Intestine. Olson and Pratt (1973) as Echinorhynchus 1.

CESTODA

PHYLLOBOTHRIDAE

Phyllobothrium sp. Larva. Oregon. Intestine. Olson (1978b).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Postlarva. British Columbia.
Stomach wall. Margolis³.

Parophrys vetulus (Continued)

COPEPODA

CALIGIDAE

Lepeophtheirus bifidus Fraser 1920. British Columbia. Kabata (1973).

Lepeophtheirus hospitalis Fraser 1920. British Columbia. Kabata (1973).

CHONDRACANTHIDAE

Acanthochondria rectangularis (Fraser 1920) Markevich 1957.
British Columbia. Bere⁵.

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. British Columbia. Bere⁵.

PENNELLIDAE

Phrixocephalus concinnatus Wilson 1908. Southern California.
Eyes. Schultze²⁵.

DIGENEA

AZYGIIIDAE

Otodistomum veliporum (Creplin 1837) Stafford 1904. Metacercaria.
Oregon. Olson and Pratt (1973).

FELLODISTOMATIDAE

Fellodistomum phrissovum Aldrich 1961. Washington. Intestine.
Aldrich (1961).

HEMIURIDAE

Genolinea laticauda Manter 1925. Oregon. Stomach. Olson (1978b).
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. British
Columbia. McFarlane (1936) as Dinurus nanaimoensis; Washington.
Ching (1960a).

LEPOCREADIIDAE

Lepidapedon calli Acena 1947. Washington. Stomach, intestine.
Acena (1947).

OPECOELIDAE

Podocotyle sp. Oregon. Intestine. Olson (1978b).
Podocotyle sinusacca Ching 1960. British Columbia. Intestine.
Arai (1969b) as Neopodocotyloides s.
Genitocotyle acirra Park 1937. Oregon. Pratt (1970).

Parophrys vetulus (Continued)

ZOOGONIDAE

Steganoderma formosum Stafford 1904. Washington. Ching (1960a).
Zoogonus dextrocirrus Aldrich 1961. Washington. Intestine.
Aldrich (1961).

HIRUDINOIDEA

PISCICOLIDAE

Oceanobdella sp. Oregon. Exteriors. Burreson⁷.

ISOPODA

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. Oregon. Gill cavity. Olson (1978b).

MONOGENEA

GYRODACTYLIDAE

Gyrodactylus sp. Oregon. Fins. Olson (1978b).

NEMATODA

ANISAKIDAE

- *Thynnascaris sp. Oregon. Intestine. Olson (1978b).
- *Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. British Columbia. Stomach, intestine. Margolis³ as Contraeaecum a.
Contraeaecum sp. Larva. British Columbia. Stomach, mesentery,
liver. Margolis³.
- Anisakis sp. Larva. British Columbia. Many places in body.
Margolis³; Oregon. Olson (1978b).

CAPILLARIIDAE

Capillaria sp. British Columbia. Intestine. Margolis³ as
C. parophrysi.

CUCULLANIDAE

Cucullanus annulatus Margolis 1960. British Columbia. Margolis
(1960); Oregon. Olson (1978b).

PHILOMETRIDAE

Philometra americana Kuitunen-Ekbaum 1933. Oregon. Between fin
rays, in muscles. Olson and Pratt (1973); Northern California.
R. Olson (1972).

Parophrys vetulus (Continued)

PROTOZOA (CILIOPHORA)

URCEOLARIIDAE

Trichodina sp. Oregon. Gills. Olson (1978b).

PROTOZOA (MICROSPORIDA)

NOSEMATIIDAE

Glugea stephani (Hagenmuller 1899) Woolcock 1904. Oregon.
Stomach, intestine. Wellings et al. (1969) as G. hertwigi.

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa hopkinsi Jameson 1929. Central California. Gallbladder.
Jameson (1929).

TETRACAPSULIDAE

Kudoa sp. British Columbia. Muscles. Margolis³.

PROTOZOA (SARCOMASTIGOPHORA)

CRYPTOBIIDAE

Cryptobia sp. Oregon. Blood. Burrenson⁷.

TRYPANOSOMATIDAE

Trypanosoma pacifica Burrenson and Pratt 1972. Oregon. Blood.
Burrenson and Pratt (1972).

Platichthys stellatus - Starry Flounder

SYNONYM - Pleuronectes stellatus

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. British Columbia.
Intestine. Arai (1969b); Kamchatka, USSR. Skryabina (1963).
Metechinorhynchus lageniformis (Ekbaum 1938) Petrotchenko 1956.
British Columbia. Intestine. Ekbaum (1938).

POLYMORPHIDAE

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Juvenile.
British Columbia. Liver, mesentery, intestinal wall. Ekbaum
(1938); Sea of Japan. Zhukov (1960a); Washington. Van Cleave (1953).

Platichthys stellatus (Continued)

CESTODA

AMPHICOTYLIDAE

Eubothrium crassum (Bloch 1779) Nybelin 1922. Western Kamchatka, USSR. Intestine. Tsimbalyuk and Semeshko (1971).

BOTHRIOCEPHALIDAE

Bothriocephalus scorpii (Müller 1776) Rudolphi 1808. Western Kamchatka, USSR. Digestive tract. Tsimbalyuk and Semeshko (1971).

DIPHYLLOBOTHRIIDAE

Diphyllobothrium sp. Larva. Western Kamchatka, USSR. Digestive tract. Tsimbalyuk and Semeshko (1971).

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. British Columbia. Intestine. Arai (1969b).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Larva. Kamchatka, USSR. Strelkov (1960).

TETRAPHYLLIDEA

Scolex pleuronectis Müller 1788. Kamchatka, USSR. Intestine, gallbladder. Skryabina (1963).

COPEPODA

CALIGIDAE

Lepeophtheirus parviventris Wilson 1905. Alaska, Washington. Townsend (1938) as L. septentrionalis; Kabata (1973).

Lepeophtheirus hospitalis Fraser 1920. British Columbia. Fraser (1920); Oregon. Ventral surface. Millemann³⁴.

Lepeophtheirus parvicruris Fraser 1920. British Columbia. Fraser (1920).

Pseudolepeophtheirus longicauda Markevich 1940. Kamchatka, USSR. Mouth. Bykhovskaya-Pavlovskaya et al. (1962).

CHONDRACANTHIDAE

Acanthochondria rectangularis (Fraser 1920) Markevich 1957. Oregon. Gill cavity. Millemann³⁴; British Columbia. Gills. Fraser (1920) as Chondracanthus r.

Platichthys stellatus (Continued)

LERNAEOPODIDAE

Nectobranchia indivisa Fraser 1920. British Columbia. Gills.
Fraser (1920); USSR. Bykhovskaya-Pavlovskaya et al. (1962).

NAOBRANCHIIDAE

Naobranchia occidentalis Wilson 1915. Pacific coast, USA.
Villadolid (1927).

DIGenea

BUCEPHALIDAE

Prosorhynchoides basaringi (Layman 1930) Margolis and Arthur 1979.
Sea of Japan. Intestine. Yamaguti (1971) as Bucephalopsis b.
Prosorhynchoides gracilescens (Rudolphi 1819) n. comb.
Kamchatka, USSR. Intestine. Skryabina (1963) as Bucephalopsis g.

FELLODISTOMATIDAE

Stenakron vetustum Stafford 1904. Kamchatka, USSR. Strelkov (1960).

HEMIURIDAE

Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. British Columbia.
Intestine. Arai (1969b).
Derogenes varicus (Müller 1784) Looss 1901. Washington. Ching
(1960a); Kamchatka, USSR. Stomach, intestine. Skryabina (1963).
Sterrhurus exodicus (McFarlane 1936) Yamaguti 1958. Washington.
Ching (1960a) as Lecithochirium e.
Parahemiurus merus (Linton 1910) Woolcock 1935. Washington.
Stomach. Lloyd (1938) as P. platichthyi.
Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Oregon.
Stomach. McCauley (1960); Central California. Nahhas¹⁰;
Sea of Japan. Zhukov (1960a).
Genarchopsis muelleri (Levinsen 1881) Yamaguti 1954. Kamchatka,
USSR. Intestine. Strelkov (1960) as Genarches m.

OPECOELIDAE

Podocotyle atomon (Rudolphi 1802) Odhner 1905. British Columbia.
Intestine. Arai (1969b); Sea of Japan. Zhukov (1960a).
Decemtestis azumae (Layman 1930) Yamaguti 1934. Sea of Japan.
Intestine. Zhukov (1960a) as Helicometrina a.

ZOOGONIDAE

Zoogonoides viviparus (Olsson 1868) Odhner 1902. Sea of Japan.
Intestine. Zhukov (1960a).

Platichthys stellatus (Continued)

MONOGENEA

GYRODACTYLIDAE

Gyrodactylus ackerti Mizelle and Kritsky 1967. Northern California. Gills. Mizelle and Kritsky (1967d).

Gyrodactylus branchius Mizelle and Kritsky 1967. Northern California. Gills. Mizelle and Kritsky (1967d).

Gyrodactylus stellatus Crane and Mizelle 1967. Northern California, Pacific Ocean. Skins. Crane and Mizelle (1967).

Gyrodactylus gröenlandicus Levinsen 1881. Bering Sea. Gills. Zhukov (1960b).

Gyrodactylus robustus Malmberg 1956. Bering Sea. Zhukov (1960b).

Gyrodactylus unicopula Gluchowa 1955. Bering Sea. Gills. Zhukov (1960b).

GYRODACTYLOIDEA

Genera and species. British Columbia. Gills. Arai (1969b).

NEMATODA

ANISAKIDAE

*Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Kamchatka, USSR. Intestine. Skryabina (1963) as Contracecum a.

Contracecum sp. Larva. British Columbia. Body cavity.

Arai (1969b); Kamchatka, USSR. Intestine, body cavity, liver, kidneys. Skryabina (1963).

Anisakis sp. British Columbia. Intestine. Arai (1969b);

Kamchatka, USSR. Body cavity, intestine, abdominal wall. Skryabina (1963).

Phocanema sp. Southern California. Dailey et al. (in press).

CUCULLANIDAE

Cucullanus annulatus Margolis 1960. British Columbia. Intestine. Arai (1969b).

Cucullanus heterochrous Rudolphi 1802. Kamchatka, USSR. Intestine, stomach. Skryabina (1963).

PHILOMETRIDAE

Philometra americana Kuitunen-Ekbaum 1933. British Columbia. Subcutaneous. Kuitunen-Ekbaum (1933a).

Philometra sp. British Columbia. Intestines. Arai (1969b)

British Columbia. Between fin rays. Margolis³.

PROTOZOA (MICROSPORIDA)

NOSEMATIDAE

Glugea stephani (Hagenmuller 1894) Woolcock 1904. Northern California. Intestine. Jensen and Wellings (1972) - tentative identification.

Platichthys stellatus (Continued)

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

Ceratomyxa platichthyis (Fujita 1923) Dogiel 1948. Japan.
Gallbladder. Fujita (1923) as Leptotheca p.

MYXIDIIDAE

Myxidium oshoroense Fujita 1923. Japan. Gallbladder. Fujita (1923).

TETRACAPSULIDAE

Kudoa sp. Washington. Muscles. Patashnik and Groninger (1964).

Pleuronichthys coenosus - C-0 Sole

COPEPODA

BOMOLOCHIDAE

Holobomolochus prolixus (Cressey 1969) Kabata 1971. Southern
California. Gill cavity. Cressey (1969b).

CALIGIDAE

Lepeophtheirus hospitalis Fraser 1920. British Columbia. Fraser (1920).

CHONDRACANTHIDAE

Acanthochondria fraseri Ho 1972. Southern California. Gills.
Ho (1972b).

Acanthochondria rectangularis (Fraser 1920) Markevich 1957.
British Columbia. Bere^b.

Pleuronichthys decurrens - Curlfin Sole

COPEPODA

PENNELLIDAE

Phrixocephalus cincinnatus Wilson 1908. Southern California.
Eyes. Schultze²⁵.

DIGENEA

FELLODISTOMATIDAE

Fellodistomum furcigerum (Olsson 1867) Yamaguti 1954. Washington.
Intestine. Ching (1960a).

Pleuronichthys decurrens (Continued)

HIRUDINOIDEA

PISCICOLIDAE

Australobdella californiana Burreson 1977. Southern California.
Body surface. Burreson (1977a).

MONOGENEA

UDONELLIDAE

Udonella caligorum Johnston 1835. Northern California. Skin.
Crane (1972).

Pleuronichthys verticalis - Hornyhead Turbot

HIRUDINEA

PISCICOLIDAE

Australobdella californiana Burreson 1977. Southern California.
Body surface. Burreson (1977a).

PROTOZOA (MYXOSPORIDA)

SPHAEROSPORIDAE

Sphaerosora divergens Thélohan 1895. Southern California.
Urinary bladder. Jameson (1931).

Psettichthys melanostictus - Sand Sole

ACANTHOCEPHALA

POLYMORPHIDAE

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Larva. British
Columbia. Margolis (1956a).

COPEPODA

CALIGIDAE

Lepeophtheirus bifurcatus Wilson 1905. Northern California.
Exterior. Wilson (1908a).
Lepeophtheirus sp. Oregon. Gills. Millemann³⁴.

CHONDRACANTHIDAE

Acanthochondria rectangularis (Fraser 1920) Markevich 1957.
Oregon. Gill cavity. Millemann³⁴.

Psettichthys melanostictus (Continued)

DIGenea

HEMIURIDAE

Tubulovesicula lindbergi (Layman 1930) Yamaguti 1934. Washington.
Oregon. Stomach. McCauley (1960).

HIRUDINOIDEA

PISCICOLIDAE

Aestabdella abditovesicula (Moore 1952) Burreson 1976. Oregon.
Mouth. Burreson (1976a).

ISOPODA

CYMOTHOIDAE

Lironeca vulgaris Stimpson 1857. Northern California. Gill
chambers. Crane (1972).

MONOGENEA

UDONELLIDAE

Udonella caligorum Johnston 1835. Northern California. Gill
chambers. Crane (1972) on Lironeca vulgaris.

NEMATODA

ANISAKIDAE

Anisakis sp. Larva. British Columbia. Many places in body.
Margolis³.

Reinhardtius hippoglossoides - Greenland Halibut

ACANTHOCEPHALA

ECHINORHYNCHIDAE

Echinorhynchus gadi Zoega in Müller 1776. Pacific Ocean. Mamaev
et al. (1963).

POLYMORPHIDAE

Corynosoma strumosum (Rudolphi 1802) Lühe 1904. Pacific Ocean.
Mamaev et al. (1963).

Corynosoma reductum (Von Lindstow 1905) Railliet and Henry 1907.
Larva. Bering Sea. Mamaev (1965).

Reinhardtius hippoglossoides (Continued)

CESTODA

AMPHICOTYLIDAE

Eubothrium sp. Pacific Ocean. Intestine. Mamaev et al. (1963).

BOTHRIOCEPHALIDAE

Bothriocephalus scorpis (Müller 1776) Rudolphi 1808. Pacific Ocean.
Mamaev (1965).

LACISTORHYNCHIDAE

Grillotia erinacea (Van Beneden 1858) Guiart 1927. Larva.
Bering Sea. Mamaev (1965).

PHYLLOBOTHRIIDAE

Phyllobothrium sp. Larva. Bering Sea. Mamaev (1965).

PSEUDOPHYLLIDEA

Genera and species. Larva. Pacific Ocean. Stomach, intestine.
Mamaev et al. (1963).

TENTACULARIIDAE

Nybelinia surmenicola Okada 1929. Pacific Ocean. Intestine.
Mamaev et al. (1963).

TETRAPHYLLIDEA

Scolex polymorphus Rudolphi 1819. Barents Sea, USSR. Intestine.
Polyanski (1955b).
Scolex pleuronectis Müller 1788. Pacific Ocean. Pyloric caeca,
intestine. Mamaev et al. (1963).

DIGenea

ACANTHOCOLPIDAE

Stephanostomum baccatum (Nicol 1907) Manter 1934. Pacific Ocean.
Intestine. Mamaev et al. (1963).

BUCEPHALIDAE

Prosorhynchoides gracilescens (Rudolphi 1819) n. comb. Pacific
Ocean. Mamaev et al. (1963) as Bucephalopsis g.

FELLODISTOMIDAE

Fellodistomum furcigerum (Olsson 1867) Yamaguti 1954. Pacific Ocean.
Mamaev et al. (1963) as Stringophorus furciger.
Stenakron vetustum Stafford 1904. Pacific Ocean. Mamaev et al. (1963).

Reinhardtius hippoglossoides (Continued)

HEMIURIDAE

- Derogenes varicus (Müller 1784) Looss 1901. Barents Sea, USSR. Stomach. Polyanski (1955b).
Genarchopsis muelleri (Levinsen 1881) Yamaguti 1954. Barents Sea, USSR. Stomach. Polyanski (1955b) as Genarches m.
Hemiurus levinseni Odhner 1905. Pacific Ocean. Mamaev et al. (1963).
Lecithaster gibbosus (Rudolphi 1802) Lühe 1901. Pacific Ocean. Mamaev et al. (1963).
Brachyphallus crenatus (Rudolphi 1802) Odhner 1905. Pacific Ocean. Mamaev et al. (1963).
Lecithophyllum sphaerolecithum (Manter 1925) Odhner 1927. Bering Sea. Mamaev (1965).

OPECOELIDAE

- Podocotyle atomon (Rudolphi 1802) Odhner 1905. Pacific Ocean. Mamaev et al. (1963).

ZOOGONIDAE

- Steganoderma formosum Stafford 1904. Pacific Ocean. Mamaev et al. (1963).

MONOGENEA

DICLIDOPHORIDAE

- Heterobothrium affinis (Linton 1898) Price 1936. Bering Sea. Mamaev (1965).

NEMATODA

ANISAKIDAE

- *Thynnascaris adunca (Rudolphi 1802) Hartwich 1957. Adult, larva. Barents Sea, USSR. Intestine, body cavity, mesentery. Polyanski (1955b) as Contracaecum a.
Anisakis sp. Larva. Barents Sea, USSR. Liver, intestine. Polyanski (1955b).
Phocanema sp. Larva. Pacific Ocean. Mamaev et al. (1963) as Porrocaecum sp.

PROTOZOA (MYXOSPORIDA)

CERATOMYXIDAE

- Ceratomyxa drepanosettae Awerinzew 1907. Barents Sea, USSR. Gallbladder. Polyanski (1955b).

BALISTIDAE -- Triggerfishes and Filefishes

Balistes polylepis - Finescale Triggerfish

SYNONYM - Verrunculus polylepis

COPEPODA

CALIGIDAE

Caligus productus Dana 1853. Gulf of California. Causey (1960).

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum provitellosum Sogandares-Bernal 1959. Galapagos Islands. Sogandares-Bernal (1959); Baja California. Intestine. Arai (1962).

ALLOCREADIIDAE

Pseudocreadium galapagoense Manter 1946. Baja California. Intestine. Arai (1962) as P. scaphosomum; Panama. Caballero et al. (1953) as P. scaphosomum.

HOMALOMETRIDAE

Homalometron caballeroi Lamothe-Argumedo 1965. Gulf of California. Yamaguti (1971).

LEPOCREADIIDAE

Lepocreadium bravoae Lamothe-Argumedo 1965. Gulf of California. Intestine. Lamothe-Argumedo (1965).

MONORCHIIDAE

Lasiotocus longicaecum (Manter 1940) Yamaguti 1954. Baja California. Intestine. Arai (1962).

MONOGENEA

CALCEOSTOMATIDAE

Paracalceostoma calceostomoides Caballero and Bravo-Hollis 1960. Baja California. Gills. Caballero and Bravo-Hollis (1962).

DISCOCOTYLIDAE

Pseudomazocraes monsvaisae Caballero and Bravo-Hollis 1955. Mexico. Gills. Caballero and Bravo-Hollis (1955).

OSTRACIIDAE -- Boxfishes

Ostracion diaphanum - Spiny Boxfish

DIGenea

FELLODISTOMATIDAE

Discogasteroides ostracii (Yamaguti 1934) Strand 1935. Japan.
Intestine. Yamaguti (1934a) as Discogaster.
Discogasteroides minor (Yamaguti 1934) Strand 1935. Japan.
Yamaguti (1971).

TETRAODONTIDAE -- Puffers

Sphoeroides sp.

COPEPODA

CHONDRACANTHIDAE

Pseudochondracanthus diceraus Wilson 1908. Southern California.
Gills and gill cavity. Wilson (1908a).

Sphoeroides annulatus - Bullseye Puffer

SYNONYM - Cheilichthys annulatus

COPEPODA

BOMOLOCHIDAE

Holobomolochus attenuatus (Wilson 1913) Vervoort 1969. Ecuador.
Gills. Wilson (1937a) as Bomolochus a.

CALIGIDAE

Caligus elongatus Nordmann 1832. West coast of Mexico. Causey
(1960) as C. latifrons.
Lepeophtheirus dissimulatus Wilson 1905. Eastern Pacific. Lewis (1967).

DIGenea

ACCACOELIDAE

Tetrochetus proctocolus Manter 1940. Galapagos Islands. Rectum.
Manter (1940a).

APOCREADIIDAE

Apocreadium longisinosum Manter 1937. Panama. Intestine.
Caballero et al. (1952); Galapagos Islands. Rectum. Manter (1940a).

Sphoeroides annulatus (Continued)

FELLODISTOMATIDAE

Lintonium srivastavi Lamothe-Argumedo 1969. West coast of Mexico.
Intestine. Lamothe-Argumedo (1969a).

GORGODERIDAE

Phyllodistomum mirandai Lamothe-Argumedo 1969. West coast of
Mexico. Urinary bladder. Lamothe-Argumedo (1969a).

LEPOCREADIIDAE

Bianium plicatum (Linton 1928) Stunkard 1930. Baja California.
Arai (1962) as Diploproctodaeum p.; Galapagos Islands and
Ecuador. Intestine. Manter (1940a).

SANGUINICOLIDAE

Cardicola tropicus (Manter 1940) Short 1953. Ecuador. Coelom,
intestine. Manter (1940a) as Psettarium t.

ISOPODA

CYMOTHOIDAE

Nerocila californica Schioedte and Meinert 1881. Gulf of California.
Gills. Brusca (1977).

MONOGENEA

CAPSALIDAE

Benedenia melleni (MacCullum 1927) Johnston 1929. New York
Aquarium. Eyes. Yamaguti (1963b) as Neobenedenia m.

DISCOCOTYLIDAE

Tagia ecuadori (Meserve 1938) Sproston 1946. Panama. Gills.
Caballero, Bravo-Hollis and Grocott (1953); Galapagos Islands.
Gills. Meserve (1938) as Heterobothrium e.; Mexico.
Lamothe-Argumedo (1967b).

DIODONTIDAE -- Porcupinefishes

Chilomycterus affinis - Pacific Burrfish

DIGenea

OPISTHOLEBETIDAE

Opistholebes colylophorus Ozaki 1935. Japan. Intestine.
Ozaki (1935).

Chilomycterus affinis (Continued)

Heterolebes maculosus Ozaki 1935. Hawaii. Intestine. Ozaki (1935).

Maculifer chilomycteri Yamaguti 1959. Japan. Digestive tract. Yamaguti (1959a).

Pseudoheterolebes chilomycteri Yamaguti 1959. Japan. Intestine. Yamaguti (1959a).

Diodon hystrix - Spotted Porcupinefish

COPEPODA

NAOBRANCHIIDAE

Naobranchia wilsoni Nigrelli 1933. New York Aquarium. Gills. Nigrelli (1935).

TUCCIDAE

Tucca impressus Krøyer 1837. West Indies. Exterior. Wilson (1932).

CRUSTACEA

LEPADIDAE

Conchoderma virgatum, India. External surface. Balakrishnan (1969).

DIGENEA

ACCOCOELIIDAE

Tetrochetus coryphaenae Yamaguti 1934. Jamaica. Intestine. Nahhas and Cable (1964).

FELLODISTOMATIDAE

Megalomyzon robustus Manter 1947. Puerto Rico. Stomach. Siddigi and Cable (1960).

LEPOCREADIIDAE

Bianium plicatum (Linton 1928) Stunkard 1930. Gulf of Panama. Intestine. Sogandares-Bernal (1959) as Diploprotodaeum.

Pseudocreadium diodontis (Nahhas and Cable 1964) Yamaguti 1971. Curacao and Jamaica. Intestine. Nahhas and Cable (1964) as Diploproctodaeum d.

MICROPHALLIDAE

Pseudomegalophallus diodontis (Siddigi and Cable 1960) Yamaguti 1971. Puerto Rico. Intestine. Siddigi and Cable (1960) as Megalophallus d.

Diodon hystrix (Continued)

OPISTHOLEBETIDAE

- Opistholebes diodontis Cable 1956. Puerto Rico. Intestine.
Cable (1956); Hawaii. Intestine. Manter and Pritchard (1962).
Opistholebes cotylophorus Ozaki 1935. Hawaii. Intestine.
Manter and Pritchard (1962).
Heterolebes maculosus Ozaki 1935. Hawaii. Intestine. Manter
and Pritchard (1962).

SCLERODISTOMATIDAE

- Sclerodistomum bravoae Pritchard 1963. Hawaii. Pritchard (1963).
Sclerodistomum diodontis Yamaguti 1942. Curacao. Stomach.
Nahhas and Cable (1964).
Sclerodistomum sphaeroides Manter 1947. Curacao, Jamaica.
Stomach. Nahhas and Cable (1964).

NEMATODA

ANISAKIDAE

- Raphidascaroides diadonis (Thwaite 1927) Olsen 1952. South India.
Baylis (1936) as Raphidascaris d.

PROTOZOA (CILIOPHORA)

OPHRYOGLENIDAE

- Cryptocaryon irritans Brown 1951. New York Aquarium. Body
surface. Nigrelli and Ruggieri (1966).

MOLIDAE -- Molas

Mola mola - Ocean Sunfish

SYNONYM - Orthagoriscus mola

ACANTHOCEPHALA

ECHINORHYNCHIDAE

- Echinorhynchus gadi Zoega in Müller 1776. Massachusetts. Dollfus
(1946) as E. acus.

BRANCHIURA

ARGULIDAE

- Argulis scutiformis Thiele 1900. Japan. Yamaguti (1963a); France.
Skin. Dollfus (1946).

Mola mola (Continued)

CESTODA

BOTHRIOCEPHALIDAE

Bothriocephalus monorchis Linstow 1903. France. Intestine.
Dollfus (1946).

DASYRHYNCHIDAE

Floriceps saccatus Cuvier 1817. France. Many places in body.
Dollfus (1946).

GYMNORHYNCHIDAE

Molicola horridus (Goodsir 1841). France. Dollfus (1946); New
Zealand. Robinson (1959a).

TRIAENOPHORIDAE

Ancistrocephalus microcephalus (Rudolphi 1819) Monticelli 1890.
Newfoundland. Intestine. Threlfall (1967); New Zealand.
Robinson (1959a); France. Dollfus (1946).
Fisticula plicatus (Rudolphi 1819) Lühe 1899. Massachusetts.
Linton (1941).

TRYPANORHYNCHA

Rhynchobothrium sp. Larva. Newfoundland. Intestine wall.
Threlfall (1967).
Tetrarhynchus elongatus Wagener 1901. Larva. Newfoundland.
Liver. Threlfall (1967); Massachusetts. Linton (1924).
[Species incertae sedis- Yamaguti (1959b)] [= Molicola horridus -
Dollfus (1942)].

COPEPODA

CALIGIDAE

Caligus elongatus Nordmann 1832. Mediterranean, North Sea.
Parker (1969).
Lepeophtheirus nordmanni (Edwards 1840) Baird 1850. France.
Skin. Dollfus (1946); New Zealand. Hewitt (1964b) as L.
insignis; Southern California. Wilson (1908a); New Foundland.
Threlfall (1967); Japan. Shiino (1957).
Lepeophtheirus hastatus Shiino 1960. Japan. Body surface. Shiino
(1960a); New Zealand. Hewitt (1964b) as L. mola; Australia.
Heegaard (1962) as L. mola.

CECROPIDAE

Cecrops exiguus Wilson 1923. Japan. Buccal cavity, gills.
Shiino (1965a).
Cecrops latreillii Leach 1816. Newfoundland. Gills.
Threlfall (1967); Massachusetts. Wilson (1932); France.
Dollfus (1946); New Zealand. Hewitt (1968a).

Mola mola (Continued)

Orthogoriscola muricatus (Krøyer 1837) Poche 1902. Massachusetts. Wilson (1907b); South Africa. Barnard (1955); France. Skin, gills. Dollfus (1946).

Philorthogoriscus serratus (Krøyer 1863) Horst 1897. Newfoundland. Body surface. Threlfall (1967); Netherlands, Massachusetts, English seas. Wilson (1932); South Africa. Barnard (1955); Japan. Shiino (1959c).

DICHELESTHIIDAE

Anthosoma crassum (Abildgaard 1794) Gould 1841. France. Inner face of operculums, fins. Dollfus (1946).

LERNAEOPODIDAE

Lernaeopoda bidiscalis Kane 1892. France. Skin. Dollfus (1946).

PANDARIDAE

Pandarus bicolor Leach 1816. France. Skin. Dollfus (1946).
Echthrogaleus coleoptratus (Guerin 1817) Wilson 1907. France. Skin. Dollfus (1946).

PENNELLIDAE

Pennella crassicornis Steenstrup and Lütken 1861. Yamaguti (1963a).
Pennella filosa (Linnaeus 1758). France. Dollfus (1946) as P. rubra; Massachusetts. Flesh. Wilson (1932); South Africa. Barnard (1955); Pacific. Wilson (1932) as P. orthogorisci.

TREBIIDAE

Trebius sp. France. Skin, gills. Dollfus (1946).

CRUSTACEA

LEPADIDAE

Conchoderma virgatum. Body surface. Balakrishnan (1969).

DIGENEA

ACANTHOCOLPIDAE

Stephanostomum baccatum (Nicolli 1907) Manter 1934. Immature. Massachusetts. Linton (1940) as S. valde-inflatum.

Mola mola (Continued)

ACCACOELIIDAE

- Accacladocoelium macrocotyle (Diesing 1858) Odhner 1928. Oregon. Pratt and McCauley (1961); Massachusetts. Linton (1940); Canada, Naples, Ireland. Intestine. Dawes (1947).
Accacladocoelium nigroflavum (Rudolphi 1819) Odhner 1928. Europe, Mediterranean. Intestine. Dawes (1947).
Accacladocoelium petasiporum Odhner 1928. Mediterranean. Intestine. Dawes (1947); France. Dollfus (1946).
Accacladocoelium alveolatum Robinson 1934. Atlantic. Intestine. Robinson (1934); New Zealand. Manter (1960).
Accacladocoelium serpentulum Odhner 1928. Japan. Intestine. Dawes (1947); Massachusetts. Linton (1940); France. Dollfus (1946); Central California. Noble and Noble (1937) as Accacladium nematulum.
Accacoelium contortum (Rudolphi 1819) Looss 1899. Newfoundland, Massachusetts. Pharynx. Threlfall (1967); Gills. Linton (1940); France. Timon-David and Musso (1971).
Odhnerium calyptrocotyle (Monticelli 1893) Yamaguti 1934. British Columbia. Intestine. Lloyd (1938); Southern California. Montgomery (1957); Japan. Yamaguti (1934b); New Zealand. Manter (1954a); Massachusetts. Linton (1940) as Orophocotyle foliata.
Orophocotyle planci (Stassich 1899) Looss 1902. Trieste. Dawes (1947).
Rhyncopharynx paradoxa Odhner 1928. Japan. Intestine. Yamaguti (1934a); France. Dollfus (1935b); New Zealand. Manter (1960).

DIDYMOZOIDAE

- Didymozoon mola (Rudolphi 1819) Dollfus 1946. Dorsal muscles. Dollfus (1946).
Nematobothrium mola MacLaren 1903. Mediterranean. Gills. Dawes (1947).
Koellikeria filicollis (Rudolphi 1819) Cobbold 1860. Intestine. Nicoll (1915).
Nematobothrioides histoidii Noble 1974. California. Connective tissue. Noble (1975).

LEPOCREADIIDAE

- Dihemistephanus lydiae (Stossich 1896) Looss 1901. France. Digestive tract. Dollfus (1946); New Zealand. Manter (1960).
Dihemistephanus fragilis (Linton 1900) Stafford 1904. Massachusetts. Digestive tract. Stafford (1904); Newfoundland. Threlfall (1967) as Distomum fragile.

ISOPODA

CYMOTHOIDAE

- Nerocila orbignyi. France. Skin. Dollfus (1946).
Nerocila macleayi White 1843. France. Skin. Dollfus (1946).

Mola Mola (Continued)

MONOGENEA

CAPSALIDAE

- Capsala martinieri Bosc 1811. Newfoundland. Body surface.
Threlfall (1967); British Columbia. Gills, body surface. Margolis³;
Norway. Brinkmann (1952).
Capsala molae (Blanchard 1847) Johnston 1929. Massachusetts.
Linton (1940); New Jersey. Skin. Price (1962a) as Tricotyla m.
Capsala cephalae (Risso 1826) St. Remy 1898. Europe. Yamaguti
(1963b).
Capsala cutanea (Guiart 1938) Price 1939. Dawes (1947).
Capsala grimaldii (Guiart 1938) Price 1939. Dawes (1947).
Capsala pelamydis (Taschenberg 1878) Price 1939. Dawes (1947).
Capsala maculata (Martiniere 1787). France. Skin. Dollfus (1946).
Tristoma papillosum Diesing 1836. France. Skin. Dollfus (1946).

NEMATODA

ANISAKIDAE

- Anisakis sp. Larva. New Zealand. Viscera, mesentery, under
peritoneum. Hewitt and Hine (1972).

CUCULLANIDAE

- Cucullanus orthagorisci (Rudolphi 1819). France. Dollfus (1946)
as Ascaris o.

PROTOZOA (SARCOMASTIGOPHORA)

ENTAMOEBIDAE

- Entamoeba molae Noble and Noble 1966. Southern California.
Hindgut. Noble and Noble (1966).

MONOCERCOMONIDAE

- Monocercomonas molae Noble and Noble 1966. Southern California.
Hindgut. Noble and Noble (1966).

Ranzania laevis - Slender Mola

SYNONYM - R. truncata

DIGENEA

ACCACOELIIDAE

- Orophocotyle planci (Stossich 1899) Looss 1902. Trieste.
Yamaguti (1971).
Orophocotyle divergens Looss 1902. Trieste. Looss (1902).

PARASITE-HOST LIST

ACANTHOCEPHALA

Genera and species - Argyropelecus pacificus, Stenobranchius leucopsarus

DIPLOSENTIDAE

Pararhadinorhynchus mugilis - Mugil cephalus

ECHINORHYNCHIDAE

Acanthocephalus anguillae - Salmo gairdneri

Acanthocephalus echigoensis - Oncorhynchus keta, O. nerka, Salmo gairdneri

Acanthocephalus jacksoni - Oncorhynchus nerka, Salmo gairdneri

Acanthocephalus lucii - Clupea harengus, Gasterosteus aculeatus

Acanthocephalus minor - Gasterosteus aculeatus, Salmo gairdneri,
Salvelinus malma

Acanthocephalus opsariichthys - Salmo gairdneri

Acanthocephalus parksidei - Salmo gairdneri

Echinorhynchus sp. - Sebastes eos, S. levis, S. paucispinis

Echinorhynchus canyonensis - Maynea californica

Echinorhynchus gadi - Agonus acipenserinus, Ammodytes hexapterus,
Anoplopoma fimbria, Aprodon cortezianus, Atheresthes stomias,
Blepsias cirrhosus, Clupea harengus, Cololabis saira, Cymatogaster
aggregata, Eopsetta jordani, Gadus macrocephalus, Gasterosteus
aculeatus, Hemilepidotus hemilepidotus, Hexagrammos lagocephalus,
H. stelleri, Hippoglossoides elassodon, Hippoglossus stenolepis,
Icelinus filamentosus, Lepidopsetta bilineata, Leptocottus armatus,
Microgadus proximus, Mola mola, Morone saxatilis, Myoxocephalus
polyacanthocephalus, Oncorhynchus gorbuscha, O. keta, O. kisutch,
O. nerka, O. tshawytscha, Platichthys stellatus, Pleurogrammus
monopterygius, Reinhardtius hippoglossoides, Salvelinus malma,
Sebastes aleutianus, S. alutus, S. babcocki, S. borealis, S. caurinus,
S. diploproa, S. flavidus, S. helvomaculatus, S. proriger, S.
ruberrimus, S. zacentrus, Squalus acanthias, Theragra chalcogramma
Metechinorhynchus lageniformis - Lepidopsetta bilineata, Parophrys
vetulus, Platichthys stellatus

ACANTHOCEPHALA (continued)

ECHINORHYNCHIDAE (continued)

Metechinorhynchus lateralis - Gasterosteus aculeatus, Oncorhynchus kisutch, Salmo clarki, S. gairdneri

Metechinorhynchus leidyi - Microgadus proximus, Salmo gairdneri

Metechinorhynchus salmonis - Clupea harengus, Gasterosteus aculeatus, Oncorhynchus kisutch, O. nerka, O. tshawytscha, Salmo gairdneri

Metechinorhynchus truttae - Salmo gairdneri

Neorhadinorhynchus nudus - Auxis thazard, Euthynnus affinis, Thunnus thynnus

Pseudoechinorhynchus clavula - Clupea harengus, Gasterosteus aculeatus, Salmo gairdneri

Pseudorhadinorhynchus samegaiensis - Salmo gairdneri

GORGORHYNCHIDAE

Gorgorhynchus sp. - Thunnus alalunga

LEPTORHYNCHOIDIDAE

Leptorhynchoides thecatus - Morone saxatilis, Oncorhynchus nerka, Salmo gairdneri

NEOECHINORHYNCHIDAE

Floridosentis elongatus - Mugil cephalus

Gracilisentis gracilisentis - Dorosoma petenense

Microsentis wardae - Gillichthys mirabilis

Neoechinorhynchus agilis - Mugil cephalus

Neoechinorhynchus chilkaense - Mugil cephalus

Neoechinorhynchus crassus - Salmo clarki

Neoechinorhynchus cristatus - Gasterosteus aculeatus, Oncorhynchus kisutch, O. tshawytscha

Neoechinorhynchus pungitius - Oncorhynchus nerka

Neoechinorhynchus rutili - Gasterosteus aculeatus, Oncorhynchus keta, O. kisutch, O. nerka, Salmo clarki, S. gairdneri, Salvelinus malma

Neoechinorhynchus tumidus - Oncorhynchus nerka

Tanaorhamphus longirostris - Dorosoma petenense

POLYMORPHIDAE

Arhythmorhynchus macracanthus - Umbrina roncadorensis

Bolbosoma sp. - Scomber japonicus

Bolbosoma caenoforme - Cololabis saira, Oncorhynchus gorboscha, O. keta,
O. kisutch, O. nerka, O. tshawytscha, Salvelinus malma

Bolbosoma thunni - Thunnus thynnus

Bolbosoma nipponicum - Theragra chalcogramma

Bolbosoma vasculosum - Thunnus alalunga, T. albacares

Corynosoma sp. - Anoplopoma fimbria, Cymatogaster aggregata,

Hemilepidotus hemilepidotus, Hexagrammos lagocephalus, Leptocottus

armatus, Myoxocephalus polyacanthocephalus, Oncorhynchus kisutch,

Sebastes aleutianus, S. borealis, S. brevispinis, S. caurinus, S. elongatus,

S. helvomaculatus, S. maliger, S. paucispinis, S. ruberrimus, S.

zacentrus

Corynosoma obtuscens - Umbrina roncadorensis

Corynosoma osmeri - Umbrina roncadorensis

Corynosoma reductum - Anoplopoma fimbria, Atheresthes stomias,

Hippoglossoides elassodon, Hippoglossus stenolepis, Reinhardtius

hippoglossoides, Sebastes aleutianus, S. alutus, S. borealis

Corynosoma semerme - Clupea harengus, Gasterosteus aculeatus,

Oncorhynchus nerka

Corynosoma strumosum - Atheresthes stomias, Clupea harengus, Eopsetta

jordani, Gadus macrocephalus, Gasterosteus aculeatus, Hexagrammos

lagocephalus, H. stelleri, Hippoglossoides elassodon, Hippoglossus

stenolepis, Lepidopsetta bilineata, Leptocottus armatus, Myoxocephalus

polyacanthocephalus, Oncorhynchus gorboscha, O. nerka, O. tshawytscha,

Platichthys stellatus, Pleurogrammus monopterygius, Psettichthys

melanostictus, Reinhardtius hippoglossoides, Salvelinus malma,

Theragra chalcogramma

ACANTHOCEPHALA (continued)

POLYMORPHIDAE (continued)

Corynosoma villosum - Oncorhynchus gorbuscha, O. keta, Sebastes alutus
Corynosoma wegeneri - Oncorhynchus nerka

POMPHORHYNCHIDAE

Pomphorynchus bulbocolli - Oncorhynchus kisutch, O. nerka, Salmo clarki,
S. gairdneri
Pomphorhynchus kostylewi - Clupea harengus
Pomphorhynchus laevis - Clupea harengus, Gasterosteus aculeatus,
Morone saxatilis, Salmo gairdneri
Pomphorhynchus rocci - Morone saxatilis

RHADINORHYNCHIDAE

Gorgorhynchoides sp. - Caranx hippos
Gorgorhynchus medius - Echeneis naucrates
Gorgorhynchus robertdollfusi - Gempylus serpens
Illiosentis africanus - Albula vulpes
Illiosentis cetratus - Menticirrhus undulatus, Roncador stearnsi,
Umbrina roncador
Raorhynchus meyeri - Euthynnus pelamis
Raorhynchus terebra - Euthynnus pelamis
Rhadinorhynchus sp. - Salmo gairdneri, Trachurus symmetricus
Rhadinorhynchus cadenati - Scomber japonicus, Thunnus albacares
Rhadinorhynchus cololabis - Cololabis saira
Rhadinorhynchus japonicus - Scomber japonicus
Rhadinorhynchus lintoni - Scomber japonicus
Rhadinorhynchus pristis - Coryphaena hippurus, Euthynnus pelamis,
Istiophorus platypterus, Scomber japonicus, Thunnus alalunga, T.
albacares
Rhadinorhynchus selkirki - Auxis thazard, Cololabis saira
Rhadinorhynchus seriola - Scomber japonicus
Rhadinorhynchus tenuicornis - Echeneis naucrates
Rhadinorhynchus trachuri - Cololabis saira, Oncorhynchus gorbuscha,
O. keta, O. kisutch, O. nerka

ACANTHOCEPHALA (continued)

RHADINORHYNCHIDAE (continued)

Serrasentis lamelliger - Naucrates ductor

Serrasentis sagittifer - Clupea harengus, Coryphaena hippurus, Echeneis naucrates, Euthynnus affinis

Telosentis exiquus - Gasterosteus aculeatus

ARACHNOIDEA

Hydrachna sp. - Oncorhynchus nerka

ASPIDOCOTYLEA

ASPIDOGASTERIDAE

Lobatostoma albulae - Albula vulpes

Multicalyx cristata - Cephaloscyllium ventriosum

Taeniocotyle elegans - Hydrolagus colliei

RUGOGASTRIDAE

Rugogaster hydrolagi - Hydrolagus colliei

BRANCHIURA

ARGULIDAE

Argulus sp. - Oncorhynchus tshawytscha

Argulus alosae - Clupea harengus, Gasterosteus aculeatus

Argulus bicolor - Morone saxatilis

Argulus borealis - Hippoglossoides elassodon, Lepidopsetta bilineata,
Sebastes caurinus, Synodus lucioceps

Argulus canadensis - Alosa sapidissima, Gasterosteus aculeatus

Argulus chesapeakeensis - Mugil cephalus

Argulus coregoni - Oncorhynchus gorbuscha, O. keta

Argulus foliaceus - Gasterosteus aculeatus, Salmo gairdneri

Argulus funduli - Mugil cephalus

Argulus japonicus - Gasterosteus aculeatus

Argulus melanostictus - Leuresthes tenuis

Argulus pugettensis - Cymatogaster aggregata, Damalichthys vacca,

Embiotoca lateralis, Hyperprosopon argenteum, Oncorhynchus kisutch,

Phanerodon furcatus, Salmo gairdneri, Sebastes caurinus

Argulus scutiformis - Mola mola

Argulus varians - Echeneis naucrates

CESTODA

Genera and species - Tarletonbeania crenularis

AMPHICOTYLIDAE

Abothrium gadi - Gadus macrocephalus, Theragra chalcogramma

Eubothrium sp. - Cymatogaster aggregata, Gasterosteus aculeatus,
Hippoglossoides elassodon, Lepidopsetta bilineata, Oncorhynchus
nerka, O. tshawytscha, Reinhardtius hippoglossoides, Salmo
gairdneri

Eubothrium crassum - Clupea harengus, Gasterosteus aculeatus,
Oncorhynchus gorbuscha, O. keta, O. kisutch, O. nerka, O. tshawytscha,
Platichthys stellatus, Salmo gairdneri, Salvelinus malma

Eubothrium salvelini - Oncorhynchus kisutch, O. nerka,
Salmo clarki, S. gairdneri, Salvelinus malma

Pseudeubothrioides lepidocybii - Lepidocybium flavobrunneum

Pseudeubothrium xiphiados - Xiphias gladius

AMPHILINIDAE

Amphilina bipunctata - Acipenser sp., A. transmontanus

Amphilina japonica - Acipenser medirostris

BALANOBOTHRIIDAE

Balanobothrium parvum - Galeocerdo cuvieri

BOTHRIOCEPHALIDAE

Anatrum histocephalum - Synodus lucioceps

Bothriocephalus sp. - Aulorhynchus flavidus, Gadus macrocephalus,
Gasterosteus aculeatus, Hippoglossoides elassodon, Lepidopsetta
bilineata, Merluccius productus, Oncorhynchus kisutch, O.

tshawytscha, Pholis laeta, Remora

remora, Scomber japonicus, Sebastes alutus, S. babcocki, S.

borealis, S. caurinus, S. paucispinis, S. pinniger, S. proriger,

S. reedi, S. ruberrimus, S. zacentrus

Bothriocephalus? claviceps - Gasterosteus aculeatus

CESTODA (continued)

BOTHRIOCEPHALIDAE (continued)

Bothriocephalus manubriiformis - Istiophorus platypterus, Tetrapturus angustirostris, T. audax, Xiphias gladius

Bothriocephalus monorchis - Mola mola

Bothriocephalus occidentalis - Leptocottus armatus, Sebastes sp.

Bothriocephalus ospariichthydis - Merluccius productus

Bothriocephalus scorpii - Apodichthys flavidus, Aprodon cortezianus, Artedius harringtoni, Blepsias cirrhosus, Clupea harengus, Delolepis gigantea, Enophrys bison, Gasterosteus aculeatus, Hexagrammos decagrammus, H. lagocephalus, H. stelleri, Leptocottus armatus, Myoxocephalus polyacanthocephalus, Nautichthys oculofasciatus, Oligoplites saurus, Platichthys stellatus, Reinhardtius hippoglossoides, Sebastes alutus, S. borealis, S. chlorostictus, S. miniatus, Theragra chalcogramma
Parabothriocephalus sagitticeps - Sebastes paucispinis

CATHETOCEPHALIDAE

Cathetocephalus thatcheri - Carcharhinus leucas

CYATHOPHYLIDAE

Bothrimonus sturionis - Oncorhynchus gorboscha, O. nerka, Salvelinus malma

Cyathocephalus sp. - Salmo clarki

Cyathocephalus truncatus - Gasterosteus aculeatus, Oncorhynchus kisutch, O. nerka, Salmo gairdneri

DASYRHYNCHIDAE

Genera and species - Thunnus albacares

Callitetrarhynchus sp. - Clevelandia ios, Ilypnus gilberti, Quietula y-cauda

Callitetrarhynchus gracilis - Auxis thazard, Carcharhinus obscurus, Coryphaena hippurus, Cynoscion nobilis, Euthynnus affinis, Morone saxatilis, Paralichthys californicus, Prionace glauca, Remora remora, Sarda chiliensis, Scomber japonicus, Seriola dorsalis, Sphyræna argentea, Stereolepis gigas, Synodus

CESTODA (continued)

DASYRHYNCHIDAE (continued)

Lucioiceps, Thunnus albacares, Thunnus thynnus
Dasyrhynchus sp. - Trachurus symmetricus
Dasyrhynchus giganteus - Carcharhinus leucas
Dasyrhynchus talismani - Carcharhinus longimanus, Thunnus albacares
Floriceps saccatus - Carcharhinus obscurus, Mola mola, Notorynchus maculatus, Prionace glauca, Xiphias gladius

DIPHYLLOBOTHRIDAE

Diphyllobothrium sp. - Gasterosteus aculeatus, Hippoglossoides elassodon, Merluccius productus, Oncorhynchus gorbuscha, O. keta, O. kisutch, O. nerka, O. tshawytscha, Platichthys stellatus, Salmo clarki, S. gairdneri, Sarda chiensis, Theragra chalcogramma
Diphyllobothrium cordiceps - Oncorhynchus kisutch, O. nerka, Salmo clarki, S. gairdneri, Salvelinus malma
Diphyllobothrium dallii - Salvelinus malma
Diphyllobothrium dendriticum - Gasterosteus aculeatus, Salmo gairdneri
Diphyllobothrium ditremum - Gasterosteus aculeatus, Salmo gairdneri
Diphyllobothrium latum - Oncorhynchus gorbuscha, O. keta, O. nerka, Salmo gairdneri, Salvelinus malma
Diphyllobothrium ursi - Oncorhynchus nerka
Diphyllobothrium vogeli - Gasterosteus aculeatus
Pyramicocephalus phocarum - Hippoglossoides elassodon, Theragra chalcogramma

DISCULICIPITIDAE

Disculiceps pileatus - Carcharhinus leucas, C. obscurus

ECHINOBOTHRIDAE

Caulobothrium opisthorchis - Myliobatis californica
Caulobothrium tetrascaphium - Myliobatis californica

CESTODA (continued)

EUTETRARHYNCHIDAE

Christianella trygonbrucco - Urolophus halleri

Eutetrarhynchus litocephalus - Mustelus californicus, Triakis semifasciata

Eutetrarhynchus macrotrachelus - Mustelus californicus

Eutetrarhynchus ruficollis - Squalus acanthias

Eutetrarhynchus schmidti - Rhinobatos productus, Urolophus halleri

Mecistobothrium myliobati - Myliobatis californica, Urolophus halleri

Parachristianella monomegacantha - Rhinobatos productus

Parachristianella trygonis - Urolophus halleri

Prochristianella fragilis - Rhinobatos productus

Prochristianella minima - Platyrhinoidis triseriata, Urolophus halleri

GILQUINIIDAE

Gilquinia squali - Citharichthys stigmatum, Squalus acanthias

GYMNORHYNCHIDAE

Gymnorhynchus gigas - Isurus oxyrinchus, Thunnus albacares

Gymnorhynchus isuri - Isurus oxyrinchus

Molicola horridus - Isurus oxyrinchus, Mola mola

Molicola uncinatus - Alopias vulpinus, Xiphias gladius

CESTODA (continued)

HEPATOXYLIDAE

Hepatoxylon sp. - Thunnus albacares

Hepatoxylon squali - Alopias vulpinus, Prionace glauca

Hepatoxylon trichiuri - Carcharodon carcharias, Coryphaena hippurus,
Isurus oxyrinchus, Oncorhynchus keta, O. tshawytscha, Prionace
glauca, Squalus acanthias, Thunnus alalunga, Xiphias gladius

LACISTORHYNCHIDAE

Grillotia sp. - Sebastes paucispinis, Thunnus albacares

Grillotia acanthoscolex - Hexanchus griseus

Grillotia erinacea - Atheresthes stomias, Carcharhinus obscurus, Clupea
harengus, Reinhardtius hippoglossoides, Sebastes aleutianus, S.
borealis, Squalus acanthias, Theragra chalcogramma, Xiphias gladius

Grillotia heptanchii - Hexanchus griseus

Grillotia musculara - Hexanchus griseus, Raja rhina

Grillotia (Paragrillotia) rowei - Coryphaenoides armatus

Grillotia scolecina - Hexanchus griseus

Grillotia smarigora - Cynoscion nobilis, Sebastes paucispinis,
Squatina californica, Synodus lucioceps

Lacistorhynchus tenuis - Alopias vulpinus, Cymatogaster aggregata,
Cynoscion nobilis, Clupea harengus, Genyonemus lineatus, Leuresthes
tenuis, Morone saxatilis, Mustelus californicus, M. henlei,
Paralichthys californicus, Rhinobatos productus, Sebastes
paucispinis, S. rastrelliger, Squalus acanthias, Synodus lucioceps,
Thunnus thynnus, Triakis semifasciata, Zenopsis nebulosa

LECANICEPHALIDAE

Discobothrium myliobatidis - Myliobatis californica

LIGULIDAE

Ligula intestinalis - Salmo gairdneri

Schistocephalus sp. - Gasterosteus aculeatus, Oncorhynchus nerka,
Salmo gairdneri

Schistocephalus solidus - Gasterosteus aculeatus, Salmo gairdneri

CESTODA (continued)

LITOBOTHRIDAE

- Litobothrium alopias - Alopias superciliosus
Litobothrium coniformis - Alopias superciliosus
Litobothrium daileyi - Alopias superciliosus
Litobothrium gracile - Odontaspis ferox
Renyxa amplificata - Alopias superciliosus

ONCOBOTHRIDAE

- Acanthobothrium sp. - Sebastes paucispinis, Synodus lucioceps
Acanthobothrium bajaensis - Heterodontus francisci
Acanthobothrium benedeni - Dasyatis violacea
Acanthobothrium brachyacanthum - Raja binocolata,
R. inornata
Acanthobothrium coronatum - Alopias vulpinus, Prionace glauca,
Squalus acanthias
Acanthobothrium crassicolle - Urolophus halleri
Acanthobothrium dujardinii - Raja binocolata, Rhinobatos productus,
Urolophus halleri
Acanthobothrium goldsteini - Platyrrhinoidis triseriata
Acanthobothrium hispidum - Torpedo californica
Acanthobothrium holorhini - Myliobatis californica
Acanthobothrium maculatum - Myliobatis californica
Acanthobothrium magnum - Dasyatis violacea
Acanthobothrium microcephalum - Myliobatis californica
Acanthobothrium olseni - Rhinobatos productus, Urolophus halleri
Acanthobothrium parviuncinatum - Gymnura marmorata
Acanthobothrium paulum - Hexachus griseus
Acanthobothrium rhinobati - Rhinobatos productus
Acanthobothrium robustum - Rhinobatos productus
Acanthobothrium unilateralis - Myliobatis californica
Calliobothrium pellucidum - Mustelus californicus
Calliobothrium verticillatum - Hexanchus griseus, Prionace glauca,
Squalus acanthias

CESTODA (continued)

ONCOBOTHRIIDAE (continued)

- Ceratobothrium xanthocephalum - Isurus oxyrinchus
Cylindrophorus posteroporus - Prionace glauca
Pedibothrium hutsoni - Galeocerdo cuvieri
Pedibothrium longispine - Galeocerdo cuvieri
Phoreiobothrium exceptum - Carcharhinus leucas, Sphyrna zygaena
Phoreiobothrium lasium - Alopias vulpinus, Carcharhinus leucas, C. obscurus, Galeocerdo cuvieri, Sphyrna zygaena
Phoreiobothrium pectinatum - Sphyrna zygaena
Phoreiobothrium triloculatum - Carcharhinus obscurus
Pinguicollum pinguicollum - Raja binoculata, R. inornata, R. rhina
Thysanocephalum crispum - Galeocerdo cuvieri, Sphyrna zygaena
Thysanocephalum rugosum - Galeocerdo cuvieri

OTOBOTHRIIDAE

- Otobothrium crenacolle - Carcharhinus leucas, C. obscurus, Coryphaena hippurus, Sphyrna zygaena, Squalus acanthias, Xiphias gladius
Otobothrium curtum - Galeocerdo cuvieri
Otobothrium dipsacum - Carcharhinus obscurus, Xiphias gladius
Otobothrium mugilis - Mugil cephalus
Otobothrium penetrans - Carcharhinus leucas, Sphyrna zygaena
Otobothrium pephrikos - Sphyrna zygaena
Otobothrium propecysticum - Sphyrna zygaena
Poecilancistrum caryophyllum - Carcharhinus leucas

PHOREIOBOTHRIIDAE

- Trilocularia acanthiaevulgaris - Squalus acanthias

PHYLLOBOTHRIIDAE

- Genera and species - Cololabis saira
Anthobothrium auriculatum - Hexanchus griseus, Prionace glauca
Anthobothrium cornucopia - Notorynchus maculatus, Prionace glauca
Anthobothrium exiquum - Alopias vulpinus
Anthobothrium laciniatum - Carcharhinus leucas, C. obscurus, Prionace glauca, Sphyrna zygaena, Urolophus halleri
Anthobothrium minutum - Prionace glauca
Anthobothrium oligorchidum - Urolophus halleri
Anthobothrium parvum - Mustelus henlei, Triakis semifasciata

CESTODA (continued)

PHYLLOBOTHRIIDAE (continued)

- Anthobothrium pulvinatum - Squalus acanthias
Anthobothrium variabile - Cetorhinus maximus
Caulobothrium multorchidum - Urolophus halleri
Crossobothrium angustum - Alopias vulpinus, Carcharhinus obscurus, Prionace glauca
Dinobothrium keilini - Prionace glauca
Dinobothrium planum - Triakis semifasciata
Dinobothrium plicatum - Carcharodon carcharias
Dinobothrium septaria - Cetorhinus maximus, Carcharodon carcharias,
Lamna ditropis, Prionace glauca
Dinobothrium simile - Lamna ditropis
Discobothrium (Echeneibothrium) fallax - Raja inornata, R. rhina
Echeneibothrium sp. - Paralichthys californicus, Thunnus albacares
Echeneibothrium dolichoophorum - Raja rhina
Echeneibothrium dubium abyssorum - Raja rhina
Echeneibothrium macrascum - Raja inornata
Echeneibothrium myzorhynchum - Myliobatis californica, Raja binoculata
Echeneibothrium octorchis - Raja binoculata, R. inornata, R. rhina
Gastrolecithus planus - Cetorhinus maximus, Mustelus henlei
Inermiphyllidium brachyascum - Myliobatis californica
Marsupiobothrium alopias - Alopias vulpinis
Marsupiobothrium forte - Sphyrna zygaena
Monorygma sp. - Squalus acanthias
Monorygma galeocerdonis - Galeocerdo cuvieri
Monorygma perfectum - Somniosus pacificus
Orygmatobothrium musteli - Galeorhinus zyopterus, Mustelus henlei,
Triakis semifasciata
Pelichnibothrium sp. - Oncorhynchus nerka, Salmo gairdneri,
Pelichnibothrium speciosum - Prionace glauca
Phyllobothrium sp. - Agonus acipenserinus, Ammodytes hexapterus, Aprodon
cortezianus, Aulorhynchus flavidus, Blepsias cirrhosus, Clupea harengus,
Coryphopterus nicholsi, Cymatogaster aggregata, Dasycottus setiger, Gadus
macrocephalus, Gasterosteus aculeatus, Hexagrammos lagocephalus, H. stelleri,
Hippoglossoides elassodon, Icelinus filamentosus, I. tenuis, Lampetra
tridentata, Lepidopsetta bilineata, Myoxocephalus polyacanthocephalus,
Oncorhynchus gorbuscha, O. keta, O. kisutch, O. nerka, O. tshawytscha,
Ophiodon elongatus, Parophrys vetulus, Platichthys stellatus, Reinhardtius
hippoglossoides, Salvelinus malma, Sebastes alutus, S. borealis, S. caurinus,

CESTODA (continued)

PHYLLOBOTHRIIDAE (continued)

- S. crameri, S. diploproa, S. elongatus, S. entomelas, S. maliger,
S. pinniger, S. ruberrimus, S. zacentrus, Squalus acanthias,
Sygnathus leptorhynchus, Thaleichthys pacificus, Theragra
chalcogramma, Triglops pingeli, Xeneretmus latifrons
Phyllobothrium caudatum - Alepisaurus ferox, Alosa sapidissima,
Eopsetta jordani, Lampris regius, Luvarus imperialis, Oncorhynchus
gorbuscha, O. keta, O. kisutch, O. nerka, O. tshawytscha, Thunnus
albacares, Thunnus thynnus
Phyllobothrium centrurum - Hexanchus griseus
Phyllobothrium dagnallium - Galeocerdo cuvieri, Prionace glauca
Phyllobothrium dohrnii - Hexanchus griseus
Phyllobothrium foliatum - Carcharhinus obscurus
Phyllobothrium gracile - Squalus acanthias
Phyllobothrium lactuca - Carcharodon carcharias, Galeocerdo cuvieri,
Hexanchus griseus, Squalus acanthias, Triakis semifasciata
Phyllobothrium magnum - Somniosus pacificus
Phyllobothrium musteli - Carcharhinus leucas, Galeocerdo cuvieri
Phyllobothrium prionacis - Prionace glauca
Phyllobothrium radioductum - Mustelus henlei, Raja binoculata, R.
inornata, Raja rhina, Triakis semifasciata
Phyllobothrium rotundum - Hexanchus griseus
Phyllobothrium sinuosiceps - Hexanchus griseus
Phyllobothrium squali - Squalus acanthias
Phyllobothrium thridax - Squalus acanthias
Phyllobothrium triacis - Hexanchus griseus
Phyllobothrium tumidum - Carcharodon carcharias, Isurus oxyrinchus,
Lamna ditropis
Pithophorus sp. - Mustelus henlei
Pithophorus vulpeculae - Alopias vulpinus
Reesium paciferum - Cetorhinus maximus
Rhinebothrium bilobatum - Urolophus halleri
Rhinebothrium ditesticulum - Urolophus halleri
Rhinebothrium flexile - Myliobatis californica, Scomber japonicus,
Urolophus halleri

CESTODA (continued)

PHYLLOBOTHRIIDAE (continued)

Rhinebothrium minimum - Urolophus halleri

Rhinebothrium palombi - Dasyatis violacea

Rhinebothrium tumidulum - Urolophus halleri

Rhinebothrium urobatidium - Urolophus halleri

Rhodobothrium pulvinatum - Squalus acanthias

Scyphophyllideum giganteum - Galeorhinus zyopterus, Squalus acanthias

PROSOBOTHRIIDAE

Platybothrium auriculatum - Prionace glauca

Platybothrium baeri - Prionace glauca

Platybothrium cervinum - Carcharhinus obscurus, Prionace glauca

Platybothrium parvum - Isurus oxyrinchus, Prionace glauca, Sphyrna zygaena

Prosobothrium adhaerans - Prionace glauca, Sphyrna zygaena

Prosobothrium armigerum - Prionace glauca, Squalus acanthias

Prosobothrium japonicum - Prionace glauca

PROTEOCEPHALIDAE

Genera and species - Morone saxatilis

Gangesia parasiluri - Oncorhynchus gorbuscha, O. keta

Proteocephalus sp. - Oncorhynchus kisutch, O. nerka, Salmo gairdneri

Proteocephalus ambloplitis - Oncorhynchus kisutch, Salmo clarki,
S. gairdneri

Proteocephalus arcticus - Oncorhynchus nerka, Salmo clarki

Proteocephalus exiguus - Oncorhynchus keta, O. kisutch, O. nerka,
O. tshawytscha

Proteocephalus filicollis - Gasterosteus aculeatus

Proteocephalus laruei - Oncorhynchus nerka, Salmo clarki

Proteocephalus longicollis - Gasterosteus aculeatus, Salmo gairdneri

Proteocephalus percae - Gasterosteus aculeatus, Salmo gairdneri

Proteocephalus pinguis - Salmo gairdneri

Proteocephalus primaverus - Salmo clarki

CESTODA (continued)

PROTEOCEPHALIDAE (continued)

Proteocephalus pugetensis - Gasterosteus aculeatus

Proteocephalus salmonidicola - Oncorhynchus kisutch, Salmo clarki,
S. gairdneri, Salvelinus malma

PSEUDOPHYLLIDEA

Genera and species - Ceratoscopelus townsendi, Clupea harengus, Diaphus theta, Hippoglossoides elassodon, Lampanyctus ritteri, Lepidopsetta bilineata, Microstomus pacificus, Reinhardtius hippoglossoides, Sebastes aleutianus, Scomber japonicus, Stenobranchius leucopsarus, Symbolophorus californiensis, Theragra chalcogramma, Triphoturus mexicanus

PTEROBOTHRIIDAE

Pterobothrium heteracanthum - Carcharhinus obsurus, Galeocerdo cuvieri

PTYCHOBOTHRIIDAE

Clestobothrium crassiceps - Merluccius productus, Squalus acanthias

SPATHEBOTHRIIDAE

Spathebothrium simplex - Liparis callyodon, L. fucensis

SPHYRIOCEPHALIDAE

Sphyriocephalus sp. - Euprotomicrus bispinatus, Thunnus albacares

Sphyriocephalus dollfusi - Thunnus obesus

Sphyriocephalus pelorosoma - Alopias superciliosus

Sphyriocephalus tergestinus - Alopias vulpinus, Euprotomicrus bispinatus,
Isurus oxyrinchus, Thunnus alalunga

Sphyriocephalus viridis - Alopias superciliosus

TENTACULARIIDAE

Nybelinia sp. - Engraulis mordax, Lamna ditropis, Makaira nigricans,

Notorynchus maculatus, Oncorhynchus gorboscha, O. keta, O. kisutch,

O. nerka, O. tshawytscha, Scomber japonicus, Thunnus albacares

Nybelinia anthicosum - Heterodontus francisci, Triakis semifasciata

CESTODA (continued)

TENTACULARIIDAE (continued)

Nybelinia bisulcata - Caranx hippos, Carcharhinus obscurus, Coryphaena hippurus, Galeocerdo cuvieri, Remora remora, Sphyrna zygaena,
Squalus acanthias, Xiphias gladius

Nybelinia lamonteeae - Xiphias gladius

Nybelinia lingualis - Isurus oxyrinchus, Naucrates ductor,
Prionace glauca, Xiphias gladius

Nybelinia palliata - Lamna ditropis, Sphyrna zygaena

Nybelinia pintneri - Isurus oxyrinchus, Prionace glauca

Nybelinia robusta - Carcharhinus obscurus, Echeneis naucrates, Isurus oxyrinchus, Remora remora

Nybelinia sphyrnae - Sphyrna zygaena

Nybelinia surmenicola - Anoplopoma fimbria, Aprodon cortezianus,
Atheresthes stomias, Eopsetta jordani, Gadus macrocephalus,
Hexagrammos stelleri, Hippoglossoides elassodon, Hippoglossus stenolepis, Lamna ditropis, Lepidopsetta bilineata, Lyopsetta exilis, Merluccius productus, Microstomus pacificus, Oncorhynchus gorbuscha, O. keta, O. kisutch, O. tshawytscha, Ophiodon elongatus,
Parophrys vetulus, Platichthys stellatus, Pleurogrammus monopterygius,
Reinhardtius hippoglossoides, Scomber japonicus, Sebastes aleutianus,
S. alutus, S. borealis, S. brevispinis, S. caurinus, S. crameri,
S. diploproa, S. elongatus, S. entomelas, S. flavidus, S. maliger,
S. nigrocinctus, S. pinniger, S. proriger, S. reedi, S. ruberrimus,
S. zacentrus, Theragra chalcogramma, Triglops pingeli

Nybelinia syngenes - Sphyrna zygaena

Tentacularia sp. - Istiophorus platypterus, Makaira nigricans,
Ophiodon elongatus, Thunnus albacares

Tentacularia coryphaenae - Alepisaurus ferox, Carcharhinus longimanus,
C. obscurus, Carcharodon carcharias, Coryphaena hippurus, Echeneis naucrates,
Euthynnus pelamis, Galeocerdo cuvieri, Oncorhynchus tshawytscha,
Prionace glauca, Scomber japonicus, Sphyrna zygaena,
Thunnus albacares, Thunnus thynnus, Xiphias gladius

Tentacularia macropora - Galeocerdo cuvieri

Tentacularia megalobothrida - Hexanchus griseus

Tetrarhynchus sp. - Hexanchus griseus

CESTODA (continued)

TETRABOTHRIIDAE

Priapocephalus sp. - Cololabis saira

TETRAGONOCEPHALIDAE

Tetragonocephalum trygonis - Dasyatis violacea

TETRAPHYLLIDEA

Genera and species - Ceratoscopelus townsendi, Clevelandia ios, Diaphus theta, Lampanyctus ritteri, Lyopsetta exilis, Macroparalepis sp., Neoclinus blanchardi, Roncador stearnsi, Sebastes paucispinis, Stenobranchius leucopsarus, Sternoptyx diaphana, Stomias atriventer, Symbolophorus californiensis

Yellow pigmented plerocercoid - Atherinopsis californiensis

Red pigmented plerocercoid - Alosa sapidissima, Cymatogaster aggregata, Engraulis mordax, Glyptocephalus zachirus, Rhinobatos productus, Sardinops sagax, Urolophus halleri

Scolex sp. - Anoplopoma fimbria, Auxis thazard

Scolex pleuronectis - Anoplopoma fimbria, Atheresthes stomias, Blepsias cirrhosus, Clupea harengus, Cololabis saira, Gadus macrocephalus, Hexagrammos lagocephalus, H. stelleri, Hippoglossoides elassodon, Hippoglossus stenolepis, Ilypnus gilberti, Lepidopsetta bilineata, Mallotus villosus, Morone saxatilis, Mugil cephalus, Myoxocephalus polyacanthocephalus, Oncorhynchus gorbuscha, O. keta, O. kisutch, O. nerka, O. tshawytscha, Platichthys stellatus, Pleurogrammus monopterygius, Quietula y-cauda, Reinhardtius hippoglossoides, Salvelinus malma, Scomber japonicus, Sebastes aleutianus, S. alutus, S. borealis, Theragra chalcogramma, Thunnus albacares, Trachurus symmetricus

Scolex polymorphus - Gasterosteus aculeatus, Mugil cephalus, Oncorhynchus gorbuscha, O. kisutch, O. nerka, O. tshawytscha, Reinhardtius hippoglossoides, Remora remora, Trachurus symmetricus, Xiphias gladius

CESTODA (continued)

TRIAENOPHORIDAE

- Ancistrocephalus microcephalus - Mola mola
Eubothrioides lamellatum - Zenopsis nebulosa
Fisticula plicatus - Mola mola, Xiphias gladius
Triaenophorus crassus - Gasterosteus aculeatus, Oncorhynchus keta,
O. nerka
Triaenophorus lucii - Gasterosteus aculeatus, Salmo gairdneri
Triaenophorus nodulosus - Oncorhynchus kisutch, O. nerka

TRYPANORHYNCHA

- Genera and species - Anoplopoma fimbria, Auxis thazard, Makaira nigricans,
Merluccius productus, Morone saxatilis, Paralichthys californicus,
Scomber japonicus, Sebastes levis, S. miniatus, Sphyrna argentea,
Thunnus albacraes
Dibothriorhynchus maccallumi - Sphyrno tiburo
Dibothriorhynchus xiphiae - Xiphias gladius
Rhynchobothrium sp. - Mola mola
Rhynchobothrium exile - Galeocerdo cuvieri
Rhynchobothrium plicatum - Sphyrna tiburo
Rhynchobothrium tumidulum - Carcharhinus obscurus
Rhynchobothrius carangis - Caranx hippos
Tetrarhynchus bicolor - Carcharhinus obscurus
Tetrarhynchus elongatus - Mola mola
Tetrarhynchus papillosus - Coryphaena hippurus
Tetrarhynchus tetrabothrium - Squalus acanthias

CESTODARIA

GYROCOTYLIDAE

Gyrocotyle fimbriata - Hydrolagus colliei

Gyrocotyle parvispinosa - Hydrolagus colliei

COPEPODA

Intermediate stage - Ceratoscopelus townsendi

BOMOLOCHIDAE

Bomolochus concinnus - Mugil cephalus

Bomolochus constrictus - Atherinops affinis

Bomolochus cuneatus - Clupea harengus, Cymatogaster aggregata,
Damalichthys vacca, Embiotoca jacksoni, Gasterosteus aculeatus,
Leuresthes tenuis, Oncorhynchus gorboscha, Phanerodon furcatus

Bomolochus decapteri - Cololabis saira

Bomolochus exilipes - Mugil cephalus

Bomolochus mugilis - Mugil cephalus

*Bomolochus solae - Paralabrax clathratus, P. nebulifer, Paralichthys californicus,
Menticirrhus undulatus, Sphyraena argentea

Holobomolochus ardeole - Hypsypops rubicunda

Holobomolochus attenuatus - Genyonemus lineatus, Roncador stearnsi,
Scorpaena guttata, Sphoeroides annulatus

Holobomolochus embiotocae - Cymatogaster aggregata, Damalichthys vacca,
Embiotoca jacksoni, Phanerodon furcatus

Holobomolochus longicaudus - Paralabrax clathratus, P. maculatofasciatus,
P. nebulifer

Holobomolochus occultus - Hippoglossoides elassodon, Lyopsetta exilis

Holobomolochus prolixus - Leptocottus armatus, Paralichthys californicus,
Pleuronichthys coenosus

Holobomolochus spinulus - Leptocottus armatus, Oligocottus maculosus,
Oxylebius pictus, Scorpaena guttata, Sebastes mystinus, S. serranoides

Holobomolochus venustus - Scorpaenichthys marmoratus, Sebastes caurinus,
S. elongatus, S. maliger, S. pinniger, S. ruberrimus

Nothobomolochus teres - Mugil cephalus

Taeniacanthus albidus - Sphyrna tiburo

Taeniacanthus flagellans - Sphyrna zygaena

Taeniacanthodes haakeri - Cymatogaster aggregata, Paralichthys californicus

COPEPODA (continued)

BOMOLOCHIDAE (continued)

Taeniastrotos californiensis - Paralabrax clathratus, P. maculatofasciatus,
P. nebulifer
Unicolax mycterobius - Auxis thazard

CALIGIDAE

Anuretes heckelii - Caranx hippos
Anuretes quadrilaterus - Zenopsis nebulosa
Caligodes laciniatus - Sphyræna argentea
Caligus sp. - Hydrolagus colliei, Merluccius productus, Morone saxatilis, Oncorhynchus tshawytscha
Caligus asymmetricus - Euthynnus affinis
Caligus auxisi - Auxis thazard
Caligus belones - Coryphaena hippurus
Caligus bonito - Coryphaena hippurus, Engraulis mordax, Euthynnus affinis,
E. pelamis, Mugil cephalus, Oligoplites saurus, Sarda chiliensis,
Thunnus thynnus
Caligus chelifer - Xiphias gladius
Caligus chorinemi - Seriola dorsalis
Caligus clemensi - Clupea harengus, Gasterosteus aculeatus, Hexagrammos
sp., Hydrolagus colliei, Oncorhynchus gorbuscha, O. keta, O. kisutch,
Salmo gairdneri, Sebastes sp., S. caurinus, Theragra chalcogramma
Caligus confusus - Caranx hippos, Coryphaena hippurus
Caligus constrictus - Caranx hippos, Coryphaena hippurus
Caligus coryphaenae - Caranx hippos, Coryphaena hippurus, Euthynnus
lineatus, E. pelamis, Isurus oxyrinchus, Polydactylus opercularis,
Seriola dorsalis, Squalus acanthias, Thunnus albacares, T. obesus,
T. thynnus, X. gladius
*Caligus curtus - Mugil cephalus, Squalus acanthias
Caligus diaphanus - Caranx hippos
Caligus elongatus - Alopias vulpinus, Alosa sapidissima, Caranx hippos,
Clupea harengus, Mola mola, Remora remora, Salmo gairdneri, Sphoeroides
annulatus, Squalus acanthias, Xiphias gladius
Caligus epidemicus - Mugil cephalus

COPEPODA (continued)

CALIGIDAE (continued)

Caligus germoi - Thunnus alalunga

Caligus glandifer - Zenopsis nebulosa

Caligus hobsoni - Chromis punctipinnis, Damalichthys vacca, Girella nigricans, Hypsypops rubicunda, Medialuna californiensis, Oxyjulius californica, Phanerodon atripes, Pimelometopon pulchrum, Rhacochilus toxotes, Scorpaenichthys marmoratus, Sebastes atrovirens, S. carnatus, S. mystinus, S. serranoides, Synodus lucioceps

Caligus irritans - Mugil cephalus

Caligus klawei - Engraulis mordax

Caligus lacustris - Gasterosteus aculeatus

Caligus lunatus - Seriola dorsalis

Caligus macarovi - Cololabis saira, Euthynnus lineatus

Caligus minimus - Mugil cephalus

Caligus mutabilis - Calamus brachysomus, Euthynnus pelamis, Menticirrhus undulatus, Mugil cephalus, Paralabrax clathratus, P. maculatofasciatus, P. nebulifer, Sarda chiliensis, Scomberomorus sierra

Caligus olsoni - Leuresthes tenuis

Caligus orientalis - Mugil cephalus

Caligus patulus - Coryphaena hippurus

Caligus pectinatus - Eopsetta jordani

Caligus pelamydis - Euthynnus pelamis, Scomber japonicus, Trachurus symmetricus

Caligus platytarsis - Mugil cephalus

Caligus praetextus - Caranx hippos, Echeneis naucrates, Mugil cephalus, Sphyrna tiburo

Caligus productus - Auxis thazard, Balistes polylepis, Calamus brachysomus, Coryphaena hippurus, Euthynnus affinis, E. pelamis, Naucrates ductor, Paralabrax clathratus, P. maculatofasciatus, Scomberomorus sierra, Seriola dorsalis, Sphyrna argentea, Thunnus alalunga, T. albacares, T. obesus, T. thynnus

COPEPODA (continued)

CALIGIDAE (continued)

- Caligus punctatus - Acanthogobius flavimanus
Caligus quadratus - Coryphaena hippurus, Cymatogaster aggregata,
Euthynnus pelamis, Istiophorus platypterus, Thunnus albacares
Caligus rectus - Caranx hippos
Caligus robustus - Caranx hippos
Caligus rufimaculatus - Mugil cephalus
Caligus schistonyx - Mugil cephalus
Caligus serratus - Atherinops affinis, Atherinopsis californiensis,
Oxyjulis californica
Caligus spinosurculus - Caranx hippos
Caligus tenax - Caranx hippos
Caligus tenuicaudatus - Seriola dorsalis
Caligus tenuifurcatus - Nematistius pectoralis
Dentigryps curtus - Euthynnus pelamis
Dentigryps longicauda - Caranx hippos
Heniochophilus branchialis - Euthynnus pelamis
Lepeophtheirus sp. - Ammodytes hexapterus, Damalichthys vacca,
Genyonemus lineatus, Hypsopops rubicunda, Medialuna californiensis,
Menticirrhus undulatus, Myoxocephalus polyacanthocephalus, Oxyjulis
californica, Sebastes paucispinis, Psettichthys melanostictus
Lepeophtheirus appendiculatus - Hippoglossus stenolepis
Lepeophtheirus bifidus - Hypsopsetta guttulata, Lepidopsetta bilineata,
Paralichthys californicus, Parophrys vetulus
Lepeophtheirus bifurcatus - Cymatogaster aggregata, Phanerodon
furcatus, Psettichthys melanostictus
Lepeophtheirus brachyurus - Scorpaena guttata
Lepeophtheirus breviventris - Ophiodon elongatus
Lepeophtheirus constrictus - Paralabrax clathratus, P. maculatofasciatus,
P. nebulifer
Lepeophtheirus crassus - Remora australis, R. remora
Lepeophtheirus cuneifer - Gadus macrocephalus, Hexagrammos lagocephalus,

CALIGIDAE (continued)

- Hippoglossus stenolepis, Isopsetta isolepis, Leptocottus armatus,
Lumpenus sagitta, Microgadus proximus, Raja binoculata, Squalus
acanthias, Theragra chalcogramma
- Lepeophtheirus dissimulatus - Euthynnus pelamis, Gadus macrocephalus,
Hypsopsetta guttulata, Merluccius productus, Mycteroperca xenarcha,
Paralabrax nebulifer, Paralichthys californicus, Sphoeroides
annulatus, Sphyraena argentea
- Lepeophtheirus edwardsi - Caranx hippos
- Lepeophtheirus emiens - Makaira nigricans
- Lepeophtheirus goniistii - Zenopsis nebulosa
- Lepeophtheirus hastatus - Mola mola
- Lepeophtheirus hexagrammi - Hexagrammos lagocephalus
- Lepeophtheirus hospitalis - Gadus macrocephalus, Lepidopsetta
bilineata, Mugil cephalus, Parophrys vetulus, Platichthys stellatus,
Pleuronichthys coenosus
- Lepeophtheirus abdominis - Cynoscion nobilis
- Lepeophtheirus longipes - Echeneis naucrates, Paralabrax clathratus,
Sebastes maliger, S. serriceps, Stereolepis gigas
- Lepeophtheirus longispinosus - Sphyrna zygaena
- Lepeophtheirus nordmanni - Mola mola
- Lepeophtheirus oblitus - Hexagrammos decagrammus, H. stelleri,
Sebastes alutus, S. caurinus, S. helvomaculatus, S. maliger
- Lepeophtheirus parvicruris - Platichthys stellatus
- Lepeophtheirus parviventris - Anoplopoma fimbria, Enophrys bison,
Eopsetta jordani, Gadus macrocephalus, Halichoeres semicinctus,
Heterostichus rostratus, Hexagrammos decagrammus, Hippoglossus
stenolepis, Lepidopsetta bilineata, Myoxocephalus polyacanthocephalus,
Platichthys stellatus, Pleurogrammus monoptyerygius, Raja binoculata,
R. rhina, Scorpaenichthys marmoratus, S. pinniger, S. rubrivinctus,
Urolophus halleri, Theragra chalcogramma, Xiphister atropurpureus
- Lepeophtheirus parvus - Cymatogaster aggregata, Damalichthys vacca,

COPEPODA (continued)

CALIGIDAE (continued)

Pimelometopon pulchrum

Lepeophtheirus paulus - Sebastes diploproa, S. flavidus, S. maliger,
S. nigrocinctus, S. ruberrimus, S. serriceps

Lepeophtherus pollachius - Clupea harengus

Lepeophtheirus pravipes - Hippoglossus stenolepis, Ophiodon elongatus,
Raja binoculata, Scorpaena guttata

Lepeophtheirus salmonis - Acipenser transmontanus, Ammodytes
hexapterus, Oncorhynchus gorbusha, O. keta, O. kisutch, O. nerka,
O. tshawytscha, Ophiodon elongatus, Salmo clarki, S. gairdneri,
Sebastes rubrivinctus

Lepeophtheirus thompsoni - Cynoscion nobilis

*Pseudocaligus apodus - Mugil cephalus

Pseudolepeophtheirus longicauda - Platichthys stellatus

Pupulina brevicauda - Mobula lucasana

Pupulina minor - Mobula lucasana

Sciaenophilus bennetti - Paralabrax maculatofasciatus

Tuxophorus caligodes - Echeneis naucrates

CECROPIDAE

Cecrops exiguus - Mola mola

Cecrops latreillii - Mola mola, Thunnus thynnus

Luetkenia asterodermi - Luvarus imperialis

Luetkenia elongata - Luvarus imperialis

Orthagoriscola muricatus - Mola mola

Philorthagoriscus serratus - Mola mola, Squalus acanthias

CHONDRACANTHIDAE

Acanthochondria sp. - Merluccius productus, Paralichthys californicus

Acanthochondria cornuta - Hippoglossus stenolepis, Maynea californica

Acanthochondria deltoideus - Hexagrammos decagrammus, Sebastes melanops

Acanthochondria epachthes - Hydrolagus colliei

Acanthochondria fraseri - Pleuronichthys coenosus

CHONDRACANTHIDAE (continued)

Acanthochondria rectangularis - Hydrolagus colliei, Leptocottus armatus, Parophrys vetulus, Platichthys stellatus, Pleuronichthys coenosus, Psettichthys melanostictus

Acanthochondria solida - Hexagrammos lagocephalus

Acanthochondria yui - Acanthogobius flavimanus

Blias prionoti - Hemanthias peruanus

Chondracanthodes deflexus - Coryphaenoides armatus

Chondracanthus sp. - Hemilepidotus hemilepidotus, Sebastes alutus,
S. melanops

Chondracanthus distortus - Zenopsis nebulosa

Chondracanthus gracilis - Hexagrammos decagrammus, Scorpaenichthys marmoratus, Scorpaena guttata

Chondracanthus heterostichi - Heterostichus rostratus

Chondracanthus horridus - Heterostichus rostratus

Chondracanthus irregularis - Enophrys bison, Myoxocephalus polyacanthocephalus

Chondracanthus lotellae - Myoxocephalus polyacanthocephalus

Chondracanthus narium - Opiodon elongatus

Chondracanthus palpifer - Gadus macrocephalus, Merluccius productus

Chondracanthus pinguis - Hexagrammos decagrammus, Scorpaenichthys marmoratus, Sebastes aleutianus, S. alutus, S. auriculatus, S. babcocki, S. borealis, S. brevispinis, S. caurinus, S. crameri, S. diploproa, S. entomelas, S. flavidus, S. maliger, S. melanops, S. pinninger, S. proriger, S. reedi, S. ruberrimus, S. zacentrus,
Xiphister atropurpureus

Chondracanthus pusillus - Apodichthys flavidus

Chondracanthus rickettsi - Coryphaenoides armatus

Chondracanthus theragrae - Theragra chalcogramma

Chondracanthus triventricosus - Sebastes aleutianus, S. alutus,
S. babcocki, S. brevispinis, S. caurinus, S. crameri, S. diploproa,
S. flavidus, S. helvomaculatus, S. maliger, S. proriger, S. reedi,
S. ruberrimus, S. zacentrus

COPEPODA (continued)

CHONDRACANTHIDAE (continued)

Heterochondria atypica - Oxyjulis californica, Oxylebius pictus

Lateracanthus quadripedis - Coryphaenoides acrolepis

Pseudochondracanthus diceraus - Sphoeroides sp.

Pseudodiocus scorpaenus - Scorpaena guttata

DICHELESTHIIDAE

Anthosoma crassum - Carcharhinus obscurus, Carcharodon carcharias,

Cetorhinus maximus, Isurus oxyrinchus, Lamna ditropis, Mola mola,

Prionace glauca

DISSONIDAE

Dissonus ruveti - Ruvettus pretiosus

ERGASILIDAE

Dermoergasilus amplectens - Mugil cephalus

Ergasilus sp. - Atherinops affinis, Fundulus parvipinnis, Leptocottus armatus, Mugil cephalus

Ergasilus auritus - Gasterosteus aculeatus, Gillichthys mirabilis,
Oncorhynchus kisutch, O. nerka

Ergasilus briani - Oncorhynchus gorbuscha, O. keta

Ergasilus caeruleus - Oncorhynchus nerka

Ergasilus clupeidarum - Dorosoma petenense

Ergasilus cyanopictus - Mugil cephalus

Ergasilus fryeri - Mugil cephalus

Ergasilus funduli - Mugil cephalus

Ergasilus globosus - Gasterosteus aculeatus

Ergasilus labracis - Morone saxatilis

Ergasilus longimanus - Mugil cephalus

Ergasilus manicatus - Gasterosteus aculeatus

Ergasilus lizae - Cymatogaster aggregata, Morone saxatilis, Mugil cephalus

Ergasilus mugilis - Mugil cephalus

Ergasilus myctarotheres - Sphyrna zygaena

COPEPODA (continued)

ERGASILIDAE (continued)

- Ergasilus nerkae - Oncorhynchus kisutch, O. nerka, Salmo gairdneri
Ergasilus orientalis - Acanthogobius flavimanus
Ergasilus sieboldi - Gasterosteus aculeatus, Salmo gairdneri
Ergasilus turgidus - Chitonotus pugetensis, Cymatogaster aggregata,
Gasterosteus aculeatus, Oncorhynchus nerka
Ergasilus versicolor - Mugil cephalus
Ergasilus wilsoni - Oncorhynchus gorboscha
Nipergasilus bora - Mugil cephalus
Thersitina gasterostei - Gasterosteus aculeatus

EUDACTYLINIDAE

- Bariaka alopiae - Alopias superciliosus
Bariaka pamelae - Hexanchus griseus
Eudactylina acanthii - Squalus acanthias
Eudactylina acuta - Squalus acanthias
Eudactylina longispina - Sphyrna tiburo
Eudactylina pusilla - Galeocerdo cuvieri
Eudactylina spinifera - Carcharhinus obscurus
Eudactylina valei - Squalus acanthias
Eudactylinodes nigra - Sphyrna tiburo
Eudactylinodes uncinata - Galeorhinus zyopterus
Nemesis aggregata - Alopias vulpinus
Nemesis atlantica - Alopias vulpinus, Carcharhinus leucas, C.
obscurus
Nemesis carchariaeglauci - Prionace glauca, Triakis semifasciata
Nemesis lamna - Alopias vulpinus, Carcharodon carcharias, Cetorhinus
maximus, Isurus oxyrinchus, Lamna ditropis, Odontaspis ferox, Prionace
glauca
Nemesis robusta - Alopias vulpinus, Carcharhinus leucas, C. obscurus,
Carcharodon carcharias, Galeocerdo cuvieri, Prionace glauca, Sphyrna
tiburo, S. zygaena
Nemesis spinulosus - Carcharhinus obscurus

COPEPODA (continued)

EUDACTYLINIDAE (continued)

Nemesis versicolor - Sphyrna zygaena

EURYPHORIDAE

Alebion carchariae - Carcharinus leucas, C. obscurus, Galeocерdo cuvieri

Alebion crassus - Sphyrna lewini, S. zygaena

Alebion glaber - Squalus acanthias

Alebion gracilis - Carcharhinus leucas, C. longimanus, C. obscurus,
Galeocерdo cuvieri, Squalus acanthias

Euryphorus brachypterus - Isurus oxyrinchus, Thunnus alalunga, T. albacares, T. obesus, T. thynnus

Euryphorus nordmanni - Coryphaena hippurus, Thunnus alalunga, T. albacares

Gloiopotes americanus - Istiophorus platypterus

Gloiopotes huttoni - Istiophorus platypterus, Makaira indica, M. nigricans, Tetrapturus audax, Thunnus obesus, Xiphias gladius

Gloiopotes ornatus - Makaira nigricans, Tetrapturus audax, Xiphias gladius

Gloiopotes watsoni - Istiophorus platypterus, Makaira nigricans,
Tetrapturus audax, Xiphias gladius

Paralebion elongatus - Carcharhinus leucas, C. obscurus

HATSCHEKIIDAE

Hatschekia albirubra - Menticirrhus undulatus, Paralabrax clathratus

Hatschekia oblonga - Caranx hippos

Hatschekia pacifica - Paralabrax clathratus, P. maculatofasciatus,
P. nebulifer

Hatschekia pinguis - Gymnothorax mordax

COPEPODA (continued)

KROYERIIDAE

- Kroyeria aculeata - Prionace glauca
Kroyeria dispar - Galeocerdo cuvieri
Kroyeria echinata - Sphyrna zygaena
Kroyeria gracilis - Carcharhinus leucas, C. longimanus, C. obscurus,
Prionace glauca, Sphyrna zygaena
Kroyeria lineata - Sphyrna zygaena
Kroyeria papillipes - Galeocerdo cuvieri, Sphyrna zygaena
Kroyeria praelongacicula - Sphyrna lewini
Kroyeria sphyrnae - Sphyrna zygaena
*Kroyeria trecai - Sphyrna zygaena
Kroyerina elongata - Galeocerdo cuvieri, Prionace glauca

LERNAIDAE

- Lernaea cyprinacea - Gasterosteus aculeatus, Oncorhynchus tshawytscha,
Salmo gairdneri

LERNAEOPODIDAE

- Genera and species - Oncorhynchus gorbuscha
Achtheres lacae - Morone saxatilis
Advena saba - Scomber japonicus
Brachiella thynni - Thunnus alalunga, T. albacares, T. obesus,
T. thynnus
Charopinopsis quaternius - Coryphaena hippurus
Clavella sp. - Damalichthys vacca, Embiotoca jacksoni
Clavella adunca - Gadus macrocephalus, Microgadus proximus, Theragra
chalcogramma
Clavella canaliculata - Microgadus proximus
*Clavella inversa - Mugil cephalus
Clavella parva - Artedius harringtoni, Chitonotus pugetensis,
Embiotoca lateralis, Paralabrax clathratus, P. maculatofasciatus,
P. nebulifer, Phanerodon furcatus, Sebastes aleutianus, S. alutus,
S. auriculatus, S. babcocki, S. caurinus, S. diploproa, S. elongatus,
S. flavidus, S. maliger, S. melanops, S. pinniger

COPEPODA (continued)

LERNAEOPODIDAE (continued)

- Clavella perfida - Merluccius productus, Theragra chalcogramma
Clavellisa scombri - Scomber japonicus
Clavellistes shoyoae - Lampris regius
Clavellopsis sp. - Leuresthes tenuis, Sebastes alutus
Clavellopsis flexicervica - Chromis punctipinnis
Clavellopsis longimana - Mugil cephalus
Dendrata cameroni longiclavata - Raja inornata
Lernaeopoda bidiscalis - Mola mola
Lernaeopoda galei - Raja binoculata, Squalus acanthias, Triakis semifasciata
Lernaeopodina pacifica - Raja rhina
Nectobranchia indivisa - Lepidopsetta bilineata, Platichthys stellatus
Neobrachiella sp. - Merluccius productus
Neobrachiella annulata - Coryphaenoides acrolepis
Neobrachiella gracilis - Caulolatilus princeps, Cynoscion nobilis,
Genyonemus lineatus
Neobrachiella gulosa - Roncador stearnsi
Neobrachiella nitida - Citharichthys sordidus, Coryphaenoides pectoralis
*Neobrachiella oblonga - Mugil cephalus
Neobrachiella regia - Lampris regius
Neobrachiella robusta - Merluccius productus, Sebastes aleutianus, S. alutus, S. auriculatus, S. aurora, S. babcocki, S. borealis, S. brevispinis, S. caurinus, S. crameri, S. diploproa, S. entomelas, S. flavidus, S. maliger, S. melanops, S. pinniger, S. proriger, S. reedi, S. ruberrimus, S. rubrivinctus, S. zacentrus

COPEPODA (continued)

LERNAEOPODIDAE (continued)

Neobrachiella sciaenophila - Roncador stearnsi

Pseudocharopinus bicaudatus - Mustelus californicus, Squalus acanthias

Pseudocharopinus dentatus - Raja binoculata, R. rhina

Salmincola californiensis - Oncorhynchus keta, O. kisutch,

O. nerka, O. tshawytscha, Salmo gairdneri, Salvelinus malma

Salmincola carpionis - Oncorhynchus nerka, Salvelinus malma

Salmincola edwardsii - Oncorhynchus nerka, Salmo clarki, S. gairdneri,
Salvelinus malma

Salmincola salmoneus - Oncorhynchus keta

Schistobranchia tertia - Raja binoculata, R. rhina

Thysanote ramosa - Xiphias gladius

LERNANTHROPIDAE

Lernanthropus giganteus - Caranx hippos

Lernanthropus hiatus - Thunnus alalunga

Lernanthropus mugili - Mugil cephalus

NAOBRANCHIIDAE

Naobranchia lizae - Mugil cephalus

Naobranchia occidentalis - Anoplopoma fimbria, Gadus macrocephalus,

Hippoglossoides elassodon, Lepidopsetta bilineata, Myoxocephalus

polyacanthocephalus, Parophrys vetulus, Platichthys stellatus,

Sebastes aleutianus, S. alutus, S. borealis, S. carnatus, S. caurinus,

S. diploproa, S. maliger, S. miniatus, S. nigrocinctus, S. paucispinis,

S. pinniger, S. proriger

Naobranchia wilsoni - Diodon hystrix

PANDARIDAE

Demoleus heptapus- Hexanchus griseus, Squalus acanthias

Demoleus latus - Squalus acanthias

Dinemoura discrepans - Alopias superciliosus, A. vulpinus

Dinemoura latifolia - Alopias vulpinus, Carcharodon carcharias, Isurus
oxyrinchus, Lamna ditropis, Prionace glauca

PANDARIDAE (continued)

- Dinemoura producta - Alopias vulpinus, Carcharodon carcharias,
Cetorhinus maximus, Isurus oxyrinchus, Lamna ditropis, Prionace glauca
- Echthrogaleus coleoptratus - Isurus oxyrinchus, Lamna ditropis,
Mola mola, Squalus acanthias, Triakis semifasciata,
Sphyrna zygaena
- Echthrogaleus denticulatus - Alopias vulpinus, Carcharodon carcharias,
Isurus oxyrinchus, Sphyrna zygaena
- Gangliopus pyriformis - Alopias vulpinus, Isurus oxyrinchus, Prionace glauca
- Nesippus borealis - Isurus oxyrinchus
- Nesippus crypturus - Carcharodon carcharias, Carcharhinus leucas,
C. longimanus, Galeocerdo cuvieri, Sphyrna zygaena
- Nesippus gracilis - Carcharhinus obscurus
- Nesippus orientalis - Carcharhinus leucas, C. obscurus, Carcharodon carcharias, Galeocerdo cuvieri, Sphyrna tiburo, S. zygaena
- Nesippus tigris - Galeocerdo cuvieri
- Nogagus ambiguus - Squalus acanthias
- Pagina tunica - Alopias superciliosus
- Pandarus bicolor - Galeorhinus zyopterus, Isurus oxyrinchus, Mola mola, Mustelus henlei, Notorynchus maculatus, Prionace glauca,
Squalus acanthias, Triakis semifasciata
- Pandarus carcharini - Carcharhinus leucas
- Pandarus cranchii - Alopias vulpinus, Carcharhinus leucas, C. longimanus, C. obscurus, Carcharodon carcharias, Galeocerdo cuvieri, Galeorhinus zyopterus, Sphyrna lewini, Sphyrna zygaena,
Triakis semifasciata
- Pandarus floridanus - Carcharodon carcharias
- Pandarus katoi - Isurus oxyrinchus

COPEPODA (continued)

PANDARIDAE (continued)

Pandarus satyrus - Carcharhinus obscurus, Isurus oxyrinchus, Prionace glauca, Sphyrna zygaena

Pandarus sinuatus - Caranx hippos, Carcharhinus leucas, C. obscurus,
Carcharodon carcharias, Sphyrna tiburo

Pandarus smithii - Alopias vulpinus, Carcharhinus leucas, C. obscurus,
Carcharodon carcharias, Isurus oxyrinchus, Sphyrna zygaena

Pandarus spinaciacanthiae - Squalus acanthias

Pannosus japonicus - Sphyrna zygaena

Perissopus dentatus - Carcharhinus leucas, C. obscurus, Sphyrna tiburo, S. zygaena

*Perissopus oblongatus - Alopias vulpinus, Mustelus californicus,
M. henlei, M. lunulatus, Notorynchus maculatus, Raja binoculata,
Remora remora, Rhinobatos productus, Sphyrna zygaena, Squalus acanthias,
Triakis semifasciata

Phyllosthyreus cornutus - Isurus oxyrinchus, Prionace glauca, Sphyrna zygaena

Prosaetes rhinodontis - Rhincodon typus

PENNELLIDAE

Cardiodectes medusaeus - Diaphus theta, Lampanyctus ritteri,
Leuroglossus stilbius, Lycodapus mandibularis, Stenobranchius leucopsarus

Haemobaphes sp. - Agonus acipenserinus, Ammodytes hexapterus,
Blepsias cirrhosus, Hexagrammos decagrammus, Lepidopsetta bilineata,
Merluccius productus, Oligocottus maculosus,
Syngnathus leptorhynchus, Triglops pingeli

Haemobaphes diceraus - Cymatogaster aggregata, Thaleichthys pacificus,
Theragra chalcogramma

Haemobaphes disphaerocephalus - Thaleichthys pacificus

Haemobaphes enodis - Lycodapus fierasfer

Haemobaphes intermedius - Artedius harringtoni, Oligocottus maculosus

PENNELLIDAE (continued)

- *Haemobaphes theragrae - Sebastes alutus, S. zacentrus, Theragra chalcogramma
- Lernaeenicus gracilis - Mugil cephalus
- Lernaeenicus longiventris - Caranx hippos, Coryphaena hippurus, Mugil cephalus, Seriola dorsalis
- Lernaeenicus vorax - Mugil cephalus
- Lernaeenicus sprattae - Clupea harengus
- Lernaeocera branchialis - Scomber japonicus
- Lernaeolophus sultanus - Xiphias gladius
- Peniculus sp. - Sebastes alutus, S. babcocki, S. brevispinis, S. crameri, S. proriger, S. reedi
- Peniculus asinus - Sebastes brevispinis, S. flavidus, S. proriger
- Peniculus clavatus - Triglops pingeli
- Peniculus fissipes - Atherinops affinis, Cymatogaster aggregata, Embiotoca jacksoni, Girella nigricans, Hypsurus caryi, Hypsypops rubicunda, Medialuna californiensis, Paralabrax clathratus, P. nebulifer, Phanerodon furcatus
- Pennella sp. - Cololabis saira, Tetrapturus audax, Thunnus albacares, Xiphias gladius
- * Pennella costai - Xiphias gladius
- Pennella crassicornis - Mola mola, Thunnus albacares, Xiphias gladius
- Pennella filosa - Istiophorus platypterus, Mola mola, Thunnus alalunga, T. albacares, T. thynnus, Xiphias gladius
- Pennella instructa - Xiphias gladius
- Pennella remorae - Remora remora
- Phrioxcephalus cincinnatus - Atheresthes stomias, Citharichthys sordidus, Parophrys vetulus, Pleuronichthys decurrens

COPEPODA (continued)

PHILICHTHYIDAE

- Colobomatus embiotocae - Amphistichus argenteus, A. koelzi,
Cymatogaster aggregata, Damalichthys vacca, Embiotoca jacksoni,
E. lateralis, Hyperprosopon anale, H. argenteum, Hypsurus caryi,
Micrometrus minimus, Rhacochilus toxotes, Zalembeus rosaceus
- Colobomatus kyphosus - Sebastes aleutianus, S. alutus, S. babcocki,
S. borealis, S. brevispinis, S. caurinus, S.
crameri, S. diploproa, S. elongatus, S. entomelas, S. flavidus,
S. maliger, S. nigrocinctus, S. pinniger, S. proriger, S. reedi,
S. ruberrimus, S. zacentrus
- Philichthys xiphiae - Xiphias gladius
- Sarcotaces sp. - S. chlorostictus
- Sarcotaces arcticus - Sebastes aleutianus, S. alutus, S. brevispinis,
S. crameri, S. flavidus, S. ruberrimus
- Sarcotaces komaii - Antimora microlepis
- Sarcotretes inflexus - Scomber japonicus

PSEUDOCYCNIDAE

- Pseudocycnus appendiculatus - Euthynnus affinis, E. pelamis,
Paralabrax maculatofasciatus, Sarda chiliensis, Thunnus alalunga,
T. albacares, T. obesus, T. thynnus
- Pseudocycnoides buccata - Scomberomorus sierra

SPHYRIIDAE

- Opimia exilis - Carcharhinus obscurus, Galeorhinus zyopterus
- Paeon elongatus - Carcharhinus obscurus, Triakis semifasciata
- Paeon ferox - Sphyrna tiburo
- Paeon vaissierei? - Sphyrna lewini

THERODAMASIDAE

- Paeonodes nemaformis - Oncorhynchus tshawytscha

TREBIIDAE

- Trebius sp. - Mola mola
- Trebius caudatus - Myliobatis californica, Squalus acanthias
- Trebius latifurcatus - Gymnura marmorata, Myliobatis californicus,

COPEPODA (continued)

TREBIIDAE (continued)

Paralichthys californicus, Urolophus halleri
Trebius tenuifurcatus - Urolophus halleri

TUCCIDAE

Tucca impressus - Diodon hystrix

CRUSTACEA

LEPADIDAE

Conchoderma auritum - Cetorhinus maximus

Conchoderma virgatum - Diodon hystrix, Mola mola, Tetrapturus audax,
Xiphias gladius

DIGENEA

ACANTHOCOLPIDAE

- Acanthocolpoides pauloi - Scomber japonicus
Manteria brachyderus - Caranx hippos, Oligoplites saurus
Pleorchis californiensis - Cynoscion nobilis
Pleorchis magniporus - Cynoscion nobilis, C. parvipinnis
Stephanostomum sp. - Atheresthes stomias, Cymatogaster aggregata,
Hyperprosopon argenteum, Leptocottus armatus, Lythrypnus dalli,
Mugil cephalus, Oligoplites saurus, Rhacochilus toxotes
Stephanostomum baccatum - Anoplopoma fimbria, Gadus macrocephalus,
Hippoglossoides elassodon, Lepidopsetta bilineata, Mola mola,
Reinhardtius hippoglossoides, Sebastes borealis
Stephanostomum californicum - Anoplopoma fimbria, Artedius harringtoni,
Genyonemus lineatus, Sebastes caurinus, S. maliger, Umbrina roncadore
Stephanostomum casum - Ophiodon elongatus, Sebastes sp.
Stephanostomum coryphaenae - Coryphaena hippurus
Stephanostomum dentatum - Dasycottus setiger, Embiotoca jacksoni,
Paralichthys californicus, Sebastes aleutianus, S. babcocki, S.
borealis
Stephanostomum ditrematis - Caranx hippos
Stephanostomum filiforme - Caranx caballus
Stephanostomum hispidum - Caranx hippos, Seriola dorsalis
Stephanostomum imparispine - Echeneis naucrates
Stephanostomum longisomum - Caranx hippos
Stephanostomum megacephalum - Caranx hippos
Stephanostomum microstephanum - Epinephelus niveatus
Stephanostomum naucrotis - Naucrates ductor
Stephanostomum provitellosum - Balistes polylepis
Stephanostomum tenue - Morone saxatilis
Stephanostomum tristephanum - Ophiodon elongatus, Scomber japonicus
Tormopsolus echenei - Echeneis naucrates

DIGENEA (continued)

ACCACOELIIDAE

- Genera and species - Naucrates ductor
Accacladocoelium alveolatum - Mola mola
Accacladocoelium macrocotyle - Mola mola
Accacladocoelium nigroflavum - Mola mola
Accacladocoelium petasiporum - Mola mola
Accacladocoelium serpentulum - Mola mola
Accacoelium contortum - Mola mola
Odhnerium calyptrocotyle - Mola mola
Orophocotyle divergens - Ranzania laevis
Orophocotyle planci - Mola mola, Ranzania laevis
Rhyncopharynx paradoxa - Mola mola
Tetrochetus coryphaenae - Coryphaena hippurus, Diodon hystrix
Tetrochetus proctocolus - Sphoeroides annulatus, Trachinotus rhodopus
Tetrochetus rayneri - Luvarus imperialis

ALBULATREMATIDAE

- Albulatrema ovale - Albula vulpes

ALLOCREADIIDAE

- Allobunodera mediovitellata - Gasterosteus aculeatus
Allocreadium lobatum - Salmo clarki, S. gairdneri
Anisorchis opisthorchis - Hemilepidotus hemilepidotus, Hexagrammos lagocephalus, H. stelleri, Sebastes aleutianus, Theragra chalcogramma
Anisorchis zhukovi - Hexagrammos lagocephalus
Bunodera luciopercae - Gasterosteus aculeatus, Salmo gairdneri,
Salvelinus malma
Bunoderina eucaliae - Gasterosteus aculeatus
Cainocreadium gasterostei - Gasterosteus aculeatus
Crepidostomum canadense - Salmo gairdneri
Crepidostomum cooperi - Gasterosteus aculeatus, Salmo clarki, S. gairdneri
Crepidostomum cornutum - Gasterosteus aculeatus

DIGENEA (continued)

ALLOCREADIIDAE (continued)

Crepidostomum farionis - Gasterosteus aculeatus, Oncorhynchus kisutch, O. nerka, Salmo clarki, S. gairdneri
Salvelinus malma

Crepidostomum metoecus - Salmo gairdneri,

Salvelinus malma

Crepidostomum salmonis - Oncorhynchus keta

Crepidostomum transmarinum - Salmo clarki

Crepidostomum ussuriensis - Oncorhynchus gorbuscha

Liliatrema skrjabini - Blepsias cirrhosus

Neophasis oculata - Hexagrammos lagocephalus, H. stelleri, Myoxocephalus polyacanthocephalus, Salvelinus malma

Pseudocreadium galapagoense - Balistes polylepis

Pseudozoogonoides microacetabulum - Hippoglossoides elassodon

APOCREADIIDAE

Apocreadium longisinosum - Spherooides annulatus

AZYGIIDAE

Azygia lucii - Salmo gairdneri, Salvelinus malma

Azygia robusta - Oncorhynchus tshawytscha

Otodistomum hydrolagi - Hydrolagus colliei

Otodistomum plicatum - Hexanchus griseus

Otodistomum scymni - Hexanchus griseus

Otodistomum veliporum - Citharichthys sordidus, Eopsetta jordani,

Hexanchus griseus, Lepidopsetta bilineata, Parophrys vetulus,

Raja binocolata, R. rhina, Squalus acanthias, Squatina californica

BATHYCOTYLIDAE

Bathycotyle branchialis - Coryphaena hippurus

Bathycotyle coryphaenae - Coryphaena hippurus

BIVESICULIDAE

Paucivitellosus fragilis - Mugil cephalus

DIGENEA (continued)

BOTULIDAE

Botulus alepidosauri - Alepisaurus ferox

BOTULISACCIDAE

Botulisaccus pisceus - Albula vulpes

BUCEPHALIDAE

Bucephalus sp. - Ophiodon elongatus

Bucephalus heterotentaculatus - Mycteroperca xenarcha, Paralichthys californicus, Scomberomorus sierra

Bucephalus introversus - Caranx hippos, Seriola dorsalis

Bucephalus polymorphus - Clupea harengus

Bucephalus varicus - Caranx hippos

Dollfustrema californiae - Gymnothorax mordax

Prosorhynchoides sp. - Damalichthys vacca

Prosorhynchoides arcuata - Caranx hippos, Carcharhinus obscurus

Prosorhynchoides basargini - Oncorhynchus gorbuscha, Platichthys stellatus

Prosorhynchoides cybii - Scomberomorus sierra

Prosorhynchoides gracilescens - Auxis thazard, Caranx hippos, Clupea harengus, Hippoglossoides elassodon, Lepidopsetta bilineata,

Oncorhynchus gorbuscha, O. keta, O. nerka, O. tshawytscha, Platichthys stellatus, Reinhardtius hippoglossoides, Salvelinus malma, Theragra chalcogramma

Prosorhynchoides labiatus - Leuresthes tenuis, Paralichthys californicus

Prosorhynchoides ozakii - Leptocottus armatus, Salvelinus malma

Prosorhynchoides sibi - Thunnus thynnus

Prosorhynchus sp. - Auxis thazard, Damalichthys vacca, Hexagrammos

Iagocephalus, H. stelleri, Sebastes alutus, S. melanops, S. pinniger

Prosorhynchus apertus - Ophiodon elongatus

Prosorhynchus crucibulum - Atheresthes stomias, Gadus macrocephalus,

Menticirrhus undulatus, Myoxocephalus polyacanthocephalus,

Pleurogrammus monoptyerygius, Polydactylus opercularis, Salvelinus malma, Sebastes aleutianus, S. alutus, S. babcocki, S. borealis,

DIGENEA (continued)

BUCEPHALIDAE (continued)

- S. brevispinis, S. crameri, S. diploproa, S. elongatus, S. entomelas, S. flavidus, S. paucispinis, S. pinniger,
S. reedi, S. ruberrimus, S. zacentrus, Theragra chalcogramma
Prosorhynchus facilis - Ophiodon elongatus
Prosorhynchus gonoderus - Epinephelus analogus
Prosorhynchus ozakii - Epinephelus analogus, E. niveatus, Mycteroperca xenarcha
Prosorhynchus pacificum - Mycteroperca xenarcha
Prosorhynchus scapellus - Liparis callyodon, Scorpaenichthys marmoratus
Prosorhynchus squamatus - Enophrys bison, Squalus acanthias
Prosorhynchus uniporus - Acanthogobius flavimanus
Rhipidocotyle sp. - Damalichthys vacca
Rhipidocotyle capitata - Auxis rochei, A. thazard
Rhipidocotyle elongata - Leptocottus armatus, Ophiodon elongatus
Rhipidocotyle heptathelata - Euthynnus affinis
Rhipidocotyle lepisostei - Mugil cephalus
Rhipidocotyle pentagonum - Auxis thazard, Euthynnus affinis, Thunnus thynnus
Rhipidocotyle septpapillata - Euthynnus affinis

CEPHALOPORIDAE

- Plectognathotrema hydrolagi - Hydrolagus colliei

CLINOSTOMATIDAE

- Clinostomum marginatum - Alosa sapidissima, Dorosoma petenense,
Morone saxatilis, Salmo clarki, S. gairdneri

COITOCAECIDAE

- Nicolla extrema - Scomber japonicus

CRYPTOGONIMIDAE

- Claribulla longula - Albula vulpes
Cryptogonimus sp. - Acanthogobius flavimanus

DIGENEA (continued)

CRYPTOGONIMIDAE (continued)

- Exorchis oviformis - Mugil cephalus
Metadena caballeroi - Liparis callyodon
Metadena magdaleneae - Paralichthys californicus
Neochasmus sp. - Hyperprosopon argenteum
Neochasmus sogandaresi - Morone saxatilis

CYATHOCOTYLIDAE

- Holostephanus luhei - Gasterosteus aculeatus
Mesostophenus appendiculatoides - Mugil cephalus
Mesostephanus appendiculatus - Fundulus parvipinnis, Gillichthys mirabilis

DEROPROSTIDAE

- Cestrahelmins rivularis - Acipenser transmontanus

DIDYMOZOIDAE

- Genera and species - Argyropelecus pacificus, Cololabis saira,
Coryphaena hippurus, Engraulis mordax, Gillichthys mirabilis,
Leuresthes tenuis, Oncorhynchus kisutch, Remora remora, Stenobranchius leucopsarus
Adenodidymocystis intestinalis - Euthynnus pelamis
Allometanematobothrioides lepidocybii - Lepidocybium flavobrunneum
Allonematobothrioides scombri - Scomber japonicus
Annulocystis auxis - Auxis thazard
Atalostrophion sardae - Thunnus albacares
Coeliodidymocystis abdominalis - Euthynnus pelamis
Coeliodidymocystis kamegaii - Euthynnus pelamis
Coeliotrema thynni - Thunnus thynnus
Colocytotrema sp. - Istiophorus platypterus, Makaira nigricans
Colocytotrema auxis - Auxis thazard
Dermatodidymocystis vivipara - Thunnus obesus
Dermatodidymocystis viviparoides - Thunnus obesus
Didymocylindrus filiformis - Euthynnus pelamis, Thunnus thynnus

DIDYMOZOIDAE (continued)

- Didymocylindrus simplex - Euthynnus pelamis
Didymocystis sp. - Thunnus albacares
Didymocystis bifurcata - Thunnus obesus
Didymocystis bilobata - Euthynnus pelamis
Didymocystis coatesi - Thunnus albacares
Didymocystis crassa - Thunnus thynnus
Didymocystis dissimilis - Auxis thazard
Didymocystis lanceolata - Thunnus alalunga
Didymocystis macrorchis - Thunnus alalunga
Didymocystis nasalis - Thunnus obesus
Didymocystis orbitalis - Thunnus obesus
Didymocystis ovata - Euthynnus pelamis, Thunnus thynnus
Didymocystis philobranchia - Thunnus alalunga, T. obesus
Didymocystis philobranchiarca - Thunnus obesus
Didymocystis poonui - Thunnus obesus
Didymocystis reniformis - Euthynnus pelamis, Thunnus thynnus
Didymocystis soleiformis - Euthynnus pelamis, Thunnus thynnus
Didymocystis thynni - Thunnus alalunga
Didymocystis wedli - Euthynnus pelamis, Thunnus alalunga, T. albacares,
T. thynnus
Didymocystoides alalongae - Thunnus alalunga
Didymocystoides bifasciatus - Thunnus obesus
Didymocystoides buccalis - Thunnus alalunga
Didymocystoides intestinomuscularis - Euthynnus pelamis
Didymocystoides opercularis - Thunnus alalunga
Didymocystoides pectoralis - Thunnus obesus
Didymocystoides pinnicola - Euthynnus pelamis
Didymocystoides semiglobularis - Thunnus thynnus
Didymocystoides submentalis - Euthynnus pelamis
Didymoproblema fusiforme - Euthynnus pelamis, Thunnus thynnus
Didymosphaera mirabilis - Auxis thazard
Didymozoides sp. - Echeneis naucrates

DIGENEA (continued)

DIDYMOZOIDAE (continued)

- Didymozoon sp. - Auxis rochei, Scomber japonicus
Didymozoon auxis - Auxis rochei, Auxis thazard
Didymozoon filicolle - Euthynnus pelamis, Thunnus thynnus
Didymozoon longicolle - Euthynnus pelamis, Scomber japonicus, Thunnus albacares, T. obesus, T. thynnus
Didymozoon minus - Euthynnus pelamis
Didymozoon mola - Mola mola
Didymozoon pretiosus - Thunnus thynnus
Epithelionematobothrium fragile - Mugil cephalus
Koellikeria abdominalis - Thunnus albacares
Koellikeria bipartita - Thunnus alalunga, T. albacares, T. thynnus
Koellikeria filicollis - Mola mola
Koellikeria globosa - Euthynnus pelamis, Thunnus albacares, T. thynnus
Koellikeria orientalis - Euthynnus pelamis, Thunnus alalunga, T. albacares, T. thynnus
Koellikeria pylorica - Thunnus obesus
Koellikeria reniformis - Euthynnus pelamis, Thunnus thynnus
Koellikeria retrorbitalis - Thunnus obesus
Koellikeria submaxillaris - Thunnus obesus
Koellikerioides apicalis - Thunnus obesus
Koellikerioides externogastricus - Thunnus obesus
Koellikerioides internogastricus - Thunnus obesus
Koellikerioides intestinalis - Thunnus obesus
Lagenocystis katsuoni - Euthynnus pelamis
Lamprididymozoon lampridis - Lampris regius
Lobatozoum multisacculatum - Auxis thazard, Euthynnus pelamis, Thunnus thynnus
Maccalumtrema xiphiados - Xiphias gladius
Metadidymocystis cymbiformis - Lampris regius
Metanematobothrium bivitellatum - Auxis thazard, Euthynnus affinis
Metanematobothrium guernei - Thunnus alalunga
Nematobibothrioides histoidii - Mola mola
Nematobothrium sp. - Euthynnus affinis, Thunnus thynnus

DIGENEA (continued)

DIDYMOZOIDAE (continued)

- Nematobothrium filliforme - Scomber japonicus
Nematobothrium latum - Thunnus alalunga
Nematobothrium mola - Mola mola
Nematobothrium robustum - Scomber japonicus
Nematobothrium scombrii - Scomber japonicus
Neodiplostrema pelamydis - Euthynnus pelamis
Neonematobothrioides poonui - Thunnus obesus
Neounitubulotestis orbitarium - Ruvettus pretiosus
Oesophagocystis dissimilis - Auxis thazard, Euthynnus affinis,
E. pelamis, Thunnus thynnus
Opepherotrema planum - Auxis thazard
Opisthorchinematobothrium parathunni - Thunnus obesus
Orbitonematobothrium perioculare - Thunnus obesus
Phacelotrema claviforme - Auxis thazard
Platocystis sp. - Thunnus albacares
Platocystis alalongae - Thunnus alalunga
Reniforma multilobularis - Xiphias gladius
Unitubulotestis maris - Sarda chiliensis
Univitellannulocystis katsuoni - Euthynnus pelamis
Univitellodidymocystis neothunni - Thunnus obesus

DIPLANGIDAE

- Diplangus macrovitellus - Cymatogaster aggregata, Damalichthys vacca,
Embiotoca jacksoni, E. lateralis, Phanerodon furcatus
Diplangus mexicanus - Cynoscion parvipinnis
Diplangus paxillus - Embiotoca jacksoni, Phanerodon furcatus
Diplangus triradiatus - Amphistichus argenteus, Menticirrhus undulatus,
Roncador stearnsi, Umbrina roncador

DIPLOSTOMATIDAE

- Diplostomum sp. - Gasterosteus aculeatus, Morone saxatilis, Oncorhynchus
kisutch, O. nerka, Salmo clarki
Diplostomum clavatum - Gasterosteus aculeatus

DIGENEA (continued)

DIPLOSTOMATIDAE (continued)

Diplostomum gasterostei - Gasterosteus aculeatus

Diplostomum gobiorum - Gasterosteus aculeatus

Diplostomum pungitius - Gasterosteus aculeatus

Diplostomum scudderi - Gasterosteus aculeatus

Diplostomum spathaceum - Gasterosteus aculeatus, Oncorhynchus nerka,
Salmo gairdneri

Neascus sp. - Gasterosteus aculeatus, Morone saxatilis, Salmo clarki

Neascus brevicaudatus - Gasterosteus aculeatus

Posthodiplostomum brevicaudatum - Gasterosteus aculeatus

Posthodiplostomum cuticola - Gasterosteus aculeatus

Posthodiplostomum minimum - Fundulus parvipinnis, Gasterosteus aculeatus, Salmo clarki

Spathaceum indistinctum - Oncorhynchus kisutch, Salmo gairdneri

Tetracotyle sp. - Gasterosteus aculeatus, Oncorhynchus nerka

Tylodelphys clavata - Gasterosteus aculeatus, Salmo gairdneri

Tylodelphys podicipina - Salmo gairdneri

ECHINOSTOMATIDAE

Echinochasmus milvi - Salmo gairdneri

Patasiger cf. pungens - Gasterosteus aculeatus

FELLODISTOMATIDAE

Genera and species - Ceratoscopelus townsendi

Discogasteroides minor - Ostracion diaphanum

Discogasteroides ostracii - Ostracion diaphanum

Faustula gasterostei - Gasterosteus aculeatus

Fellodistomum brevum - Microstomus pacificus

Fellodistomum furcigerum - Anoplopoma fimbria, Hippoglossoides

elassodon, Lepidopsetta bilineata, Merluccius productus,

Pleuronichthys decurrens, Reinhardtius hippoglossoides, Sebastes

aleutianus, S. borealis, Theragra chalcogramma

Fellodistomum melanostigum - Melanostigma pammelas

Fellodistomum phrissovum - Parophrys vetulus

DIGENEA (continued)

FELLODISTOMATIDAE (continued)

Fellodistomum sebastodis - Sebastes alutus, S. elongatus, S. ruberrimus, S. zacentrus

Hexagrammia longitestis - Hexagrammos decagrammus

Hexagrammia zhukovi - Pleurogrammus monopterygius

Lintonium novikovi - Cololabis saira

Lintonium srivastavi - Sphoeroides annulatus

Megalomyzon robustus - Diodon hystrix

Monascus typicus - Caranx hippos

Pseudopentagramma petrowi - Clupea harengus, Gadus macrocephalus,
Hexagrammos lagocephalus, Hypomesus pretiosus, Mallotus villosus,
Oncorhynchus gorbuscha, O. nerka, Salvelinus malma, Spirinchus thaleichthys

Stenakron problematicum - Myoxocephalus polyacanthocephalus

Stenakron quinquelobatum - Hippoglossoides elassodon

Stenakron vetustum - Gadus macrocephalus, Hippoglossoides elassodon,
Hippoglossus stenolepis, Lepidopsetta bilineata, Platichthys stellatus,
Reinhardtius hippoglossoides

Stringotrema ovacutum - Hippoglossoides elassodon, Lepidopsetta bilineata

Tergestia acanthocephala - Scomber japonicus

Tergestia acanthogobii - Acanthogobius flavimanus, Auxis thazard

Tergestia laticollis - Auxis thazard, Caranx caballus, Euthynnus pelamis,
Scomber japonicus

Tergestia pectinata - Auxis rochei, Caranx hippos, Oligoplites saurus

GASTEROSTOMIDAE

Gasterostomum capitatum - Auxis rochei

GORGODERIDAE

Phyllodistomum sp. - Fundulus parvipinnis, Sebastes caurinus, S. diploproa,
S. ruberrimus

Phyllodistomum borisbychowski - Gibbonsia metzi

DIGENEA (continued)

GORGODERIDAE (continued)

- Phyllodistomum conostomum - Oncorhynchus nerka
Phyllodistomum folium - Gasterosteus aculeatus
Phyllodistomum lachancei - Salmo gairdneri
Phyllodistomum lancea - Auxis thazard, Euthynnus affinis
Phyllodistomum mirandae - Sphoeroides annulatus
Phyllodistomum scrippsi - Pimelometopon pulchrum
Phyllodistomum thunni - Thunnus albacares
Probolitrema californiense - Myliobatis californica
Probolitrema richiardii - Mustelus lunulatus, Platyrrhinoidis triseriata, Rhinobatos productus, Squalus acanthias

HAPLOPORIDAE

- Carassotrema mugilicola - Mugil cephalus
Dicrogaster fastigatus - Mugil cephalus
Haploporus benedeni - Mugil cephalus
Haploporus lateralis - Mugil cephalus
Haploporus longibollum - Mugil cephalus
Isorchis manteri - Mugil cephalus
Lecithobothrys putrescens - Mugil cephalus
Lecithobothrys sprengi - Mugil cephalus
Paralecithobotrys brisbanensis - Mugil cephalus
Paraunisaccoides lobolectithus - Mugil cephalus
Saccacoelium obesum - Mugil cephalus
Saccacoelium tensum - Mugil cephalus
Saccacoelioides beauforti - Mugil cephalus
Saccacoelioides pearsoni - Mugil cephalus
Unisaccoides vitellosus - Mugil cephalus
Unisaccus brisbanensis - Mugil cephalus
Vitellibaculum girellicola - Girella nigricans
Vitellibaculum girellae - Girella nigricans

HAPLOSPLANCHNIDAE

- Haplosplanchnus mugilis - Mugil cephalus

DIGENEA (Continued)

HAPLOSPLANCHNIDAE (continued)

Hymenocotta mulli - Mugil cephalus

Hymenocottoides manteri - Mugil cephalus

Schikhobalotrema sp. - Mugil cephalus

Schikhobalotrema elongatum - Mugil cephalus

Schikhobalotrema girellae - Girella nigricans, Hyperprosopon argenteum,
Micrometrus minimus

Schikhobalotrema magnum - Mugil cephalus

Schikhobalotrema sparisomae - Mugil cephalus

HEMIURIDAE

Genera and species - Ceratoscopelus townsendi, Cololabis saira,

Icelinus tenuis, Melamphaes acanthomus, Scomber japonicus, Scopelogadus mizolepis bispinosus

Aphanurus sp. - Mugil cephalus

Aphanurus stossichi - Mugil cephalus

Aponurus sp. - Melanostigma pammelas, Salmo gairdneri

Aponurus argentini - Merluccius productus

Aponurus californicus - Leuroglossus stilbius, Melanostigma pammelas

Aponurus lagunculus - Thunnus thynnus

Aponurus pacificus - Melanostigma pammelas

Aponurus trachinoti - Porichthys sp.

Brachadena pyriformis - Anisotremus davidsoni, Porichthys sp.

Brachyphallus amuriensis - Clupea harengus, Oncorhynchus gorbuscha,
O. keta

Brachyphallus crenatus - Blepsias cirrhusus, Clupea harengus,
Cololabis saira, Gadus macrocephalus, Gasterosteus aculeatus,
Hippoglossoides elassodon, Hippoglossus stenolepis, Lepidopsetta
bilineata, Oncorhynchus gorbuscha, O. keta, O. kisutch, O. nerka,
O. tshawytscha, Reinhardtius hippoglossoides, Remora remora,
Salvelinus malma, Sebastes borealis, Theragra chalcogramma

Brachyphallus parvus - Auxis thazard, Thunnus albacares

Bunocotyle mugilis - Mugil cephalus

Derogenes sp. - Oncorhynchus kisutch, O. tshawytscha, Salmo clarki,
S. gairdneri

DIGENEA (continued)

HEMIURIDAE (continued)

Derogenes crassus - Ophiodon elongatus, Sebastes paucispinis

Derogenes infirmus - Oncorhynchus tshawytscha

Derogenes macrostoma - Merluccius productus

Derogenes varicus - Anoplopoma fimbria, Blepsias cirrhosus,
Citharichthys sordidus, Clinocottus embryum, Clupea harengus,
Gadus macrocephalus, Gasterosteus aculeatus, Hemilepidotus
hemilepidotus, Hexagrammos lagocephalus, H. stelleri, Hippoglossoides
elassodon, Hippoglossus stenolepis, Isopsetta isolepis, Lepidopsetta
bilineata, Leptocottus armatus, Lyopsetta exilis, Merluccius
productus, Microgadus proximus, Myoxocephalus polyacanthocephalus,
Oncorhynchus gorbuscha, O. nerka, Ophiodon elongatus, Platichthys
stellatus, Porichthys notatus, Reinhardtius hippoglossoides,
Ronquilus jordani, Salvelinus malma, Sebastes aleutianus, S. alutus,
S. babcocki, S. borealis, S. brevispinis, S. caurinus, S. crameri,
S. diploproa, S. elongatus, S. entomelas, S. flavidus, S. goodei,
S. helvomaculatus, S. maliger, S. paucispinis, S. pinniger,
S. proriger, S. reedi, S. ruberrimus, S. zacentrus, Squalus acanthias,
Theragra chalcogramma

Derogenoides sp. - Damalichthys vacca

Deropegus aspina - Oncorhynchus kisutch, O. tshawytscha, Salmo
clarki, S. gairdneri

Dichadena galeata - Mugil cephalus

Dinosoma oregonensis - Coryphaenoides acrolepis, C. pectoralis

Dinosoma pectoralis - Coryphaenoides acrolepis, C. pectoralis

Dinosoma tortum - Anoplopoma fimbria, Sebastes aleutianus, S. borealis

Dinurinae - Auxis thazard

Dinurus barbatus - Coryphaena hippurus, Paralabrax maculatofasciatus

Dinurus breviductus - Coryphaena hippurus

Dinurus euthynni - Auxis thazard, Euthynnus affinis, E. pelamis

Dinurus longisinus - Coryphaena hippurus

Dinurus scombri - Istiophorus platypterus, Scomber japonicus

Dinurus tornatus - Coryphaena hippurus

DIGENEA (continued)

HEMIURIDAE (continued)

Dissosaccus sp.? - Melanostigma pammelas

Dissosaccus laevis - Glyptocephalus zachirus

Ectenurus americanus - Caranx hippos

Ectenurus lepidocybii - Lepidocybium flavobrunneum

Ectenurus lepidus - Oligoplites saurus, Scomber japonicus

Ectenurus virgulus - Caranx hippos

Ectenurus yamagutii - Caranx hippos

Elytorphallus mexicanus - Paralabrax clathratus

Genarchopsis muelleri - Hexagrammos lagocephalus, H. stelleri,

Hippoglossoides elassodon, Hippoglossus stenolepis, Lepidopsetta

bilineata, Myoxocephalus polyacanthocephalus, Oncorhynchus

gorbuscha, O. keta, O. nerka, Platichthys stellatus, Reinhardtius

hippoglossoides, Salvelinus malma, Squalus acanthias

Genolinea aburame - Pleurogrammus monopterygius

Genolinea anura - Blepsias cirrhosus, Hexagrammos lagocephalus, H.

stelleri, Myoxocephalus polyacanthocephalus, Oncorhynchus

gorbuscha, Salvelinus malma, Theragra chalcogramma

Genolinea laticauda - Artemius fenestralis, Blepsias cirrhosus,

Clinocottus analis, C. globiceps, Enophrys bison, Gibbonsia sp.,

Hemilepidotus hemilepidotus, Hexagrammos decagrammus, H. lagocephalus,

Isopsetta isolepis, Leptocottus armatus, Liparis callyodon,

Myoxocephalus polyacanthocephalus, Nautichthys oculofasciatus

Oligocottus maculosus, Oncorhynchus nerka, Ophiodon elongatus,

Parophrys vetulus, Scorpaenichthys marmoratus

Genolinea lintoni - Oncorhynchus tshawytscha

Genolinea manteri - Dasycottus setiger, Enophrys bison, Leptocottus

armatus, Lumpenus sagitta

Genolinea montereyensis - Clinocottus analis, Leptocottus armatus

Genolinea oncorhynchi - Oncorhynchus gorbuscha

Genolinea tanyopa - Hypsypops rubicunda, Medialuna californiensis

Glomerocirrus ulmeri - Coryphaenoides armatus, C. leptolepis

Gonocerca sp. - Thunnus albacares

Gonocerca haedrichi - Coryphaenoides armatus

HEMIURIDAE (continued)

Gonocerca oregonensis - Coryphaenoides filifer, C. pectoralis,
Parabassogigas grandis

Gonocerca oshoro - Coryphaenoides pectoralis

Gonocerca phycidis - Coryphaenoides armatus

Gonocercella pacifica - Trachinotus rhodopus

Gonocercella trachinoti - Albula vulpes

Hemiurus communis - Theragra chalcogramma

Hemiurus levinseni - Clupea harengus, Gadus macrocephalus, Hexagrammos stelleri, Hippoglossoides elassodon, Hippoglossus stenolepis,
Lepidopsetta bilineata, Microgadus proximus, Myoxocephalus polyacanthocephalus, Oncorhynchus gorboscha, O. keta, O. kisutch,
O. nerka, O. tshawytscha, Ophiodon elongatus, Reinhardtius hippoglossoides, Salvelinus malma, Sebastes caurinus, S. ruberrimus,
Squalus acanthias, Theragra chalcogramma

Hemiurus luehei - Clupea harengus

Hemiurus odhneri - Theragra chalcogramma

Hysterolecitha elongata - Mugil cephalus

Hysterolecitha trilocalis - Gillichthys mirabilis

Intuscirrus aspicotti - Enophrys bison

Lampritrema hawaiiense - Lampris regius

Lampritrema nipponicum - Lampris regius

Lecithaster confusus - Clupea harengus

Lecithaster gibbosus - Ammodytes hexapterus, Anoplarchus purpurescens,
Aprodon cortezianus, Atheresthes stomias, Aulorhynchus flavidus,
Blepsias cirrhosus, Brachyistius frenatus, Clinocottus acuticeps,
C. embryum, C. globiceps, Clupea harengus, Cololabis saira,
Coryphopterus nicholsi, Cymatogaster aggregata, Dasycottus setiger,
Gadus macrocephalus, Gasterosteus aculeatus, Hemilepidotus hemilepidotus,
Hexagrammos lagocephalus, H. stelleri, Hippoglossoides elassodon,
Hypomesus pretiosus, Lepidopsetta bilineata, Leptocottus armatus,
Liparis pulchellus, Lumpenus sagitta, Lyconectes aleutensis,
Mallotus villosus, Myoxocephalus polyacanthocephalus, Nautichthys

DIGENEA (continued)

HEMIURIDAE (continued)

- oculofasciatus, Oligocottus maculosus, O. snyderi, Oncorhynchus gorbuscha, O. keta, O. kisutch, O. nerka, O. tshawytscha, Ophiodon elongatus, Pholis ornata, Platichthys stellatus, Porichthys sp., P. notatus, Reinhardtius hippoglossoides, Ronquilus jordani, Salvelinus malma, Scomber japonicus, Sebastes aleutianus, S. alutus, S. borealis, S. caurinus, S. maliger, S. melanops, S. pinniger, S. proriger, S. zacentrus, Syngnathus leptorhynchus, Thaleichthys pacificus, Theragra chalcogramma
- Lecithaster helodes - Mugil cephalus
- Lecithaster minimus - Clevelandia ios, Gillichthys mirabilis, Ilypnus gilberti, Quietula y-cauda
- Lecithaster mugilis - Mugil cephalus
- Lecithaster sayori - Cololabis saira
- Lecithaster stellatus - Acanthogobius flavimanus, Oncorhynchus gorbuscha, O. keta
- Lecithochirium sp. - Merluccius productus
- Lecithochirium albulae - Albula vulpes
- Lecithochirium keokeo - Auxis thazard
- Lecithochirium magnaporum - Scomber japonicus, Seriola dorsalis, Trachurus symmetricus
- Lecithochirium medium - Sebastes ruberrimus
- Lecithochirium microstomum - Calamus brachysomus, Euthynnus pelamis, Oligoplites saurus, Scomberomorus sierra
- Lecithochirium monticellii - Echeneis naucrates, Oligoplites saurus, Remora remora
- Lecithochirium parvum - Caranx hippos
- Lecithochirium platessae - Sebastes aleutianus
- Lecithocladium excisum - Scomber japonicus
- Lecithocladium harpodontis - Scomber japonicus
- Lecithophyllum botryophorum - Dasycottus setiger, Hexagrammos lagocephalus, H. stelleri, Merluccius productus, Oncorhynchus gorbuscha, O. nerka, Sebastes aleutianus, S. alutus,

DIGENEA (continued)

HEMIURIDAE (continued)

S. borealis, S. crameri, S. flavidus, S. paucispinis, S. reedi

Lecithophyllum intermedium - Gymnothorax mordax, Xenistius californiensis

Lecithophyllum sphaerolecithum - Reinhardtius hippoglossoides,

Sebastes aleutianus, S. alutus, S. borealis, Theragra chalcogramma

Lecithophyllum trachinoti - Trachinotus rhodopus

Magniscyphus taboganus - Gymnothorax mordax, Paralabrax maculatofasciatus

Mecoderus oligoplites - Oligoplites saurus

Myosaccium ecaude - Sardinops sagax

Opisthadena bodegnesis - Cebidichthys violaceus

Opisthadena cheni - Girella nigricans

Parahemiurus merus - Aprodon cortezianus, Caranx hippos, Clupea

harengus, Echeneis naucrates, Engraulis mordax, Gadus macrocephalus,

Gasterosteus aculeatus, Hexagrammos stelleri, Hippoglossoides

elassodon, Hippoglossus stenolepis, Lyopsetta exilis, Oncorhynchus

gorbuscha, O. keta, O. kisutch, O. nerka, Ophiodon elongatus,

Platichthys stellatus, Sardinops sagax, Syngnathus leptorhynchus

Parahemiurus noblei - Sardinops sagax

Parahemiurus sardiniae - Istiophorus platypterus

Plerurus carangi - Auxis thazard, Euthynnus affinis

Pronopyee ocreata - Clupea harengus

Saturnis segmentatus - Mugil cephalus

Sterrhurus sp. - Oncorhynchus nerka

Sterrhurus exodicus - Embiotoca lateralis, Eopsetta jordani, Gibbonsia

sp., Gobiesox maeandricus, Ophiodon elongatus, Platichthys stellatus,

Sebastes atrovirens, S. caurinus, S. constellatus, S. elongatus, S.

flavidus, S. maliger, S. mystinus, S. nebulosus, S. paucispinis

Sterrhurus floridensis - Echeneis naucrates

Sterrhurus imocavus - Auxis thazard, Euthynnus affinis, Thunnus thynnus

Sterrhurus magnatestis - Citharichthys sordidus, C. stigmaeus

Sterrhurus monticelli - Sebastes sp.

DIGENEA (continued)

HEMIURIDAE (continued)

Sterrhurus musculus - Caranx hippos

Sterrhurus taboganus - Gymnothorax mordax

Sterrhurus zeloticus - Caranx hippos

Tubulovesicula lindbergi - Acipenser transmontanus, Anoplarchus purpurescens, Citharichthys sordidus, C. stigmaeus, Cymatogaster aggregata, Echeneis naucrates, Enophrys bison, Eopsetta jordani, Gadus macrocephalus, Gasterosteus aculeatus, Hemilepidotus hemilepidotus, Hippoglossus stenolepis, Hyperprosopon ellipticum, Hypsopsetta guttulata, Isopsetta isolepis, Lepidopsetta bilineata, Leptocottus armatus, Myoxocephalus polyacanthocephalus, Oligottus maculosus, Oncorhynchus gorbuscha, O. keta, O. kisutch, O. nerka, O. tshawytscha, Ophiodon elongatus, Paralichthys californicus, Parophrys vetulus, Platichthys stellatus, Porichthys notatus, Psettichthys melanostictus, Salvelinus malma, Scorpaenichthys marmoratus, Sebastes alutus, S. borealis, S. brevispinis, S. caurinus, S. crameri, S. maliger, S. melanops, S. nigrocinctus, S. paucispinis, S. pinniger, Synchirus gilli, Syngnathus leptorhynchus, Theragra chalcogramma

HETEROPHYIDAE

Adleriella minutissima - Mugil cephalus

Apophallus sp. - Oncorhynchus gorbuscha, O. keta, Salmo clarki

Apophallus bacalloti - Gasterosteus aculeatus

Apophallus brevis - Gasterosteus aculeatus

Apophallus donicus - Oncorhynchus kisutch, Salmo gairdneri

Ascocotyle angrense - Atherinops affinis, Fundulus parvipinnis,

Gillichthys mirabilis

Ascocotyle sexidigita - Fundulus parvipinnis, Gillichthys mirabilis

Centrocestus asadai - Acanthogobius flavimanus, Mugil cephalus

Cercarioides humbargari - Atherinops affinis, Leuresthes tenuis

Cryptocotyle concavum - Gasterosteus aculeatus

Cryptocotyle lingua - Clupea harengus

DIGENEA (continued)

HETEROPHYIDAE (continued)

- Euhaplorchis californiensis - Fundulus parvipinnis
Galactosomum sp. - Ammodytes hexapterus, Cymatogaster aggregata,
Hexagrammos lagocephalus, Oncorhynchus keta
Galactosomum phalacrocoracis - Oncorhynchus gorbuscha
Galactosomum sanaensis - Mugil cephalus
Haplorchis microrchis - Mugil cephalus
Haplorchis yokogawai - Mugil cephalus
Heterophyes heterophyes - Mugil cephalus
Heterophyes katuradai - Mugil cephalus
Heterophyes nocens - Acanthogobius flavimanus, Mugil cephalus
Heterophyopsis continua - Mugil cephalus
Metagonimus minutus - Mugil cephalus
Metagonimus yokogawai - Acanthogobius flavimanus, Mugil cephalus
Phagicola longa - Mugil cephalus
Phocitrema ovale - Fundulus parvipinnis
Procerovum varium - Acanthogobius flavimanus, Mugil cephalus
Pseudogalactosoma macrostoma - Acanthogobius flavimanus, Mugil cephalus
Pygidiopsis summa - Acanthogobius flavimanus, Mugil cephalus
Pygidiopsoides spindalis - Fundulus parvipinnis
Stellantchasmus falcatus - Acanthogobius flavimanus, Mugil cephalus
Stictodora fuscata - Acanthogobius flavimanus, Mugil cephalus
Stictodora hancocki - Fundulus parvipinnis, Gillichthys mirabilis
Stictodora perpendiculara - Acanthogobius flavimanus, Mugil cephalus
Stictodora sawakinesis - Mustelus californicus

HIRUDINELLIDAE

- Hirudinella sp. - Auxis thazard
Hirudinella ampullacea - Istiophorus platypterus
Hirudinella fusca - Makaira nigricans, Thunnus alalunga, T. albacares,
Xiphias gladius
Hirudinella oxysoma - Thunnus alalunga

DIGENEA (continued)

HIRUDINELLIDAE (continued)

Hirudinella poirieri - Thunnus alalunga

Hirudinella spinulosa - Euthynnus affinis, Istiophorus platypterus,
Makaira nigricans, Thunnus alalunga, T. albacares, T. thynnus

Hirudinella ventricosa - Coryphaena hippurus, Euthynnus lineatus,
E. pelamis, Istiophorus platypterus, Naucrates ductor,
T. albacares, T. thynnus, Xiphias gladius

Uroproctinella attenuata - Thunnus albacares

HOMALOMETRIDAE

Homalometron caballeroi - Balistes polylepis

Myzotus vitellus - Caulolatilus princeps

ISOPARORCHIIDAE

Isoparorchis hypselobargi - Oncorhynchus keta

LAMPFITREMATIDAE

Lampfitrema miescheri - Brama japonica, Oncorhynchus gorbusha,
O. nerka

LEPOCREADIIDAE

Bianium plicatum - Diodon hystrix, Sphoeroides annulatus

Cephalolepidapedon saba - Scomber japonicus

Dihemistophenus fragilis - Mola mola

Dihemistophenus lydiae - Mola mola

Echeneidocoelium indicum - Echeneis naucrates, Remora remora

Labrifer balli - Zalembeus rosaceus

Labrifer secundus - Pimelometopon pulchrum

Lepidapedon sp. - Mycteroperca sp.

Lepidapedon antimorae - Antimora microlepis

Lepidapedon calli - Microstomus pacificus, Parophrys vetulus

Lepidapedon cascadenis - Coryphaenoides filifer, C. leptolepis

Lepidapedon elongatum - Sebastes mystinus, S. nebulosus

Lepidapedon epinepheli - Epinephelus analogus

LEPOCREADIIDAE (continued)

Lepidapedon filiformis - Coryphaenoides filifer

Lepidapedon gadi - Gadus macrocephalus, Hippoglossus stenolepis,
Lepidopsetta bilineata, Sebastes alutus, S. borealis, Theragra
chalcogramma

Lepidapedon hancocki - Epinephelus analogus, Mycteroperca xenarcha

Lepidapedon luteum abyssensis - Coryphaenoides sp., C. acrolepis,
C. filifer, C. leptolepis

Lepidapedon microtylum - Theragra chalcogramma

Lepidapedon nicolli - Epinephelus niveatus

Lepidapedon oregonensis - Coryphaenoides filifer, C. leptolepis

Lepidapedon yaquina - Coryphaenoides filifer, C. leptolepis

Lepocreadium sp. - Atherinopsis californiensis

Lepocreadium areolatum - Morone saxatilis

Lepocreadium bimarinum - Pimelometopon pulchrum

Lepocreadium bravoae - Balistes polylepis

Lepocreadium californianum - Morone saxatilis

Lepocreadium ghanensis - Scomber japonicus

Lepocreadium manteri - Leuresthes tenuis

Lepocreadium scombri - Scomber japonicus

Lepocreadium setiferoides - Morone saxatilis

Neolabrifer bravoae - Pimelometopon pulchrum

Neolepidapedon medialunae - Medialuna californiensis

Neolepidapedon pugetense - Sebastes caurinus, S. nebulosus

Neolepidapedon retrusum - Scomber japonicus

Neolepidapedon sebastisci - Sebastes aleutianus, S. alutus, S.
babcocki, S. borealis, S. helvomaculatus, S. paucispinis, S.
pinniger, S. ruberrimus, S. zacentrus

Opechona alaskensis - Porichthys notatus, Sebastes aleutianus,
S. alutus, S. borealis, S. flavidus, S. maliger, S. pinniger,
S. ruberrimus, S. zacentrus, Theragra chalcogramma

Opechona bacillaris - Clupea harengus, Scomber japonicus, Sebastes sp.

DIGENEA (continued)

LEPOCREADIIDAE (continued)

Opechona occidentalis - Sebastes sp., S. alutus, S. atrovirens,
S. caurinus, S. chrysomelas, S. elongatus, S. flavidus, S. maliger,
S. nebulosus, Syngnathus leptorhynchus

Opechona olssoni - Scomber japonicus

Opechona orientalis - Girella nigricans, Scomber japonicus, Sebastes sp.

Opechona parvasoma - Sebastes melanops

Opechona pharyngodactyla - Trachinotus rhodopus

Opechona theragrae - Sebastes maliger

Pseudocreadium diodontis - Diodon hystrix

MICROPHALLIDAE

Pseudomegalophallus diodontis - Diodon hystrix

MONORCHIIDAE

Asymphylogora atherinopsidis - Atherinopsis californiensis, Leuresthes
tenuis

Lasiotocus sp. - Amphistichus argenteus, Hyperprosopon argenteum

Lasiotocus albulae - Albula vulpes

Lasiotocus glebulentus - Mugil cephalus

Lasiotocus longicaecum - Anisotremus davidsoni, Balistes polylepis

Lasiotocus mugilis - Mugil cephalus

Lasiotocus oculatus - Albula vulpes

Monorcheides alexanderi - Paralabrax clathratus

Monorchis sp. - Amphistichus argenteus

Postmonorchis donacis - Cymatogaster aggregata, Embiotoca jacksoni,
Menticirrhus undulatus, Micrometrus minimus, Roncador stearnsi

Telolecithus pugetensis - Amphistichus argenteus, Cymatogaster
aggregata, Damalichthys vacca, Embiotoca jacksoni, E. lateralis,
Hyperprosopon anale, Hyperprosopon argenteum, Phanerodon furcatus,
Rhacochilus toxotes, Sebastes sp.

NANOPHYETIDAE

Nanophyetus salmincola - Lampetra tridentata, Oncorhynchus keta,

DIGENEA (continued)

NANOPHYETIDAE (continued)

O. kisutch, O. tshawytscha, Salmo clarki, S. gairdneri

OPECOELIDAE

Alloanomalotrema ghanensis - Caranx hippos

Allopodocotyle lepomis - Liparis fucensis

Anomalotrema putjatini - Hexagrammos stelleri

Crowcrocaecum testiobliquum - Salmo gairdneri

Crowcrocaecum wisniewskii - Salmo gairdneri

Dactylostomum winteri - Paralabrax maculatofasciatus

Decemtestis azumae - Hippoglossoides elassodon, Platichthys stellatus

Eurycreadium vitellosum - Microstomus pacificus

Genitocotyle acirra - Amphistichus argenteus, A. rhodoterus,

Cymatogaster aggregata, Damalichthys vacca, Embiotoca lateralis,

Gibbonsia metzi, Hyperprosopon anale, H. argenteum, H. ellipticum,

Micrometrus minimus, Parophrys vetulus, Phanerodon furcatus,

Scorpaenichthys marmoratus, Umbrina roncador

Genitocotyle heterostichi - Heterostichus rostratus

Hamacreadium bolivari - Paralabrax maculatofasciatus

Hamacreadium mutabile - Mycteroperca xenarcha

Helicometra sp. - Sebastes maliger

Helicometra pretiosa - Paralabrax maculatofasciatus

Helicometrina sp. - Sebastes alutus

Helicometrina elongata - Amphistichus argenteus, Clinocottus analis,

Gibbonsia sp., G. elegans, G. metzi, Gobiesox maeandricus, Neoclinus unnotatus, Scorpaena guttata

Helicometrina fasciata - Paralabrax maculatofasciatus

Helicometrina nimia - Amphistichus argenteus, Clinocottus analis,

Coryphaena hippurus, Embiotoca jacksoni, E. lateralis, Epinephelus analogus, Gibbonsia elegans, Leptocottus armatus, Menticirrhus

undulatus, Paralabrax clathratus, P. maculatofasciatus, P. nebulifer,

Sebastes atrovirens, S. chrysomelas, S. serriceps, S. vexillaris,

Synodus lucioceps, Xenistius californiensis

DIGENEA (continued)

OPECOELIDAE (continued)

Manteriella sp. - Lythrypnus dalli

Neohelicometra pleurogrammi - Hexagrammos decagrammus

Neohelicometra sebastis - Sebastes aleutianus, S. alutus, S. babcocki,
S. caurinus, S. diploproa, S. flavidus, S. helvomaculatus, S.
maliger, S. nebulosus, S. nigrocinctus, S. reedi, S. ruberrimus,
S. zacentrus

Opecoelina pharynmagna - Sebastes nebulosus

Opecoelina radifistuli - Sebastes elongatus

Opecoelina theragrae - Theragra chalcogramma

Opecoeloides sp. - Coryphaena hippurus

Opecoeloides eucinostomi - Polydactylus approximans

Opecoelus adsphaericus - Cebidichthys sp., Clinocottus analis,
Girella nigricans

Opecoelus inimici - Paralabrax nebulifer

Opecoelus mexicanus - Paralabrax maculatofasciatus

Opecoelus minor - Sebastes atrovirens

Opecoelus noblei - Sebastes sp., S. chrysomelas

Opecoelus xenistii - Xenistius californiensis

Opegaster sp. - Trachurus symmetricus

Opegaster cameroni - Clinocottus analis, Girella nigricans

Opegaster parapristipomatis - Trachinotus rhodopus

Ozaki orthorchis - Acanthogobius flavimanus

Pellamyzon sebastodis - Sebastes atrovirens, S. serriceps

Plagioporus angusticolle - Salmo gairdneri

Plagioporus issaitschikowi - Paralabrax clathratus

Plagioporus shawi - Oncorhynchus kisutch, O. nerka, Salmo clarki,
S. gairdneri

Plagioporus siliculus - Salmo clarki

Podocotyle sp. - Agonus acipenserinus, Aprodon cortezianus,
Ascelichthys rhodorus, Blepsias cirrhosus, Clinocottus analis,
Eopsetta jordani, Gibbonsia sp., Hemilepidotus spinosus,
Hexagrammos lagocephalus, H. stelleri, Leptocottus armatus,

DIGENEA (continued)

OPECOELIDAE (continued)

Oncorhynchus kisutch, Parophrys vetulus, Pholis laeta, Scorpaenichthys marmoratus, Sebastes aleutianus, S. alutus, S. babcocki, S. brevispinis, S. diploproa, S. elongatus, S. flavidus, S. goodei, S. helvomaculatus, S. maliger, S. paucispinis, S. pinniger, S. proriger, S. reedi, S. ruberrimus, S. wilsoni, S. zacentrus

Podocotyle abitionis - Sebastes sp., S. maliger

Podocotyle apodichthysi - Apodichthys flavidus, Gasterosteus aculeatus

Podocotyle atomon - Aulorhynchus flavidus, Blepsias cirrhosus, Clinocottus globiceps, Gadus macrocephalus, Gasterosteus aculeatus, Hexagrammos lagocephalus, H. stelleri, Hippoglossoides elassodon, Hippoglossus stenolepis, Lepidopsetta bilineata, Leptocottus armatus, Liparis fucensis, Myoxocephalus polyacanthocephalus, Oncorhynchus gorbuscha, Platichthys stellatus, Porichthys notatus, Reinhardtius hippoglossoides, Salvelinus malma, Sebastes aleutianus, S. alutus, S. borealis, S. wilsoni, Syngnathus leptorhynchus, Xiphister atropurpureus

Podocotyle californica - Anoplarchus purpureus, Ascelichthys rhodorus, Clinocottus analis, C. globiceps, Enophrys bison, Hemilepidotus spinosus, Leptocottus armatus, Oligocottus maculosus, O. snyderi, Scorpaenichthys marmoratus, Xiphister atropurpureus, X. mucosus

Podocotyle enophrysi - Agonopsis emmelane, Artedius notospilotus, Ascelichthys rhodorus, Clinocottus globiceps, Enophrys bison, Gasterosteus aculeatus, Leptocottus armatus, Liparis fucensis, L. pulchellus, Lycodopsis pacifica, Myoxocephalus polyacanthocephalus, Oncorhynchus gorbuscha, Scorpaenichthys marmoratus, Syngnathus leptorhynchus, Triglops pingeli

Podocotyle gibbonsiae - Agonopsis emmelane, Eopsetta jordani, Gibbonsia elegans, Gobiesox maeandricus, Lepidopsetta bilineata, Lycodopsis pacifica, Oncorhynchus gorbuscha

Podocotyle levenseni - Liparis fucensis

Podocotyle olssoni - Leptocottus armatus

DIGENEA (continued)

OPECOELIDAE (continued)

Podocotyle pacifica - Pholis ornata

Podocotyle reflexa - Agonus acipenserinus, Anoplopoma fimbria, Blepsias cirrhosus, Clinocottus globiceps, Clupea harengus, Gadus macrocephalus, Gasterosteus aculeatus, Hexagrammos lagocephalus, H. stelleri, Hippoglossus stenolepis, Leptocottus armatus, Myoxocephalus polyacanthocephalus, Pleurogrammus monopterygius, Salvelinus malma, Sebastes aleutianus, S. alutus, S. borealis, Syngnathus leptorhynchus, Theragra chalcogramma, Xiphister atropurpureus

Podocotyle simplex - Gasterosteus aculeatus

Podocotyle sinusacca - Blepsias cirrhosus, Gasterosteus aculeatus, Hemilepidotus hemilepidotus, Hexagrammos lagocephalus, H. stelleri, Leptocottus armatus, Liparis callyodon, Parophrys vetulus, Sebastes maliger, Syngnathus leptorhynchus, Theragra chalcogramma

Pseudopecoeloides carangis - Caranx hippos

Pseudopecoelus gibbonsiae - Gibbonsia metzi

Pseudopecoelus japonicus - Zenopsis nebulosa

Pseudopecoelus nassamani - Hippoglossus stenolepis

Pseudopecoelus umbrinae - Amphistichus argenteus, Cymatogaster aggregata, Roncador stearnsi, Umbrina roncador

Pseudopecoelus vulgaris - Anoplopoma fimbria, Lycodopsis pacifica

OPISTHOLEBETIDAE

Heterolebes maculosus - Chilomycterus affinis, Diodon hystrix

Maculifer chilomycteri - Chilomycterus affinis

Opistholebes cotylophorus - Chilomycterus affinis, Diodon hystrix

Opistholebes diodontis - Diodon hystrix

Pachycreadium gastrocotylum - Calamus brachysomus

Pseudoheterolebes chilomycteri - Chilomycterus affinis

PTYCHOGONIMIDAE

Ptychogonimus megastomus - Prionace glauca

RENICOLIDAE

Renicola sp. - Clupea harengus

Renicola buchanani - Fundulus parvipinnis, Gillichthys mirabilis

Renicola cerithidicola - Fundulus parvipinnis

DIGENEA (continued)

SANGUINICOLIDAE

Aporocotyle macfarlani - Sebastes sp., S. atrovirens, S. caurinus,

S. chrysomelas, S. flavidus, S. maliger, S. melanops, S. pinniger

Aporocotyle margolisi - Merluccius productus

Aporocotyle pacifica - Ruvettus pretiosus

Aporocotyle simplex - Hippoglossoides elassodon, Theragra chalcogramma

Aporocotyle theragrae - Theragra chalcogramma

Cardicola ahi - Thunnus obesus

Cardicola alseae - Salmo clarki, S. gairdneri

Cardicola congruenta - Euthynnus affinis

Cardicola davisi - Salmo clarki, S. gairdneri

Cardicola klamathensis - Salmo clarki

Cardicola mugilis - Mugil cephalus

Cardicola tropicus - Sphoeroides annulatus

Plethorchis acanthus - Mugil cephalus

Psettarium Sebastodorum - Sebastes aleutianus, S. alutus, S. atrovirens,

S. auriculatus, S. aurora, S. babcocki, S. brevispinis, S. carnatus,

S. caurinus, S. chrysomelas, S. crameri, S. diploproa, S. flavidus,

S. helvomaculatus, S. maliger, S. melanops, S. nigrocinctus, S.

paucispinis, S. pinniger, S. proriger, S. reedi, S. serriceps,

S. zacentrus

Sanguinicola idahoensis - Salmo gairdneri

SCLERODISTOMATIDAE

Sclerodistomum bravoae - Diodon hystrix

Sclerodistomum diodontis - Diodon hystrix

Sclerodistomum sphaeroides - Diodon hystrix

SPIRORCHIDAE

Genera and species - Cetorhinus maximus

STEGANODERMATIDAE

Pseudochetosoma salmonicola - Salmo gairdneri

STRIGEIDAE

- Apatemon gracilis - Gasterosteus aculeatus
Cardiocephalus medioconiger - Mugil cephalus
Cotylurus erraticus - Oncorhynchus kisutch, O. nerka, Salmo gairdneri
Cotylurus pileatus - Gasterosteus aculeatus

SYNCOELIIDAE

- Capiatestes thyrsitae - Brama japonica
Syncoelium sp. - Brama japonica
Syncoelium filiferum - Euthynnus pelamis, Oncorhynchus gorbuscha,
O. kisutch, O. nerka, Sebastes alutus, S. brevispinis, S. flavidus,
S. pinniger, S. proriger, Thunnus alalunga

WARETREMATIDAE

- Magasolena kyphosi - Kyphosus analogus
Myodera medialunae - Medialuna californiensis
Scorpidicola californiensis - Medialuna californiensis
Vitellibaculum girellae - Girella nigricans

ZOOGONIDAE

- Brachyenteron dodderleinae - Atheresthes stomias
Deretrema cholaeum - Sebastes sp., S. caurinus, S. elongatus, S. maliger, S. nigrocinctus, S. paucispinis, S. ruberrimus
Deretrema pooli - Sebastes sp.
Diphtherostomum albulae - Albula vulpes
Diphtherostomum macrosaccum - Neoclinus uninotatus
Diphtherostomum microacetabulum - Hippoglossoides elassodon,
Lepidopsetta bilineata
Lepidophyllum cameroni - Hemilepidotus hemilepidotus
Lepidophyllum pleuronectini - Hippoglossoides elassodon, Lepidopsetta bilineata
Neozoogonus californicus - Cymatogaster aggregata, Damalichthys vacca,
Embiotoca jacksoni, E. lateralis, Hypsurus caryi, Micrometrus minimus, Phanerodon furcatus, Rhacochilus toxotes, Zalambius rosaceus

DIGENEA (continued)

ZOOGONIDAE (continued)

Pseudozoogonoides microacetabulum - Lepidopsetta bilineata

Steganoderma formosum - Atheresthes stomias, Gadus macrocephalus,
Hemilepidotus hemilepidotus, Hippoglossoides elassodon, Hippoglossus
stenolepis, Lepidopsetta bilineata, Parophrys vetulus, Reinhardtius
hippoglossoides, Sebastes aleutianus, S. alutus, Squalus acanthias,
Theragra chalcogramma

Urinatrema aspinosum - Hexagrammos lagocephalus

Urinatrema hirudinaceum - Hexagrammos lagocephalus

Zoogonoides acanthogobii - Acanthogobius flavimanus

Zoogonoides viviparus - Clinocottus globiceps, Hippoglossoides
elassodon, Lepidopsetta bilineata, Microstomus pacificus, Oligocottus
snyderi, Platichthys stellatus

Zoogonus dextrocirrus - Isopsetta isolepis, Lepidopsetta bilineata,
Lumpenus anguillaris, Lycodes brevipes, Lycodopsis pacifica
Microstomus pacificus, Parophrys vetulus, Rhacochilus toxotes

HIRUDINOIDEA

GLOSSIPHONIIDAE

Genera and species - Leptocottus armatus, Mugil cephalus
Hemiclepsis marginata - Oncorhynchus gorbuscha

PISCICOLIDAE

Aestabdella abditovesiculata - Gymnothorax mordax, Hypsopsetta
guttulata, Leptocottus armatus, Psettichthys melanostictus
Australobdella californiana - Hippoglossina stomata, Pleuronichthys
decurrens, P. verticalis, Scorpaena guttata
Beringobdella rectangulata - Gadus macrocephalus, Theragra chalcogramma
Branchellion lobata - Galeorhinus zyopterus, Hydrolagus colliei,
Mustelus henlei, Notorynchus maculatus, Raja binocolata, Squalus
acanthias, Squatina californica, Triakis semifasciata
Calliobdella vivida - Squalus acanthias
Malmiana sp. - Ophiodon elongatus
Malmiana diminuta - Scorpaenichthys marmoratus, Sebastes melanops
Malmiana virida - Enophrys bison
Myzobdella sp. - Salmo clarki, S. gairdneri
Myzobdella lugubris - Morone saxatilis, Mugil cephalus
Oceanobdella sp. - Parophrys vetulus
Orientobdella sp. - Raja binocolata
Ostreobdella papillata - Sebastes melanops
Piscicola sp. - Mugil cephalus, Sebastes borealis, S. caurinus
Piscicola geometra - Gasterosteus aculeatus, Salmo gairdneri
Piscicola salmositica - Oncorhynchus gorbuscha, O. keta, O. kisutch,
O. nerka, O. tshawytscha, Salmo clarki, S. gairdneri
Stibarobdella macrothela - Carcharhinus leucas, C. longimanus,
C. obscurus
Trachelobdella okae - Oncorhynchus keta
Trachelobdella oregonensis - Scorpaenichthys marmoratus

ISOPODA

Genera and species - Gnathiid larva - Chromis punctipinnis,
Hypsypops rubicunda, Oxylebius pictus, Pimelometopon pulchrum,
Scorpaenichthys marmoratus, Sebastes atrovirens, S. carnatus,
S. chrysomelas, S. constellatus, S. serranoides, S. serriceps

AEGIIDAE

Rocinela belliceps - Hydrolagus colliei, Sebastes maliger
Rocinela propodialis - Sebastes maliger
Rocinela signata - Thunnus alalunga

CYMOTHOIDAE

Aegathoa cf. oculata - Morone saxatilis
Braga sp. - Hypsopsetta guttulata
Codonophilus gilberti - Mugil cephalus
Lironeca californica - Cymatogaster aggregata, Engraulis mordax,
Leuresthes tenuis, Micrometrus minimus
Lironeca convexa - Chloroscombrus orqueta
Lironeca ovalis - Caranx hippos, Morone saxatilis, Trachurus symmetricus
Lironeca vulgaris - Anoplopoma fimbria, Cymatogaster aggregata,
Damalichthys vacca, Embiotoca jacksoni, Hyperprosopon argenteum, Leptocottus
armatus, Neoclinus blanchardi, Ophiodon elongatus, Paralabrax nebulifer,
Paralichthys californicus, Parophrys vetulus, Phanerodon furcatus,
Psettichthys melanostictus, Scorpaena guttata, Scorpaenichthys
marmoratus, Sebastes chrysomelas, S. mystinus, S. serranoides,
Synodus lucioceps,
Nerocila californica - Amphistichus argenteus, Atherinops affinis,
Atherinopsis californiensis, Cetengraulis mysticetus, Cymatogaster
aggregata, Damalichthys vacca, Embiotoca jacksoni, Engraulis mordax,
Heterodontus francisci, Istiophorus platypturus, Leuresthes tenuis,
Micrometrus minimus, Mugil cephalus, Mycteroperca xenarcha,
Myliobatis sp., Paralabrax clathratus,
Phanerodon furcatus, Scorpaena guttata, Sphoeroides annulatus,
Stereolepis gigas, Triakis semifasciata, Umbrina roncadore

ISOPODA (continued)

CYMOTHOIDAE (continued)

Nerocila macleayi - Mola mola

Nerocila orbignyi - Mola mola

MOLLUSCA

Genera and species - Gasterosteus aculeatus, Morone saxatilis,
Oncorhynchus gorbuscha

UNIONIDAE

Anodonta sp. - Salmo gairdneri

Anodonta beringiana - Gasterosteus aculeatus, Oncorhynchus nerka,
O. tshawytscha

Margaritifera margaritifera - Oncorhynchus tshawytscha, Salmo clarki,
S. gairdneri

Unio sp. - Oncorhynchus keta

MONOGENEA

Genera and species - Cynoscion nobilis

ACANTHOCOTYLIDAE

Allacanthocotyla pugetensis - Raja binoculata

Pseudacanthocotyla pacifica - Raja binoculata, R. rhina, R. stellulata

Pseudacanthocotyla williamsi - Sebastes alutus

ALLOPYRAEGRAPHORIDAE

Allopyrgraphorus hippos - Caranx hippos

AXINIDAE

Allopseudaxine katsuwonis - Euthynnus pelamis

Allopseudaxine macrova - Euthynnus affinis

Allopseudaxine vagans - Euthynnus pelamis

Heteraxine argentea - Sphyræna argentea

Sibitrema poonui - Thunnus obesus

CALCEOSTOMATIDAE

Paracalceostoma calceostomoides - Balistes polylepsis

CAPSALIDAE

Ancyrocotyle bartschi - Naucrates ductor

Ancyrocotyle vallei - Naucrates ductor

Benedenia sp. - Istiophorus platypterus

Benedenia derzhavini - Sebastes aleutianus, S. borealis, S. crameri,
S. proriger, S. reedi, S. zacentrus

Benedenia hendorffi - Coryphaena hippurus

Benedenia melleni - Morone saxatilis, Naucrates ductor, Paralabrax
maculatofasciatus, Sphoeroides annulatus

Caballerocotyla abidjani - Thunnus albacares

Caballerocotyla albsmithi - Thunnus thynnus

Caballerocotyla biparasitica - Thunnus albacares, T. obesus

Caballerocotyla gregalis - Sarda chiliensis

Caballerocotyla katsuwoni - Euthynnus pelamis

CAPSALIDAE (continued)

- Caballerocotyla klawei - Thunnus albacares, T. obesus
Caballerocotyla magronum - Thunnus thynnus
Caballerocotyla manteri affinis - Auxis thazard, Euthynnus affinis
Caballerocotyla marielenae - Istiophorus platypterus
Caballerocotyla notosinense - Euthynnus affinis
Caballerocotyla paucispinosa - Euthynnus affinis, Thunnus thynnus
Caballerocotyla pseudomagronum - Thunnus obesus
Caballerocotyla verrucosa - Thunnus albacares, T. obesus
Capsala sp. - Istiophorus platypterus
Capsala cephala - Mola mola
Capsala cutanea - Mola mola
Capsala gotoi - Thunnus albacares, T. obesus
Capsala grimaldii - Mola mola
Capsala interrupta - Euthynnus pelamis, Thunnus thynnus
Capsala laevis - Coryphaena hippurus, Euthynnus affinis, Makaira indica, Xiphias gladius
Capsala lintoni - Euthynnus pelamis
Capsala maculata - Mola mola
Capsala martinieri - Mola mola
Capsala molae - Mola mola
Capsala neothunni - Thunnus albacares
Capsala nozawae - Euthynnus pelamis, Thunnus alalunga, T. albacares, T. obesus, T. thynnus
Capsala onchidiocotyle - Thunnus obesus, T. thynnus
Capsala ovalis - Istiophorus platypterus, Makaira nigricans, Tetrapturus angustirostris, T. audax
Capsala pelamydis - Mola mola
Capsala poeyi - Makaira nigricans
Capsala pricei - Tetrapturus audax
Capsala thynni - Thunnus alalunga, T. albacares
Capsaloides cristatus - Tetrapturus angustirostris
Capsaloides istiophori - Istiophorus platypterus, Tetrapturus audax

CAPSALIDAE (continued)

- Capsaloides nairagi - Tetrapturus angustirostris
Capsaloides sinuatus - Istiophorus platypterus, Makaira nigricans,
Tetrapturus audax
Capsaloides tetrapteri - Tetrapturus angustirostris
Encotyllabe embiotocae - Amphistichus argenteus, Cymatogaster aggregata
Encotyllabe masu - Oncorhynchus kisutch
Entobdella diadema - Dasyatis violacea
Entobdella guberleti - Urolophus halleri
Entobdella hippoglossi - Atheresthes stomias, Hippoglossus stenolepis
Entobdella pugetensis - Atheresthes stomias
Entobdella rosaceus - Zalembeius rosaceus
Entobdella squamula - Eopsetta jordani, Hippoglossus stenolepis,
Paralichthys californicus
Neobenedenia girellae - Girella nigricans, Leptocottus armatus,
Pimelometopon pulchrum
Neobenedenia pacificia - Mugil cephalus
Nitzchia quadritestes - Acipenser medirostris, A. transmontanus
Pseudobenedenia noblei - Sebastes paucispinis
Pseudoentobdella pacifica - Myliobatis californica
Tristoma adcockineum - Xiphias gladius
Tristoma adintegrum - Xiphias gladius
Tristoma coccineum - Sphyrna zygaena, Xiphias gladius
Tristoma integrum - Xiphias gladius
Tristoma papillosum - Mola mola, Xiphias gladius
Tristomella pricei - Istiophorus platypterus
Trochopus sp. - Sebastes aleutianus, S. alutus, S. babcocki, S.
borealis, S. brevispinis, S. crameri, S. diploproa, S. elongatus,
S. entomelas, S. flavidus, S. goodei, S. pinniger, S. proriger,
S. reedi, S. ruberrimus, S. zacentrus
Trochopus marginata - Sebastes alutus, S. atrovirens, S. auriculatus,
S. carnatus, S. caurinus, S. maliger, S. melanops, S. nebulosus,
S. ruberrimus, S. serriceps, S. umbrosus

MONOGENEA (continued)

CAPSALIDAE (continued)

Trochopus pseudomarginatus - Epinephelus analogus

Trochopus sprostoni - Scorpaena guttata

Trochopus trituba - Sebastes alutus, S. caurinus, S. diploproa,
S. paucispinis, S. pinniger, S. ruberrimus

CHIMAERICOLIDAE

Chimaericola leptogaster - Hydrolagus colliei

DACTYLOGYRIDAE

Amphibdelloides maccallumi - Squalus acanthias, Torpedo californica

Ancyrocephalus vanbenedeni - Mugil cephalus

Aristocleidus hastatus - Morone saxatilis

Cleidodiscus sp. - Mugil cephalus

Cleidodiscus pricei - Morone saxatilis

Dactylogyrus sp. - Gasterosteus aculeatus

Microncotrematoides inversum - Scomber japonicus

Pseudohaliotrema mugilinus - Mugil cephalus

Urocleidus sp. - Fundulus parvipinnis

DICLIDOPHORIDAE

Choricotyle caulolati - Caulolatilus princeps

Choricotyle exilis - Lyopsetta exilis

Choricotyle oregonensis - Antimora microlepis

Cyclobothrium sp. - Engraulis mordax

Cyclocotyloides pinguis - Coryphaenoides pectoralis

Diclidophora sp. - Amphistichus rhodoterus, Hyperprosopon argenteum,
A. ellipticum, Phanerodon furcatus

Diclidophora pugetensis - Atheresthes stomias

Heterobothrium affinis - Atheresthes stomias, Hippoglossus stenolepis,
Reinhardtius hippoglossoides

DICLYBOTHRIIDAE

Paradiclybothrium pacificum - Acipenser medirostris

DIONCIDAE

Dioncus agassizi - Echeneis naucrates, Remora brachyptera, R. remora
Dioncus remorae - Caranx hippos, Echeneis naucrates

DIPLECTANIDAE

Diplectanum americanum - Stereolepis gigas
Diplectanum amplidiscatum - Paralabrax maculatofasciatus
Diplectanum collinsi - Morone saxatilis
Rhamnocereus rhamnocereus - Umbrina roncador

DISCOCOTYLIDAE

Allodiscocotyla mexicana - Caranx hippos
Allopseudopisthogyne constricta - Lepidocybium flavobrunneum
Anthocotyle americana - Merluccius productus
Anthocotyle merlucci - Merluccius productus
Cyclocotyloides pinguis - Coryphaenoides acrolepis, C. filifer
Diplozoon paradoxum - Gasterosteus aculeatus
Discocotyle sagittata - Salmo gairdneri, Salvelinus malma
Discocotyle salmonis - Salmo gairdneri
Pseudomazocraes monsvaisae - Balistes polylepis
Pseudopisthogyne lepidocybii - Lepidocybium flavobrunneum
Pseudopisthognopsis lepidocybii - Lepidocybium flavobrunneum
Tagia ecuadori - Sphoeroides annulatus
Vallisia oligoplites - Oligoplites saurus
Vallisia riojai - Caranx hippos

GASTROCOTYLIDAE

Allopseudaxine macrova - Auxis thazard
Areotestis sibi - Thunnus alalunga, T. albacares, T. obesus
Churavera macrova - Euthynnus affinis
Gastrocotyle japonica - Scomber japonicus
Lithidocotyle acanthophallus - Morone saxatilis
Metapseudaxine ventrosicula - Auxis thazard, Euthynnus affinis,
Thunnus thynnus

MONOGENEA (continued)

GASTROCOTYLIDAE (continued)

Neothroacocotyle coryphaenae - Coryphaena hippurus

Pricea minima - Euthynnus pelamis

Pseudaxine sp. - Auxis thazard

Pseudaxine triangula - Auxis thazard

Pseudomazocraes monsvaisae - Caranx hippos

GYRODACTYLIDAE

Archigyrodactylus archigyrodactylus - Cymatogaster aggregata

Archigyrodactylus atherinops - Atherinops affinis

Archigyrodactylus leiby - Hyperprosopon anale, H. argenteum, H. ellipticum

Gyrodactyloides baueri - Clupea harengus

Gyrodactyloides petruschewskii - Clupea harengus

Gyrodactyloides strelkowi - Oncorhynchus gorbuscha, O. keta, O. kisutch, O. nerka

Gyrodactylus sp. - Atherinops affinis, Cymatogaster aggregata, Fundulus parvipinnis, Leptocottus armatus, Morone saxatilis, Parophrys vetulus

Gyrodactylus ackerti - Platichthys stellatus

Gyrodactylus aculeati - Gasterosteus aculeatus

Gyrodactylus aggregata - Cymatogaster aggregata

Gyrodactylus alexanderi - Gasterosteus aculeatus

Gyrodactylus ammodyti - Ammodytes hexapterus

Gyrodactylus arcuatus - Gasterosteus aculeatus

Gyrodactylus armatus - Leptocottus armatus

Gyrodactylus avalonia - Gasterosteus aculeatus

Gyrodactylus bodegensis - Clinocottus acuticeps

Gyrodactylus branchius - Platichthys stellatus

Gyrodactylus brevis - Salmo gairdneri

Gyrodactylus bychowskyi - Gasterosteus aculeatus

Gyrodactylus californiensis - Microgadus proximus

Gyrodactylus canadensis - Gasterosteus aculeatus

GYRODACTYLIDAE (continued)

- Gyrodactylus colemanensis - Salmo gairdneri
Gyrodactylus corti - Anarrhichthys ocellatus
Gyrodactylus cranei - Microgadus proximus
Gyrodactylus doglieli - Clupea harengus
Gyrodactylus elegans - Gasterosteus aculeatus, Gillichthys mirabilis,
Ophiodon elongatus, Salmo clarki, S. gairdneri
Gyrodactylus elongatus - Microgadus proximus
Gyrodactylus groenlandicus - Pallasina barbata, Platichthys stellatus
Gyrodactylus groenlandicus pacificus - Blepsias cirrhosus
Gyrodactylus harengi - Ammodytes hexapterus, Clupea harengus
Gyrodactylus imperialis - Gillichthys mirabilis
Gyrodactylus lairdi - Gasterosteus aculeatus
Gyrodactylus lenoki - Oncorhynchus keta
Gyrodactylus marinus - Gadus macrocephalus, Theragra chalcogramma
Gyrodactylus memorialis - Gasterosteus aculeatus
Gyrodactylus mugilis - Mugil cephalus
Gyrodactylus olsoni - Gillichthys mirabilis
Gyrodactylus pacificus - Microgadus proximus
Gyrodactylus perforatus - Clevelandia ios
Gyrodactylus proximus - Pallasina barbata
Gyrodactylus pterigialis - Theragra chalcogramma
Gyrodactylus pungitii - Gasterosteus aculeatus
Gyrodactylus rarus - Gasterosteus aculeatus
Gyrodactylus robustus - Platichthys stellatus
Gyrodactylus rogersi - Microgadus proximus
Gyrodactylus salaris - Salmo gairdneri
Gyrodactylus sculpinus - Leptocottus armatus
Gyrodactylus stellatus - Platichthys stellatus
Gyrodactylus unicipula - Platichthys stellatus
Gyrodactylus vancleavi - Hexagrammos lagocephalus
Micropolyclithrum parvum - Mugil cephalus
Polyclithrum mugilini - Mugil cephalus

MONOGENEA (continued)

GYRODACTYLOIDEA

Genera and species - Ammodytes hexapterus, Clupea harengus,
Cymatogaster aggregata, Gasterosteus aculeatus, Oligocottus
maculosus, Oncorhynchus kisutch, Pholis ornata, Platichthys
stellatus, Syngnathus leptorhynchus

HETERAXINIDAE

Allencotyle pricei - Damalichthys vacca
Cemocotyle borinquenensis - Caranx caballus
Cemocotyle noveboracensis - Caranx hippos
Helixaxine winteri - Caranx hippos
Heteraxinoides oligoplitis- Oligoplites saurus
Leuresticola olsoni - Leuresthes tenuis
Zeuxapta seriolae - Caranx hippos, Seriola dorsalis

HEXABOTHRIIDAE

Genera and species - Triakis semifasciata
Erpocotyle abbreviata - Squalus acanthias
Erpocotyle grisea - Hexanchus griseus, Sphyrna zygaena
Erpocotyle microstoma - Sphyrna zygaena
Erpocotyle somniosi - Somniosus pacificus
Erpocotyle sphyrnae - Sphyrna lewini, S. zygaena
Erpocotyle squali - Galeorhinus zyopterus, Mustelus henlei, Squalus
acanthias, Triakis semifasciata
Erpocotyle striata - Squalus acanthias
Erpocotyle taschenbergi - Hexanchus griseus
Erpocotyle tiburonis - Sphyrna tiburo
Heteroncocotyle leucas - Carcharhinus leucas
Hexabothrium appendiculata - Squalus acanthias
Neoerpocotyle platensis - Sphyrna zygaena
Pseudohexabothrium rajae - Mustelus henlei
Rajonchocotyle sp. - Raja binoculata
Rajonchocotyle batis - Raja binoculata, R. stellulata
Rhinobatonchocotyle cyclovaginatus - Rhinobatos productus

MONOGENEA (continued)

HEXOSTOMATIDAE

- Hexostoma sp. - Sarda chiliensis
Hexostoma acutum - Thunnus obesus, Thunnus thynnus
Hexostoma albsmithi - Thunnus thynnus
Hexostoma auxisi - Auxis thazard
Hexostoma dissimile - Thunnus thynnus
Hexostoma grossum - Euthynnus pelamis, Thunnus obesus, T. thynnus
Hexostoma keokeo - Auxis thazard
Hexostoma sibi - Thunnus alalunga, T. albacares, T. obesus
Hexostoma thynni - Thunnus thynnus
Homostoma chura - Euthynnus affinis
Neohexostoma euthynni - Euthynnus affinis, E. lineatus
Neohexostoma extensicaudum - Thunnus thynnus
Neohexostoma kawakawa - Thunnus albacares
Neohexostoma robustum - Thunnus obesus
Neohexostoma thunninas - Thunnus thynnus

LOIMOIDAE

- Loimosina wilsoni - Sphyrna zygaena

MACROVALVITREMATIDAE

- Genera and species - Lampanyctus ritteri
Pseudotagia clathratus - Paralabrax clathratus

MAZOCRAEIDAE

- Grubea sp. - Sarda chiliensis
Grubea cochlear - Scomber japonicus
Grubea pnematophori - Scomber japonicus
Kuhnia minor - Scomber japonicus
Kuhnia scombri - Scomber japonicus
Kuhnia thunni - Thunnus thynnus
Mazocraeoides georgei - Clupea harengus
Mazocraes harengi - Clupea harengus

MONOGENEA (continued)

MICROBOTHRIIDAE

Microbothrium apiculatum - Squalus acanthias

MICROCOTYLIDAE

Aspinatrium acanthogobii - Acanthogobius flavimanus

Bivagina punctipinnis - Chromis punctipinnis

Metamicrocotyla bora - Mugil cephalus

Metamicrocotyla cephalus - Mugil cephalus

Metamicrocotyla filiformis - Mugil cephalus

Metamicrocotyla macracantha - Mugil cephalus

Metamicrocotyla mugilis - Mugil cephalus

Microcotyle sp. - Radulinus asprellus, Sebastes alutus

Microcotyle chiri - Hexagrammos decagrammus

Microcotyle eueides - Morone saxatilis

Microcotyle macroura - Morone saxatilis

Microcotyle pacifica - Lycodopsis pacifica

Microcotyle sebastis - Hexagrammos lagocephalus, Ophiodon elongatus, Sebastes alutus, S. atrovirens, S. auriculatus, S. brevispinis, S. carnatus, S. caurinus, S. chlorostictus, S. diploproa, S. elongatus, S. helvomaculatus, S. maliger, S. melanops, S. miniatus, S. nigrocinctus, S. paucispinis, S. proriger, S. reedi, S. saxicola, S. umbrosus, S. wilsoni, S. zacentrus

Microcotyle zalembius - Zalembius rosaceus

Microcotyloides impudicus - Polydactylus approximans

Prosomicrocotyla chiri - Hexagrammos stelleri

Prosomicrocotyla gotoi - Hexagrammos lagocephalus

Pyragraphorus caballeroi - Caranx hippos

Solostamenides mugilis - Mugil cephalus

Solostamenides pseudomugilis - Mugil cephalus

MONOCOTYLIDAE

Genera and species - Rhinobatos productus

Anoplocotyloides papillata - Rhinobatos productus

MONOGENEA (continued)

MONOCOTYLIDAE (continued)

Calicotyle ramsayi - Squalus acanthias

Cathariotrema selachii - Carcharhinus obscurus, Sphyrna zygaena

Heterocotyle minima - Squalus acanthias

Merizocotyle pugetensis - Raja binoculata

Spinuris lophosoma - Rhinobatos productus

POLYOPISTHOCOTYLEA

Genera and species - Atherinops affinis

PROTOMICROCOTYLIDAE

Abortipedia indica - Caranx hippos

Protomicrocotyle manteri - Caranx hippos

Protomicrocotyle mirabilis - Caranx hippos

PTERINOTREMATIDAE

Pseudopterinotrema albulae - Albula vulpes

Pterinotrema macrostomon - Albula vulpes

Pterinotrema mirabilis - Albula vulpes

TETRAONCHIDAE

Tetraonchus alaskensis - Oncorhynchus nerka, Salmo clarki

TROCHOPODINAE

Genera and species - Scorpaena guttata

UDONELLIDAE

Udonella caligorum - Mugil cephalus, Myliobatis californica,

Pleuronichthys decurrens, Psettichthys melanostictus

Udonella ophiodontis - Ophiodon elongatus

NEMATODA

ACUARIIDAE

Synhimantus brevicaudatus - Gasterosteus aculeatus

ACANTHOCHEILIDAE

Acanthocheilus bicuspis - Squalus acanthias

Acanthocheilus nudiflex - Galeocerdo cuvieri, Sphyrna zygaena

Acanthocheilus quadridentatus - Apristurus brunneus, Mustelus henlei, Squalus acanthias

Pseudanisakis tricupula - Lampetra tridentata, Squalus acanthias

ANISAKIDAE

Anisakis sp. - Acipenser transmontanus, Ammodytes hexapterus,
Anoplarchus purpureus, Anoplopoma fimbria, Apodichthys flavidus,
Atheresthes stomias, Atherinopsis californiensis, Aulorhynchus flavidus,
Auxis thazard, Blepsias cirrhosus, Ceratoscopelus townsendi,
Cheilotrema saturnum, Citharichthys sordidus, C. stigmaeus,
Clupea harengus, Cololabis saira, Cymatogaster aggregata,
Cynoscion nobilis, Delolepis gigantea, Diaphus theta, Engraulis mordax,
Eopsetta jordani, Euthynnus affinis, E. pelamis, Gadus macrocephalus,
Gasterosteus aculeatus, Genyonemus lineatus, Gilbertidia sigalutes,
Glyptocephalus zachirus, Hexagrammos lagocephalus, Hippoglossina stomata,
Hippoglossoides elassodon, Hippoglossus stenolepis, Hydrolagus colliei,
Hypomesus pretiosus, Icosteus enigmaticus, Isopsetta isolepis,
Isurus oxyrinchus, Lampanyctus regalis, L. ritteri, Lampris regius,
Lepidopsetta bilineata, Leptocottus armatus, Lycodes brevipes,
Lyopsetta exilis, Macroparalepis sp., Mallotus villosus,
Melanostigma pammelas, Merluccius productus, Microstomus pacificus,
Mola mola, Myoxocephalus polyacanthocephalus, Oligocottus maculosus,
Oncorhynchus gorboscha, O. keta, O. kisutch, O. nerka, O. tshawytscha,
Ophiodon elongatus, Paralabrax clathratus, P. nebulifer,
Paralichthys californicus, Parophrys vetulus, Parvilux ingens,
Pholis laeta,

ANISAKIDAE (continued)

P. ornata, Platichthys stellatus, Pleurogrammus monoptyerygius,
Prionace glauca, Psettichthys melanostictus, Raja rhina,
Reinhardtius hippoglossoides, Ronquilus jordani, Salmo gairdneri,
Salvelinus malma, Sarda chiliensis, Sardinops sagax, Scomber
japonicus, Scorpaena guttata, Sebastes aleutianus, S. alutus, S. atrovirens, S.
auriculatus, S. babcocki, S. borealis, S. brevispinis, S.
chlorostictus, S. constellatus, S. dalli, S. diploproa, S.
elongatus, S. gilli, S. goodei, S. hopkinsi, S. levis, S.
macdonaldi, S. miniatus, S. ovalis, S. paucispinis, S. phillipsi,
S. pinniger, S. rastrelliger, S. rosaceus, S. rosenblatti, S.
rubrivinctus, S. rufus, S. serranoides, S. serriceps, Seriphus
politus, Serrivomer sector, Squalus acanthias, Stenobranchius
leucopsarus, Symbolophorus californiensis, Syngnathus leptorhynchus,
Synodus lucioceps, Tarletonbeania crenularis, Theragra chalcogramma,
Thunnus alalunga, T. thynnus, Trachurus symmetricus, Triglops
pingeli, Triphoturus mexicanus, Zenopsis nebulosa
Contracaecum sp. - Ammodytes hexapterus, Anoplarchus purpurescens,
Anoplopoma fimbria, Aprodon cortezianus, Artedius harringtoni,
Atherinops affinis, Atherinopsis californiensis, Auxis thazard,
Ceratoscopelus townsendi, Chitonotus pugetensis, Clupea harengus,
Coryphaena hippurus, Coryphopterus nicholsi, Cymatogaster aggregata,
Diaphus theta, Dorosoma petenense, Engraulis mordax, Eopsetta
jordani, Euthynnus affinis, E. pelamis, Gadus macrocephalus,
Gasterosteus aculeatus, Hexagrammos lagocephalus, Hippoglossoides
elassodon, Hippoglossus stenolepis, Hypomesus pretiosus, Icelinus
filamentosus, Jordania zonope, Lampanyctus ritteri, Leptocottus
armatus, Leuresthes tenuis, Lyopsetta exilis, Macroparalepis sp.,
Malacottus kincaidii, Melamphaes acanthomus, Melanostigma pammelas,
Merluccius productus, Mugil cephalus, Myoxocephalus polyacanthocephalus,
Oligocottus maculosus, Ocorhynchus gorbuscha, O. keta, O. kisutch,
O. nerka, O. tshawytscha, Paralichthys californicus, Parophrys
vetulus, Pholis laeta, Platichthys stellatus,

NEMATODA (continued)

ANISAKIDAE (continued)

S. gairdneri, Salvelinus malma, Sardinops sagax, Scomber japonicus,
Sebastes aleutianus, S. alutus, S. babcocki, S. brevispinis, S. borealis,
S. caurinus, S. crameri, S. diploproa, S. elongatus, S. entomelas,
S. flavidus, S. goodei, S. helvomaculatus, S. maliger, S. nebulosus,
S. nigrocinctus, S. paucispinis, S. pinniger, S. proriger, S. reedi,
S. ruberrimus, S. wilsoni, S. zacentrus, Stenobranchius leucopsarus,
Syngnathus leptorhynchus, Synodus lucioceps, Tarletonbeania
crenularis, Tetrapturus audax, Thaleichthys pacificus, Theragra
chalcogramma, Thunnus alalunga, T. albacares, T. thynnus, Trachurus
symmetricus, Triglops pingeli, Triphoturus mexicanus, Zenopsis
nebulosa

Contracaecum benimasu - Oncorhynchus keta, O. nerka

Contracaecum brachyurum - Alosa sapidissima, Morone saxatilis

*Contracaecum cornutum - Thunnus thynnus

Contracaecum crassicaudatum - Oncorhynchus kisutch

Contracaecum elongatum - Oncorhynchus nerka

*Contracaecum fabri - Cololabis saira, Scomber japonicus

Contracaecum hippoglossi - Oncorhynchus kisutch, O. nerka

Contracaecum hypomesi - Clupea harengus, Oncorhynchus gorbuscha,
O. keta, O. nerka

*Contracaecum longispiculum - Oncorhynchus keta

Contracaecum ochotense - Oncorhynchus nerka

Contracaecum oshoroensis - Oncorhynchus keta

Contracaecum plagiostomorum - Cetorhinus maximus

Contracaecum robustum - Mugil cephalus, Oncorhynchus gorbuscha

*Contracaecum saba - Scomber japonicus

Contracaecum spiculigerum - Mugil cephalus, Oncorhynchus nerka,
O. tshawytscha, Salmo gairdneri

Contracaecum tridentatum - Oncorhynchus keta

Contracaecum unidentatum - Oncorhynchus keta

*Contracaecum zenopsis - Zenopsis nebulosa

Goezia sp. - Morone saxatilis

NEMATODA (continued)

ANISAKIDAE (continued)

Goezia annulata - Morone saxatilis

Goezia ascaroides - Salmo gairdneri

Goezia oncorhynchi - Oncorhynchus keta

Paranisakis sp. - Cyclothone acclinidens, Lampanyctus ritteri

Phocanema sp. - Anoplarchus purpurescens, Anoplopoma fimbria,

Ceratoscopelus townsendi, Clupea harengus, Gadus macrocephalus,

Hippoglossoides elassodon, Lepidopsetta bilineata, Macroparalepis sp.,

Myoxocephalus polyacanthocephalus, Ophiodon elongatus, Paralabrax

clathratus, P. nebulifer, Paralichthys californicus, Platichthys

stellatus, Pleurogrammus monoptyerygius, Reinhardtius hippoglossoides,

Rhamphocottus richardsoni, Scomber japonicus, Sebastes auriculatus,

S. caurinus, S. chlorostictus, S. gilli, S. miniatus, S. paucispinis,

S. rastrelliger, S. serranoides, Serrivomer sector, Squalus acanthias,

Stenobranchius leucopsarus, Synodus lucioceps, Theragra chalcogramma,

Trachurus symmetricus

Phocanema decipiens - Anoplopoma fimbria, Atheresthes stomias, Clupea

harengus, Gadus macrocephalus, Hemilepidotus hemilepidotus,

Hexagrammos lagocephalus, Hippoglossus stenolepis, Ophiodon

elongatus, Sebastes alutus, S. borealis, S. pinniger, Theragra

chalcogramma

Raphidascaris sp. - Alosa sapidissima, Echeneis naucrates, Engraulis

mordax, Gasterosteus aculeatus, O. kisutch, O. nerka, O. tshawytscha,

Scomber japonicus

Raphidascaris acus - Gasterosteus aculeatus, Salmo gairdneri

Raphidascaris? adelinae - Mugil cephalus

Raphidascaris cristata - Gasterosteus aculeatus

Raphidascaris gracillima - Gasterosteus aculeatus

Raphidascaroides diadonis - Diodon hystrix

Terranova brevicapitata - Carcharhinus obscurus, Galeocerdo cuvieri

Terranova galeocerdonis - Galeocerdo cuvieri, Sphryna lewini, S. zygaena

*Thynnascaris sp. - Mugil cephalus, Oncorhynchus kisutch, O. tshawytscha,

Parophrys vetulus, Sebastes rubrivinctus

NEMATODA (continued)

ANISAKIDAE (continued)

*Thynnascaris adunca - Agonus acipenserinus, Apodichthys flavidus,
Atheresthes stomias, Aulorhynchus flavidus, Blepsias cirrhus,
Clupea harengus, Cololabis saira, Delolepis gigantea, Eopsetta
jordani, Gadus macrocephalus, Gasterosteus aculeatus, Glyptocephalus
zachirus, Hexagrammos lagocephalus, H. stelleri, Hippoglossoides
elassodon, Hypomesus pretiosus, Lepidopsetta bilineata, Leptocottus
armatus, Mallotus villosus, Merluccius productus, Oncorhynchus
gorbuscha, O. keta, O. kisutch, O. nerka, O. tshawytscha, Ophiodon
elongatus, Parophrys vetulus, Platichthys stellatus, Reinhardtius
hippoglossoides, Salvelinus malma, Scomber japonicus, Sebastes
aleutianus, S. alutus, S. babcocki, S. brevispinis, S. caurinus,
S. crameri, S. diploproa, S. elongatus, S. entomelas, S. flavidus,
S. helvomaculatus, S. maliger, S. nebulosus, S. paucispinis, S.
pinniger, S. proriger, S. reedi, S. ruberrimus, S. serranoides,
S. zacentrus, Synodus lucioceps, Theragra chalcogramma, Thunnus thynnus

*Thynnascaris clavata - Squalus acanthias

*Thynnascaris histiophori - Istiophorus platypterus

*Thynnascaris incurva - Istiophorus platypterus, Xiphias gladius

*Thynnascaris legendrei - Thunnus alalunga

*Thynnascaris melanogrammi - Merluccius productus

CAMALLANIDAE

Camallanus sp. - Dorosoma petenense

Camallanus lacustris - Gasterosteus aculeatus, Salmo gairdneri

Camallanus oxycephalus - Dorosoma petense

Camallanus truncatus - Gasterosteus aculeatus

Oncophora albacarensis - Thunnus albacares

Oncophora melanocephala - Auxis thazard, Scomber japonicus, Thunnus
albacares, T. thynnus

Spirocamallanus sp. - Clevelandia ios, Ilypnus gilberti, Quietula
y-cauda

Spirocamallanus olseni - Echeneis naucrates

NEMATODA (continued)

CAMALLANIDAE (continued)

Spirocamallanus pereirai - Atherinops affinis, Atherinopsis californiensis, Fundulus parvipinnis, Gillichthys mirabilis, Girella nigricans, Leptocottus armatus, Leuresthes tenuis, Paralichthys californicus

CAPILLARIIDAE

Capillaria sp. - Apodichthys flavidus, Aprodon cortezianus, Chitonotus pugetensis, Lepidopsetta bilineata, Lycodes brevipes, Malacottus kincaidii, Mugil cephalus, Oncorhynchus kisutch, O. nerka, O. tshawytscha, Parophrys vetulus, Salmo gairdneri, Salvelinus malma, Scomber japonicus, Sebastes alutus, S. babcocki, S. borealis, S. caurinus, S. flavidus, S. maliger, S. nigrocinctus, S. paucispinis, S. ruberrimus

Capillaria echenei - Echeneis naucrates

Capillaria salvelini - Salmo gairdneri

Hepaticola petruschewskii - Gasterosteus aculeatus

Skrjabinocapillaria bakeri - Oncorhynchus kisutch, Salmo clarki, S. gairdneri

Thominx catenata - Oncorhynchus nerka, Salmo clarki

CUCULLANIDAE

Bulbodacnitis ampullastoma - Salmo gairdneri

Cucullanellus kanabus - Cymatogaster aggregata

Cucullanus sp. - Damalichthys vacca, Lepidopsetta bilineata, Leuresthes tenuis, Morone saxatilis, Mugil cephalus, Oncorhynchus kisutch, Ronquilus jordani, Salvelinus malma, Sebastes aleutianus, S. alutus, S. babcocki, S. borealis, S. crameri, S. flavidus, S. paucispinis, S. ruberrimus

Cucullanus annulatus - Parophrys vetulus, Platichthys stellatus

Cucullanus carangis - Caranx hippos

Cucullanus dodsworthi - Mugil cephalus

Cucullanus elongatus - Ophiodon elongatus, Sebastes caurinus, S. maliger, S. ruberrimus

NEMATODA (continued)

CUCULLANIDAE (continued)

Cucullanus heterochrous - Hippoglossoides elassodon, Hippoglossus stenolepis, Lepidopsetta bilineata, Platichthys stellatus, Sebastes alutus, S. borealis

Cucullanus orthagorisci - Mola mola

Truttaedacnitis trutta - Oncorhynchus gorbuscha, O. kisutch, O. nerka, O. tshawytscha, Salmo clarki, S. gairdneri, Salvelinus malma

CYSTIDICOLIDAE

Genera and species - Salmo clarki

Ascarophis sp. - Echeneis naucrates, Serrivomer sector, Stenobranchius leucopsarus

Ascarophis curvicauda - Hexagrammos lagocephalus

Ascarophis filiformis - Gadus macrocephalus

Ascarophis morrhuae - Gasterosteus aculeatus

Ascarophis pacificus - Gadus macrocephalus, Clupea harengus, Lepidopsetta bilineata, Myoxocephalus polyacanthocephalus, Salvelinus malma, Theragra chalcogramma

Ascarophis Sebastodis - Anoplarchus purpureus, Artedius harringtoni, Aulorhynchus flavidus, Hemilepidotus hemilepidotus, Hexagrammos lagocephalus, Myoxocephalus polyacanthocephalus, Nautichthys oculofasciatus, Oncorhynchus kisutch, O. nerka, Rhamphocottus richardsoni, Sebastes alutus, S. borealis, S. caurinus, S. diploproa, S. elongatus, S. flavidus, S. maliger, S. proriger, S. ruberrimus, S. zacentrus

Ascarophis skrjabini - Oncorhynchus gorbuscha, O. keta, Salmo gairdneri, Theragra chalcogramma

Caballeronema wardlei - Scorpaenichthys marmoratus

Ctenascarophis gastricus - Auxis thazard, Euthynnus affinis

Cystidicola sp. - Salvelinus malma

Cystidicola farionis - Gasterosteus aculeatus, Oncorhynchus gorbuscha, O. kisutch, O. nerka, S. gairdneri, Salvelinus malma

Cystidicola stigmatura - Oncorhynchus nerka

NEMATODA (continued)

CYSTIDICOLIDAE (continued)

Cystidicoloides sp. - Salmo clarki

Cystidicoloides tenuissima - Gasterosteus aculeatus, Oncorhynchus kisutch, O. nerka, Salmo clarki, S. gairdneri, Salvelinus malma

Metabronema laticauda - Oncorhynchus nerka

Parascarophis galeata - Sphyrna tiburo

Salvelinema ishii - Oncorhynchus keta

Salvelinema salmonicola - Oncorhynchus keta, O. nerka

Salvelinema walkeri - Oncorhynchus kisutch, O. tshawytscha, Salmo clarki, S. gairdneri

Spinitectus sp. - Auxis thazard, Cololabis saira, Morone saxatilis

Spinitectus beaveri - Albula vulpes

Spinitectus echenei - Echeneis naucrates

Spinitectus gordani - Salmo gairdneri

Spinitectus gracilis - Oncorhynchus nerka, Salmo gairdneri

Spinitectus? mollis - Auxis thazard

Spinitectus pacificus - Cololabis saira

CYSTOOPSIDAE

Cystoopsis acipenseri - Acipenser transmontanus

DIOCTOPHYMATIDAE

Eustrongylides sp. - Gasterosteus aculeatus, Lampetra tridentata, Oncorhynchus kisutch, Salmo clarki, S. gairdneri, Salvelinus malma

GNATHOSTOMATIDAE

Echinocephalus pseudouncinatus - Heterodontus francisci, Myliobatis californica

Spiroxys sp. - Morone saxatilis

ICHTHYOSTRONGYLIDAE

Ichthyostrongylus thunni - Thunnus albacares

PHILOMETRIDAE

Philometra sp. - Euthynnus affinis, E. pelamis, Mugil cephalus, Morone saxatilis, Platichthys stellatus, Salmo clarki, S. gairdneri

Philometra americana - Gobiesox maeandricus, Lepidopsetta bilineata, Parophrys vetulus, Pholis laeta, Pholis ornata, Platichthys stellatus, Xiphister atropurpureus

NEMATODA (continued)

PHILOMETRIDAE (continued)

Philometra cephalus - Mugil cephalus

Philometra rubra - Morone saxatilis

Philonema sp. - Oncorhynchus kisutch, O. tshawytscha, Salmo gairdneri,

Philonema agubernaculum - Gasterosteus aculeatus, Oncorhynchus kisutch, Salmo gairdneri

Philonema kondai - Oncorhynchus keta

Philonema oncorhynchi - Oncorhynchus gorboscha, O. keta, O. kisutch, O. nerka, O. tshawytscha, Salmo clarki, S. gairdneri, Salvelinus malma

Phlyctainophora squali - Squalus acanthias

PHYSALOPTERIDAE

Proleptus acutus - Heterodontus francisci, Mustelus californicus, Mustelus henlei, Platyrrhinoideis triseriata, Squalus acanthias

Proleptus australis - Galeocerdo cuvieri

Proleptus elegans - Hexanchus griseus

Proleptus obtusus - Mustelus henlei, Squalus acanthias, Triakis semifasciata

PSEUDALIIDAE

Parafilaroides decorus - Girella nigricans

THELAZIIDAE

Heptachona caudata - Thunnus thynnus

Rhabdochona sp. - Oncorhynchus nerka, Salmo clarki

Rhabdochona cascadilla - Oncorhynchus nerka, Salmo clarki, S. gairdneri

Rhabdochona denudata - Salmo gairdneri

Rhabdochona fujii - Oncorhynchus nerka

Rhabdochona kisutchi - Oncorhynchus kisutch

Rhabdochona milleri - Salvelinus malma

NEMATODA (continued)

Rhabdochona oncorhynchi - Oncorhynchus keta

Sterliadochona pedispicula - Salmo gairdneri

Vasorhabdochona cablei - Gillichthys mirabilis

SPIRURIDAE

Dollfusnema piscicola - Paralabrax clathratus

SPIRUROIDEA

Genera and species - Euthynnus pelamis

PROTOZOA (CILIOPHORA)

AMPHILEPTIDAE

Litonotus branchiarum - Gasterosteus aculeatus

CHLAMYDODONTIDAE

Chilodonella cyprini - Oncorhynchus tshawytscha, Salmo gairdneri

DENDROSOMATIDAE

Trichophyra sp. - Morone saxatilis, Oncorhynchus kisutch, Salmo clarki, S. gairdneri

Trichophyra intermedia - Gasterosteus aculeatus, Oncorhynchus keta

Trichophyra piscium - Oncorhynchus nerka, Salmo gairdneri

EPISTYLIDAE

Epistylis sp. - Morone saxatilis, Mugil cephalus, Salmo gairdneri

Epistylis lwoffii - Gasterosteus aculeatus

OPHRYOGLENIDAE

Cryptocaryon irritans - Diodon hystrix, Girella nigricans, Paralabrax nebulifer

Ichthyophthirius sp. - Gasterosteus aculeatus

Ichthyophthirius multifillis - Gasterosteus aculeatus, Oncorhynchus gorbuscha, O. keta, Salmo gairdneri

SCYPHIDIIDAE

Ambipherya sp. - Leptocottus armatus

Apiosoma sp. - Gastereus aculeatus

Glossatella sp. - Morone saxatilis, Salmo gairdneri

Glossatella amebae - Gasterosteus aculeatus

Glossatella conica - Oncorhynchus keta

Scyphidia sp. - Leptocottus armatus, Morone saxatilis, Salmo gairdneri

Scyphidia arctica - Asterotheca infraspinata, Oncorhynchus keta,

Radulinus asprellus

URCEOLARIIDAE

Genera and species - Isopsetta isolepis, Lepidopsetta bilineata,

Ophiodon elongatus

Trichodina sp. - Acanthogobius flavimanus, Atherinops affinis,

Fundulus parvipinnis, Gasterosteus aculeatus, Gillichthys mirabilis,

Leptocottus armatus, Mugil cephalus, Oncorhynchus kisutch, Parophrys

vetulus, Salmo clarki

Trichodina borealis - Lepidopsetta bilineata

Trichodina cottidarum subsp. cottidarum - Oligocottus maculosus

Trichodina davisii - Morone saxatilis

Trichodina domerguei - Salmo gairdneri

Trichodina domerguei subsp. domerguei - Enophrys bison, Gasterosteus aculeatus

Trichodina domerguei latispina - Oncorhynchus keta

Trichodina fultani - Salmo gairdneri

Trichodina gracilis - Gasterosteus aculeatus, Oncorhynchus gorbuscha,
O. keta

Trichodina hexagrammi - Hexagrammos stelleri

Trichodina lairdi - Arteidius fenestralis, Oligocottus maculosus

Trichodina megamicronucleata - Gasterosteus aculeatus

Trichodina microdenticulata - Dorosoma petenense

Trichodina murmanica - Gadus macrocephalus

Trichodina nigra kamchatka - Oncorhynchus nerka

Trichodina ovonucleata - Asterotheca infraspinata, Dasycottus setiger,
Radulinus asprellus

Trichodina parvula - Dasycottus setiger

Trichodina ploveri - Clupea harengus

Trichodina puytoraci - Mugil cephalus

Trichodina rectuncinata - Arteidius fenestralis

Trichodina salmincola - Salmo gairdneri

Trichodina tenuidens - Gasterosteus aculeatus

Trichodina truttiae - Oncorhynchus gorbuscha, O. keta, Salmo clarki

Trichodina vancouverense - Arteidius fenestralis

PROTOZOA (CILIOPHORA) (continued)

URCEOLARIIDAE (continued)

Trichodinella sp. - Morone saxatilis

Tripartiella californica - Oncorhynchus gorbuscha, O. keta, O.
tshawytscha

Tripartiella obliqua - Mugil cephalus

PROTOZOA (HAPLOSPORIDA)

Genera and species - Oncorhynchus gorbuscha, O. kisutch
Dermocystidium gasterostei - Gasterosteus aculeatus
Dermocystidium salmonis - Oncorhynchus tshawytscha, Salmo
gairdneri

PROTOZOA (MICROSPORIDA)

Genera and species - Coryphaenoides filifer, Lycodopsis pacifica,
Oncorhynchus gorbuscha

NOSEMATIDAE

Glugea anomala - Gasterosteus aculeatus

Glugea punctifera - Theragra chalcogramma

Glugea stephani - Parophrys vetulus, Platichthys stellatus

Glugea takedai - Oncorhynchus gorbuscha, O. nerka, O. tshawytscha,

Salmo gairdneri, Salvelinus malma

Nosema sp. - Morone saxatilis

Plistophora sp. - Oncorhynchus keta, O. nerka, Salmo gairdneri

Plistophora salmonae - Oncorhynchus kisutch, O. tshawytscha, Salmo
gairdneri

PROTOZOA (MYXOSPORIDA)

Genera and species - Apristurus brunneus, Sebastolobus sp.,
Serrivomer sector, Stenobranchius leucopsarus, Triphoturus
mexicanus

CERATOMYXIDAE

Ceratomyxa sp. - Acanthogobius flavimanus, Caulolatilus princeps,
Coryphaenoides filifer, Gasterosteus aculeatus, Synodus lucioceps

Ceratomyxa acadensis - Clupea harengus

Ceratomyxa anoplopoma - Anoplopoma fimbria

Ceratomyxa auerbachii - Clupea harengus

Ceratomyxa blennius - Gibbonsia elegans, G. metzi, Hysoblennius
gilberti

Ceratomyxa californica - Eptatretus stouti, Sebastes paucispinis

Ceratomyxa crassa - Leptocottus armatus

Ceratomyxa drepanosettae - Reinhardtius hippoglossoides

Ceratomyxa elegans - Porichthys notatus, Sebastes paucispinis, S.
pinniger, S. rosaceus

Ceratomyxa filiformis - Sardinops sagax

Ceratomyxa furcata - Apodichthys flavidus

Ceratomyxa gracilis - Gibbonsia metzi

Ceratomyxa hokarari - Coryphaenoides acrolepis

Ceratomyxa hopkinsi - Citharichthys xanthostigma, Microstomus
pacificus, Nezumia stelgidolepis, Parophrys vetulus, Scorpaena
guttata, Sebastes goodei, S. paucispinis

Ceratomyxa inconstans - Scomber japonicus

Ceratomyxa jamesoni - Triakis semifasciata

Ceratomyxa laxa - Sebastes serranoides

Ceratomyxa lunata - Galeocerdo cuvieri

Ceratomyxa mesospora - Sphyrna tiburo, S. zygaena

PROTOZOA (MYXOSPORIDA) (continued)

CERATOMYXIDAE (continued)

Ceratomyxa obesa - Clinocottus analis

Ceratomyxa orientalis - Clupea harengus, Sardinops sagax

Ceratomyxa platichthyis - Platichthys stellatus

Ceratomyxa porrecta - Myoxocephalus polyacanthocephalus

Ceratomyxa recurvata - Sphyrna zygaena

Ceratomyxa sebasta - Sebastes carnatus, S. ensifer, S. paucispinis,
S. pinniger, S. serranoides

Ceratomyxa shasta - Oncorhynchus keta, O. kisutch, O. tshawytscha,
Salmo clarki, S. gairdneri

Ceratomyxa starski - Sebastes rosaceus

Ceratomyxa tenuis - Leptocottus armatus

Ceratomyxa venusta - Cynoscion nobilis

Ceratomyxa vepallida - Sebastes carnatus, Sebastes ensifer, S.
paucispinis, S. serranoides, Typhlogobius californiensis

Leptotheca armatura - Coryphaenoides acrolepis, C. armatus, C.
leptolepis, C. pectoralis

Leptotheca coelorhynchus - Coryphaenoides armatus

Leptotheca compressa - Rimicola eigenmanni

Leptotheca elegans - Artedius lateralis, Gibbonsia elegans, G. metzi,
Paraclinus integripinnis, Typhlogobius californiensis

Leptotheca fisheri - Chromis punctipinnis, Halichoeres semicinctus
Hydrolagus colliei, Rhacochilus toxotes

Leptotheca fusiformis - Sphyrna zygaena

Leptotheca galeata - Eptatretus stouti

Leptotheca informis - Anoplopoma fimbria, Coelorinchus scaphopsis,
Coryphaenoides acrolepis, C. filifer, C. pectoralis, Sebastes
chlorostictus, S. goodei, S. paucispinis, S. rosaceus, S.
serranoides

Leptotheca krogiusi - Oncorhynchus gorbuscha, O. keta, O. kisutch,
O. nerka, O. tshawytscha

Leptotheca longipes - Sebastes serranoides

Leptotheca macrospora - Sebastes serranoides

Leptotheca minima - Coryphaenoides acrolepis, C. armatus

Leptotheca sebasta - Sebastes serranoides

Leptotheca sphaerula - Gibbonsia elegans, G. metzi

MYXIDIIDAE

- Myxidium sp. - Acanthogobius flavimanus, Agonopsis emmelane,
Anoplopoma fimbria
- Myxidium bajacalifornium - Bajacalifornia burragei
- Myxidium calcariferi - Sebastes carnatus, S. miniatus, S. paucispinis
- Myxidium coryphaenoidium - Coryphaenoides armatus, C. filifer, C. leptolepis, Nezumia liolepis, N. stelgidolepis
- Myxidium gasterostei - Gasterosteus aculeatus
- Myxidium incurvatum - Ascelichthys rhodorus, Mugil cephalus,
Oligocottus snyderi, Scorpaena guttata, S. carnatus, S. caurinus,
S. ensifer, S. paucispinis, S. serranoides
- Myxidium japonicum - Myoxocephalus polyacanthocephalus
- Myxidium melanostigmum - Melanostigma pammelas, Sagamichthys abei
- Myxidium minteri - Oncorhynchus keta, O. kisutch, O. tshawytscha,
Salmo clarki, S. gairdneri
- Myxidium obscurum - Oncorhynchus gorbuscha, O. keta, O. nerka
- Myxidium ochotense - Gadus macrocephalus
- Myxidium orientalis - Coryphaenoides leptolepis
- Myxidium oshoroense - Platichthys stellatus
- Myxidium oviforme - Cymatogaster aggregata, Damalichthys vacca,
Hypsurus caryi, Oncorhynchus gorbuscha, O. keta, O. nerka, O. tshawytscha,
Phanerodon furcatus, Salmo gairdneri, Salvelinus malma
- Myxidium pearcyi - Coryphaenoides armatus, C. leptolepis
- Myxidium theragrae - Theragra chalcogramma
- Sphaeromyxa balbianii - Agonopsis emmelane, Gobiesox maeandricus
- Sphaeromyxa gibbonsia - Gibbonsia elegans, G. metzi
- Sphaeromyxa lateralis - Artedius lateralis
- Sphaeromyxa magna - Liparis cyclopus
- Sphaeromyxa maiyai - Microgadus proximus
- Sphaeromyxa ovula - Gobiesox rhessodon
- Sphaeromyxa parva - Cololabis saira
- Sphaeromyxa reinhardti - Engraulis mordax
- Zschokkella sp. - Anoplarchus purpurescens, Gobiesox maeandricus

PROTOZOA (MYXOSPORIDA) (continued)

MYXIDIIDAE (continued)

- Zschokkella dogieli - Mugil cephalus
Zschokkella embiotocidis - Damalichthys vacca, Embiotoca lateralis
Zschokkella globulosa - Coryphaenoides acrolepis, C. armatus, C. leptolepis, Nezumia liolepis, N. stelgidolepis
Zschokkella ilishae - Sebastes serranoides
Zschokkella meglitschi - Coryphaenoides armatus, C. filifer, C. pectoralis, Nezumia stelgidolepis
Zschokkella nova - Mugil cephalus, Salmo gairdneri
Zschokkella orientalis - Oncorhynchus gorbuscha, O. kisutch, O. tshawytscha
Zschokkella rovigensis - Coelorinchus scaphopsis
Zschokkella russelli - Coryphaenoides armatus, C. filifer

MYXOBOLIDAE

- Henneguya sp. - Damalichthys vacca, Gasterosteus aculeatus
Henneguya salminicola - Oncorhynchus gorbuscha, O. keta, O. kisutch, O. nerka, O. tshawytscha
Henneguya sebasta - Sebastes chlorostictus, S. diploproa, S. flavidus, S. goodei, S. jordani, S. levis, S. melanops, S. miniatus, S. paucispinis, S. rubrivinctus, S. rufus, S. serranoides, S. vexillaris
Henneguya tridentigeri - Acanthogobius flavimanus
Myxobilatus sp. - Gasterosteus aculeatus
Myxobilatus gasterostei - Gasterosteus aculeatus
Myxobilatus medius - Gasterosteus aculeatus
Myxobolus sp. - Leuroglossus stilbius
Myxobolus acanthogobii - Acanthogobius flavimanus
Myxobolus achmerovi - Mugil cephalus
Myxobolus cheni - Mugil cephalus
Myxobolus exiguus - Mugil cephalus
Myxobolus insidiosus - Oncorhynchus kisutch, O. tshawytscha
Myxobolus kisutchi - Oncorhynchus kisutch, O. tshawytscha, Salmo gairdneri
Myxobolus krokhini - Oncorhynchus nerka

PROTOZOA (MYXOSPORIDA) (continued)

MYXOBOLIDAE (continued)

Myxobolus mexicanus - Coelorinchus scaphopsis, Coryphaenoides armatus

Myxobolus mulleri - Mugil cephalus

Myxobolus neurobius - Oncorhynchus kisutch, O. nerka

Myxobolus parvus - Mugil cephalus

Myxobolus physophilus - Gasterosteus aculeatus

Myxobolus squamae - Oncorhynchus kisutch

MYXOSOMATIDAE

Myxosoma sp. - Morone saxatilis

Myxosoma branchialis - Mugil cephalus

Myxosoma cephalus - Mugil cephalus

Myxosoma cerebralis - Oncorhynchus gorbuscha, O. keta, O. nerka,

Salmo clarki, S. gairdneri, Salvelinus malma

Myxosoma dermatobia - Mugil cephalus, Oncorhynchus keta, O. kisutch

Myxosoma salmonis - Oncorhynchus keta

Myxosoma soldatovi - Oncorhynchus keta

Myxosoma squamalis - Oncorhynchus keta, O. kisutch, Salmo gairdneri

SINUOLINEIDAE

Conispora renalis - Merluccius productus

Davisia sp. - Gobiesox maeandricus, Porichthys notatus

Davisia anoplopoma - Anoplopoma fimbria

Davisia bidens - Porichthys notatus

Davisia cella - Porichthys notatus

Davisia coryphaenoidia - Coryphaenoides acrolepis, C. pectoralis

Davisia pectoralis - Coryphaenoides acrolepis, C. pectoralis

Davisia reginae - Damalichthys vacca, Embiotoca lateralis, Sebastes maliger, S. serranoides

Myxoproteus abyssus - Coryphaenoides acrolepis, C. armatus, C. filifer

Myxoproteus californicus - Coryphaenoides acrolepis, C. pectoralis

Myxoproteus rosenblatti - Coryphaenoides acrolepis, C. armatus, C. filifer

Sinuolinea dimorpha - Porichthys notatus

Sinuolinea magna - Coryphaenoides acrolepis, C. pectoralis

Sinuolinea triangulata - Coryphaenoides acrolepis, C. armatus, C. filifer, C. leptolepis, C. pectoralis

PROTOZOA (MYXOSPORIDA) (Continued)

SPHAEROSPORIDAE

- Auerbachia pulchra - Coryphaenoides acrolepis, C. filifer, C. pectoralis
Chloromyxum sp. - Sphyrna zygaena
Chloromyxum chitosense - Oncorhynchus keta
Chloromyxum correioni - Oncorhynchus nerka
Chloromyxum giganteum - Oncorhynchus gorbuscha
Chloromyxum kabatai - Coryphaenoides acrolepis
Chloromyxum levigatum - Squatina californica
Chloromyxum leydigi - Sphyrna tiburo, S. zygaena, Squalus acanthias,
Torpedo californica
Chloromyxum majori - Oncorhynchus tshawytscha, Salmo gairdneri
Chloromyxum orientalis - Oncorhynchus gorbuscha, O. keta
Chloromyxum ovatum - Galeorhinus zyopterus, Mustelus californicus,
M. henlei, Squalus acanthias, Torpedo californica, Urolophus halleri
Chloromyxum quadriforme - Oncorhynchus gorbuscha, O. keta
Chloromyxum sphyrnae - Sphyrna tiburo
Chloromyxum subsphaericum - Coryphaenoides armatus
Chloromyxum tanakai - Oncorhynchus keta
Chloromyxum truttae - Salmo gairdneri
Chloromyxum wardi - Oncorhynchus nerka
Sphaerospora divergens - Pleuronichthys verticalis
Sphaerospora elegans - Gasterosteus aculeatus
Sphaerospora orientalis - Clupea harengus
Unicapsula muscularis - Hippoglossus stenolepis
Unicauda brevis - Gasterosteus aculeatus

TETRACAPSULIDAE

- Kudoa sp. - Atheresthes stomias, Coryphaena hippurus, Eopsetta
jordani, Gadus macrocephalus, Hippoglossus stenolepis, Lepidopsetta
bilineata, Microstomus pacificus, Parophrys vetulus, Platichthys
stellatus
Kudoa bora - Mugil cephalus
Kudoa cerebralis - Morone saxatilis
Kudoa clupeidae - Clupea harengus, Cynoscion nobilis, Sebastes
elongatus, S. paucispinis, Thunnus thynnus
Kudoa maculoliquifaciens - Xiphias gladius

PROTOZOA (MYXOSPORIDA)

TRILOSPORIDAE

Trilospora californica - Gibbonsia elegans, G. metzi, Typhlogobius californiensis

TRIGONOSPORIDAE

Trigonosporus acanthogobii - Acanthogobius flavimanus

PROTOZOA (SARCOMASTIGOPHORA)

BLASTODINIIDAE

Oodinium sp. - Morone saxatilis

BODONIDAE

Colponema sp. - Morone saxatilis

CRYPTOBIIDAE

Cryptobia sp. - Bathylagus ochotensis, B. wesethi, Coryphaenoides filifer, Dorosoma petenense, Eopsetta jordani, Lyopsetta exilis, Parophrys vetulus, Scorpaenichthys marmoratus

Cryptobia borreli - Oncorhynchus kisutch, O. tshawytscha, Salmo gairdneri

Cryptobia branchialis - Gasterosteus aculeatus, Oncorhynchus nerka

Cryptobia coryphaenoideana - Coryphaenoides acrolepis

Cryptobia makeevi - Oncorhynchus gorbuscha, O. keta

Cryptobia salmositica - Gasterosteus aculeatus, Oncorhynchus gorbuscha, O. keta, O. kisutch, O. nerka, O. tshawytscha, Salmo gairdneri

Cryptobia stilbia - Leuroglossus stilbius

ENTAMOEBIDAE

Entamoeba mola - Mola mola

HEXAMITIDAE

Hexamita salmonis - Clupea harengus, Gasterosteus aculeatus,

Oncorhynchus nerka, O. tshawytscha, Salmo clarki, S. gairdneri

Octomitus truttae - Salmo gairdneri

MONOCERCOMONIDAE

Monocercomonas mola - Mola mola

TETRAMITIDAE

Costia pyriformis - Salmo clarki, S. gairdneri

Ichthyobodo necatrix - Gasterosteus aculeatus, Oncorhynchus gorbuscha, O. keta, O. nerka, Salmo clarki, S. gairdneri

PROTOZOA (SARCOMASTIGOPHORA) (continued)

THECAMOEBIDAE

Schizamoeba salmonis - Salmo gairdneri

Thecamoeba hoffmani - Oncorhynchus kisutch, O. tshawytscha, Salmo gairdneri

TRYPANOSOMATIDAE

Trypanosoma sp. - Eopsetta jordani, Glyptocephalus zachirus,
Microstomus pacificus, Mugil cephalus

Trypanosoma gargantua - Raja binoculata

Trypanosoma occidentalis - Gasterosteus aculeatus

Trypanosoma pacifica - Citharichthys sordidus, Lyopsetta exilis,
Parophrys vetulus

PROTOZOA (SPOROZOA)

HAEMOGREGARINIDAE

Haemogregarina sp. - Salmo clarki

Haemogregarina bigemina - Artedius fenestralis, Auxis thazard, Caranx hippos, Coryphaena hippurus

Haemogregarina delagei - Squalus acanthias

Haemogregarina mugili - Mugil cephalus

EIMERIIDAE

Genera and species - Sebastes levis

Eimeria sp. - Scorpaenichthys marmoratus

Eimeria auxidis - Cololabis saira

Eimeria clupearum - Clupea harengus, Engraulis mordax

Eimeria gasterostei - Gasterosteus aculeatus

Eimeria myoxocephali - Myoxocephalus polyacanthocephalus

Eimeria lucida - Squalus acanthias

Eimeria nishin - Clupea harengus

Eimeria pneumatophori - Scomber japonicus

Eimeria sardinae - Clupea harengus

Eimeria squali - Squalus acanthias

TURBELLARIA

HYPOTRICHINIDAE

Ichthyophaga subcutanea - Hexagrammos decagrammus

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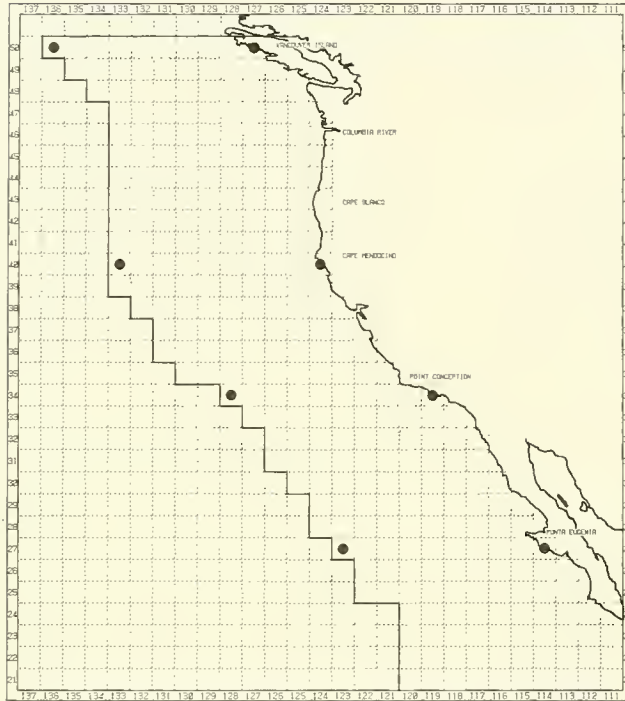
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ERRATA

NOAA Technical Report NMFS SSRF-763: Climatology of surface heat fluxes over the California Current region, by Craig S. Nelson and David M. Husby.

Page 2, Figure 1 is upside down. Figure 1 should appear as below.



Page 29, Equation (11). The term to the left of the equal sign should read $\frac{\partial \bar{T}}{\partial t}$ rather than $\frac{\partial \bar{T}}{\partial t}$

Page 30, Equation (12) should read $\bar{w} \approx \frac{\vec{k} \cdot (\nabla \times \vec{\tau})}{\rho_0 f}$ and the first line following the

equation should read “where $\vec{k} \cdot (\nabla \times \vec{\tau}) \dots$ ”

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