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# An Updated List of the Fishes of British Columbia, and Those of Interest in Adjacent Waters, with Numeric Code Designations

G. E. Gillespie

Biological Sciences Branch
Department of Fisheries and Oceans
Pacific Biological Station
Nanaimo, British Columbia V9R 5K6

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# ADDENDUM

Gillespie, G.E. 1993. An updated list of the fishes of British Columbia, and those of interest from adjacent waters, with numeric code designations. Can. Tech. Rep. Fish. Aquat. Sci. 1918: 116 p.

On page 8, immediately following the entry for *Bathyraja abyssicola*, please insert:

**Bathyraja aleutica* (Gilbert, 1895) 052
Aleutian skate

Allen and Smith (1988) considered the Aleutian skate to be an Aleutian/Bering Sea species, and commented that it was likely confused with other species in reports from trawling investigations in those areas.

The systematics and taxonomy of skates in the north Pacific is confused, and such the distribution of these fish is, at times, poorly understood. The Aleutian skate may occur considerably south of its recorded range, and possibly in northern Canadian waters. I include it as a hypothetical species. Specimens not fitting descriptions of species known from British Columbia should be retained for further study.

On page 75, please insert in proper numeric sequence:

0 5 2 BATHYRAJA ALEUTICA/ALEUTIAN SKATE

On page 31, immediately following the entry for *Oneirodes thompsoni*, please insert the following:

Family Ceratiidae - seadevils / poissons-pêcheurs 215

*Ceratias holboelli* Krŏyer, 1844 217
northern seadevil / pêcheur á deux massettes (marine)

I have a record of a single female specimen taken in deep water off Clayoquot Sound in January of 1993. This specimen resides at the Royal British Columbia Museum in Victoria, and represents the first record of the species and family in British Columbia waters.

On page 77 please insert, in proper numeric sequence:

2 1 5 CERATIIDAE (FAMILY)/SEADEVILS
and
2 1 7 CERATIAS HOLBOELLI/NORTHERN SEADEVIL

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# AN UPDATED LIST OF THE FISHES OF BRITISH COLUMBIA, AND THOSE OF INTEREST IN ADJACENT WATERS, WITH NUMERIC CODE DESIGNATIONS

by

G.E. Gillespie

Biological Sciences Branch
Department of Fisheries and Oceans
Pacific Biological Station
Nanaimo, British Columbia V9R 5K6

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## ABSTRACT

Gillespie, G. E. 1993. An updated list of the fishes of British Columbia, and those of interest in adjacent waters, with numeric code designations. Can. Tech. Rep. Fish. Aquat. Sci. 1918: 116 p.

I have updated and corrected a previous list, based on McPhail and Lindsey (1970) and Hart (1973), of freshwater, marine and euryhaline fishes of British Columbia, Canada. This list was constructed in 1980 as a reference file on the computer system at the Pacific Biological Station, Nanaimo, B.C. Many species have been recorded from British Columbian waters for the first time, and numerous taxonomic changes have taken place, since the construction of the list. This manuscript provides documentation of the changes which have occurred, and assigns three-digit codes to all species, and to other useful taxonomic units, for use in databases at the Pacific Biological Station. Species accorded special status (Vulnerable, Rare, Threatened or Endangered) are noted. A list of species not recorded from British Columbia waters, but which have been encountered during high seas research from the Pacific Biological Station, is also included.

## RESUME

Gillespie, G. E. 1993. An updated list of the fishes of British Columbia, and those of interest in adjacent waters, with numeric code designations. Can. Tech. Rep. Fish. Aquat. Sci. 1918: 116 p.

Mise à jour et correction d'une liste antérieure de poissons de la Colombie-Britannique fondée sur les répertoires de poissons d'eau douce et salée et de poissons euryhalins de la Colombie-Britannique dressés par McPhail and Lindsey (1970) et Hart (1973). La liste, établie en 1980, avait été constituée en base de données dans le système informatique de la Station biologique du Pacifique, à Nanaimo (C.-B.). Depuis l'établissement de cette liste, nombre de d'espèces des eaux de la Colombie-Britannique ont été répertoriées pour la première fois et il y a eu de nombreux changements d'information taxonomique. Le document renferme de l'information sur les changements apportés et toutes les espèces ainsi que d'autres unités taxonomiques jugées utiles y sont identifiées au moyen d'un code à trois caractères utile qui pourra servir dans les bases de données de la Station biologique de Pacifique. Les cas particuliers (espèces vulnérables, rares et menacées d'extinction) sont indigués. Le document renferme également une liste d'espéces non consignées pour les eaux de la Colombie-Britannique qui ont été observées lors des recherches de la Station en haute mer.

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# INTRODUCTION

Systematics and taxonomy are important aspects of biological investigation, but are often forgotten. The recent interest in cataloguing and sustaining biodiversity emphasizes the importance of systematics and taxonomy as a cornerstone of biological research and resource management. The names for most fish species which are important to researchers and fisheries managers in British Columbia have long been established, and are assumed to be unchanging. The inconvenience of taxonomic change is an unfortunate consequence of the dynamic nature of fish systematics and taxonomy.

Names change as new information changes our perception of the relationship of species to each other and to species in higher taxonomic groups. The trivial name of a Fish B may be changed when it is found that it is synonymous with another species, Fish A, which was described previous to Fish B. Fish B is then considered a junior synonym of Fish A, and the name of Fish A is the proper one due to priority.

The generic name applied to a group of species may also change when their evolutionary relationships to other groups are re-examined. This type of change can result in alteration of the higher taxonomic categories: classes, orders and families.

The recent replacement of the long-established name *Salmo gairdneri* by *Oncorhynchus mykiss* is an example of both these types of changes. When the rainbow trout, named *Salmo gairdneri* by Richardson in 1836, was found to be the same species of trout which had been named *Salmo mykiss* in Asia by Walbaum in 1792, the name *mykiss* was applied to the entire species, on the basis of the chronological priority of that name (Okazaki 1984). It was also proposed that the native western trouts were more closely related to the Pacific salmons (genus *Oncorhynchus*) than to the Atlantic salmon and anadromous trouts (genus *Salmo*). Smith and Stearley (1989) recommended that the western trouts be removed from *Salmo* and placed in *Oncorhynchus*. Much of the confusion generated was due to the double name change applied to the rainbow trout, each name changed for a different reason.

In this report I attempt to list all of the recent species which have been recorded from the marine, brackish and fresh waters of British Columbia. The works of Clemens and Wilby (1946, 1961), Carl et al. (1959), McPhail and Lindsey (1970), Hart (1973), Scott and Crossman (1973), and Jean et al. (1981) are either outdated or becoming so. The recent List of the Fishes of Canada (McAllister 1990) is compiled from a national view, and describes freshwater distributions by major drainage basin, not provincial boundaries. The American Fisheries Society lists, the most recent being Robins et al. (1991a), only describe distributions as Atlantic, Pacific, or freshwater. Peden (1990a, 1990b) provides the most complete list of British Columbia fishes to date, but is purely a list, and does not provide notes on taxonomic changes, or unverified or hypothetical occurrences.

This report was initiated to document the changes which I made in the species code file on the computer system at the Pacific Biological Station (Nanaimo, B.C.) of the Department of Fisheries and Oceans. This file serves as a convenient on-line reference for scientific and English vernacular names, and of the three-digit codes used to identify species in numerous databases and programs. The full objectives of the report are to provide a complete listing of the fishes of British Columbia; provide numerical codes for each family and species, and other useful taxonomic groups; provide references for new records and taxonomic changes; and note species which may potentially be collected from British Columbia waters.

## METHODS

The names of the marine and euryhaline fishes in the original data file were based directly on Hart (1973), with the numeric codes corresponding to the page number on which the species description was found. Families were given numeric codes in the same manner. When conflicts arose, because the family description and the first species description were from the same page, these conflicts were resolved by utilizing gaps in the numeric sequence. For example, the descriptions for the family Notacanthidae and the longnose tapirfish, *Polyacanthonotus challengeri* (then contained in the genus *Macdonaldia*), both start on page 92. The description for *P. challengeri* continues onto page 93. In the code file, the family Notacanthidae was assigned the code 092, and *P. challengeri* was assigned 093.

Freshwater fishes were coded separately in the original file using the number series 701-804. From the taxonomy used, I believe that McPhail and Lindsey (1970) was the reference for freshwater fishes. Rather than change existing codes in the database, I carried these codes over.

When a species or family had been assigned two codes in the file, I retained both for continuity. For example, the Pacific lamprey, *Lampetra tridentata*, was coded both as 020, the code from the page number in Hart (1973), and as *Entosphenus tridentatus*, code number 702. I retain the redundant entry in the database, updating the nomenclature for 702 to the presently accepted name.

New codes added to the file are underlined in the list. I attempted to use the numeric gaps when inserting new species into the code. When no gap was available within the family in question, I used the next available number in the series 641-900. Some researchers requested new codes for collections which could not be identified to species, but to functional taxonomic units. Thus some genera (e.g. *Artedius* sp.), or other functional units (e.g. *Artedius*-type larvae) are given numeric codes.

Scientific names are presented in the form *Genus species subspecies* Author(s), Date. The presence of a comma between the author's name(s) and the date of publication indicates a citation of authority for the trivial name. Following common practise , I do not include these authorities as literature cited in the report. When the species was originally described in a different genus than that in which it presently resides, the authority is contained in parentheses. Notes on subspecific designations are included in the list for each species in which I found designations in the literature.

I classify the fishes in the list as marine, freshwater, anadromous or euryhaline, based on Hart (1973), Scott and Crossman (1973), Peden (1990a,b), McAllister (1990) and Robins et al. (1991a). Foreign species which have appeared as a result of human intervention are noted when such introductions resulted in established populations. I include special status assigned to species by the British Columbia Conservation Data Center (BCCDC), Committee on the Status of Endangered Wildlife in Canada (COSEWIC), the American Fisheries Society (AFS), or by McAllister et al. (1985), with appropriate references in each species' notes.

Spelling was taken from Robins et al. (1991a). Previous lists (eg. Jean et al. 1981) adhered to the grammatically correct spelling of certain family names, following Steyskal (1980). However, I support Wheeler (1990, and references therein) and use historically accepted spellings of certain family and subfamily names (Dasyatidae, Echeneidae, Engraulidae, Pholidae and Liparinae).

Accepted English vernaculars were taken from McAllister (1990) or Robins et al. (1991a). French vernaculars were taken from McPhail and Lindsey (1970), Jean et al. (1981) and McAllister (1990). Where other common names have appeared in the recent literature, these are discussed in the notes provided with that species' entry.

Taxa above the genus level are arranged phylogenetically, following Eschmeyer (1990). Notes are provided in the list where his classification scheme departs from other authors. Genera and species are arranged alphabetically within families.

I include records of fish taken at Canadian Weathership Station (CWS) Papa, located approximately 50°N by 145°W. Peden (1979a) argued that his record of *Paralepis atlantica* from CWS Papa should be included in the Canadian fauna, and Hart (1973) included CWS Papa records in his accounting of the marine fishes of British Columbia. Although these fish were taken outside Canadian waters, their occurrence in close proximity, and the dearth of deepsea collection effort in Canadian waters justifies their inclusion here.

An asterisk (*) before the scientific name in the entry indicates that the species has been recorded from CWS Papa, or just outside Canadian waters, but not from Canadian waters, *sensu stricto*. These are included as hypothetical occurrences only, and any specimens collected within Canadian waters should be saved. Other species captured near Canadian waters, but as extremely rare occurrences, not likely a consequence of extremely low collection effort, are noted, but not given entries in the list.

I include a list of fishes which have not been recorded from Canadian Pacific waters, but which have been encountered by high seas researchers from the Pacific Biological Station (Part 2). I also include a numeric listing of the updated code file (Appendix 1).

## RESULTS

The list contains 449 species in 109 families and 35 orders, which have been verified to occur in the fresh, estuarine or marine waters of British Columbia. An additional 16 species, two of which are from families and orders not yet collected from British Columbia waters, are listed as hypothetical occurrences and require verification. The list documents approximately 120 changes, either additions to the fauna or taxonomic changes at the genus and species levels, which have occurred since the publication of McPhail and Lindsey (1970) and Hart (1973).

## ACKNOWLEDGEMENTS

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Part 1. Fishes of British Columbia waters, and adjacent waters, including CWS Papa.

## CLASS MYXINI

### Order Myxiniformes

Family Myxinidae - hagfishes / myxines 016

Subfamily Eptatretinae - Pacific hagfishes

*Eptatretus deani* (Evermann & Goldsborough, 1907) 017
black hagfish / myxine noire (marine)

*Eptatretus stouti* (Lockington, 1878) 018
Pacific hagfish / myxine brune (marine)

## CLASS CEPHALASPIDOMORPHI

### Order Petromyzontiformes

Family Petromyzontidae - lampreys / lamproies 019

Subfamily Petromyzontinae

*Lampetra ayresi* (Günther, 1870) 022
river lamprey / lamproie à queue noire (anadromous)

*Lampetra macrostoma* Beamish, 1982 021
Vancouver lamprey / lamproie à grand disque (freshwater)

Beamish (1982) described the Vancouver lamprey from Cowichan and Mesachie Lakes, on Vancouver Island. The species is apparently endemic to these lakes. He used the common name lake lamprey. Robins et al. (1991a) coined the vernacular Vancouver lamprey.

Beamish (1987) considered the Vancouver lamprey to be rare, due to its restricted range. COSEWIC listed the Vancouver lamprey as a Rare species in 1986. The Rare category was changed to Vulnerable in 1988 (R.R. Campbell 1992). The AFS considered the Vancouver lamprey to be of special concern, due to its restricted range (Williams et al. 1989). The BCCDC considered the Vancouver lamprey to be critically imperilled in British Columbia due to its restricted distribution, and placed it on the provincial Red List of Endangered and/or Threatened Species (Cannings 1993).

*Lampetra richardsoni* Vladykov & Follett, 1965 703
western brook lamprey / lamproie du l'ouest (freshwater)

*Lampetra tridentata* (Gairdner, *in* Richardson, 1836) 020
Pacific lamprey / lamproie du Pacifique (anadromous)

## CLASS ELASMOBRANCHII

Nelson (1984) placed all cartilaginous fishes in to the Class Chondrichthyes, and further divided it into two subclasses: the Holocephali (chimaeras and ratfishes) and the Elasmobranchii (sharks and rays). Robins et al. (1991a) combined the Holocephali and Chondrichthyes in the Class Elasmobranchiomorphi. I follow Eschmeyer (1990), who retained these two taxa as full classes.

Castro (1983) and Compagno (1984a) described the range of the Pacific angelshark, *Squatina californica* Ayres, 1859, as southeastern Alaska to the Gulf of California in the northeastern Pacific, thus implicitly including British Columbia in the recorded range of the species. I traced this to at least the 1930's (Barnhart 1936), without specific documentation of the Alaskan record. No specimens of *Squatina* have been reported from British Columbia waters, and any encountered should be saved.

### Order Hexanchiformes

Family Hexanchidae - cow sharks / grisets 026

*Hexanchus griseus* (Bonnaterre, 1788) 027
sixgill shark / requin griset (marine)

Castro (1983) stated that the bigeye sixgill shark, *Hexanchus vitulus* Springer & Waller, 1969, may be distributed worldwide in deep water. Specimens of sixgill sharks taken from 180 m of water or more should be saved for careful examination.

Two other nominal species of cow sharks have been reported from the eastern Pacific: *H. corinus* Jordan & Gilbert, 1880 and *H. vulgaris* Perez Canto, 1886. Springer and Waller (1969) lacked conclusive evidence to validate either of these nominal species. More specimens of sixgill sharks from the eastern Pacific need to be examined to explore the systematics of the family. Evidence from morphometrics, jaw and tooth morphology, and size at maturity are needed for assessment of validity of these other possible species. Compagno (1984a) included *H. corinus* and *H. vulgaris* as junior synonyms of *H. griseus*.

*Notorynchus cepedianus* (Peron, 1807) 028
sevengill shark / requin à sept branchies (marine)

Hart (1973) recorded this species as *Notorynchus maculatus* Ayres, 1855. Compagno (1984a) merged several nominal species of *Notorynchus* into *N. cepedianus*, and used the English common name broadnose sevengill shark and French vernacular platnez. Castro (1983) noted that *maculatus* was a synonym of *cepedianus*, but provided no documentation. Robins et al. (1991a) listed the sevengill shark as *N. cepedianus*.

### Order Lamniformes

Family Lamnidae - mackerel sharks / lamies 031

*Carcharodon carcharias* (Linnaeus, 1758) 032
great white shark / requin blanc (marine)

Compagno (1984a) used the French common name grand requin blanc.

*Isurus oxyrinchus* Rafinesque, 1810 035
shortfin mako / mako à nageoires courtes (marine)

Compagno (1984a) used the French vernacular taupe bleu. McAllister (1990) indicated that there was an undocumented record for British Columbia. Peden (1990a) did not include this species in a list of British Columbia fishes. I have a verified record of the shortfin mako captured 185 nautical miles west of Cape St. James, Queen Charlotte Islands, in the summer of 1992. The specimen is currently at the Pacific Biological Station.

*Lamna ditropis* Hubbs & Follett, 1947 036
salmon shark / taupe du Pacifique (marine)

Compagno (1984a) reported the French vernacular requin-taupe saumon.

Family Cetorhinidae - basking sharks / pèlerins 033

I follow Eschmeyer (1990) according the Cetorhinidae familial status. Nelson (1984) had included the subfamily Cetorhininae in the family Lamnidae.

*Cetorhinus maximus* (Gunnerus, 1765) 034
basking shark / pèlerin (marine)

Family Alopiidae - thresher sharks / renards 029

Nelson (1984) included the thresher sharks in the family Lamnidae, as the subfamily Alopiinae. I follow Eschmeyer (1990), who placed the thresher sharks in their own family.

*Alopias vulpinus* (Bonnaterre, 1788) 030
thresher shark / renard marin (marine)

Hart (1973), McAllister (1990) and Robins et al. (1991a) used the vernacular thresher shark, which does not differentiate this species from others in the genus. Jean et al. (1981) used the name pelagic thresher, which has been used for *A. pelagicus* Nakamura, 1935 (Compago 1984a). Eschmeyer and Herald (1983) used the vernacular common thresher.

**Order Carchariniformes**

Family Scyliorhinidae - cat sharks / roussettes 037

Nelson (1984) divided the Scyliorhinidae into the subfamilies Pseudotriakinae, Scyliorhininae and Proscylliinae. Eschmeyer attributed each of these groups familial status, and I follow his example here.

*Apristurus brunneus* (Gilbert, 1891) 038
brown cat shark / roussette (marine)

Compagno (1984b) used the French common name holibiche brune. The brown cat shark is the subject of taxonomic debate, and further specimens from British Columbia waters are required.

Family Triakidae - houndsharks / emissoles 045

Previous authors have considered the Triakinae a subfamily within the Carcharhinidae. Eschmeyer (1990) elevated the Triakidae to full familial status, along with several other taxa. I follow his example

here.

Subfamily Galeorhininae

*Galeorhinus zyopterus* Jordan & Gilbert, 1883 040
soupfin shark / requin à grands ailerons (marine)

Compagno (1984b) synonymized the soupfin shark with the tope shark, *Galeorhinus galeus* (Linnaeus, 1758). I follow Robins et al. (1991a) in noting this proposed synonymy, but retaining *zyopterus* as a separate species, until further evidence is provided for its merger with *galeus*.

Family Carcharhinidae - requiem sharks / mangeurs d'hommes 039

Eschmeyer (1990) uses this taxon as an elevation of Nelson's (1984) Carcharininae, *sensu stricto*, and as such, does not included subfamilial divisions.

*Prionace glauca* (Linnaeus, 1758) 041
blue shark / requin bleu (marine)

McAllister (1990) placed *Prionace* in the subfamily Carcharhininae, within the Carcharhinidae. Compagno (1984b) used the French vernacular peau bleue.

**Order Squaliformes**

Family Squalidae - dogfish sharks / chiens de mer 042

Nelson (1984) divided the Squalidae into the subfamilies Echinorhininae, Dalatiinae, Squalinae and Oxynotinae. Some authors (e.g. Jean et al. 1981, Peden 1990a) have attributed the Dalatiinae full familial status. I follow Eschmeyer (1990), and include it in the Squalidae, without subfamilial status.

*Somniosus pacificus* Bigelow & Schroeder, 1944 043
Pacific sleeper shark / laimargue dormeur (marine)

The French vernacular follows Compagno (1984a). McAllister (1990) used the French name laimargue du Pacifique.

*Squalus acanthias* Linnaeus, 1758 044
spiny dogfish / aiguillat commun (marine)

Hubbs et al. (1979) and Castro (1983) considered Pacific populations to be a separate subspecies, *S. a. suckleyi* (Girard, 1854). Compagno (1984a) used the vernacular piked dogfish.

**Order Torpediniformes**

Family Torpedinidae - electric rays / torpilles 049

Nelson (1984) placed all of the torpidiform, rajiform and mylobatiform fishes in the order Rajiformes, as the suborders Torpedinoidei, Rajoidei and Mylobatidoidei. I follow Eschmeyer (1990), who attributed ordinal status to all of these taxa.

Subfamily Torpedininae

*Torpedo californica* Ayres, 1855 050
Pacific electric ray / torpille du Pacifique (marine)

**Order Rajiformes**

Family Rajidae - skates / raies 051

Subfamily Rajinae

Several species which were included in the genus *Raja* by some authors have been placed in the genus *Bathyraja*, following Ishiyama and Hubbs (1968) and Robins et al. (1991a).

*Bathyraja abyssicola* (Gilbert, 1895) 054
abyssal skate / raie du profondeur (marine)

Hart (1973), Jean et al. (1981), Eschmeyer and Herald (1983) and Peden (1990a) used the common name deepsea skate. McAllister (1990) proposed the new vernacular to avoid confusion with the deepsea skate of the Atlantic coast, *B. richardsoni* (Garrick, 1961).

*Bathyraja interrupta* (Gill & Townsend, 1897) 058
sandpaper skate / raie rugueuse (marine)

Hart (1973) and Jean et al. (1981) referred to this species as the black skate, *Raja kincaidi* Garman, 1908 and *Bathyraja kincaidi*, respectively. Ishihara and Ishiyama (1985) synonymized *kincaidi* with *interrupta*.

*Bathyraja trachura* (Gilbert, 1891) 057
roughtail skate / raie à queue rude (marine)

The roughtail skate was first reported from British Columbia waters by Peden (1975). Some authors have used the common name black skate for this species.

*Raja badia* Garman, 1899 055
broad skate / raie large (marine)

The broad skate was first reported from Canadian Pacific waters by Jean et al. (1981), without documentation of location or date of capture. The French vernacular was assigned by McAllister (1990), to avoid confusion with the Atlantic species *R. laevis* Mitchell, 1817, the barndoor skate.

*Raja binoculata* Girard, 1854 056
big skate / raie biocellée (marine)

**Raja inornata* Jordan & Gilbert, 1881 053
California skate / raie californien (marine)

Eschmeyer and Herald (1983) recorded the California skate from Juan de Fuca Strait. Researchers should be aware of the possibility of finding this species in Canadian waters, and specimens not fitting descriptions of familiar species should be retained for careful examination.

*Raja rhina* (Jordan & Gilbert, 1880) 059
longnose skate / pocheteau long-nez (marine)

This species, and *R. stellulata*, were originally described in the genus *Raia*, and thus the authority is placed in parentheses (Robins et al. 1991a).

*Raja stellulata* (Jordan & Gilbert, 1880) 061
starry skate / raie du Pacifique (marine)

**Order Mylobatiformes**

Family Dasyatidae - stingrays / pastenagues 062

Subfamily Dasyatinae

Williamson (1930) reported the capture of stingrays in the summer of 1928 at Kyuquot, Vancouver Island. They were identified only as *Dasyatis* sp., and Hart (1973) included two species which could account for the record, neither of which normally range north of southern California (Eschmeyer and Herald 1983).

*Dasyatis violacea* (Bonaparte, 1832) 064
pelagic stingray / pastenague violette (marine)

Peden and Jamieson (1988) reported the first verified record of *D. violacea* from Canadian waters.

**Dasyatis brevis* (Garman, 1880) 063
diamond stingray (marine)

Hart (1973) referred to this species as a junior synonym, *Dasyatis dipterura* (Jordan & Gilbert, 1880). It is rarely recorded north of southern California (Eschmeyer and Herald 1983). Peden (1990a) did not include *D. brevis* in a list of British Columbia fishes, due to the lack of voucher specimens. It is included here as a hypothetical occurrence, for continuity only.

**CLASS HOLOCEPHALI**

**Order Chimaeriformes**

Family Chimaeridae - shortnose chimaeras / chimères 065

*Hydrolagus colliei* (Lay & Bennett, 1839) 066
spotted ratfish / chimère d'Amérique (marine)

Robins et al. (1980) specified the common name spotted ratfish. Previous authors had used the name ratfish, which was loosely applied to many chimaeras, and other groups of fishes.

**CLASS ACTINOPTERYGII**

Nelson (1984) included the Actinopterygii as a subclass of his class Osteichthyes.

**Order Acipenseriformes**

Family Acipenseridae - sturgeons / esturgeons 081

Subfamily Acipenserinae

*Acipenser medirostris* Ayres, 1854 082
green sturgeon / esturgeon vert (anadromous)

McAllister (1990) assigned Canadian populations to the subspecies A. *m. medirostris*, which Hubbs et al. (1979) referred to as the American green sturgeon.

Houston (1988) considered the green sturgeon to be rare in Canada, and felt that it could potentially be threatened by habitat alteration (e.g. hydroelectric development). The green sturgeon was listed as a Rare species by COSEWIC in 1987. The Rare category was changed to Vulnerable in 1988 (R.R. Campbell 1992).

*Acipenser transmontanus* Richardson, 1836 083
white sturgeon / esturgeon blanc (anadromous)

Lane (1990) expressed concern regarding the limited distribution of significant populations of the white sturgeon (Fraser, Columbia and Sacramento Rivers), and the potential impacts of hydroelectric developments, agricultural practices, urbanization, and increased fishing pressure on this species. COSEWIC listed the white sturgeon as a Vulnerable species in 1990 (R.R. Campbell 1992). The BCCDC expressed concern that B.C. populations of the white sturgeon may be susceptible to large-scale perturbations, and placed this species on the provincial Blue List of Sensitive and/or Vulnerable Species.

**Order Osteoglossiformes**

**Suborder Notopteroidei**

Family Hiodontidae - mooneyes / laquaiches 764

*Hiodon alosoides* (Rafinesque, 1819) 765
goldeye / laquaiche aux yeux d'or (freshwater)

Page and Burr (1991) include the northeastern corner of British Columbia in the range of the goldeye. Peden (1990b) included the goldeye in his list of British Columbia freshwater fishes.

**Order Notacanthiformes**

Family Notacanthidae - spiny eels / poissons-tapirs à épines 092

*Polyacanthonotus challengeri* (Vaillant, 1888) 093
longnose tapirfish / tapir à nez long (marine)

Hart (1973) listed this species as *Macdonaldia challengeri* (Vaillant, 1888). McDowell (1973) synonymized *Macdonaldia* with *Polyacanthonotus*.

**Order Anguilliformes**

**Suborder Congroidei**

Family Congeridae - conger eels / congres 084

Subfamily Congrinae

Nelson (1984) placed *Xenomystax* in the subfamily Muaenesocinae, within the Congridae. Jean et al. (1981), McAllister (1990) and Peden (1990a) attributed full familial status to the Muraenesocidae. I follow the classification of Eschmeyer (1990).

*Xenomystax atrarius* Gilbert, 1891 080
twinpored eel / anguille à pores jumelés (marine)

The twinpored eel was first recorded from British Columbia by Peden (1972).

Family Nemichthyidae - snipe eels / avocettes 087

*Avocettina infans* (Günther, 1878) 089
closespine snipe eel / avocette immature (marine)

Hart (1973) listed two species of snipe eel from British Columbia: *Avocettina infans* and *A. gilli* (Bean, 1890), the spaced snipe eel. Early descriptions of *gilli* had remarkably low counts of dorsal and anal fin spines and lateral line pores, which led Nielsen and Smith (1978) to believe that the specimen was missing at least part of the tail section. They included *gilli* as a synonym of *A. infans*. Peden (1975) recorded the closespine snipe eel as *Borodinula infans* (Günther). Nielsen and Smith (1978) indicated that *Borodinula* was synonymous with *Avocettina*. Hubbs et al. (1979) used the common name blackline snipe eel.

*Nemichthys scolopaceus* Richardson, 1848 090
slender snipe eel / avocette ruban (marine)

Hubbs et al. (1979) used the common name brown snipe eel.

Family Serrivomeridae - sawpalates / serrivomers 085

*Serrivomer jesperseni* Bauchot-Boutin, 1953 086
crossthroat sawpalate / serrivomer à gorge croisée (marine)

**Order Clupeiformes**

Family Clupeidae - herrings / harengs 094

*Alosa sapidissima* (Wilson, 1811) 095
American shad / alose savoureuse (anadromous, introduced)

*Clupea pallasi* 096
Valenciennes, *in* Cuvier & Valenciennes, 1847
Pacific herring / hareng du Pacifique (marine)

Most authors have considered Pacific and Atlantic herring (*C. harengus* Linnaeus, 1758) to be at the subspecific level of evolutionary divergence. The notable exception was Hubbs et al. (1979), who listed the Pacific herring as *C. pallasi*. Grant (1986) presented genetic and life history evidence supporting the split of Atlantic and Pacific herring into distinct species. Robins et al. (1991a) followed Grant's (1986) elevation of the Pacific herring to full specific status.

*Sardinops sagax* (Jenyns, 1842) 100
Pacific sardine / sardine du Pacifique (marine)

Hubbs et al. (1979) recognized the northern Pacific sardine, *Sardinops sagax caeruleus* (Girard, 1854). Some authors (eg. Miller and Lea 1972) have suggested that *caeruleus* is a distinct species, not a subspecies of *S. sagax*.

Schweigert (1988) reviewed the status of the Pacific sardine in Canadian waters. He felt that the disappearance of sardines from British Columbia waters may have been a result of overfishing of California stocks, environmentally-induced reproductive failure, and/or interspecific competition with the northern anchovy, *Engraulis mordax*. The Pacific sardine was listed as a Vulnerable species by COSEWIC in 1987 (R.R. Campbell 1992). McAllister et al. (1985) considered the Pacific sardine Rare in B.C. waters, citing many of the reasons outlined by Schweigert (1988).

Pacific sardines were observed in small numbers off the southwest coast of Vancouver Island during the summer and fall of 1992, after being virtually absent since the 1950's.

Family Engraulidae - anchovies / anchois 103

Other authors have spelled the family name Engraulididae.

*Engraulis mordax* Girard, 1854 104
northern anchovy / anchois du Pacifique (marine)

Hart (1973) referred British Columbia populations to the subspecies *E. m. mordax*. Hubbs et al. (1979) used the common name ocean northern anchovy for this subspecies.

**Order Cypriniformes**

Family Cyprinidae - minnows / carpes 203

*Acrocheilus alutaceus* Aggasiz & Pickering, 1855 747
chiselmouth / bouche coupante (freshwater)

The chiselmouth is a designated species of interest to COSEWIC, which may list it as a Vulnerable species in British Columbia (R.R. Campbell 1992). The BCCDC considered the chiselmouth to be rare to uncommon in British Columbia, and placed it on the provincial Blue List of Sensitive and/or Vulnerable Species (Cannings 1993).

*Carassius auratus* (Linnaeus, 1758) 739
goldfish / cyprin doré (freshwater, introduced)

*Couesius plumbeus* (Agassiz, 1850) 749
lake chub / méné de lac (freshwater)

An undescribed subspecies of the lake chub, endemic to the Liard Hotspring, British Columbia, is of interest to COSEWIC, and may be listed as a Vulnerable species (R.R. Campbell 1992). McPhail and Lindsey (1970) doubted the validity of subspecies of lake chub.

*Cyprinus carpio* Linneaus, 1758 204
common carp / carpe (freshwater, introduced)

*Hybognathus hankinsoni* Hubbs, *in* Hubbs & Greene, 1929 753
brassy minnow / méné laiton (freshwater)

The BCCDC considered the brassy minnow to be rare to uncommon in British Columbia, and placed it on the provincial Blue List of Sensitive and/or Vulnerable Species (Cannings 1993). The British Columbia populations are of considerable interest to zoogeographers.

*Margariscus margarita* Cope, *in* Günther, 1868 743
pearl dace / mulet perlé (freshwater)

Robins et al. (1991a) returned the pearl dace to the genus *Margariscus*, and stated doubts as to the relationship of this species to others in the genus *Semotilus*, where it had been placed by previous authors. McPhail and Lindsey (1970) and Carl et al. (1959) assigned British Columbia populations to the wide-ranged subspecies *M. m. nachtriebi* (Cox, 1896). McPhail and Lindsey (1970) used the English vernacular northern pearl dace, and the French name mulet perlé du nord for this subspecies.

The pearl dace is known in British Columbia only from Charlie Lake, Lattice Creek, and a tributary of the Redwillow River in the Peace River district, though it may be more widespread in this area. The BCCDC placed this species on the provincial Blue List of Sensitive and/or Vulnerable Species, and considered it rare or uncommon in British Columbia (Cannings 1993).

*Mylocheilus caurinus* (Richardson, 1836) 744
peamouth / méné deux-barres (freshwater)

*Notropis atherinoides* Rafinesque, 1818 754
emerald shiner / méné émeraude (freshwater)

McPhail and Lindsey (1970) expressed doubt as to the vailidity of subspecies of emerald shiner, but assigned British Columbia populations to the subspecies *N. a. atherinoides*, if such were recognized.

The emerald shiner is known from only one location in British Columbia, the Fort Nelson River at Old Fort Nelson (Cannings 1993).

The BCCDC placed the emerald shiner on the provincial Red List of Endangered and/or Threatened Species, and considered the British Columbia population to be critically imperilled due to its restricted distribution (Cannings 1993).

*Notropis hudsonius* (Clinton, 1824) 736
spottail shiner / queue à tache noire (freshwater)

McPhail and Lindsey (1970) attributed British Columbia populations to the subspecies *N. h. hudsonius*.

Peden (1990b) included the spottail shiner in a list of British Columbia fishes. This species was not recorded from British Columbia in previous literature, but had been recorded from the Petitot River of the Liard drainage in the Northwest Territories and Alberta (Scott and Crossman 1973). It is known in British Columbia only from Maxhamish Lake, though further collecting may reveal more sites (Cannings 1993).

The BCCDC placed the spottail shiner on the provincial Red List of Endangered and/or Threatened Species, and considered it critically imperilled due to its restricted distribution in British Columbia (Cannings 1993).

*Phoxinus eos* (Cope, 1862) 745
northern redbelly dace / ventre rouge du nord (freshwater)

Scott and Crossman (1973) and Peden (1990b) recorded the northern redbelly dace and the finescale dace in the genus *Chrosomus*, which is now considered a junior synonym of *Phoxinus* (Eschmeyer 1990, Robins et al. 1991a).

The BCCDC placed a population of *P. eos* x *P. neogaeus* hybrids on the provincial Red List of Endangered and/or Threatened Species, and considered this population to be critically imperilled (Cannings 1993). The hybrid population is known only from Graveyard Creek, near Chetwynd. The hybrid population appears to be entirely female, and coexist only with *P. neogaeus*; *P. eos* is not present (Cannings 1993).

*Phoxinus neogaeus* Cope, *in* Günther, 1868 746
finescale dace / ventre citron (freshwater)

*Pimephales promelas* Rafinesque, 1820 737
fathead minnow / tête-de-boule (freshwater)

The fathead minnow is known in British Columbia only from One Island Lake, in the Peace River region (Smith and Lamb 1976). The BCCDC considered the fathead minnow critically imperilled in British Columbia, due to its restricted distribution, and placed it on the provincial Red List of Endangered and/or Threatened Species (Cannings 1993)

*Platygobio gracilis* (Richardson, 1836) 748
flathead chub / méné à tête plate (freshwater)

Robins et al. (1980) placed this species in the genus *Hybopsis*, but returned it to the monotypic genus *Platygobio* in the latest edition of their list (Robins et al. 1991a). McPhail and Lindsey (1970) assigned British Columbia populations to the subspecies *P. g. gracilis*.

*Ptychocheilus oregonensis* (Richardson, 1836) 742
northern squawfish / sauvagesse du nord (freshwater)

*Rhinichthys cataractae* 752
(Valenciennes, *in* Cuvier & Valenciennes, 1842)
longnose dace / naseux de rapides (freshwater)

An undescribed species or subspecies, variously referred to as the nooky dace or Nooksack dace, was reported by McPhail (1967) from the southwest corner of the Fraser Valley and Puget Sound area of Washington State. The nooky dace was recognized as Rare by McAllister et al. (1985). The AFS considered the nooky dace to be a Threatened subspecies, due to its restricted range and potential destruction of its habitat (Williams et al. 1989). The BCCDC plaed the Nooksack dace on the provincial Red List of Endangered and/or Threatened Species, and considered it critically imperilled due to its restricted distribution (Cannings 1993). COSEWIC has expressed interest in this species/subspecies and may list it as a Vulnerable species (R.R. Campbell 1992).

*Rhinichthys falcatus* (Eigenmann & Eigenmann, 1893) 751
leopard dace / naseux léopard (freshwater)

Peden (1991) reviewed the status of the leopard dace in Canada, and indicated that no status designation was required, due to its wide distribution in numerous river drainages in British Columbia.

*Rhinichthys osculus* (Girard, 1857) 750
speckled dace / naseux moucheté (freshwater)

Peden and Hughes (1984a) suggested that the speckled dace could be threatened by a single catastrophic event, due to its restricted

distribution in Canada. It was listed as a Rare species by COSEWIC in 1983. The Rare category was changed to Vulnerable by COSEWIC in 1987 (R.R. Campbell 1992). The BCCDC placed this species on the provincial Red List of Endangered and/or Threatened Species, and considered it critically imperilled (Cannings 1993)

*Rhinichthys umatilla* (Gilbert & Evermann, 1894) 755
Umatilla dace / naseux d'Umatilla (freshwater)

Robins et al. (1991a) withheld full specific status for *umatilla*, retaining it as a subspecies of *osculus*, pending further research.

Peden and Hughes (1988) differentiated Canadian populations of speckled and Umatilla dace. They proposed that *R. umatilla* be considered potentially Rare or Threatened in Canadian waters. The BCCDC placed the Umatilla dace on the provincial Red List of Endangered and/or Threatened Species, and considered it imperilled due to its restricted distribution (Cannings 1993).

*Richardsonius balteatus* (Richardson, 1836) 741
redside shiner / méné rose (freshwater)

*Tinca tinca* (Linnaeus, 1758) 740
tench / tanche (freshwater, introduced)

Family Catostomidae - suckers / meuniers 730

Nelson (1984) divided the Catostomidae into three subfamilies, the Cycleptinae, the Ictiobinae and the Catostominae. Eschmeyer (1990) did not divide the family.

*Catostomus catostomus* (Forster, 1773) 733
longnose sucker / meunier rouge (freshwater)

An undescribed species related to the longnose sucker, the Salish or Campbell River sucker, *Catostomus* sp., is found in the southwest corner of the lower Fraser Valley, and the Puget Sound area of Washington State (McPhail 1967; 1987). The Salish sucker was assigned Endangered status by COSEWIC in 1986 (R.R. Campbell 1992), and by the AFS (Williams et al. 1989). The BCCDC placed the Salish sucker on the provincial Red List of Endangered and/or Threatened Species, and considered it critically imperilled due to its restricted distribution and habitat degradation due to urban expansion and agricultural pollution (Cannings 1993)

*Catostomus columbianus* (Eigenmann & Eigenmann, 1893) 734
bridgelip sucker / meunier de l'ouest (freshwater)

*Catostomus commersoni* (Lacepède, 1803) 732
white sucker / meunier noir (freshwater)

*Catostomus macrocheilus* Girard, 1857 731
largescale sucker / meunier à grandes écailles (freshwater)

*Catostomus platyrhynchus* (Cope, 1874) 735
mountain sucker / meunier des montagnes (freshwater)

The status of the mountain sucker was reported by R.E. Campbell (1992c), and reviewed by COSEWIC (R.R. Campbell 1992). The presence of several scattered, viable populations, none of which were perceived to be under any threat, indicated that no special status designation was required.

**Order Siluriformes**

Family Ictaluridae - North American freshwater catfishes / barbottes 758

Bailey and Robins (1988a, 1988b) indicated that the *Ameiurus*, considered unavailable under earlier versions of the Code of Zoological Nomenclature as a minor division of a generic name, was available under the 1985 Code. Robins et al. (1991a) included the bullhead catfishes in the genus *Ameiurus*, removed from *Ictalurus*.

*Ameiurus melas* (Rafinesque, 1820) 760
black bullhead / barbotte noir (freshwater, introduced)

*Ameiurus nebulosus* (LeSueur, 1819) 759
brown bullhead / barbotte brune (freshwater, introduced)

## Order Salmoniformes

### Suborder Esocoidei

Family Esocidae - pikes / brochets 768

*Esox lucius* Linnaeus, 1758 769
northern pike / grand brochet (freshwater)

### Suborder Argentinoidei

Nelson (1984) divided this suborder into the superfamilies Argentinoidea (Argentinidae, Bathylagidae and Opisthoproctidae) and Alepocephaloidea (Alepocephalidae and Searsiidae (= Platytroctidae)). I follow the conservative arrangement of Eschmeyer (1990).

Family Argentinidae - argentines / argentines 150

*Nanensia candida* Cohen, 1958 151
bluethroat argentine / argentine à gorge bleue (marine)

Peden (1975) was unable to assign his specimens to a given species, but he later attributed them to *N. candida*. McAllister (1990) placed *N. candida* in the Microstomatidae, the pencilsmelts.

Family Bathylagidae - deepsea smelts / garcettes 152

*Bathylagus milleri* Jordan & Gilbert, 1898 153
stout blacksmelt / grosse garcette (marine)

*Bathylagus ochotensis* Schmidt, 1938 154
popeye blacksmelt / garcette à oreilles (marine)

Hart (1973) used the common name eared blacksmelt.

*Bathylagus pacificus* Gilbert, 1890 155
slender blacksmelt / garcette élancée (marine)

*Bathylagus schmidti* (Rass, 1955) 156
northern smoothtongue / leuroglosse luisant (marine)

Hart (1973) referred to the northern smoothtongue as a subspecies of *Leuroglossus stilbius* Gilbert, 1890. Eschmeyer (1990) listed

*Leuroglossus* as a junior synonym of *Bathylagus*. Peden (1981b) presented evidence for the separation of *schmidti* and *stilbius* as distinct species.

*Bathylagus stilbius* (Gilbert, 1890) 149
southern smoothtongue / leuroglosse du sud (marine)

Dunn (1983) reported the eggs of *B. stilbius* collected from off the west coast of Vancouver Island, south of 51° N, but larvae or adults of this species have not been recorded in the literature north of Oregon. Peden (1990a) included both *B. stilbius* and *B. schmidti* in a list of British Columbia fishes.

Family Opisthoproctidae - spookfishes / revenants 157

*Bathylychnops exilis* Cohen, 1958 641
javelin spookfish / revenant javaline (marine)

Peden (1975) documented the first record of the javelin spookfish from British Columbia waters.

**Dolichopteryx* sp. 158
winged spookfish / revenant ailé (marine)

A single specimen of this undescribed form was collected at CWS Papa (Hart 1973).

*Macropinna microstoma* Chapman, 1939 159
barreleye / vise-en-l'air (marine)

Family Alepocephalidae - slickheads / alépocéphales 642

Begle (1992) suggested that the families Platytroctidae, Leptochilichthyidae, Bathylaconidae and Bathyprionidae were erected based on characters unique to their respective members, which needlessly complicate decisions on monophyly at more inclusive levels. He did not recognize these groups, and included all of their members in a single family, the Alepocephalidae. Nelson (1984) included the latter three as subfamilies within the Alepocephalidae. Eschmeyer (1990) recognized the first two families as valid, but included the latter two in the Alepocephalidae. I have used Eschmeyer's classification.

*Talismania bifurcata* (Parr, 1951) 643
threadfin slickhead / alépocéphale filamenteux (marine)

The threadfin slickhead was first reported from British Columbia waters by Peden (1975).

Family Platytroctidae - tubeshoulders / circés 172

**Holtbyrnia innesi* (Fowler, 1934) 644
Innes' tubeshoulder / circé d'Innès (marine)

Recorded by Peden et al. (1985) from CWS Papa as *H. macrops* Maul, 1957, but later re-identified as *H. innesi* (McAllister 1990). The vernacular names follow McAllister (1990).

*Holtbyrnia latifrons* Sasanov, 1976 645
streaklight tubeshoulder / circé a branchies longues (marine)

McAllister (1990) and Peden (1990a) included the streaklight tubeshoulder in their lists of British Columbia fishes.

*Maulisia argipalla* Matsui & Rosenblatt, 1979 646
pitted tubeshoulder / circé troué (marine)

Peden (1975) first reported this species from British Columbia waters as *Maulisia mauli* Parr, 1960. Jean et al. (1981) reported its re-identification as *M. argipalla*.

*Sagamichthys abei* Parr, 1953 173
shining tubeshoulder / circé luisant (marine)

Peden (1975) provided confirmatory records of the shining tubeshoulder in British Columbia waters.

**Suborder Salmonoidei**

Nelson (1984) divided the Salmonoidei into the superfamilies Osmeroidea (Osmeridae, Plecoglossidae, Salangidae and Sundasalangidae), Galaxioidea (Retropinnidae and Galaxiidae) and Salmonoidea (Salmonidae). I follow the more conservative classification of Eschmeyer (1990).

Family Osmeridae - smelts / éperlans 136

Nelson (1984) divided the Osmeridae into the subfamilies Hypomesinae (for *Hypomesus* and *Mallotus*) and Osmerinae (for *Allosmerus*, *Osmerus*, *Spirinchus* and *Thaleichthys*). He assigned the Japanese species *Plecoglossus altivelis* to its own family, the Plecoglossidae. Begle (1991) included *Plecoglossus* in the Osmeridae, which he divided into two subfamilies: the monotypic Thaleichthyinae (for *Thaleichthys pacificus*) and the Osmerinae. The second subfamily was divided into two tribes: the Hypomesini (for *Allosmerus*, *Hypomesus*, *Mallotus* and *Spirinchus*) and the Plecoglossini (for *Osmerus* and *Plecoglossus*). I follow the more conservative classification used by Eschmeyer (1990).

*Allosmerus elongatus* (Ayres, 1854) 138
whitebait smelt / éperlan blanchaille (marine)

*Hypomesus pretiosus* (Girard, 1855) 139
surf smelt / éperlan argenté (marine, euryhaline)

Hart (1973) placed North American populations in the subspecies *H. p. pretiosus*, distinct from the Asian subspecies, *H. p. japonicus* (Brevoort, 1856).

*Mallotus villosus* (Müller, 1777) 141
capelin / capelan (marine)

Jean et al. (1981) listed the British Columbia population as the subspecies *M. v. catervarius* (Pennant, 1784), but this distinction was questioned by McAllister (1990).

*Osmerus mordax* (Mitchell, 1814) 143
rainbow smelt / éperlan arc-en-ciel (anadromous)

McPhail and Lindsey (1970) referred to this species as the boreal smelt, *Osmerus eperlanus* complex (Linnaeus, 1758), and presented a summary of the taxonomy to that point. They used the French vernacular éperlan du nord. Hart (1973) assigned British Columbia populations to the subspecies *O. m. dentex* (Steindachner, 1870).

*Spirinchus starksi* (Fisk, 1913) 145
night smelt / éperlan nocturne (marine)

*Spirinchus thaleichthys* (Ayres, 1860) 146
longfin smelt / éperlan d'hiver (anadromous, freshwater)

A landlocked population from Harrison Lake, British Columbia, referred to as the pygmy longfin smelt, is of interest to COSEWIC, and may be listed as a Vulnerable species (R.R. Campbell 1992). Its taxonomic status requires review (McAllister 1990). The BCCDC considered populations of longfin smelt in Harrison and Pitt Lakes to be a separate species, placed them on the provincial Red List of Endangered and/or Threatened Species, and considered them critically imperilled due to their restricted distributions (Cannings 1993).

*Thaleichthys pacificus* (Richardson, 1836) 148
eulachon / eulakane (anadromous)

Family Salmonidae - salmonids / saumons 106

Nelson (1984) briefly discussed the wide biological diversity within this family, and commented that this diversity, like that exhibited by the gasterosteids, cannot be adequately expressed in the current taxonomy, within the limits of binomial nomenclature.

I follow the subfamilial classification of Nelson (1984) and Eschmeyer (1990).

Subfamily Coregoninae - whitefishes / corégones 707

*Coregonus artedii* complex LeSueur, 1818 715
lake cisco / cisco de lac (freshwater)

McPhail and Lindsey (1970) refer to a species complex due to widespread morphological variation and the presence of more than one form in certain bodies of water which may be acting as biological species.

Clarke (1980) recorded an introduced population of lake cisco in eastern British Columbia. Peden (1990b) included *artedii* in his list of British Columbia freshwater fishes. The lake cisco is known in British Columbia only from Maxhamish Lake, in the Liard drainage (Cannings 1993).

The BCCDC considered the lake cisco to be critically imperilled in British Columbia due to its restricted range, and placed it on the provincial Red List of Endangered and/or Threatened Species (Cannings 1993).

*Coregonus clupeaformis* complex (Mitchell, 1818) 711
lake whitefish / grand corégone (freshwater)

McPhail and Lindsey (1970) recorded the humpback whitefish, *C. clupeaformis*, from northern British Columbia, but the other members of the complex, *C. pidschian* (Gmelin, 1788) and *C. nelsoni* (Bean 1884), the latter a possible hybrid, were not reported from British Columbia. Lee (1980) recorded *C. pidschian* and intermediates ("*nelsoni*") from sites along the northern border of British Columbia, but questioned the validity of the cryptic species. Because of the confused taxonomy in the group, both in North America and Asia, the designation of a species complex is advisable.

The Squanga whitefish, *Coregonus* sp., is an undescribed species endemic to four small lakes in the Yukon and Alsek drainages of southwestern Yukon Territory, where it is sympatric with *C. clupeaformis*. It is possible that this species is present in these drainages in British Columbia, though not detected. Bodaly et al. (1988) recommended Rare status to COSEWIC for the Squanga whitefish. The Rare category was

changed to Vulnerable in 1988 (R.R. Campbell 1992). McAllister et al. (1985) listed the Squanga whitefish as a Threatened species.

Two forms of lake whitefish were known from Dragon Lake, near Quesnel, and are referred to as the Dragon Lake whitefish, *Coregonus* sp. by some authors. These forms were exterminated during lake rehabilitation for sport fish management, before they could be critically studied (Lindsey et al. 1970).

*Coregonus nasus* (Pallas, 1776) 712
broad whitefish / corégone tschir (freshwater)

The broad whitefish ranges through Arctic Russia and Alaska and the Yukon and Northwest Territories. It is found only in Teslin Lake, in the Yukon River dranage in British Columbia (Cannings 1993).

The BCCDC considered British Columbia populations of the broad whitefish to be critically imperilled, and placed the species on the provincial Red List of Endangered and/or Threatened Species (Cannings 1993).

*Coregonus sardinella* Valenciennes, *in* Cuvier & Valenciennes, 1848 713
least cisco / cisco sardinelle (freshwater)

McPhail and Lindsey (1970) referred to the anadromous and non-migratory forms of *C. sardinella* as a species complex. The form found in British Columbia is the smaller, non-migratory one.

The least cisco is found in Arctic coastal waters and rivers draining into the Arctic Ocean and Bering Sea in Russia, Siberia, Alaska and Canada. It is known from only Atlin, Teslin and Swan Lakes, all in the Yukon River Drainage, in British Columbia (Cannings 1993).

The BCCDC considered British Columbia populations of the least whitefish to be imperilled, and placed this species on the provincial Red List of Endangered and/or Threatened Species, although they are considered to be common on a global scale (Cannings 1993).

*Prosopium coulteri* (Eigenmann & Eigenmann, 1892) 710
pygmy whitefish / ménomini pygmée (freshwater)

The pygmy whitefish is currently under review by COSEWIC to determine if special status is required (R.R. Campbell 1992). The BCCDC accorded full specific status (as *Prosopium* sp.) to populations in McCleese and McClure Lakes, and used the common name giant pygmy whitefish. The BCCDC placed these populations on the provincial Red List of Endangered and/or Threatened Species, and considered them critically imperilled due to their restricted distributions (Cannings 1993).

*Prosopium cylindraceum* (Pallas, *in* Pennant, 1784) 708
round whitefish / ménomini rond (freshwater)

*Prosopium williamsoni* (Girard, 1856) 709
mountain whitefish / ménomini des montagnes (freshwater)

*Stenodus leucichthys* (Güldenstadt, 1772) 714
inconnu / inconnu (anadromous, freshwater)

McPhail and Lindsey (1970) assigned North American and Siberian populations of the inconnu to the subspecies *S. l. nelma* (Pallas, 1776), distinct from the subspecies *S. l. leucichthys*, found in the drainages of the Caspian Sea.

Subfamily Thymallinae - graylings / ombres 718

*Thymallus arcticus* (Pallas, 1776) 719
arctic grayling / ombre arctique (freshwater)

Some authors reduce the present species to a subspecies of *Thymallus thymallus* (McAllister 1990).

Subfamily Salmoninae - salmon and trout / saumon et truite 109

Smith and Stearley (1989) provided evidence for the inclusion of rainbow and cutthroat trouts in the genus *Oncorhynchus*. This arrangement was supported by Robins et al. (1991a). Previous authors had placed these species in *Salmo*.

Though McAllister (1990) was technically correct in referring to members of the genus *Salvelinus* under the common name char, I believe that the common names bull trout, brook trout and lake trout are deeply entrenched in common usage. I follow Robins et al. (1991a), and refer to these fish as trout.

*Oncorhynchus* sp. 107
Pacific salmon and western native trouts

*Oncorhynchus clarki* (Richardson, 1836) 127
cutthroat trout / truite fardée (anadromous, freshwater)

Two subspecies of cutthroat trout are generally recognized in British Columbia: the coastal cutthroat trout, *O. c. clarki*, with anadromous and freshwater populations; and the Yellowstone cutthroat trout, *O. c. lewisi* (Girard, 1856), with freshwater populations only (Scott and Crossman 1973). Each of these subspecies was given a unique code in the original file: 127 for *clarki*, and 724 for *lewisi*. I have carried these over in the new file.

*Oncorhynchus gorbuscha* (Walbaum, 1792) 108
pink salmon / saumon rose (anadromous)

*Oncorhynchus keta* (Walbaum, 1792) 112
chum salmon / saumon kéta (anadromous)

*Oncorhynchus kisutch* (Walbaum, 1792) 115
coho salmon / saumon coho (anadromous)

*Oncorhynchus mykiss* (Walbaum, 1792) 128
rainbow trout / truite arc-en-ciel (freshwater)
steelhead trout / truite arc-en-ciel anadrome (anadromous)

Okazaki (1984) synonymized *Salmo gairdneri* Richardson, 1836 with *Salmo mykiss* Walbaum, 1792.

*Oncorhynchus nerka* (Walbaum, 1792) 118
kokanee / kokani (freshwater)
sockeye salmon / saumon rouge (anadromous)

McPhail and Lindsey (1970) used the French name saumon nerka for the anadromous form. They argued against the use of the subspecific name *O. n. kennerlyi* (Suckley, 1862) for the landlocked form.

*Oncorhynchus tshawytscha* (Walbaum, 1792) 124
chinook salmon / saumon quinnat (anadromous)

McPhail and Lindsey (1970) used the French name saumon chinook.

*Salmo salar* Linnaeus, 1758 131
Atlantic salmon / saumon d'Atlantique (anadromous, introduced)

Early introductions to the Pacific coast were not successful. Atlantic salmon are regularly reported as escapees from aquaculture facilities, but successful reproduction has not been recorded.

*Salmo trutta* Linnaeus, 1758 133
brown trout / truite brune (anadromous, freshwater, introduced)

Transplants of brown trout in British Columbia were from non-anadromous stock, but there is at least one record of adult brown trout captured in a stream which had not been planted (Carl et al. 1959, Hart 1973)

*Salvelinus confluentus* (Suckley, 1858) 721
bull trout / omble à tête plate (freshwater)

Cavender (1978) resurrected the species *confluentus*, splitting it from *S. malma*. The AFS listed the bull trout as a species of special concern, potentially threatened by habitat alteration and competition with introduced species (Williams et al. 1989). A report on the status of the bull trout in Canada is under review by COSEWIC, and the species may be listed as Vulnerable (R.R. Campbell 1992).

*Salvelinus fontinalis* (Mitchell, 1815) 723
brook trout / omble de fontaine (freshwater, introduced)

McAllister (1990) assigned northern populations of the brook trout, including those introduced into the Pacific drainages of British Columbia, to the subspecies *S. f. fontinalis*.

*Salvelinus malma* (Walbaum, 1792) 134
Dolly Varden / Dolly Varden (anadromous)

*Salvelinus namayacush* (Walbaum, 1792) 722
lake trout / touladi (freshwater)

## Order Stomiiformes

Nelson (1984) divided the Stomiiformes into two suborders: the Gonostomatoidei (Gonostomatidae and Sternoptychidae) and the Photichthyoidei. The latter suborder was further divided into three superfamilies: the Photichthyoidea (Photichthyidae), the Stomioidea (Chauliodontidae and Stomiidae), and the Astronesthoidea (Astronesthidae, Melanostomiidae, Malacosteidae, and Idiacanthidae). I follow Eschmeyer (1990) in omitting subordinal taxa.

Family Gonostomatidae - bristlemouths / cyclothones 160

*Cyclothone pacifica* Mukhacheva, 1964 161
yellow bristlemouth / cyclothone jaune (marine)

This species was recorded as the veiled anglemouth, *C. microdon* (Günther, 1878), by Hart (1973). Peden (1975) referred these records to *C. pacifica*.

*Cyclothone pallida* Brauer, 1902 647
tan bristlemouth / cyclothone pâle (marine)

Peden et al. (1985) reported specimens of the tan bristlemouth from CWS Papa. Peden and Jamieson (1988) recorded the first verified specimen

from Canadian waters.

*Cyclothone pseudopallida* Mukhacheva, 1964 648
slender bristlemouth / cyclothone mince (marine)

This species was first recorded from British Columbia as *Cyclothone* sp. by Peden (1975) and Jean et al. (1981). Peden et al. (1985) attributed this record to *C. pseudopallida*. Peden and Hughes (1986) provided confirmatory records of the slender bristlemouth in British Columbia.

*Cyclothone signata* Garman, 1899 649
showy bristlemouth / cyclothone prétentieuse (marine)

Peden (1975) first recorded the showy bristlemouth in British Columbia. Peden et al. (1985, from CWS Papa) and Peden and Hughes (1986) provided confirmatory records.

**Gonostoma gracile* Günther, 1878 650
slender fangjaw / gonostome élancé (marine)

The slender fangjaw was recorded from CWS Papa by Jean et al. (1981) and Peden et al. (1985).

Family Sternoptychidae - marine hatchetfishes / haches d'argen 162

Matarese et al. (1989) reported the spurred hatchetfish, *Argyropelecus hemigymnus* Cocco, 1929, the tropical hatchetfish, *A. lynchus* Garmann, 1899, and other unidentified species of larval hatchetfish, from as far north as 48°30'N, which implies that other species may be present in British Columbia waters. Any specimens not exactly matching the description of those listed below should be retained for further examination.

Subfamily Maurolicinae

*Danaphos oculatus* (Garmann, 1899) 651
bottlelight / danaphe (marine)

Peden and Hughes (1986) provide the first records of the species for British Columbia waters.

Subfamily Sternoptychinae

*Argyropelecus sladeni* Regan, 1908 163
lowcrest hatchetfish / hache d'argent mince (marine)

This species was recorded as the silvery hatchetfish, *A. lynchus* Garmann, 1899, by Hart (1973). McAllister (1990) documented the re-identification of British Columbia specimens as *A. sladeni*.

*Sternoptyx pseudobscura* Baird, 1971 652
highlight hatchetfish / hache d'argent à haute épine (marine)

Peden (1975) provided the first record of the highlight hatchetfish in British Columbia waters.

Family Phosichthyidae - lightfishes / poissons étiolés 653

Nelson (1984) spelled the family name Photichthyidae, based on the genus name *Photichthys*. Eschmeyer (1990) showed that the original spelling of *Phosichthys* was correct, and that the family name should be Phosichthyidae.

*Ichthyococcus elongatus* Imai, 1941 654
slim lightfish / poisson étiolé élancé (marine)

Peden and Hughes (1986) documented the first British Columbia specimen of the slim lightfish, from foreign literature.

Family Chauliodontidae - viperfishes / chauliodes 170

*Chauliodus macouni* Bean, 1890 171
Pacific viperfish / chauliode féroce (marine)

Family Melanostomiidae - scaleless black dragonfishes / dragons-brochets 164

*Bathophilus flemingi* Aron & McCrery, 1958 165
highfin dragonfish / dragon à haute nageoire (marine)

*Opostomias mitsuii* Imai, 1941 166
pitgum dragonfish / dragon japonais (marine)

The pitgum dragonfish was first reported from British Columbia waters by Peden (1975). I have two specimens from Canadian waters off southwestern Vancouver Island, which are presently stored at the Pacific Biological Station.

*Tactostoma macropus* Bolin, 1939 167
longfin dragonfish / dragon à longues nageoires (marine)

Family Malacosteidae - loosejaws / dragues 168

*Aristostomias scintillans* (Gilbert, 1915) 169
shining loosejaw / drague scintillante (marine)

**Malacosteus danae* (Regan & Trewavas, 1930) 655
shortnose loosejaw / drague à nez court (marine)

The shortnose loosejaw was reported from CWS Papa by Jean et al. (1981) and Peden et al. (1985). McAllister (1990) suggested that *M. danae* may be a junior synonym of *M. niger* Ayres, 1849.

**Order Aulopiformes**

Jean et al. (1981) and Peden (1990a) did not recognize this order, and included the following five families in the Myctophiformes.

**Suborder Aulopoidei**

Family Scopelarchidae - pearleyes / yeux-perlés 178

*Benthalbella dentata* (Chapman, 1939) 179
northern pearleye / oeil-perlé du nord (marine)

**Benthalbella linguidens* (Mead & Bohlke, 1953) 657
longfin pearleye / oeil-perlé à longues nageoires (marine)

Reported from CWS Papa by Jean et al. (1981) and Peden et al. (1985).

Family Notosudidae - waryfishes / guetteurs 183

*Scopelosaurus harryi* (Mead, *in* Mead & Taylor, 1953) 184
scaly waryfish / lanterne-lézard écaillée (marine)

Jean et al. (1981) placed *Scopelosaurus* in the Scopelosauridae. McAllister (1990) indicated that Notosudidae had priority over Scopelosauridae. Hart (1973) and Peden (1975) used the vernacular scaly wearyfish.

**Suborder Alepisauroidei**

Family Synodontidae - lizardfishes / poissons-lézards 658

Subfamily Synodontinae

*Synodus lucioceps* (Ayres, 1855) 659
smallscale lizardfish / poisson-lézard à petites écailles (marine)

McAllister (1990) reported the first British Columbia record from near Bamfield, without detailed documentation. He felt that the common name used by Eschmeyer and Herald (1983), California lizardfish, was inappropriate, as the species is recorded from Mexico to British Columbia, and proposed the vernacular smallscale lizardfish. Peden (1990a) included the smallscale lizardfish in his list of British Columbia fishes.

Family Paralepididae - barracudinas / lussions 180

*Lestidiops ringens* (Jordan & Gilbert, 1881) 181
slender barracudina / lussion long (marine)

Peden et al. (1985) stated that British Columbia specimens corresponded well to descriptions of *Lestidiops elongatum* (Ege, 1953), but they indicated that more study of southern populations was required before deciding on the status of this taxon.

*Notolepis rissoi* (Bonaparte, 1840) 182
ribbon barracudina / lussion blanc (marine)

Hart (1973) assigned British Columbia specimens to the subspecies *N. r. rissoi*.

*Paralepis atlantica* Kroyer, 1868 660
duckbill barracudina / lussion à bec de canard (marine)

Peden (1979a) and Peden et al. (1985) reported the species from CWS Papa. Peden and Jamieson (1988) recorded the first verified specimens from Pacific Canadian waters. British Columbia specimens were attributed to the subspecies *P. a. atlantica* by McAllister (1990). Hubbs et al. (1979) used the common name northern duckbill barracudina for this subspecies.

Family Anotopteridae - daggertooth / pharaons 176

*Anotopterus pharao* Zugmayer, 1911 177
daggertooth / pharaon (marine)

Family Alepisauridae - lancetfishes / cavalos 174

*Alepisaurus ferox* Lowe, 1833 175
longnose lancetfish / cavalo féroce (marine)

**Order Myctophiformes**

Family Neoscopelidae - blackchins / mentons noirs 661

*Neoscopelus macrolepidotus* Johnson, 1863 662
glowingfish / lanterne à grandes écailles (marine)

Jean et al. (1981) and Peden and Hughes (1986) first reported and documented, respectively, the glowingfish from British Columbia waters.

Family Myctophidae - lanternfishes / poissons-lanternes 185

Nelson (1984) divided the Myctophidae into two subfamilies: the Myctophinae (e.g. *Protomyctophum* and *Tarletonbeania*), and the Lampanyctinae (e.g. *Ceratoscopelus, Diaphus, Lampanyctus, Notoscopelus* and *Stenobrachius*). Eschmeyer (1990) did not recognize subfamilies within the Myctophidae.

*Ceratoscopelus townsendi* (Eigenmann & Eigenmann, 1889) 187
dogtooth lampfish / lampe à sourcils lumineux (marine)

Hart (1973) included this species based on a record from west of the Canadian 200-mile limit. Peden and Hughes (1986) documented Canadian records of the dogtooth lampfish which Hart had overlooked.

*Diaphus theta* Eigenmann & Eigenmann, 1890 189
California headlightfish / lampe-de-tête à taches blanches (marine)

*Lampadena urophaos* Paxton, 1963 188
sunbeam lampfish / lampe à rayon de soleil (marine)

The first British Columbia collection of the sunbeam lampfish was documented by Peden and Hughes (1986), who assigned it to the subspecies *L. u. urophaos*.

**Lampanyctus jordani* Gilbert, 1915 190
brokenline lanternfish / lanterne à ligne brisée (marine)

The brokenline lanternfish was recorded from CWS Papa by Jean et al. (1981), with detailed documentation by Peden et al. (1985) and Peden and Hughes (1986).

*Lampanyctus regalis* (Gilbert, 1892) 191
pinpoint lanternfish / lampe royale (marine)

*Lampanyctus ritteri* Gilbert, 1915 193
broadfin lanternfish / lampe à grandes nageoires (marine)

*Notoscopelus japonicus* (Tanaka, 1908) 195
Japanese lanternfish / lanterne japonaise (marine)

Hart (1973) recorded this species as the patchwork lampfish, *N. resplendens* (Richardson, 1845). Jean et al. (1981) used the vernacular patchwork lanternfish. Peden and Hughes (1986) provided the first verified record for British Columbia waters. Peden (1990a) used the vernacular spiny lanternfish.

*Protomyctophum crockeri* (Bolin, 1939) 192
penlight fish / télescope californien (marine)

Peden and Hughes (1986) documented the first record for British Columbia waters. McAllister (1990) felt that the common name California

flashlightfish was too long and geographically misleading, and coined the vernacular penlight fish. Peden (1990a) used the vernacular southern flashlightfish.

*Protomyctophum thompsoni* (Chapman, 1944) 196
bigeye flashlightfish / télescope à grands yeux (marine)

McAllister (1990) coined the vernacular bigeye flashlightfish to distinguish this species from others in the genus. Peden (1990a) used the vernacular northern flashlightfish.

*Stenobrachius leucopsarus* (Eigenmann & Eigenmann, 1890) 198
northern lanternfish / lanterne du nord (marine)

*Stenobrachius nannochir* (Gilbert, 1890) 199
garnet lanternfish / lanterne grenat (marine)

Peden (1975) provided the first British Columbia record of the garnet lanternfish. Wisner (1976) assigned Canadian populations to the subspecies *S. n. nannochir*.

*Symbolophorus californiensis* (Eigenmann & Eigenmann, 1889) 200
bigfin lanternfish / lanterne à grandes nageoires (marine)

McAllister (1990) assigned British Columbia specimens to the subspecies *S. c. californiensis*.

*Tarletonbeania crenularis* (Jordan & Gilbert, 1880) 202
blue lanternfish / lanterne bleue (marine)

*Tarletonbeania taylori* Mead, 1953 201
taillight lanternfish / lanterne feu-arrière (marine)

Peden et al. (1985) reviewed the taxonomic status of *crenularis* and *taylori*. They reported both forms from CWS Papa, and recommended recognizing both as full species (*fide* Wisner (1976)). Peden (1990a) recorded *taylori* in a list of British Columbia fishes, as the northern blue lanternfish, as he had used the vernacular taillight lanternfish for *Lampadena urophaos*.

**Order Percopsiformes**

Nelson (1984) recognized two extant suborders within the Percopsiformes: the Percopsoidei (Percopsidae) and the Aphredoderoidei (Aphredoderidae and Amblyopsidae). Eschmeyer (1990) did not recognize suborders within the Percopsidae.

Family Percopsidae - troutperches / perches-truites 778

*Percopsis omiscomaycus* (Walbaum, *in* Artedi, 1792) 779
troutperch / omisco (freshwater)

**Order Gadiformes**

Family Macrouridae - grenadiers / grenadiers 249

Subfamily Macrourinae

*Albatrossia pectoralis* (Gilbert, 1891) 256
pectoral rattail / grenadier pectoral (marine)

Hart (1973), Eschmeyer and Herald (1983), Peden et al. (1985) and Peden (1990a) recorded this species in the genus *Coryphaenoides*. Iwamoto and Sazonov (1988) considered *Albatrossia* a valid genus. Hubbs et al. (1979) and Eschmeyer and Herald (1983) used the common name giant grenadier. McAllister (1990) and Robins et al. (1991a) recorded *pectoralis* in *Albatrossia*.

*Coryphaenoides acrolepis* (Bean, 1883) 251
roughscale grenadier / grenadier à écailles rudes (marine)

Hubbs et al. (1979) and Eschmeyer and Herald (1983) used the vernacular Pacific grenadier for *C. acrolepis*.

*Coryphaenoides armatus* (Hector, 1875) 252
russet grenadier / grenadier roux (marine)

Iwamoto and Stein (1974) recorded *C. armatus* from British Columbia waters. Hart (1973) recorded this species as the smoothscale rattail, *Coryphaenoides cyclolepis* (Gilbert, 1895). *C. cyclolepis* is a junior synonym of *C. armatus* (Iwamoto and Stein 1974). McAllister (1990) listed this species as *Nematonurus armatus* (Hector, 1875). Iwamoto and Stein (1974) considered *Nematonurus* to be a subgenus of *Coryphaenoides*. Jean et al. (1981) and Peden (1990a) used the vernacular abyssal grenadier.

*Coryphaenoides cinereus* (Gilbert, 1893) 250
popeye / grenadier cendré (marine)

The popeye was first recorded from British Columbia waters by Iwamoto and Stein (1974).

*Coryphaenoides filifer* (Gilbert, 1895) 254
filamented rattail / grenadier filamenté (marine)

Hart (1973) recorded this species as *Coryphaenoides filifera* (Gilbert, 1895). Hubbs et al. (1979) used the common name threadfin grenadier.

*Coryphaenoides leptolepis* Günther, 1877 253
ghostly grenadier / grenadier à écailles minces (marine)

*C. leptolepis* was first recorded from British Columbia waters by Iwamoto and Stein (1974), who placed it in the subgenus *Chalinura*.

*Coryphaenoides liocephalus* (Günther, 1887) 255
bearded rattail / grenadier barbu (marine)

Peden (1990a) did not include *C. liocephalus* in his list of British Columbia fishes. Iwamoto and Stein (1974) and Jean et al. (1981) indicated that this species may be synonymous with *C. leptolepis*. It is included here for completeness, until the synonymy is properly documented.

*Nezumia stelgidolepis* (Gilbert, 1891) 257
lamp grenadier / grenadier-lampe (marine)

Iwamoto and Stein (1974) recorded a single specimen of the lamp grenadier from off Vancouver Island, the only British Columbia record. It is considered rare north of California, and any specimens encountered should be saved. Hubbs et al. (1979) used the common name California grenadier.

Family Moridae - deepsea cods / mores 219

*Antimora microlepis* Bean, 1890 220
Pacific flatnose / antimore à petites écailles (marine)

Hart (1973) recorded this species as *Antimora rostrata* (Günther, 1878). Small (1981) showed that the north Pacific species is *A. microlepis*, and that *rostrata* is found in the southeastern Pacific, Southern Ocean and Atlantic Ocean.

**Halargyreus johnsoni* Günther, 1862 223
dainty mora / more délicat (marine)

Peden et al. (1985) reported the dainty mora from CWS Papa.

Family Melanonidae - arrowtails / mores noirs 663

*Melanonus zugamayeri* Norman, 1930 664
arrowtail / more noir (marine)

Peden (1975) first recorded the arrowtail from British Columbia waters. Peden (1975; 1990a) reported this species using the common name coalfish, but McAllister (1990) outlined reasons for using the vernacular arrowtail.

Family Gadidae - cods / morues 221

*Gadus macrocephalus* Tilesius, 1810 222
Pacific cod / morue du Pacifique (marine)

*Microgadus proximus* (Girard, 1854) 226
Pacific tomcod / poulamon du Pacifique (marine)

Peden (1990a) mistakenly reported *M. proximus* as an introduced species.

*Theragra chalcogramma* (Pallas, 1814) 228
walleye pollock / goberge de l'Alaska (marine)

Family Lotidae - burbots / lottes 774

McAllister (1990) placed *Lota* in the subfamily Lotinae within the Gadidae. Peden (1990b) placed *Lota* in the Gadidae, without subfamilial designation.

*Lota lota* (Linnaeus, 1758) 775
burbot / lotte (freshwater)

Pivnicka (1970) reviewed this species and delineated two subspecies, both of which were present in British Columbia. The subspecies *L. l. lota* (Linnaeus, 1758) was found in the MacKenzie drainage, and *L. l. lacustris* Walbaum, 1792, was found in the Fraser and Columbia drainages.

Family Merlucciidae - merluccid hakes / merlus 224

Subfamily Merlucciinae

*Merluccius productus* (Ayres, 1855) 225
Pacific hake / merlu du Pacifique (marine)

The name Pacific whiting is commonly used in the United States, under approval of the U.S. Food and Drug Administration.

## Order Ophidiiformes

Family Ophidiidae - cuskeels / donzelles 665

Subfamily Neobythitinae

*Spectrunculus grandis* (Günther, 1877) 666
giant cuskeel / donzelle géante (marine)

Jean et al. (1981) first recorded this species from British Columbia waters. Other authors have placed *S. grandis* in the genus *Parabassogigas*, however, *Parabassogigas* is synonymous with *Spectrunculus* (McAllister 1990). Peden (1990a) placed *S. grandis* in the Bythitidae.

Family Bythitidae - livebearing brotulas / donzelles vivipares 229

Subfamily Brosmophycinae

*Brosmophycis marginata* (Ayres, 1854) 230
red brotula / donzelle rouge (marine)

## Order Batrachoidiformes

Family Batrachoididae - toadfishes / poissons-grenouilles 206

Subfamily Porichthyinae

*Porichthys notatus* Girard, 1854 207
plainfin midshipman / pilotin tachetée (marine)

## Order Lophiiformes

### Suborder Ceratioidei

Family Oneirodidae - dreamers / rêveurs 213

*Chaenophryne melanorhabdus* Regan & Trewavas, 1932 214
smooth dreamer / rêveur sombre (marine)

Hart (1973) and Jean et al. (1981) reported a British Columbia specimen under the name *C. parviconus* Regan & Trewavas, 1932. *C. melanorhabdus* had been considered a junior synonym of *C. parviconus* (Peden et al. 1985, McAllister 1990).

**Oneirodes bulbosus* Chapman, 1939 218
bulbous dreamer / queue-de-rêve bulbeuse (marine)

Peden et al. (1985) indicated that *O. bulbosus* is the correct taxon for British Columbia records, not the *O. eschrichti* Lütken, 1871 species group, which was the designation used by Hart (1973) and Jean et al. (1981). Peden et al. (1985) recorded this species from CWS Papa, and indicated that British Columbia records require confirmation.

*Oneirodes thompsoni* (Schultz, 1934) 216
spiny dreamer / queue-de-rêve épineuse (marine)

Hart (1973) recorded this species as *O. acanthias* (Gilbert, 1915). Pietsch (1974) distinguished *thompsoni* from *acanthias*.

**Order Gobiesociformes**

Family Gobiesocidae - clingfishes / crampons 209

Subfamily Gobiesocinae

*Gobiesox maeandricus* (Girard, 1858) 210
northern clingfish / crampon bariolé (marine)

*Rimicola muscarum* (Meek & Pierson, 1895) 212
kelp clingfish / crampon de varech (marine)

**Order Atheriniformes**

Family Atherinidae - silversides / capucettes 260

Subfamily Atherinopsinae

*Atherinops affinis* (Ayres, 1860) 261
topsmelt / capucette barrée (marine)

Hart (1973) assigned the only known British Columbia specimen to the northernmost subspecies recognized on the Pacific coast of North America, *A. a. affinis*. This subspecies was referred to as the San Francisco topsmelt by Hubbs et al. (1979). McAllister (1990) followed Hart in assigning subspecific status.

**Order Beloniformes**

**Suborder Exocetoidei**

Family Scomberesocidae - sauries / balaous 258

*Cololabis saira* (Brevoort, 1856) 259
Pacific saury / balaou japonais (marine)

**Order Lampriformes**

**Suborder Lamproidei**

Family Lampridae - opahs 268

*Lampris guttatus* (Brünnich, 1788) 269
opah / opah (marine)

Hart (1973) recorded this species as *L. regius* (Bonaterre, 1788), which is considered a junior synonym for *L. guttatus* (Palmer and Oelschläger 1976).

**Suborder Trachipteroidei**

Family Trachipteridae - ribbonfishes / trachyptères 270

*Trachipterus altivelis* Kner, 1859 271
king-of-the-salmon / roi-des saumons (marine)

**Order Beryciformes**

**Suborder Stephanoberycoidei**

Family Melamphaidae - ridgeheads / poissons-heaumes 262

Hubbs et al. (1979) used the common name bigscales to refer to the species in this family.

*Melamphaes lugubris* Gilbert, 1890 263
highsnout ridgehead / heaume triste (marine)

*Poromitra crassiceps* (Günther, 1878) 264
crested ridgehead / heaume à crête (marine)

Eschmeyer and Herald (1983) used the common name crested bigscale.

*Scopelogadus mizolepis* (Günther, 1878) 265
soft melamphid / heaume à deux épines (marine)

Peden and Jamieson (1988) recorded the first verified specimen from Canadian waters, and assigned it to the subspecies *S. m. bispinosus* (Gilbert, 1915). McAllister (1990) used the vernacular twospine bigscale. Peden (1990a) used the common name flabby ridgehead for this species.

**Order Cetomimiformes**

**Suborder Cetomimoidei**

Family Cetomimidae - whalefishes / poissons-baleines 667

**Gyrinomimus* sp. 668
flabby whalefish / poisson-baleine flasque (marine)

This undescribed species was recorded by Peden et al. (1985) at CWS Papa.

**Order Zeiformes**

Family Oreosomatidae - oreos / oréos 266

*Allocyttus folletti* Myers, 1960 267
oxeye oreo / oréo occulé (marine)

Hart (1973) listed the first Canadian specimen and a CWS Papa specimen, both of which were juveniles, as *Allocyttus* sp. Peden et al. (1985)

recorded this species from CWS Papa as *Allocyttus* sp., though they indicated their specimens were of the same species recorded from British Columbia waters by Nagtegaal (1983), *A. folletti*. Peden (1990a) erroneously included *A. verrucossus* (Gilchrist) in his list of British Columbia fishes, not *A. folletti* (A.E. Peden, pers. comm.).

**Order Gasterosteiformes**

Family Gasterosteidae - sticklebacks and tubesnouts 771

Nelson (1984), McAllister (1990), Peden (1990a; b) and others have emphasized the significance of morphological differences between the sticklebacks and tubesnouts and placed them in separate families, the Gasterosteidae and the Aulorhynchidae. I follow Eschmeyer (1990) and Robins et al. (1991a) in attributing them subfamilial status within the Gasterosteidae.

Subfamily Gasterosteinae - sticklebacks / épinoches 275

*Culaea inconstans* (Kirtland, 1841) 772
brook stickleback / épinoche à cinq épines (freshwater)

*Gasterosteus aculeatus* complex Linnaeus, 1758 276
threespine stickleback / épinoche à trois épines
(freshwater, anadromous)

Hubbs et al. (1979) recognized three subspecies of threespine stickleback in California: *G. a. aculeatus* Linnaeus, 1758, the armoured threespine stickleback; *G. a. microcephalus* Girard, 1854, the semiarmoured threespine stickleback; and *G. a. williamsoni* Girard, 1854, the unarmoured stickleback.

Four nominal species related to the threespine stickleback, and endemic to British Columbia, were assigned special status by COSEWIC, the BCCDC and/or the AFS.

Moodie (1984) reviewed the status of the giant stickleback (*Gasterosteus* sp.), endemic to Mayer Lake, Queen Charlotte Islands. The giant stickleback was listed as a Rare species (now termed Vulnerable) in 1980 by COSEWIC (R.R. Campbell 1992), and a Threatened species by the AFS (Williams et al. 1989). Giant black sticklebacks are also present in Drizzle Lake, Graham Island, and Misty Lake, northern Vancouver Island (Lavin and McPhail 1993).

Reimchen (1984) reviewed the status of unarmoured sticklebacks (*Gasterosteus* sp.), endemic to Boulton, Rouge and Serendipity Lakes, Queen Charlotte Islands. The unarmoured stickleback was listed as a Rare species by COSEWIC (now termed Vulnerable) in 1983 (R.R. Campbell 1992), and was listed as a species of special concern by the AFS (Williams et al. 1989).

McPhail (1989) reviewed the status of the Enos Lake stickleback (*Gasterosteus* sp.), endemic to Enos Lake, Vancouver Island. The Enos LAke stickleback was listed as a Threatened species by COSEWIC in 1988 (R.R. Campbell 1992), and by the AFS (Williams et al. 1989).

The Texada, or Paxton Lake stickleback (*Gasterosteus* sp.), endemic to Texada Island, Strait of Georgia (McPhail 1992), is of interest to COSEWIC, and may be listed as Vulnerable (R.R. Campbell 1992).

The BCCDC considered the giant black stickleback and the Enos Lake and

Paxton Lake limnetic/benthic species pairs to be critically imperilled, and placed them on the provincial Red List of Endangered and/or Threatened Species, as their endemicity made them particularly vulnerable to extinction. They also placed on the Red List critically imperilled limnetic/benthic species pairs from Spectacle (Balkwill), Emily, and Priest Lakes on Texada Island, and Hadley Lake on Lesqueti Island (Cannings 1993).

*Pungitius pungitius* (Linnaeus, 1758) 773
ninespine stickleback / épinoche à neuf épines (freshwater)

McPhail and Lindsey (1970) reported the ninespine stickleback from Fort Nelson, B.C. The BCCDC considered British Columbia populations of the ninespine stickleback to be critically imperilled due to their limited distribution, and placed it on the provincial Red List of Endangered and/or Threatened Species (Cannings 1993).

Subfamily Aulorhynchinae - tubesnouts / trompes 273

*Aulorhynchus flavidus* Gill, 1861 274
tubesnout / trompe (marine)

**Order Syngnathiformes**

**Suborder Syngnathoidei**

Family Syngnathidae - pipefishes / syngnathes 277

Subfamily Syngnathinae

*Syngnathus leptorhynchus* Girard, 1854 278
bay pipefish / syngnathe à lignes grises (marine)

Hart (1973) recorded this species as *Syngnathus griseolineatus* Ayres, 1854, which is considered a junior synonym of *S. leptorhynchus* (Fritzche 1980). Hubbs et al. (1979) assigned *griseolineatus* subspecific status, and used the common name northern bay pipefish. Fritzche (1980) demonstrated mosaic morphological variation in populations of *S. leptorhynchus*, and concluded that no single character justified the recognition of more than one species or subspecies. Jean et al. (1981) used the French vernacular hippocampe, which was reserved for the seahorses by McAllister (1990).

**Order Scorpaeniformes**

**Suborder Scorpaenoidei**

Family Scorpaenidae - scorpionfishes / scorpènes 388

Subfamily Sebastinae 389

*Sebastes aleutianus* (Jordan & Evermann, 1898) 394
rougheye rockfish / sébaste à oeil épineaux (marine)

*Sebastes alutus* (Gilbert, 1891) 396
Pacific ocean perch / sébaste à longue mâchoire (marine)

**Suborder Anoplopomatoidei**

Family Anoplopomatidae - sablefishes / morues noires 454

*Anoplopoma fimbria* (Pallas, 1814) 455
sablefish / morue charbonnière (marine)

*Erilepis zonifer* (Lockington, 1880) 458
skilfish / morue bariolée (marine)

**Suborder Hexagrammoidei**

Family Hexagrammidae - greenlings / sourcils 459

I follow Eschmeyer (1990) in the division of subfamilies within the Hexagrammidae. Hart (1973) included all of these species in the Hexagrammidae, but did not delineate subfamilies.

Subfamily Hexagramminae 460

*Hexagrammos decagrammus* (Pallas, 1811) 461
kelp greenling / sourcil de varech (marine)

*Hexagrammos lagocephalus* (Pallas, 1811) 463
rock greenling / sourcil de roche (marine)

Hubbs et al. (1979) referred California populations to the subspecies *H. l. superciliosus* Pallas, 1811, and used the common name American rock greenling.

*Hexagrammos octogrammus* (Pallas, 1811) 464
masked greenling / sourcil masqué (marine)

*Hexagrammos stelleri* Tilesius, 1809 466
whitespotted greenling / sourcil à taches blanches (marine)

Subfamily Pleurogramminae 468

*Pleurogrammus monopterygius* (Pallas, 1811) 469
Atka mackerel / maquereau d'Atka (marine)

Peden (1977) first reported the Atka mackerel from British Columbia waters.

Subfamily Ophiodontinae 465

*Ophiodon elongatus* Girard, 1854 467
lingcod / morue-lingue (marine)

Subfamily Oxylebiinae 462

*Oxylebius pictus* Gill, 1862 470
painted greenling / sourcil à tête pointue (marine)

Subfamily Zaniolepidinae 669

*Zaniolepis latipinnis* Girard, 1857 471
longspine combfish / sourcil à longues épines (marine)

Peden (1990a) and McAllister (1990) considered the combfishes to occupy a distinct family, the Zaniolepididae.

**Suborder Cottoidei**

Family Cottidae - sculpins / chabots 472

Hubbs et al. (1979) split *Rhamphocottus* into its own family, the Rhamphocottidae. Yabe (1985) proposed that the Rhamphocottidae (*Rhamphocottus*) and Hemitripteridae (*Hemitripterus, Blepsias, Nautichthys*) be split from the Cottidae. However, Eschmeyer (1990), McAllister (1990), Peden (1990a) and Robins et al. (1991a) all retained these species within the Cottidae. I have followed their conservative classification.

*Artedius* sp. 480

*Artedius*-type larvae 473

*Artedius fenestralis* Jordan & Gilbert, 1882 478
padded sculpin / chabot rembourré (marine)

*Artedius harringtoni* (Starks, 1896) 479
scalyhead sculpin / chabot à tête écailleuse (marine)

*Artedius lateralis* (Girard, 1854) 481
smoothhead sculpin / chabot à tête lisse (marine)

*Ascelichthys rhodorus* Jordan & Gilbert, 1880 484
rosylip sculpin / chabot à lèvres roses (marine)

*Asemichthys taylori* Gilbert, 1912 485
spinynose sculpin / chabot à museau épineaux (marine)

The spinynose sculpin is of interest to COSEWIC, and may be listed as a Vulnerable species (R.R. Campbell 1992). Peden (1990a) recorded this species as *Radulinus taylori* (Gilbert).

*Blepsias bilobus* Cuvier, *in* Cuvier & Valenciennes, 1829 487
crested sculpin / chabot bilobé (marine)

*Blepsias cirrhosus* (Pallas, 1814) 489
silverspotted sculpin / chabot à taches argentées (marine)

*Chitonotus pugetensis* (Steindachner, 1876) 491
roughback sculpin / chabot à dos rugueux (marine)

*Clinocottus acuticeps* (Gilbert, 1895) 493
sharpnose sculpin / chabot à nez pointu (marine)

*Clinocottus embryum* (Jordan & Starks, 1895) 494
calico sculpin / chabot calico (marine)

*Clinocottus globiceps* (Girard, 1857) 496
mosshead sculpin / chabot à tête moussue (marine)

*Cottus aleuticus* Gilbert, 1895 796
coastrange sculpin / chabot côtier (freshwater, catadromous)

Ricker (1960) first documented a population of coastrange sculpins endemic to Cultus Lake, British Columbia, which are considered by some to be a distinct species derived from *C. aleuticus*, perhaps as an example of neotenic evolution (Cannings 1993). There is also a dwarf limnetic sculpin in found in Lakes Washington and Samammish, near Seattle (Larson and Brown 1975), which may represent parallel evolution

(Cannings 1993).

The Cultus pygmy coastrange sculpin is of interest to COSEWIC, and may be assigned Threatened status (R.R. Campbell 1992). The BCCDC considered this population to be a distinct species, the Cultus Lake sculpin, *Cottus* sp., which was ranked as critically imperilled due to its restricted distribution, and placed on the provincial Red List of Endangered and/or Threatened Species (Cannings 1993).

*Cottus asper* Richardson, 1836 795
prickly sculpin / chabot piquant (freshwater, catadromous)

Hubbs et al. (1979) recognized two subspecies of prickly sculpin in California: *C. a. asper*, the freshwater prickly sculpin; and *C. a. parvus* (Girard, 1854), the coastal prickly sculpin.

*Cottus bairdi* Girard, 1850 800
mottled sculpin / chabot tacheté (freshwater)

In British Columbia, the mottled sculpin is restricted to a portion of the Columbia River drainage. The systematic relationships of various subspecies and populations are not well known. Peden et al. (1989) intimated that only the populations in the Flathead River may be the true *C. bairdi*, and that *C. hubbsi* Bailey and Dimick, 1949, considered a junior synonym by Scott and Crossman (1973), may be a valid species.

A status report on the mottled sculpin is under review by COSEWIC (R.R. Campbell 1992), and the species may be listed as a Vulnerable species. The BCCDC considered the mottled sculpin to be rare or uncommon in British Columbia, and placed it on the provincial Blue List of Sensitive and/or Vulnerable Species (Canninngs 1993).

*Cottus cognatus* Richardson, 1836 799
slimy sculpin / chabot visqueux (freshwater)

*Cottus confusus* Bailey & Bond, 1963 801
shorthead sculpin / chabot à tête courte (freshwater)

Peden and Hughes (1984b) recommended that the shorthead sculpin be listed as a Threatened species, based on its restricted distribution, insufficient scientific information to assess population fluctuations, difficulty in distinguishing *confusus* from sympatric congeners, and the potential for habitat degradation due to a proposed mining development in the watershed. The shorthead sculpin was listed as a Threatened species by COSEWIC in 1983 (Campbell 1991). An updated status report is under review, and the ranking may reduced to Vulnerable (R.R. Campbell 1992). The BCCDC ranked the shorthead sculpin as imperilled or rare in British Columbia, and placed it on the provincial Blue List of Sensitive and/or Vulnerable Species (Cannings 1993).

Peden and Hughes (1984d) Peden et al. (1989) investigated the systematic relationships between two populations of shorthead sculpin and *C. bairdi*, in southern British Columbia.

*Cottus rhotheus* (Smith, 1882) 798
torrent sculpin / chabot de torrent (freshwater)

*Cottus ricei* (Nelson, 1876) 797
spoonhead sculpin / chabot à tête plate (freshwater)

Houston (1990) reviewed the status of the spoonhead sculpin in Canada, and found that populations outside of Lakes Erie and Ontario did not require special protection.

*Enophrys bison* (Girard, 1854) 499
buffalo sculpin / chabot-bison (marine)

*Enophrys lucasi* (Jordan & Gilbert, *in* Jordan and Evermann, 1898) 500
leister sculpin / chabot de leister (marine)

The leister sculpin was first reported from British Columbia waters by Peden and Wilson (1976).

*Gymnocanthus galeatus* (Bean, 1881) 498
armourhead sculpin / chabot casqué (marine)

Peden and Wilson (1976) first reported the armourhead sculpin from Canadian waters.

*Hemilepidotus* sp. 503

*Hemilepidotus hemilepidotus* (Tilesius, 1811) 502
red Irish lord / chabot trilobé rouge (marine)

*Hemilepidotus spinosus* (Ayres, 1855) 504
brown Irish lord / chabot trilobé brun (marine)

*Hemitripterus bolini* (Myers, 1934) 505
bigmouth sculpin / hémitriptère à grand bouche (marine)

Matarese et al. (1989) recorded the shaggy sea raven, *Hemitripterus villosus* (Pallas, 1814) from the Gulf of Alaska, which included the northern part of British Columbia by their definition (54-60°N). Eschmeyer and Herald (1983) recorded the range of *H. villosus* as Japan to the Bering Sea and Kodiak Island.

*Icelinus borealis* Gilbert, 1895 507
northern sculpin / icéline boréale (marine)

*Icelinus burchami* Evermann & Goldsborough, 1907 508
dusky sculpin / icéline obscure (marine)

Peden (1981a) attributed British Columbia specimens of the dusky sculpin to the subspecies *burchami*, and differentiated these from *I. b. fuscescens* Gilbert, 1915, which was found south of Point Conception, California.

*Icelinus filamentosus* Gilbert, 1890 510
threadfin sculpin / icéline filamenteuse (marine)

*Icelinus fimbriatus* Gilbert, 1890 512
fringed sculpin / icęline à grands yeux (marine)

Hart (1973) recorded the frogmouth sculpin, *Icelinus oculatus* Gilbert, 1891, from British Columbia waters. Peden (1984) delineated the geographic ranges of *I. fimbriatus*, found from southern California to Vancouver Island, and *I. oculatus*, which was found only in southern California.

*Icelinus tenuis* Gilbert, 1890 513
spotfin sculpin / icéline à nageoires tachetées (marine)

*Icelus spiniger* Gilbert, 1895 515
thorny sculpin / icéline épineuse (marine)

Peden and Hughes (1986) provided confirmatory records of the thorny sculpin from Canadian waters.

*Jordania zonope* Starks, 1895 516
longfin sculpin / chabot à longues nageoires (marine)

*Leptocottus armatus* Girard, 1854 518
Pacific staghorn sculpin / chabot armé (marine, euryhaline)

Hubbs et al. (1979) recognized two subspecies in California: *L. a. armatus*, the northern Pacific staghorn sculpin; and *L. a. australis* Hubbs, 1921, the southern Pacific staghorn sculpin. British Columbia populations were assigned to the northern subspecies by McAllister (1990).

*Myoxocephalus*-type larvae 524

*Myoxocephalus* sp. 523
stellate sculpin / chabot étiolé (marine)

Peden and Wilson (1976) recorded this undescribed species from British Columbia waters. Peden (1990a) listed these records as *M. scorpius* (Linnaeus), the closest described species, until the new description is complete.

*Myoxocephalus polyacanthocephalus* (Pallas, 1814) 521
great sculpin / grand chaboisseau (marine)

*Nautichthys oculofasciatus* (Girard, 1857) 522
sailfin sculpin / chabot à grand voile (marine)

*Nautichthys robustus* Peden, 1970 525
smallsail sculpin / chabot à petite voile (marine)

*Oligocottus maculosus* Girard, 1856 527
tidepool sculpin / chabot de bâche (euryhaline)

*Oligocottus rimensis* (Greeley, 1901) 529
saddleback sculpin / chabot mantelé (marine)

*Oligocottus snyderi* Greeley, 1901 530
fluffy sculpin / chabot pelucheux (marine)

*Paricelinus hopliticus* Eigenmann & Eigenmann, 1889 532
thornback sculpin / chabot à dos épineux (marine)

*Radulinus* sp. 537

*Radulinus asprellus* Gilbert, 1890 535
slim sculpin / chabot élancé (marine)

*Radulinus boleoides* Gilbert, *in* Jordan & Evermann, 1893 536
darter sculpin / chabot-dart (marine)

*Rhamphocottus richardsoni* Günther, 1874 538
grunt sculpin / chabot grogneur (marine)

*Ruscarius meanyi* (Jordan & Starks, 1895) 483
Puget Sound sculpin / chabot à joue écailleuse (marine)

Hart (1973), and other authors, have recorded this species in the genus *Artedius*. Begle (1989) placed it in the genus *Ruscarius*, as did Robins et al. (1991a).

*Scorpaenichthys marmoratus* (Ayres, 1854) 540
cabezon / chabot marbré (marine)

*Synchirus gilli* Bean, 1889 542
manacled sculpin / chabot emmenoté (marine)

*Triglops macellus* (Bean, 1883) 543
roughspine sculpin / faux-trigle épineux (marine)

*Triglops pingeli* Reinhardt, 1831 545
ribbed sculpin / faux-trigle bardé (marine)

Family Psychrolutidae - fatheads 474

Nelson (1982) divided the Psychrolutidae into two subfamilies: the Cottunculinae, which included *Malacocottus*, *Dasycottus*, *Eurymen* and an undescribed genus; and the Psychrolutinae, which included *Ebinania*, *Psychrolutes* and *Neophrynichthys*.

Subfamily Cottunculinae 475

*Dasycottus setiger* Bean, 1890 497
spinyhead sculpin / chabot à tête épineuse (marine)

*Malacocottus kincaidi* Gilbert & Thompson, 1905 519
blackfin sculpin / chabot à nageoires noires (marine)

Peden (1990a) coined the vernacular blackfin blobsculpin.

*Malacocottus zonurus* Bean, 1890 520
darkfin sculpin / chabot à queue barrée (marine)

Peden (1990a) used the vernacular spinycheek blobsculpin. McAllister (1990) used the common name bartail sculpin, and coined the French vernacular.

Subfamily Psychrolutinae 476

*Psychrolutes paradoxus* Günther, 1861 533
tadpole sculpin / chabot-têtard (marine)

*Psychrolutes phrictus* Stein & Bond, 1978 534
blob sculpin / chabot maculé (marine)

The blob sculpin was first reported from British Columbia waters by Peden and Ostermann (1980). Peden (1990a) referred to *P. phrictus* as the giant blobsculpin.

*Psychrolutes sigalutes* (Jordan & Starks, 1895) 501
soft sculpin / chabot velouté (marine)

Hart (1973) recorded this species as *Gilbertidia sigalutes*. Nelson (1982) synonymized *Gilbertidia* with *Psychrolutes*.

Family Agonidae - poachers / agones 546

*Agonomalus mozinoi* Wilimovsky & Wilson, 1978 547
kelp poacher / agone de varech (marine)

Peden and Wilson (1976) first reported the kelp poacher as an undescribed species taken off Langara Island. Wilimovsky and Wilson (1978) described the species and reported specimens from off Vancouver Island.

*Agonopsis vulsa* (Jordan & Gilbert, 1880) 549
northern spearnose poacher / agone foncé (marine)

Hart (1973) recorded the northern spearnose poacher as *Agonopsis emmelane* (Jordan & Starks, 1895), which is a junior synonym of *vulsa* (Lea and Dempster 1982).

*Anoplagonus inermis* (Günther, 1860) 552
smooth alligatorfish / poisson-alligator lisse (marine)

*Bathyagonus alascanus* (Gilbert, 1895) 553
gray starsnout / astérothèque gris (marine)

Hart (1973) recorded the gray starsnout as *Asterotheca alascana* (Gilbert, 1895). Fitch (1973) synonymized *Asterotheca* with *Bathyagonus*.

*Bathyagonus infraspinatus* (Gilbert, 1904) 554
spinycheek starsnout / astérothèque épineux (marine)

Hart (1973) recorded the spinycheek starsnout as *Asterotheca infraspinata* (Gilbert, 1904).

*Bathyagonus nigripinnis* Gilbert, 1890 557
blackfin poacher / astérothèque à nageoires noires (marine)

*Bathyagonus pentacanthus* (Gilbert, 1890) 556
bigeye poacher / astérothèque à cinq épines (marine)

Hart (1973) recorded the bigeye poacher as *Asterotheca pentacanthus* (Gilbert, 1890).

*Bothragonus swani* (Steindachner, 1876) 558
rockhead / tête-de-roche (marine)

*Hypsagonus quadricornis* (Cuvier, *in* Cuvier & Valenciennes, 1829) 560
fourhorn poacher / agone à quatre cornes (marine)

*Occella impi* Gruchy, 1970 561
pixie poacher / lutin (marine)

R.E. Campbell (1992b) reviewed the status of the pixie poacher for COSEWIC. The species is known from only a single, juvenile specimen taken from Graham Island, Queen Charlotte Islands, in 1957. Insufficient scientific information regarding the species prevented status designation (R.R. Campbell 1992).

*Occella verrucosa* (Lockington, 1879) 562
warty poacher / agone verruqueux (marine)

*Odontopyxis trispinosa* (Lockington, 1879) 564
pygmy poacher / agone pygmée (marine)

*Pallasina barbata* (Steindachner, 1876) 565
tubenose poacher / agone barbu (marine)

Hart (1973) assigned British Columbia populations to the subspecies *P. b. aix* (Starks, 1896), distinct from the Asian subspecies, *P. b. barbata* (Steindachner, 1876), which is distributed from the Bering Sea to Japan. Hubbs et al. (1979) used the common name southern tubenose poacher for *P. b. aix*.

*Podathecus acipenserinus* (Pallas, *in* Tilesius, 1813) 550
sturgeon poacher / agone-esturgeon (marine)

Hart (1973), and most other authors, have included *acipenserinus* in the genus *Agonus*. Robins et al. (1991a) document the placement in

*Podathecus*.

*Sarritor frenatus* (Gilbert, 1893) 563
sawback poacher / agone à dos denté (marine)

Hughes and Kashino (1985) reported the first British Columbia specimens of the sawback poacher.

*Stellerina xyosterna* (Jordan & Gilbert, 1880) 559
pricklebreast poacher / agone à poitrine épineuse (marine)

The pricklebreast poacher was first recorded from British Columbia waters by Barraclough and Peden (1977).

*Xeneretmus latifrons* (Gilbert, 1890) 566
blacktip poacher / agone à dorsale noire (marine)

*Xeneretmus leiops* Gilbert, 1915 555
cutfin poacher / agone à nageoire coupée (marine)

Barraclough and Peden (1977) provided the first records of the cutfin poacher from British Columbia waters. McAllister (1990) used the vernacular smootheye poacher.

*Xeneretmus triacanthus* (Gilbert, 1890) 567
bluespotted poacher / agone à trois épines (marine)

Family Cyclopteridae - lumpfishes and snailfishes / poules de mer et limaces de mer 568

McAllister (1990) and Peden (1990a) accorded the following two subfamilies full familial status, as the Cyclopteridae (lumpfishes) and the Liparidae (snailfishes).

Subfamily Cyclopterinae - lumpfishes / poules de mer 569

*Aptocyclus ventricosus* (Pallas, 1770) 571
smooth lumpsucker / poule de mer ventrue (marine)

*Eumicrotremus orbis* (Günther, 1861) 577
Pacific spiny lumpsucker / petite poule de mer ronde (marine)

Subfamily Liparinae - snailfishes / limaces de mer 578

Stein (1978) reviewed deepwater liparids from off the coast of Oregon and adjacent waters, and proposed that some species, other than those formally listed below, could be present in British Columbia waters. Eight species had recorded ranges which either bracket or terminate near British Columbia waters. These are: *Acantholiparis caecus* Grinols, 1969, *Careproctus cypselurus* (Jordan & Gilbert, *in* Jordan & Evermann, 1898), *Careproctus longifilis* Garman, 1892, *Elassodiscus caudatus* Gilbert, 1915, *Paraliparis mento* Gilbert, 1892, *Paraliparis dactylosus* Gilbert, 1895, *Paraliparis ulochir* Gilbert, 1895 and *Rhinoliparis barbulifer* (Gilbert, 1896).

All deepwater liparids collected in British Columbia waters should be retained for careful identification.

*Acantholiparis opercularis* Gilbert & Burke, 1912 572
spiny snailfish / limace à joue épineuse (marine)

The spiny snailfish was first recorded from British Columbia by Stein (1978).

*Careproctus gilberti* Burke, 1912 573
smalldisk snailfish / limace à petite ventouse (marine)

*Careproctus melanurus* Gilbert, 1891 574
blacktail snailfish / limace à queue noire (marine)

*Careproctus oregonensis* Stein, 1978 576
smallfin snailfish / limace à petites nageoires (marine)

Jean et al. (1981) discussed the first record of the smalldisk snailfish from British Columbia waters.

*Careproctus ovigerum* (Gilbert, 1895) 575
abyssal snailfish / limace de profondeur (marine)

Jean et al. (1981) reported a second record of the abyssal snailfish from British Columbia waters.

*Liparis* sp. 600

*Liparis callyodon* (Pallas, 1811) 579
spotted snailfish / limace tachetée (marine)

*Liparis cyclopus* Günther, 1861 580
ribbon snailfish / limace-ruban (marine)

*Liparis dennyi* Jordan & Starks, 1895 582
marbled snailfish / limace à petits yeux (marine)

*Liparis florae* (Jordan & Starks, 1895) 583
tidepool snailfish / limace de bâche (marine)

*Liparis fucensis* Gilbert, *in* Jordan & Starks, 1895 585
slipskin snailfish / limace de varech (marine)

*Liparis gibbus* Bean, 1881 670
dusky snailfish / limace marbrée (marine)

A.E. Peden (pers. comm.) has specimens from British Columbia which he distinguished meristically from *L. dennyi*, and assigned to *L. gibbus*. Peden (1990a) included the dusky snailfish in his list of British Columbia fishes. Robins et al . (1991a) used the common name variegated snailfish for this species.

*Liparis greeni* (Jordan & Starks, 1895) 594
lobefin snailfish / limace à nageoires lobée (marine)

Hart (1973) recorded this species as *Polypera greeni*. Kido (1988) synonymized the genus *Polypera* with *Liparis*, and his classification was followed by Peden (1990a) and Robins et al. (1991a).

*Liparis mucosus* Ayres, 1855 586
slimy snailfish / limace visqueuse (marine)

*Liparis pulchellus* Ayres, 1855 588
showy snailfish / limace prétentieuse (marine)

*Liparis rutteri* (Gilbert & Snyder, *in* Jordan & Evermann, 1898) 590
ringtail snailfish / limace annalée (marine)

*Lipariscus nanus* Gilbert, 1915 589
pygmy snailfish / limace naine (marine)

The pygmy snailfish was first recorded from British Columbia by Stein (1978). Peden (1981) provided confirmatory records.

*Nectoliparis pelagicus* Gilbert & Burke, 1912 591
tadpole snailfish / limace-têtard (marine)

*Osteodiscus cascadiae* Stein, 1978 587
bigtailed snailfish / limace à tête trouée (marine)

Stein (1978) reported British Columbia specimens of the bigtailed snailfish, when he described the species as new to science.

*Paraliparis cephalus* Gilbert, 1892 592
swellhead snailfish / limace à grosse tête (marine)

The first British Columbia specimen of the swellhead snailfish was reported by Stein (1978).

*Paraliparis deani* Burke, 1912 593
prickly snailfish / limace épineuse (marine)

*Paraliparis latifrons* Garman, 1899 584
bigpored snailfish / limace à front large (marine)

The bigpored snailfish was first reported from British Columbia waters by Jean et al. (1981).

*Paraliparis paucidens* Stein, 1978 581
toothless snailfish / limace édentée (marine)

The toothless snailfish was first recorded from British Columbia waters by Stein and Peden (1979).

*Paraliparis rosaceus* Gilbert, 1890 570
pink snailfish / limace rosâtre (marine)

Peden and Ostermann (1980) reported the first specimens of the pink snailfish from British Columbia waters.

*Rhinoliparis attenuatus* Burke, 1912 671
slim snailfish / limace svelte (marine)

Stein (1978) recorded a specimen of the slim snailfish collected from British Columbia waters.

**Order Perciformes**

**Suborder Percoidei**

Family Percichthyidae - temperate basses / bars 280

*Morone saxatilis* (Walbaum, 1792) 281
striped bass / bar rayé (anadromous, introduced)

A status report is under review by COSEWIC, and a status of Endangered was proposed for the striped bass in Canada (R.R. Campbell 1992).

Family Centrarchidae - sunfishes / crapets 787

Nelson (1984) divided the Centrarchidae into the subfamilies

Centrarchinae and Elassomatinae, the latter for the genus *Elassoma*. Eschmeyer (1990) placed *Elassoma* in its own family, the Elassomatidae.

*Lepomis gibbosus* (Linnaeus, 1758) 790
pumpkinseed / crapet-soleil (freshwater, introduced)

Bailey and Robins (1988a) indicated that the generic name *Lepomis* is feminine, and thus the trivial name should be corrected to *gibbosa*. The matter is under consideration by the International Commission on Zoological Nomenclature, and the present spelling is maintained pending a decision by the Commission (Robins et al. 1991a).

*Micropterus dolomieui* Lacepède, 1802 788
smallmouth bass / achigan à petite bouche (freshwater, introduced)

*Micropterus salmoides* (Lacepède, 1802) 789
largemouth bass / achigan à grande bouche (freshwater, introduced)

McAllister (1990) assigned British Columbia populations to the subspecies *M. s. salmoides* (Lacepède, 1802), which was referred to by Hubbs et al. (1979) as the northern largemouth bass.

*Pomoxis nigromaculatus* (LeSueur, *in* Cuvier & Valenciennes, 1829) 791
black crappie / marigane noire (freshwater, introduced)

Family Percidae - perches / perches 782

Nelson (1984) recognized the subfamilies Luciopercinae (*Stizostedion*, *Zingel* and *Romanichthys*) and Percinae, the latter divided into two tribes: the Percini (*Perca*, *Gymnocephalus* and *Percarina*) and the Etheostomatini (*Percina*, *Ammocrypta* and *Etheostoma*). Eschmeyer (1990) did not subdivide the Percidae.

*Perca flavescens* (Mitchell, 1814) 783
yellow perch / perchaude (freshwater, introduced)

Some authors (e.g. McPhail and Lindsey (1970)) considered North American populations to a subspecies of the European yellow perch, *Perca fluviatilis* Linnaeus, 1758.

*Stizostedion vitreum* (Mitchell, 1818) 784
yellow walleye / doré jaune (freshwater)

Extant populations are attributed to the subspecies *S. v. vitreum*, to separate the yellow walleye from the extinct blue walleye, *S. v. glaucum* Hubbs, 1926, of the Great Lakes (McAllister 1990).

Family Malacanthidae - tilefishes / tiles 282

Subfamily Latilinae

*Caulolatilus princeps* (Jenyns, 1842) 283
ocean whitefish / tile océanique (marine)

Family Echeneidae - remoras / rémoras 284

Earlier authors (e.g. Bailey et al. 1960) placed the remoras in their own order, the Echeneiformes. I follow Nelson (1984) and Eschmeyer (1990) in including the Echeneidae in the order Perciformes. Some authors spell the family name Echeneididae.

*Remora australis* (Bennett, 1840) 285
whalesucker / rémora austral (marine)

**Remora remora* Linnaeus, 1758 793
black remora / rémora noir (marine)

Hughes (1985) reported a black remora, captured 19 km southwest of British Columbia territorial waters.

Family Carangidae - jacks / carangues 286

*Naucrates ductor* (Linnaeus, 1759) 672
pilotfish / fanfre (marine)

Peden and Nagtegaal (1981) first reported the pilotfish from British Columbia waters.

*Seriola lalandi* Valenciennes, *in* Cuvier & Valenciennes, 1833 288
yellowtail / sériole à queue jaune (marine)

Nagtegaal and Farlinger (1981) first reported the yellowtail from British Columbia waters, as *Seriola dorsalis* (Gill, 1863). Peden and Jamieson (1988) supplied confirmatory records, as *S. lalandi dorsalis* (Gill). Hubbs et al. (1979) used the common name California yellowtail for this subspecies. Bailey and Robins (1988a) noted their correction of the spelling of the trivial name from *lalandei*, which was used in Robins et al. (1980).

*Trachurus symmetricus* (Ayres, 1865) 287
jack mackerel / carangue symétrique (marine)

Family Bramidae - pomfrets / castagnoles 289

Nelson (1984) divided the Bramidae into the subfamilies Braminae (*Brama, Eumegistus, Taractes* and *Taractichthys*) and Pteraclinae (*Pteraclis* and *Pterycombus*). Eschmeyer (1990) included all of these genera in the Bramidae, without subfamilial divisions.

*Brama japonica* Hilgendorf, 1878 290
Pacific pomfret / castagnole mince (marine)

*Taractes asper* Lowe, 1843 675
rough pomfret / castagnole rugueuse (marine)

The rough pomfret was first reported from British Columbia waters by Peden and Ostermann (1980), with confirmatory records by Peden and Jamieson (1988).

Family Caristiidae - manefishes / caristes 291

*Caristius macropus* (Bellotti, 1903) 292
manefish / cariste (marine)

Eschmeyer and Herald (1983) used the vernacular veilfin.

Family Sciaenidae - croakers / tambours 293

*Atractoscion nobilis* (Ayres, 1860) 295
white seabass / acoupa blanc (marine)

Hart (1973) recorded the white seabass as *Cynoscion nobilis* (Ayres, 1860). Robins et al. (1980) documented the placement of *nobilis* in *Atractoscion*.

*Genyonemus lineatus* (Ayres, 1855) 294
white croaker / tambour rayé (marine)

Peden and Hughes (1986) provided additional records of the white croaker in British Columbia waters.

*Seriphus politus* Ayres, 1863 676
queenfish / tambour royal (marine)

The queenfish was first reported from British Columbia waters by Peden and Hughes (1986).

Family Kyphosidae - sea chubs / kyphoses

Subfamily Scorpidinae - halfmoons / demi-lune 673

*Medialuna californiensis* (Steindachner, 1875) 674
halfmoon / demi-lune (marine)

Nagtegaal and Farlinger (1981) first recorded the halfmoon from British Columbia waters.

Family Pentacerotidae - armourheads / têtes casquées 296

*Pseudopentaceros wheeleri* Hardy, 1983 297
pelagic armourhead / tête-casquée pélagique (marine)

Peden et al. (1985) reported the pelagic armourhead from CWS Papa. McAllister (1990) indicated that the species had been reported in Canadian waters, and Peden (1990a) included it in his list of British Columbia fishes. Earlier authors had recorded this species as *Pentaceros richardsoni* Smith, 1844, a species which is confined to the southern hemisphere (Hardy 1983).

Family Embiotocidae - surfperches / ditrèmes 298

**Amphistichus koelzi* (Hubbs, 1933) 300
calico surfperch / ditrème calico (marine)

Hart (1973) included the calico surfperch in the British Columbia fish fauna on the basis of a specimen collected 20 miles south of Canadian waters. This species has not been recorded from British Columbia, and I consider it a hypothetical occurrence.

*Amphistichus rhodoterus* (Agassiz, 1854) 301
redtail surfperch / ditrème rosé (marine)

The range of the redtail surfperch in British Columbia was expanded to the entire west coast of Vancouver Island by Peden and Hughes (1986).

*Brachyistius frenatus* Gill, 1862 303
kelp surfperch / perche de varech (marine)

*Cymatogaster aggregata* Gibbons, 1854 304
shiner perch / perche-méné (marine, euryhaline)

Hubbs et al. (1979) recognized two subspecies of shiner perch in California: *C. a. aggregata*, the bay shinerperch, and *C. a. gracilis* Tarp, 1952, the island shinerperch. British Columbia populations were considered to be of the former subspecies. Eschmeyer and Herald (1983) and Robins et al. (1991a) referred to *gracilis* as a local population only, and did not accord it taxonomic status.

*Embiotoca lateralis* Agassiz, 1854 306
striped seaperch / ditrème rayé (marine)

*Hyperprosopon argentum* Gibbons, 1854 307
walleye surfperch / ditrème-vairon (marine)

*Hyperprosopon ellipticum* (Gibbons, 1854) 309
silver surfperch / ditrème argenté (marine)

Peden and Hughes (1986) extended the recorded range of the silver surfperch north to Brooks Penninsula, on the west coast of Vancouver Island.

*Phanerodon furcatus* Girard, 1854 310
white seaperch / ditrême fourchu (marine)

*Rhacochilus vacca* (Girard, 1855) 312
pile perch / perche de pilotis (marine)

Hubbs et al. (1979) and Eschmeyer and Herald (1983) placed this species in the genus *Damalichthys* Girard, 1855. Eschmeyer (1990) recorded *Damalichthys* as a junior synonym of *Rhacochilus* Agassiz, 1854.

**Suborder Zoarcoidei**

Family Bathymasteridae - ronquils / ronquilles 317

*Bathymaster caeruleofasciatus* Gilbert & Burke, 1912 320
bluefin searcher / ronquille à nageoires bleues (marine)

The bluefin searcher was first recorded from British Columbia waters by Peden and Wilson (1976). McAllister (1990) cited its occurrence in British Columbia as justification for rejecting the common name Alaska ronquil.

*Bathymaster signatus* Cope, 1873 318
blue-eyed searcher / chercheur aux yeux bleus (marine)

*Ronquilus jordani* (Gilbert, 1889) 319
northern ronquil / ronquille du nord (marine)

Family Zoarcidae - eelpouts / lycodes 231

Peden and Anderson (1978) were unable to ascribe definite northern limit on the distribution of *Lycodapus dermatinus* Gilbert, 1895, but presented evidence which indicated that the species may be present in British Columbia. Any specimens of the midwater eelpout genus *Lycodapus* should be retained for careful examination.

Subfamily Zoarcinae

Tribe Lycodini

*Bothrocara brunneum* (Bean, 1891) 235
twoline eelpout / lycode à deux lignes (marine)

*Bothrocara molle* (Bean, 1890) 236
soft eelpout / lycode molle (marine)

*Bothrocara pusillum* (Bean, 1890) 232
Alaska eelpout / lycode à oeil ovale (marine)

The Alaska eelpout was first recorded from British Columbia waters by Peden (1979b).

*Bothrocara remigerum* Gilbert, 1915 237
longsnout eelpout / lycode à long nez (marine)

*B. remigerum* may be a junior synonym of *B. molle* (McAllister 1990)

*Lycenchelys* sp. 234
slipskin / lycode (marine)

An undescribed species of *Lycenchelys* was collected in British Columbia waters by A.E. Peden (McAllister 1990).

*Lycenchelys crotalina* (Gilbert, 1890) 677
snakehead eelpout / lycode-crotale (marine)

Peden (1973) provided the first records of the snakehead eelpout from British Columbia waters, as *Embryx crotalinus* (Gilbert, 1890). McAllister (1990) indicated that the genus *Embryx* is synonymous with *Lycenchelys*, and changed the gender of the trivial name to match the generic designation.

*Lycenchelys jordani* (Evermann & Goldsborough, 1907) 238
shortjaw eelpout / lycode de Jordan (marine)

*Lycodapus endemoscotus* Peden & Anderson, 1978 678
deepwater slipskin / lycode abyssale (marine)

Peden and Anderson (1978) reported British Columbia specimens when they described the species as new to science.

*Lycodapus fierasfer* Gilbert, 1891 239
blackmouth slipskin / lycode nacrée (marine)

Hart (1973) recorded the bigtooth eelpout, *Lycodapus grossidens* Gilbert, 1915, from British Columbia waters. *L. grossidens* is a junior synonym of *L. fierasfer* (Peden and Anderson 1978).

*Lycodapus mandibularis* Gilbert, 1915 241
pallid slipskin / lycode à longues brachiospines (marine)

Peden and Anderson (1978) attributed Clemens and Wilby's (1946, 1961) and Hart's (1973) distribution records and descriptions of *L. fierasfer* to *L. mandibularis*.

*Lycodapus pachysoma* Peden & Anderson, 1978 679
stout slipskin / lycode trapue (marine)

Peden and Anderson (1978) reported specimens from British Columbia in the original description of the species.

*Lycodapus parviceps* Gilbert, 1915 680
stubraker slipskin / lycode à petite tête (marine)

Lee and Bourne (1976) first reported *L. parviceps* from British Columbia waters, off the west coast of Vancouver Island.

*Lycodes brevipes* Bean, 1890 242
shortfin eelpout / lycode à courtes nageoires (marine)

*Lycodes cortezianus* (Gilbert, 1890) 233
bigfin eelpout / lycode à grandes nageoires (marine)

This species was recorded by Hart (1973) and Jean et al. (1981) as *Aprodon cortezianus* Gilbert, 1890. Eschmeyer and Herald (1983) placed

*cortezianus* in *Lycodes*, as did Robins et al. (1991a)

*Lycodes diapterus* Gilbert, 1891 243
black eelpout / lycode noire (marine)

*Lycodes pacificus* Collett, 1879 245
blackbelly eelpout / lycode à ventre noir (marine)

Hart (1973) recorded this species as *Lycodopsis pacifica* (Collett, 1879). Jean et al. (1981), McAllister (1990) and Peden (1990a) used the genus *Lycodes*.

*Lycodes palearis* Gilbert, 1895 244
wattled eelpout / lycode tressée (marine)

*Taranetzella lyoderma* Andriashev, 1952 681
ghostly eelpout / lycode flasque (marine)

Peden and Jamieson (1988) recorded the first verifiable Canadian specimens of the ghostly eelpout. McAllister (1990) used the vernacular looseskin eelpout.

Subfamily Melanostigmatinae 246

*Melanostigma pammelas* Gilbert, 1895 247
Pacific softpout / mollasse noire (marine)

Hubbs et al. (1979) and Eschmeyer and Herald (1983) used the common name midwater eelpout for this species.

*Pachycara bulbiceps* (Garman, 1899) 682
snubnose eelpout / lycode camuse (marine)

McAllister (1990) and Peden (1990a) listed *P. bulbiceps* from British Columbia waters. Peden (1990a) used the common name abyssal eelpout.

*Pachycara gymninium* Anderson & Peden, 1988 683
nakednape eelpout / lycode à nuque nue (marine)

Anderson and Peden (1988) reported British Columbia specimens of both *P. gymninium* and *P. lepinium*, when these species were originally described.

*Pachycara lepinium* Anderson & Peden, 1988 684
scalednape eelpout / lycode à nuque écaillée (marine)

Subfamily *incertae cedis*

*Derepodichthys alepidotus* Gilbert, 1895 248
cuskpout / lycode-donzelle (marine)

Both Hart (1973) and Peden (1990a) placed the cuskpout in a distinct family, the Derepodichthyidae. Anderson and Hubbs (1981) redescribed the species, and placed it *incertae cedis* in the Zoarcidae, which was followed by Nelson (1984) and Eschmeyer (1990).

Family Stichaeidae - pricklebacks / stichées 324

Nelson (1984) divided the Stichaeidae in to the Stichaeinae, with the tribes Stichaeini and Chirolophini; the Lumpeninae, with the tribes Lumpenini and Opisthocentrini; and the Xiphisterinae, with the tribes Alectriini, Xiphisterini, Azygopterini and Eulophiini. Eschmeyer (1990) did not recognize subfamilial divisions within the Stichaeidae. McAllister (1990) elevated many of Nelson's tribes to subfamilial

status, and, because these are useful taxonomic units in the identification of stichaeid larvae (Matarese et al. 1989), I follow McAllister's classification.

Subfamily Stichaeinae 325

*Stichaeus punctatus* (Fabricius, 1780) 330
Arctic shanny / stichée arctique (marine)

Peden (1975) first recorded the Arctic shanny from British Columbia waters.

Subfamily Chirolophinae 326

*Bryozoichthys marjorius* McPhail, 1970 331
pearly prickleback / stichée perlée (marine)

A confirmatory record for this species in British Columbia was reported by Gillespie (1991).

*Chirolophis* sp. 818
warbonnets/toupets

*Chirolophis decoratus* (Jordan & Snyder, 1903) 332
decorated warbonnet / toupet décorét (marine)

*Chirolophis nugator* (Jordan & Williams, 1895) 333
mosshead warbonnet / toupet élégant (marine)

*Chirolophis tarsodes* (Jordan & Snyder, 1903) 335
matcheek warbonnet / bonnet à joues touffues (marine)

Peden (1975) documented the first record of the matcheek warbonnet in British Columbia waters.

Subfamily Lumpeninae 819

*Leptoclinus maculatus* (Fries, 1837) 336
daubed shanny / lompénie tachetée (marine)

Peden (1990a) recorded this species as the daubed blenny, *Lumpenus maculatus* (Fries). McAllister (1990) assigned north Pacific populations to the subspecies *L. m. diaphanocarus* (Schmidt, 1904).

*Lumpenus sagitta* Wilimovsky, 1956 337
snake prickleback / lompénie élancée (marine)

*Poroclinus rothrocki* Bean, 1890 340
whitebarred prickleback / lompénie à barres blanches (marine)

Subfamily Opisthocentrinae 825

*Allolumpenus hypochromus* Hubbs & Schultz, 1932 327
y-prickleback / stichée-y(marine)

A COSEWIC status report on the y-prickleback (R.E. Campbell 1992a) did not recommend special status, but did emphasize the limited distribution of the species could make it vulnerable to a destructive event of modest scale (e.g. toxic waste dumping). R.E. Campbell (1992a) used the French vernacular lompénie i-grec. Eschmeyer and Herald (1983) extended the species' recorded range to California, though its presence in California has not been confirmed (R.E. Campbell 1992a).

*Plectobranchus evides* Gilbert, 1890 339
bluebarred prickleback / lompénie à barres bleues (marine)

Subfamily Alectriinae 826

*Anoplarchus* sp. 817
cockscombs/crête-de-coqs

*Anoplarchus insignis* Gilbert & Burke, 1912 328
slender cockscomb / crête-de-coq mince (marine)

*Anoplarchus purpurescens* Gill, 1861 329
high cockscomb / crête-de-coq pourpre (marine)

Hubbs et al. (1979) listed southern California populations as a separate subspecies, *A. p. archolepis* Hubbs, 1927, placing northern populations in the subspecies *A. p. purpurescens*. However, Yoshiyama and Sassaman (1983) did not find the southern populations to be genetically distinct.

Subfamily Xiphisterinae 827

*Lumpenella longirostris* (Evermann & Goldsborough, 1907) 334
longsnout prickleback / stichée à long nez (marine)

*Phytichthys chirus* (Jordan & Gilbert, 1880) 338
ribbon prickleback / lompénie ruban (marine)

*Xiphister atropurpureus* (Kittlitz, 1858) 341
black prickleback / lompénie noir (marine)

*Xiphister mucosus* (Girard, 1858) 343
rock prickleback / lompénie de roche (marine)

Family Cryptacanthodidae - wrymouths / terrassiers 354

*Cryptacanthodes aleutensis* (Gilbert, 1895) 356
dwarf wrymouth / terrassier nain (marine)

Hart (1973) and Peden (1990a) recorded the dwarf wrymouth as *Lyconectes aleutensis* Gilbert, 1895. The genus *Lyconectes* is considered a junior synonym of *Cryptacanthodes* (McAllister 1990).

*Cryptacanthodes giganteus* (Kittlitz, 1858) 355
giant wrymouth / terrassier géant (marine)

Hart (1973) and Peden (1990a) recorded the giant wrymouth as *Delolepis gigantea* Kittlitz, 1858. The genus *Delolepis* is considered a junior synonym of *Cryptacanthodes*, and McAllister (1990) altered the spelling of the trivial name to match the gender of the new generic name.

Family Pholidae - gunnels / sigouines 344

Nelson (1984) recognized the two subfamilies Pholidinae (*Pholis*) and Apodichthyinae (*Apodichthys*, *Xererpes* (= *Apodichthys*) and *Ulvicola*).

Yatsu (1981, 1985) reviewed the systematics of this family, removed *clemensi*, *laeta*, and *schultzi* from *Pholis* and erected the new genus *Allopholis*. This classification has been accepted by McAllister (1990), but was viewed as excessive splitting by Peden and Hughes (1984c). Eschmeyer (1990) considered *Allopholis* a valid genus.

In the interest of maintaining a North American standard, I follow Robins et al. (1991a), and retain the old classification until more

information is gathered to resolve the issue.

*Apodichthys flavidus* Girard, 1854 345
penpoint gunnel / sigouine jaunâtre (marine)

*Apodichthys fucorum* (Jordan & Gilbert, 1880) 350
rockweed gunnel / sigouine de varech (marine)

Hart (1973) listed this species as *Xererpes fucorum* (Jordan & Gilbert, 1880). Yatsu (1981) synonymized *Xererpes* with *Apodichthys*.

*Pholis* sp. 692

*Pholis clemensi* (Rosenblatt, 1964) 346
longfin gunnel / sigouine à longue nageoire (marine)

*Pholis laeta* (Cope, 1873) 347
crescent gunnel / sigouine lunée (marine)

*Pholis ornata* (Girard, 1854) 348
saddleback gunnel / sigouine mantelée (marine)

Hart (1973) indicated that *ornata* ranged from northern California to the Bering Sea and Sea of Japan, with the caution that the exact status was uncertain due to "frequent misidentifications". Peden and Hughes (1984c) reviewed the distribution of this species, which is restricted to British Columbia (Vancouver Island only), Washington, Oregon and south to Carmel Beach, California.

*Pholis schultzi* (Hubbs, *in* Schultz, 1931) 349
red gunnel / sigouine rouge (marine)

Family Anarhichadidae - wolffishes / poissons-loups 342

*Anarrhichthys ocellatus* Ayres, 1855 351
wolf-eel / loup ocellé (marine)

Family Ptilichthyidae - quillfishes / fouette-queues 352

*Ptilichthys goodei* Bean, 1881 353
quillfish / fouette-queue (marine)

Family Zaproridae - prowfishes / zaproridés 358

*Zaprora silenus* Jordan, 1896 359
prowfish / zaprora (marine)

Family Scytalinidae - graveldivers / blennies fouisseuses 364

*Scytalina cerdale* Jordan & Gilbert, 1880 357
graveldiver / blennie fouisseuse (marine)

**Suborder Trachinoidei**

Family Trichodontidae - sandfishes / trichodontes 315

*Trichodon trichodon* (Tilesius (ex Steller), 1813) 316
Pacific sandfish / trichodonte (marine)

Eschmeyer (1990) used this format for the authority, because of confusion as to the actual authorship of the name.

Family Ammodytidae - sandlances / lançons 360

Nelson (1984) placed the Ammodytidae in their own suborder, the Ammodytoidei. I follow Eschmeyer (1990), who included this family in the Trachinoidei.

*Ammodytes hexapterus* Pallas, 1814 361
Pacific sand lance / lançon gourdeau (marine)

McAllister (1990) provisionally listed *Ammodytes americanus* DeKay, 1842, as a junior synonym of *A. hexapterus*. He felt that the occurrence of this species in the Arctic and north Atlantic Oceans made the vernacular "Pacific" inappropriate, and used the common name stout sand lance. I follow Robins et al. (1991a) in maintaining *americanus* and *hexapterus* as separate species.

**Suborder Blennioidei**

Family Clinidae - clinids / clinides 321

Matarese et al. (1989) included British Columbia in the range of the giant kelpfish, *Heterostichus rostratus* Girard, 1854, as did Eschmeyer and Herald (1983), though the latter questioned the British Columbia record.

*Gibbonsia metzi* Hubbs, 1927 322
striped kelpfish / clinide rayé (marine)

*Gibbonsia montereyensis* Hubbs, 1927 323
crevice kelpfish / clinide de crevasse (marine)

Hubbs et al. (1979) listed two subspecies from California waters: *G. m. montereyensis*, the Monterey crevice kelpfish; and *G. m. vulgaris* Hubbs, 1952, the northern crevice kelpfish. British Columbia specimens would likely be of the subspecies *vulgaris*.

**Suborder Icosteoidei**

Family Icosteidae - ragfishes / torchons 385

*Icosteus aenigmaticus* Lockington, 1880 386
ragfish / torchon mou (marine)

**Suborder Gobioidei**

Family Gobiidae - gobies / gobies 362

*Clevelandia ios* (Jordan & Gilbert, 1882) 363
arrow goby / gobie-flèche (marine, euryhaline)

*Coryphopterus nicholsi* (Bean, 1881) 365
blackeye goby / gobie aux yeux noirs (marine)

*Lepidogobius lepidus* (Girard, 1858) 366
bay goby / gobie de baie (marine)

**Suborder Acanthuroidei**

Family Luvaridae - louvars / louvereaux 685

Nelson (1984) provisionally placed the Luvaridae in the suborder Scombroidei, within the superfamily Xiphioidea. Eschmeyer (1990) placed this family in the Acanthuroidei.

**Luvarus imperialis* Rafinesque, 1810 686
louvar / louvereau (marine)

Peden and Jamieson (1988) recorded specimens just outside of Canadian waters, and suggested that the species probably does stray into Canadian waters. McAllister (1990) included it in the Canadian fauna, but Peden (1990a) did not. I accord it the same status as CWS Papa fish, and include it here as a hypothetical occurrence.

**Suborder Sphyraenoidei**

Family Sphyraenidae - barracudas / barracudas 313

*Sphyraena argentea* Girard, 1854 314
Pacific barracuda / barracuda argenté (marine)

The common name California barracuda was used by Eschmeyer and Herald (1983). This name was rejected by McAllister (1990), who felt it was inappropriate for a species which has been recorded as far north as Prince William Sound, Alaska.

**Suborder Scombroidei**

Family Trichiuridae - cutlassfishes / trichiures 367

Subfamily Aphanopodinae

*Aphanopus carbo* Lowe, 1839 687
black scabbardfish / aphanope charbon (marine)

Peden (1975) first recorded the black scabbardfish from British Columbia. Peden and Hughes (1986) provided confirmatory records.

*Benthodesmus elongatus* (Clarke, 1879) 368
bigeye frostfish / sabre d'argent à grands yeux (marine)

Hart (1973) recorded this species as *B. simonyi* (Steindachner, 1891). Peden (1979a) reported a second Canadian record. McAllister assigned British Columbia specimens to the subspecies *B. e. pacificus* Parin & Becker, 1970, to distinguish them from the Atlantic subspecies *B. e. simonyi* (Steindachner, 1891).

*Benthodesmus tenuis* (Günther, 1877) 688
smalleye frostfish / sabre d'argent à petits yeux (marine)

The first record for British Columbia waters was documented by Peden and Hughes (1986). Peden (1990a) used the vernacular javelinfish.

Family Xiphiidae - swordfishes / espadons 689

*Xiphias gladius* Linnaeus, 1758 690
swordfish / espadon (marine)

Peden and Jamieson (1988) recorded the first verified Canadian specimen. The unverified record of Sloane (1984), which was reported by McAllister (1990), is the same specimen reported by Peden and Jamieson (1988).

Family Scombridae - mackerels / maquereaux 369

Nelson (1984) recognized the subfamilies Gasterochismatinae (*Gasterochisma*) and Scomberinae, the latter containing tribes Scombrini (*Rastrelliger* and *Scomber*); Scomberomorini (*Acanthocybium*, *Grammatorcynus* and *Scomberomorus*); Sardini (*Allothunnus*, *Cybiosarda*, *Gymnosarda*, *Orcynopsis* and *Sarda*); and Tunnini (*Auxis*, *Euthynnus*, *Katsuwonus* and *Thynnus*). Eschmeyer (1990) did not recognize subfamilial or tribal divisions within the Scombridae.

*Katsuwonus pelamis* (Linnaeus, 1758) 371
skipjack tuna / thonine à ventre rayé (marine)

Hart (1973) recorded the skipjack tuna as *Euthynnus pelamis* (Linnaeus, 1758). Collette and Nauen (1983) placed *pelamis* in *Katsuwonus*.

*Sarda chiliensis* (Cuvier, 1831) 373
Pacific bonito / bonite du Pacifique (marine)

Collette and Chao (1975) referred to northern populations of the bonito as *S. c. lineolata* (Girard, 1858). Hubbs et al. (1979) used the common name California bonito for this subspecies.

*Scomber japonicus* Houttuyn, 1782 374
chub mackerel / maquereaux blanc (marine)

*Thunnus alalunga* (Bonnaterre, 1788) 376
albacore / germon (marine)

**Thunnus albacares* (Bonnaterre, 1788) 377
yellowfin tuna / albacore à nageoires jaunes (marine)

This species was included by McAllister (1990), based on a personal communication from A.E. Peden, but British Columbia records require verification, and I list it as a hypothetical occurrence only. Peden (1990a) does not include it in his list.

*Thunnus thynnus* (Linnaeus, 1758) 379
bluefin tuna / thon rouge (marine)

Gibbs and Collette (1967) recognized two subspecies of bluefin tuna in the northern hemisphere, *T. t. thynnus* (Linnaeus, 1758) in the Atlantic, and *T. t. orientalis* (Temminck & Schlegel, *in* Siebold, 1844) in the Pacific. McAllister assigned British Columbia specimens to *T. t. orientalis*. Hubbs et al. (1979) used the name Pacific bluefin tuna for this subspecies.

The bluefin tuna is currently under review by COSEWIC, to determine if special status is required (R.R. Campbell 1992).

**Suborder Stromateoidei**

Family Centrolophidae - ruffs / pompiles 382

*Icichthys lockingtoni* Jordan & Gilbert, 1880 381
medusafish / stromatée-méduse (marine)

Family Tetragonuridae - squaretails / tétragonures 691

*Tetragonurus cuvieri* Risso, 1810 384
smalleye squaretail / tétragonure lilas (marine)

McAllister chose this French vernacular over tétragonure à petits yeux, which was used by Jean et al. (1981).

Family Stromateidae - butterfishes / stromatées 380

*Peprilus simillimus* (Ayres, 1860) 383
Pacific pompano / pompano du Pacifique (marine)

Hubbs et al. (1979) and Eschmeyer and Herald (1983) used the common name Pacific butterfish.

**Order Pleuronectiformes**

**Suborder Pleuronectoidei**

Family Bothidae - lefteye flounders / turbots 595

Subfamily Paralichthyinae

Eschmeyer (1990) placed *Citharichthys* in the family Paralichthyidae. Nelson (1984) included the Paralichthyinae as a subfamily within the Bothidae. I follow Nelson and Robins et al. (1991a), and retain the Bothidae intact, until the alternate classification is more widely accepted.

*Citharichthys sordidus* (Girard, 1854) 596
Pacific sanddab / limande sordide (marine)

*Citharichthys stigmaeus* Jordan & Gilbert, 1882 598
speckled sanddab / limande tachetée (marine)

Family Pleuronectidae - righteye flounders / plies 599

Subfamily Pleuronectinae

Nelson (1984) recognized the tribes Hippoglossini (*Atheresthes, Eopsetta, Hippoglossoides, Hippoglossus, Lyopsetta, Psettichthys* and *Reinhardtius*) and Pleuronectini (e.g. *Embassichthys, Glyptocephalus, Isopsetta, Lepidopsetta, Limanda, Microstomus, Platichthys, Pleuronectes*). Eschmeyer (1990) did not include tribal subdivisions in the Pleuronectinae.

Matarese et al. (1989) implicitly included northern British Columbia in the ranges of the Kamchatka flounder, *Atheresthes evermanni* Jordan & Starks, 1904, and the Alaska plaice, *Pleuronectes quadrituberculatus* Pallas, 1814, due to their definition of the Gulf of Alaska as 54-60°N. These records are noted here for information only.

*Atheresthes stomias* (Jordan & Gilbert, 1880) 602
arrowtooth flounder / plie à grande bouche (marine)

*Clidoderma asperrimum* (Temminck & Schlegel, 1846) 604
roughscale sole / plie rugueuse (marine)

Additional records of the roughscale sole in British Columbia waters were reported by Gillespie (1991), and it has been collected as far south as Eureka, California (Lea 1990).

*Embassichthys bathybius* (Gilbert, 1890) 605
deepsea sole / plie de profondeur (marine)

*Eopsetta exilis* (Jordan & Gilbert, 1880) 625
slender sole / plie mince (marine)

Most authors have recorded this species as *Lyopsetta exilis*. Sakamoto (1984) revised the Pleuronectidae, and moved *exilis* to the genus *Eopsetta*, and his classification was adopted by Robins et al. (1991a).

*Eopsetta jordani* (Lockington, 1879) 607
petrale sole / plie de Californie (marine)

*Errex zachirus* (Lockington, 1879) 610
rex sole / sole américaine (marine)

Most authors recorded this species in the genus *Glyptocephalus*. Robins et al. (1991a) followed Sakamoto (1984) in placing the rex sole in the genus *Errex*.

*Hippoglossoides elassodon* Jordan & Gilbert, 1880 612
flathead sole / plie à tête plate (marine)

*Hippoglossus stenolepis* Schmidt, 1904 614
Pacific halibut / flétan du Pacifique (marine)

*Microstomus pacificus* (Lockington, 1879) 626
Dover sole / sole à petite bouche (marine)

*Platichthys stellatus* (Pallas, 1814) 631
starry flounder / flet étiolé (marine, euryhaline)

McAllister (1990) assigned British Columbia populations to the subspecies *P. s. stellatus* (Pallas, 1814). This subspecies was called the northern starry flounder, as opposed to the southern starry flounder, *P. s. rugosus* Girard, 1854, by Hubbs et al. (1979).

*Pleuronectes asper* Pallas, 1811 623
yellowfin sole / limande à nageoires jaunes (marine)

Robins et al. (1991a) followed Sakamoto (1984) in returning the yellowfin sole to the genus *Pleuronectes*. Hart (1973), and subsequent authors, had recorded this species as *Limanda aspera* (Pallas, 1811).

*Pleuronectes bilineatus* (Ayres, 1855) 621
rock sole / sole du Pacifique (marine)

Hart (1973), and subsequent authors had recorded this species as *Lepidopsetta bilineata* (Ayres, 1855). Sakamoto (1984) moved the rock sole to the genus *Pleuronectes*, which was supported by Robins et al. (1991a).

*Pleuronectes isolepis* (Lockington, 1880) 619
butter sole / plie à écailles régulières (marine)

Sakamoto (1984) and Robins et al. (1991a) placed the butter sole in the genus *Pleuronectes*. Hart (1973), and other authors, had referred this species to the genus *Isopsetta*.

*Pleuronectes vetulus* (Girard, 1854) 628
English sole / sole anglaise (marine)

Sakamoto (1984) and Robins et al. (1991a) refer the English sole to the genus *Pleuronectes*. Previous authors had recorded it as *Parophrys vetulus* Girard, 1854.

Hart (1973) recorded a hybrid of the English sole and the starry flounder as (hybrid) sole, *Inopsetta ischyra* (Jordan & Gilbert, 1881).

*Pleuronichthys coenosus* Girard, 1854 633
C-O sole / plie vaseuse (marine)

*Pleuronichthys decurrens* Jordan & Gilbert, 1880 635
curlfin sole / plie à nageoires frisées (marine)

*Psettichthys melanostictus* Girard, 1854 636
sand sole / plie à points noirs (marine)

*Reinhardtius hippoglossoides* (Walbaum, 1792) 638
Greenland halibut / flétan du Groenland (marine)

**Order Tetraodontiformes**

**Suborder Tetraodontiodei**

Family Molidae - ocean sunfishes / moles 639

*Mola mola* (Linnaeus, 1758) 640
ocean sunfish / mole commun (marine)

Part 2. Foreign species of interest to the Department of Fisheries and Oceans.

**Order Lamniformes**

Family Alopiidae - thresher sharks 029

*Alopias superciliosus* (Lowe, 1841) 024
bigeye thresher (marine)

Compagno (1984a) used the French vernacular renard à gros yeux.

**Order Carchariniformes**

Family Sphyrnidae - hammerhead sharks 025

**Order Squaliformes**

Family Squalidae - dogfish sharks 042

*Etmopterus* sp. 048
green eye sharks (marine)

Compagno (1984a) listed the French vernacular sagres for this genus.

*Euprotomicrus bispinatus* (Quoy & Gaimard, 1824) 047
pygmy shark (marine)

Compagno (1984a) used the French vernacular squale pygmée.

*Isistius braziliensis* (Quoy & Gaimard, 1824) 046
cookie-cutter shark (marine)

The vernacular cookie-cutter shark is in wide use for this species (Compagno 1984a). Robins et al. (1991b) used collared dogfish as their primary common name. Compagno (1984a) listed the French common name squalelet féroce.

**Order Clupeiformes**

Family Engraulidae - anchovies 103

*Engraulis japonicus* Temminck & Schlegel, 1846 105
Japanese anchovy (marine)

**Order Beloniformes**

**Suborder Exocetoidei**

Family Exocetidae - flyingfishes 704

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Appendix 1. Numeric listing of updated code file.

0 0 0 PISCES/FISH
0 0 1 FISH EGGS
0 0 2 UNIDENTIFIED LARVAE
0 1 5 UNKNOWN FISH
0 1 6 MYXINIDAE (FAMILY)/HAGFISHES
0 1 7 EPTATRETUS DEANI/BLACK HAGFISH
0 1 8 EPTATRETUS STOUTI/PACIFIC HAGFISH
0 1 9 PETROMYZONTIDAE (FAMILY)/LAMPREYS
0 2 0 LAMPETRA TRIDENTATA/PACIFIC LAMPREY
0 2 1 LAMPETRA MACROSTOMA/VANCOUVER LAMPREY
0 2 2 LAMPETRA AYRESI/RIVER LAMPREY
0 2 4 ALOPIAS SUPERCILIOSUS/BIGEYE THRESHER
0 2 5 SPHYRNIDAE (FAMILY)/HAMMERHEAD SHARKS
0 2 6 HEXANCHIDAE (FAMILY)/COW SHARKS
0 2 7 HEXANCHUS GRISEUS/SIXGILL SHARK
0 2 8 NOTORYNCHUS CEPEDIANUS/SEVENGILL SHARK
0 2 9 ALOPIIDAE (FAMILY)/THRESHER SHARKS
0 3 0 ALOPIAS VULPINUS/THRESHER SHARK
0 3 1 LAMNIDAE (FAMILY)/MACKEREL SHARKS
0 3 2 CARCHARODON CARCHARIAS/GREAT WHITE SHARK
0 3 3 CETORHINIDAE (FAMILY)/BASKING SHARK
0 3 4 CETORHINUS MAXIMUS/8ASKING SHARK
0 3 5 ISURUS OXYRINCHUS/SHORTFIN MAKO
0 3 6 LAMNA DITROPIS/SALMON SHARK
0 3 7 SCYLIORHINIDAE (FAMILY)/CAT SHARKS
0 3 8 APRISTURUS BRUNNEUS/BROWN CAT SHARK
0 3 9 CARCHARHINIDAE (FAMILY)/REQUIEM SHARKS
0 4 0 GALEORHINUS ZYOPTERUS/SOUPFIN SHARK
0 4 1 PRIONACE GLAUCA/BLUE SHARK
0 4 2 SQUALIDAE (FAMILY)/DOGFISH SHARKS
0 4 3 SOMNIOSUS PACIFICUS/PACIFIC SLEEPER SHARK
0 4 4 SQUALUS ACANTHIAS/SPINY DOGFISH
0 4 5 TRIAKIDAE (FAMILY)/HOUNDSHARKS
0 4 6 ISISTIUS BRAZILIENSIS/COOKIE-CUTTER SHARK
0 4 7 EUPROTOMICRUS BISPINATIS/PYGMY SHARK
0 4 8 ETMOPTERUS (GENUS)/GREEN-EYE SHARKS
0 4 9 TORPEDINIDAE (FAMILY)/ELECTRIC RAYS
0 5 0 TORPEDO CALIFORNICA/PACIFIC ELECTRIC RAY
0 5 1 RAJIDAE (FAMILY)/SKATES
0 5 4 BATHYRAJA ABYSSICOLA/ABYSSAL SKATE
0 5 5 RAJA BADIA/BROAD SKATE
0 5 6 RAJA BINOCULATA/BIG SKATE
0 5 7 BATHYRAJA TRACHURA/ROUGHTAIL SKATE
0 5 8 BATHYRAJA INTERRUPTA/SANDPAPER SKATE
0 5 9 RAJA RHINA/LONGNOSE SKATE
0 6 1 RAJA STELLULATA/STARRY SKATE
0 6 2 DASYATIDAE (FAMILY)/STINGRAYS
0 6 3 DASYATIS BREVIS/DIAMOND STINGRAY
0 6 4 DASYATIS VIOLACEA/PELAGIC STINGRAY
0 6 5 CHIMAERIDAE (FAMILY)/RATFISHES
0 6 6 HYDROLAGUS COLLIEI/SPOTTED RATFISH
0 8 0 XENOMYSTAX ATRARIUS/TWINPORED EEL
0 8 1 ACIPENSERIDAE (FAMILY)/STURGEONS
0 8 2 ACIPENSER MEDIROSTRIS/GREEN STURGEON
0 8 3 ACIPENSER TRANSMONTANUS/WHITE STURGEON
0 8 4 CONGERIDAE (FAMILY)/CONGER EELS
0 8 5 SERRIVOMERIDAE (FAMILY)/SAWPALATES
0 8 6 SERRIVOMER JESPERSENI/CROSSTHROAT SAWPALATE
0 8 7 NEMICHTHYIDAE (FAMILY)/SNIPE EELS

0 8 8 AVOCETTINA INFANS/CLOTHESPIN SNIPE EEL
0 8 9 AVOCETTINA INFANS/CLOTHESPIN SNIPE EEL
0 9 0 NEMICHTHYS SCOLOPACEUS/SLENDER SNIPE EEL
0 9 2 NOTACANTHIDAE (FAMILY)/SPINY TAPIRFISHES
0 9 3 POLYACANTHONOTUS CHALLENGERI/LONGNOSE TAPIRFISH
0 9 4 CLUPEIDAE (FAMILY)/HERRINGS
0 9 5 ALOSA SAPIDISSIMA/AMERICAN SHAD
0 9 6 CLUPEA PALLASI/PACIFIC HERRING
1 0 0 SARDINOPS SAGAX/PACIFIC SARDINE
1 0 3 ENGRAULIDAE (FAMILY)/ANCHOVIES
1 0 4 ENGRAULIS MORDAX/NORTHERN ANCHOVY
1 0 5 ENGRAULIS JAPONICUS/JAPANESE ANCHOVY
1 0 6 SALMONIDAE (FAMILY)/SALMONIDS
1 0 7 ONCORHYNCHUS (GENUS)/PACIFIC SALMON AND NATIVE TROUT
1 0 8 ONCORHYNCHUS GORBUSCHA/PINK SALMON
1 0 9 SALMONINAE (SUBFAMILY)/PACIFIC SALMON AND NATIVE TROUT
1 1 2 ONCORHYNCHUS KETA/CHUM SALMON
1 1 5 ONCORHYNCHUS KISUTCH/COHO SALMON
1 1 8 ONCORHYNCHUS NERKA/SOCKEYE SALMON
1 2 4 ONCORHYNCHUS TSHAWYTSCHA/CHINOOK SALMON
1 2 7 ONCORHYNCHUS CLARKI CLARKI/COASTAL CUTTHROAT TROUT
1 2 8 ONCORHYNCHUS MYKISS/RAINBOW TROUT
1 3 1 SALMO SALAR/ATLANTIC SALMON
1 3 3 SALMO TRUTTA/BROWN TROUT
1 3 4 SALVELINUS MALMA/DOLLY VARDEN
1 3 6 OSMERIDAE (FAMILY)/SMELTS
1 3 8 ALLOSMERUS ELONGATUS/WHITEBAIT SMELT
1 3 9 HYPOMESUS PRETIOSUS/SURF SMELT
1 4 1 MALLOTUS VILLOSUS/CAPELIN
1 4 3 OSMERUS MORDAX/RAINBOW SMELT
1 4 5 SPIRINCHUS STARKSI/NIGHT SMELT
1 4 6 SPIRINCHUS THALEICHTHYS/LONGFIN SMELT
1 4 8 THALEICHTHYS PACIFICUS/EULACHON
1 4 9 BATHYLAGUS STILBIUS/SOUTHERN SMOOTHTONGUE
1 5 0 ARGENTINIDAE (FAMILY)/ARGENTINES
1 5 1 NANENSIA CANDIDA/BLUETHROAT ARGENTINE
1 5 2 BATHYLAGIDAE (FAMILY)/DEEPSEA SMELTS
1 5 3 BATHYLAGUS MILLERI/STOUT BLACKSMELT
1 5 4 BATHYLAGUS OCHOTENSIS/POPEYE BLACKSMELT
1 5 5 BATHYLAGUS PACIFICUS/SLENDER BLACKSMELT
1 5 6 BATHYLAGUS SCHMIDTI/NORTHERN SMOOTHTONGUE
1 5 7 OPISTHOPROCTIDAE (FAMILY)/SPOOKFISHES
1 5 8 DOLICHOPTERYX SP/WINGED SPOOKFISH
1 5 9 MACROPINNA MICROSTOMA/BARRELEYE
1 6 0 GONOSTOMATIDAE (FAMILY)/LIGHTFISHES
1 6 1 CYCLOTHONE PACIFICA/YELLOW BRISTLEMOUTH
1 6 2 STERNOPTYCHIDAE (FAMILY)/MARINE HATCHETFISHES
1 6 3 ARGYROPELECUS SLADENI/LOWCREST HATCHETFISH
1 6 4 MELANOSTOMIIDAE (FAMILY)/SCALELESS BLACK DRAGONFISHES
1 6 5 BATHOPHILUS FLEMINGI/HIGHFIN DRAGONFISH
1 6 6 OPOSTOMIAS MITSUII/PITGUM DRAGONFISH
1 6 7 TACTOSTOMA MACROPUS/LONGFIN DRAGONFISH
1 6 8 MALACOSTEIDAE (FAMILY)/LOOSEJAWS
1 6 9 ARISTOSTOMIAS SCINTILLANS/SHINING LOOSEJAW
1 7 0 CHAULIODONTIDAE (FAMILY)/VIPERFISHES
1 7 1 CHAULIODUS MACOUNI/PACIFIC VIPERFISH
1 7 2 PLATYTROCTIDAE (FAMILY)/TUBESHOULDERS
1 7 3 SAGAMICHTHYS ABEI/SHINING TUBESHOULDER
1 7 4 ALEPISAURIDAE (FAMILY)/LANCETFISHES
1 7 5 ALEPISAURUS FEROX/LONGNOSE LANCETFISH
1 7 6 ANOTOPTERIDAE (FAMILY)/DAGGERTOOTH
1 7 7 ANOTOPTERUS PHARAO/DAGGERTOOTH
1 7 8 SCOPELARCHIDAE (FAMILY)/PEARLEYES

1 7 9 BENTHALBELLA DENTATA/NORTHERN PEARLEYE
1 8 0 PARALEPIDIDAE (FAMILY)/BARRACUDINAS
1 8 1 LESTIDIOPS RINGENS/SLENDER BARRACUDINA
1 8 2 NOTOLEPIS RISSOI/RIBBON BARRACUDINA
1 8 3 NOTOSUDIDAE (FAMILY)/WARYFISHES
1 8 4 SCOPELOSAURUS HARRYI/SCALY WARYFISH
1 8 5 MYCTOPHIDAE (FAMILY)/LANTERNFISHES
1 8 7 CERATOSCOPELUS TOWNSENDI/DOGTOOTH LAMPFISH
1 8 8 LAMPADENA UROPHAOS/SUNBEAM LIGHTFISH
1 8 9 DIAPHUS THETA/CALIFORNIA HEADLIGHTFISH
1 9 0 LAMPANYCTUS JORDANI/BROKENLINE LANTERNFISH
1 9 1 LAMPANYCTUS REGALIS/PINPOINT LAMPFISH
1 9 2 PROTOMYCTOPHUM CROCKERI/PENLIGHT FISH
1 9 3 LAMPANYCTUS RITTERI/BROADFIN LAMPFISH
1 9 5 NOTOSCOPELUS JAPONICUS/JAPANESE LANTERNFISH
1 9 6 PROTOMYCTOPHUM THOMPSONI/BIGEYE FLASHLIGHTFISH
1 9 8 STENOBRACHIUS LEUCOPSARUS/NORTHERN LAMPFISH
1 9 9 STENOBRACHIUS NANNOCHIR/GARNET LANTERNFISH
2 0 0 SYMBOLOPHORUS CALIFORNIENSIS/BIGFIN LANTERNFISH
2 0 1 TARLETONBEANIA TAYLORI/TAILLIGHT LANTERNFISH
2 0 2 TARLETONBEANIA CRENULARIS/BLUE LANTERNFISH
2 0 3 CYPRINIDAE (FAMILY)/MINNOWS
2 0 4 CYPRINUS CARPIO/CARP
2 0 6 BATRACHOIDIDAE (FAMILY)/TOADFISHES
2 0 7 PORICHTHYS NOTATUS/PLAINFIN MIDSHIPMAN
2 0 9 GOBIESOCIDAE (FAMILY)/CLINGFISHES
2 1 0 GOBIESOX MAEANDRICUS/NORTHERN CLINGFISH
2 1 2 RIMICOLA MUSCARUM/KELP CLINGFISH
2 1 3 ONEIRODIDAE (FAMILY)/DREAMERS
2 1 4 CHAENOPHRYNE MELANORHABDUS/SMOOTH DREAMER
2 1 6 ONEIRODES THOMPSONI/SPINY DREAMER
2 1 8 ONEIRODES BULBOSUS/BULBOUS DREAMER
2 1 9 MORIDAE (FAMILY)/DEEPSEA CODS
2 2 0 ANTIMORA MICROLEPIS/PACIFIC FLATNOSE
2 2 1 GADIDAE (FAMILY)/CODFISHES
2 2 2 GADUS MACROCEPHALUS/PACIFIC COD
2 2 3 HALARGYREUS JOHNSONI/DAINTY MORA
2 2 4 MERLUCCIIDAE (FAMILY)/MERLUCCID HAKES
2 2 5 MERLUCCIUS PRODUCTUS/PACIFIC HAKE
2 2 6 MICROGADUS PROXIMUS/PACIFIC TOMCOD
2 2 8 THERAGRA CHALCOGRAMMA/WALLEYE POLLOCK
2 2 9 BYTHITIDAE (FAMILY)/LIVEBEARING BROTULAS
2 3 0 BROSMOPHYCIS MARGINATA/RED BROTULA
2 3 1 ZOARCIDAE (FAMILY)/EELPOUTS
2 3 2 BOTHROCARA PUSILLUM/ALASKA EELPOUT
2 3 3 LYCODES CORTEZIANUS/BIGFIN EELPOUT
2 3 4 LYCENCHELYS SP/SLIPSKIN
2 3 5 BOTHROCARA BRUNNEUM/TWOLINE EELPOUT
2 3 6 BOTHROCARA MOLLE/SOFT EELPOUT
2 3 7 BOTHROCARA REMIGERUM/LONGSNOUT EELPOUT
2 3 8 LYCENCHELYS JORDANI/SHORTJAW EELPOUT
2 3 9 LYCODAPUS FIERASFER/BLACKMOUTH SLIPSKIN
2 4 0 LYCODAPUS FIERASFER/BLACKMOUTH SLIPSKIN
2 4 1 LYCODAPUS MANDIBULARIS/PALLID SLIPSKIN
2 4 2 LYCODES BREVIPES/SHORTFIN EELPOUT
2 4 3 LYCODES DIAPTERUS/BLACK EELPOUT
2 4 4 LYCODES PALEARIS/WATTLED EELPOUT
2 4 5 LYCODES PACIFICUS/BLACKBELLY EELPOUT
2 4 6 MELANOSTIGMATINAE (SUBFAMILY)
2 4 7 MELANOSTIGMA PAMMELAS/PACIFIC SOFTPOUT
2 4 8 DEREPODICHTHYS ALEPIDOTUS/CUSKPOUT
2 4 9 MACROURIDAE (FAMILY)/GRENADIERS
2 5 0 CORYPHAENOIDES CINEREUS/POPEYE

2 5 1 CORYPHAENOIDES ACROLEPIS/ROUGHSCALE RATTAIL
2 5 2 CORYPHAENOIDES ARMATUS/RUSSET GRENADIER
2 5 3 CORYPHAENOIDES LEPTOLEPIS/GHOSTLY GRENADIER
2 5 4 CORYPHAENOIDES FILIFER/FILAMENTED RATTAIL
2 5 5 CORYPHAENOIDES LIOCEPHALUS/BEARDED RATTAIL
2 5 6 ALBATROSSIA PECTORALIS/PECTORAL RATTAIL
2 5 7 NEZUMIA STELGIDOLEPIS/LAMP GRENADIER
2 5 8 SCOMBERESOCIDAE (FAMILY)/SAURIES
2 5 9 COLOLABIS SAIRA/PACIFIC SAURY
2 6 0 ATHERINIDAE (FAMILY)/SILVERSIDES
2 6 1 ATHERINOPS AFFINIS/TOPSMELT
2 6 2 MELAMPHAIDAE (FAMILY)/RIDGEHEADS
2 6 3 MELAMPHAES LUGUBRIS/HIGHSNOUT RIDGEHEAD
2 6 4 POROMITRA CRASSICEPS/CRESTED RIDGEHEAD
2 6 5 SCOPELOGADUS MIZOLEPIS/SOFT MELAMPHID
2 6 6 OREOSOMATIDAE (FAMILY)/OREOS
2 6 7 ALLOCYTTUS FOLLETTI/OXEYE OREO
2 6 8 LAMPRIDAE (FAMILY)/OPAHS
2 6 9 LAMPRIS GUTTATUS/OPAH
2 7 0 TRACHIPTERIDAE (FAMILY)/RIBBONFISHES
2 7 1 TRACHIPTERUS ALTIVELIS/KING-OF-THE-SALMON
2 7 3 AULORHYNCHINAE (SUBFAMILY)/TUBE SNOUTS
2 7 4 AULORHYNCHUS FLAVIDUS/TUBE SNOUT
2 7 5 GASTEROSTEINAE (SUBFAMILY)/STICKLEBACKS
2 7 6 GASTEROSTEUS ACULEATUS/THREESPINE STICKLEBACK
2 7 7 SYNGNATHIDAE (FAMILY)/PIPEFISHES
2 7 8 SYNGNATHUS LEPTORHYNCHUS/BAY PIPEFISH
2 8 0 PERCICHTHYIDAE (FAMILY)/TEMPERATE BASSES
2 8 1 MORONE SAXATILIS/STRIPED BASS
2 8 2 MALACANTHIDAE (FAMILY)/TILEFISHES
2 8 3 CAULOLATILUS PRINCEPS/OCEAN WHITEFISH
2 8 4 ECHENEIDAE (FAMILY)/REMORAS
2 8 5 REMORA AUSTRALIS/WHALESUCKER
2 8 6 CARANGIDAE (FAMILY)/JACKS
2 8 7 TRACHURUS SYMMETRICUS/JACK MACKEREL
2 8 8 SERIOLA LALANDI/YELLOWTAIL
2 8 9 BRAMIDAE (FAMILY)/POMFRETS
2 9 0 BRAMA JAPONICA/PACIFIC POMFRET
2 9 1 CARISTIIDAE (FAMILY)/MANEFISHES
2 9 2 CARISTIUS MACROPUS/MANEFISH
2 9 3 SCIAENIDAE (FAMILY)/DRUMS
2 9 4 GENYONEMUS LINEATUS/WHITE CROAKER
2 9 5 ATRACTOSCION NOBILIS/WHITE SEABASS
2 9 6 PENTACEROTIDAE (FAMILY)/ARMOURHEADS
2 9 7 PSEUDOPENTACEROS WHEELERI/PELAGIC ARMOURHEAD
2 9 8 EMBIOTOCIDAE (FAMILY)/SURFPERCHES
3 0 0 AMPHISTICHUS KOELZI/CALICO SURFPERCH
3 0 1 AMPHISTICHUS RHODOTERUS/REDTAIL SURFPERCH
3 0 3 BRACHYISTIUS FRENATUS/KELP PERCH
3 0 4 CYMATOGASTER AGGREGATA/SHINER PERCH
3 0 6 EMBIOTOCA LATERALIS/STRIPED SEAPERCH
3 0 7 HYPERPROSOPON ARGENTUM/WALLEYE SURFPERCH
3 0 9 HYPERPROSOPON ELLIPTICUM/SILVER SURFPERCH
3 1 0 PHANERODON FURCATUS/WHITE SEAPERCH
3 1 2 RHACOCHILUS VACCA/PILE PERCH
3 1 3 SPHYRAENIDAE (FAMILY)/BARRACUDAS
3 1 4 SPHYRAENA ARGENTEA/PACIFIC BARRACUDA
3 1 5 TRICHODONTIDAE (FAMILY)/SANDFISHES
3 1 6 TRICHODON TRICHODON/PACIFIC SANDFISH
3 1 7 BATHYMASTERIDAE (FAMILY)/RONQUILS
3 1 8 BATHYMASTER SIGNATUS/BLUE-EYED SEARCHER
3 1 9 RONQUILUS JORDANI/NORTHERN RONQUIL
3 2 0 BATHYMASTER CAERULEOFASCIATUS/BLUEFIN SEARCHER

3 2 1 CLINIDAE (FAMILY)/CLINIDS
3 2 2 GIBBONSIA METZI/STRIPED KELPFISH
3 2 3 GIBBONSIA MONTEREYENSIS/CREVICE KELPFISH
3 2 4 STICHAEIDAE (FAMILY)/PRICKLEBACKS
3 2 5 STICHAEINAE (SUBFAMILY)
3 2 6 CHIROLOPHINAE (SUBFAMILY)
3 2 7 ALLOLUMPENUS HYPOCHROMUS/Y PRICKLEBACK
3 2 8 ANOPLARCHUS INSIGNIS/SLENDER COCKSCOMB
3 2 9 ANOPLARCHUS PURPURESCENS/HIGH COCKSCOMB
3 3 0 STICHAEUS PUNCTATUS/ARCTIC SHANNY
3 3 1 BRYOZOICHTHYS MARJORIUS/PEARLY PRICKLEBACK
3 3 2 CHIROLOPHIS DECORATUS/DECORATED WARBONNET
3 3 3 CHIROLOPHIS NUGATOR/MOSSHEAD WARBONNET
3 3 4 LUMPENELLA LONGIROSTRIS/LONGSNOUT PRICKLEBACK
3 3 5 CHIROLOPHIS TARSODES/MATCHEEK WARBONNET
3 3 6 LEPTOCLINUS MACULATUS/DAUBED SHANNY
3 3 7 LUMPENUS SAGITTA/SNAKE PRICKLEBACK
3 3 8 PHYTICHTHYS CHIRUS/RIBBON PRICKLEBACK
3 3 9 PLECTOBRANCHUS EVIDES/BLUEBARRED PRICKLEBACK
3 4 0 POROCLINUS ROTHROCKI/WHITEBARRED PRICKLEBACK
3 4 1 XIPHISTÈR ATROPURPUREUS/BLACK PRICKLEBACK
3 4 2 ANARHICHADIDAE (FAMILY)/WOLFFISHES
3 4 3 XIPHISTER MUCOSUS/ROCK PRICKLEBACK
3 4 4 PHOLIDAE (FAMILY)/GUNNELS
3 4 5 APODICHTHYS FLAVIDUS/PENPOINT GUNNEL
3 4 6 PHOLIS CLEMENSI/LONGFIN GUNNEL
3 4 7 PHOLIS LAETA/CRESCENT GUNNEL
3 4 8 PHOLIS ORNATA/SADDLEBACK GUNNEL
3 4 9 PHOLIS SCHULTZI/RED GUNNEL
3 5 0 APODICHTHYS FUCORUM/ROCKWEED GUNNEL
3 5 1 ANARRHICHTHYS OCELLATUS/WOLF EEL
3 5 2 PTILICHTHYIDAE (FAMILY)/QUILLFISH
3 5 3 PTILICHTHYS GOODEI/QUILLFISH
3 5 4 CRYPTACANTHODIDAE (FAMILY)/WRYMOUTHS
3 5 5 CRYPTACANTHODES GIGANTEA/GIANT WRYMOUTH
3 5 6 CRYPTACANTHODES ALEUTENSIS/DWARF WRYMOUTH
3 5 7 SCYTALINA CERDALE/GRAVELDIVER
3 5 8 ZAPRORIDAE (FAMILY)/PROWFISHES
3 5 9 ZAPRORA SILENUS/PROWFISH
3 6 0 AMMODYTIDAE (FAMILY)/SAND LANCES
3 6 1 AMMODYTES HEXAPTERUS/PACIFIC SAND LANCE
3 6 2 GOBIIDAE (FAMILY)/GOBIES
3 6 3 CLEVELANDIA IOS/ARROW GOBY
3 6 4 SCYTALINIDAE (FAMILY)/GRAVELDIVERS
3 6 5 CORYPHOPTERUS NICHOLSI/BLACKEYE GOBY
3 6 6 LEPIDOGOBIUS LEPIDUS/BAY GOBY
3 6 7 TRICHIURIDAE (FAMILY)/HAIRTAILS
3 6 8 BENTHODESMUS ELONGATUS/BIGEYE FROSTFISH
3 6 9 SCOMBRIDAE (FAMILY)/MACKERELS AND TUNAS
3 7 0 AUXIS ROCHEI/BULLET TUNA (MACKEREL)
3 7 1 KATSUWONUS PELAMIS/SKIPJACK TUNA
3 7 2 AUXIS THAZARD/FRIGATE MACKEREL
3 7 3 SARDA CHILIENSIS/PACIFIC BONITO
3 7 4 SCOMBER JAPONICUS/CHUB MACKEREL
3 7 5 EUTHYNNUS AFFINIS/KAWAKAWA
3 7 6 THUNNUS ALALUNGA/ALBACORE
3 7 7 THUNNUS ALBACARES/YELLOWFIN TUNA
3 7 8 THUNNUS OBESUS/BIGEYE TUNA
3 7 9 THUNNUS THYNNUS/BLUEFIN TUNA
3 8 0 STROMATEIDAE (FAMILY)/BUTTERFISHES
3 8 1 ICICHTHYS LOCKINGTONI/MEDUSAFISH
3 8 2 CENTROLOPHIDAE (FAMILY)/RUFFS
3 8 3 PEPRILUS SIMILLIMUS/PACIFIC POMPANO

3 8 4 TETRAGONURUS CUVIERI/SMALLEYE SQUARETAIL
3 8 5 ICOSTEIDAE (FAMILY)/RAGFISHES
3 8 6 ICOSTEUS AENIGMATICUS/RAGFISH
3 8 8 SCORPAENIDAE (FAMILY)/SCORPIONFISHES
3 8 9 SEBASTINAE (SUBFAMILY)/ROCKFISHES
3 9 4 SEBASTES ALEUTIANUS/ROUGHEYE ROCKFISH
3 9 6 SEBASTES ALUTUS/PACIFIC OCEAN PERCH
3 9 8 SEBASTES AURICULATUS/BROWN ROCKFISH
4 0 0 SEBASTES AURORA/AURORA ROCKFISH
4 0 1 SEBASTES BABCOCKI/REDBANDED ROCKFISH
4 0 3 SEBASTES BOREALIS/SHORTRAKER ROCKFISH
4 0 5 SEBASTES BREVISPINIS/SILVERGRAY ROCKFISH
4 0 7 SEBASTES CAURINUS/COPPER ROCKFISH
4 0 9 SEBASTES CILIATUS/DUSKY ROCKFISH
4 1 0 SEBASTES CRAMERI/DARKBLOTCHED ROCKFISH
4 1 2 SEBASTES DIPLOPROA/SPLITNOSE ROCKFISH
4 1 4 SEBASTES ELONGATUS/GREENSTRIPED ROCKFISH
4 1 5 SEBASTES EMPHAEUS/PUGET SOUND ROCKFISH
4 1 7 SEBASTES ENTOMELAS/WIDOW ROCKFISH
4 1 8 SEBASTES FLAVIDUS/YELLOWTAIL ROCKFISH
4 2 0 SEBASTES GOODEI/CHILIPEPPER
4 2 1 SEBASTES HELVOMACULATUS/ROSETHORN ROCKFISH
4 2 3 SEBASTES JORDANI/SHORTBELLY ROCKFISH
4 2 4 SEBASTES MALIGER/QUILLBACK ROCKFISH
4 2 6 SEBASTES MELANOPS/BLACK ROCKFISH
4 2 8 SEBASTES MINIATUS/VERMILION ROCKFISH
4 2 9 SEBASTES MYSTINUS/BLUE ROCKFISH
4 3 1 SEBASTES NEBULOSUS/CHINA ROCKFISH
4 3 3 SEBASTES NIGROCINCTUS/TIGER ROCKFISH
4 3 5 SEBASTES PAUCISPINIS/BOCACCIO
4 3 7 SEBASTES PINNIGER/CANARY ROCKFISH
4 3 8 SEBASTES POLYSPINIS/NORTHERN ROCKFISH
4 3 9 SEBASTES PRORIGER/REDSTRIPE ROCKFISH
4 4 0 SEBASTES REEDI/YELLOWMOUTH ROCKFISH
4 4 2 SEBASTES RUBERRIMUS/YELLOWEYE ROCKFISH
4 4 4 SEBASTES SAXICOLA/STRIPETAIL ROCKFISH
4 4 6 SEBASTES VARIEGATUS/HARLEQUIN ROCKFISH
4 4 8 SEBASTES WILSONI/PYGMY ROCKFISH
4 5 0 SEBASTES ZACENTRUS/SHARPCHIN ROCKFISH
4 5 1 SEBASTOLOBUS ALASCANUS/SHORTSPINE THORNYHEAD
4 5 2 SEBASTOLOBINAE (SUBFAMILY)/THORNYHEADS
4 5 3 SEBASTOLOBUS ALTIVELIS/LONGSPINE THORNYHEAD
4 5 4 ANOPLOPOMATIDAE (FAMILY)/SABLEFISHES
4 5 5 ANOPLOPOMA FIMBRIA/SABLEFISH
4 5 8 ERILEPIS ZONIFER/SKILFISH
4 5 9 HEXAGRAMMIDAE (FAMILY)/GREENLINGS
4 6 0 HEXAGRAMMINAE (SUBFAMILY)/GREENLINGS
4 6 1 HEXAGRAMMOS DECAGRAMMUS/KELP GREENLING
4 6 2 OXYLEBIINAE (SUBFAMILY)/PAINTED GREENLING
4 6 3 HEXAGRAMMOS LAGOCEPHALUS/ROCK GREENLING
4 6 4 HEXAGRAMMOS OCTOGRAMMUS/MASKED GREENLING
4 6 5 OPHIODONTINAE (SUBFAMILY)/LINGCOD
4 6 6 HEXAGRAMMOS STELLERI/WHITESPOTTED GREENLING
4 6 7 OPHIODON ELONGATUS/LINGCOD
4 6 8 PLEUROGRAMMINAE (SUBFAMILY)/ATKA MACKEREL
4 6 9 PLEUROGRAMMUS MONOPTERYGIUS/ATKA MACKEREL
4 7 0 OXYLEBIUS PICTUS/PAINTED GREENLING
4 7 1 ZANIOLEPIS LATIPINNIS/LONGSPINE COMBFISH
4 7 2 COTTIDAE (FAMILY)/SCULPINS
4 7 3 ARTEDIUS-TYPE LARVAE
4 7 4 PSYCHROLUTIDAE (FAMILY)/FATHEADS
4 7 5 COTTUNCULINAE (SUBFAMILY)
4 7 6 PSYCHROLUTINAE (SUBFAMILY)

4 7 8 ARTEDIUS FENESTRALIS/PADDED SCULPIN
4 7 9 ARTEDIUS HARRINGTONI/SCALYHEAD SCULPIN
4 8 0 ARTEDIUS (GENUS)
4 8 1 ARTEDIUS LATERALIS/SMOOTHHEAD SCULPIN
4 8 3 RUSCARIUS MEANYI/PUGET SOUND SCULPIN
4 8 4 ASCELICHTHYS RHODORUS/ROSYLIP SCULPIN
4 8 5 ASEMICHTHYS TAYLORI/SPINYNOSE SCULPIN
4 8 7 BLEPSIAS BILOBUS/CRESTED SCULPIN
4 8 9 BLEPSIAS CIRRHOSUS/SILVERSPOTTED SCULPIN
4 9 1 CHITONOTUS PUGETENSIS/ROUGHBACK SCULPIN
4 9 3 CLINOCOTTUS ACUTICEPS/SHARPNOSE SCULPIN
4 9 4 CLINOCOTTUS EMBRYUM/CALICO SCULPIN
4 9 6 CLINOCOTTUS GLOBICEPS/MOSSHEAD SCULPIN
4 9 7 DASYCOTTUS SETIGER/SPINYHEAD SCULPIN
4 9 8 GYMNOCANTHUS GALEATUS/ARMOURHEAD SCULPIN
4 9 9 ENOPHRYS BISON/BUFFALO SCULPIN
5 0 0 ENOPHRYS LUCASI/LEISTER SCULPIN
5 0 1 PSYCHROLUTES SIGALUTES/SOFT SCULPIN
5 0 2 HEMILEPIDOTUS HEMILEPIDOTUS/RED IRISH LORD
5 0 3 HEMILEPIDOTUS (GENUS)
5 0 4 HEMILEPIDOTUS SPINOSUS/BROWN IRISH LORD
5 0 5 HEMITRIPTERUS BOLINI/BIGMOUTH SCULPIN
5 0 7 ICELINUS BOREALIS/NORTHERN SCULPIN
5 0 8 ICELINUS BURCHAMI/DUSKY SCULPIN
5 1 0 ICELINUS FILAMENTOSUS/THREADFIN SCULPIN
5 1 1 ICELINUS FIMBRIATUS/FRINGED SCULPIN
5 1 2 ICELINUS FIMBRIATUS/FRINGED SCULPIN
5 1 3 ICELINUS TENUIS/SPOTFIN SCULPIN
5 1 5 ICELUS SPINIGER/THORNY SCULPIN
5 1 6 JORDANIA ZONOPE/LONGFIN SCULPIN
5 1 8 LEPTOCOTTUS ARMATUS/PACIFIC STAGHORN SCULPIN
5 1 9 MALACOCOTTUS KINCAIDI/BLACKFIN SCULPIN
5 2 0 MALACOCOTTUS ZONURUS/DARKFIN SCULPIN
5 2 1 MYOXOCEPHALUS POLYACANTHOCEPHALUS/GREAT SCULPIN
5 2 2 NAUTICHTHYS OCULOFASCIATUS/SAILFIN SCULPIN
5 2 3 MYOXOCEPHALUS SP/STELLATE SCULPIN
5 2 4 MYOXOCEPHALUS-TYPE LARVAE
5 2 5 NAUTICHTHYS ROBUSTUS/SMALLSAIL SCULPIN
5 2 7 OLIGOCOTTUS MACULOSUS/TIDEPOOL SCULPIN
5 2 9 OLIGOCOTTUS RIMENSIS/SADDLEBACK SCULPIN
5 3 0 OLIGOCOTTUS SNYDERI/FLUFFY SCULPIN
5 3 2 PARICELINUS HOPLITICUS/THORNBACK SCULPIN
5 3 3 PSYCHROLUTES PARADOXUS/TADPOLE SCULPIN
5 3 4 PSYCHROLUTES PHRICTUS/BLOB SCULPIN
5 3 5 RADULINUS ASPRELLUS/SLIM SCULPIN
5 3 6 RADULINUS BOLEOIDES/DARTER SCULPIN
5 3 7 RADULINUS (GENUS)
5 3 8 RHAMPHOCOTTUS RICHARDSONI/GRUNT SCULPIN
5 4 0 SCORPAENICHTHYS MARMORATUS/CABEZON
5 4 2 SYNCHIRUS GILLI/MANACLED SCULPIN
5 4 3 TRIGLOPS MACELLUS/ROUGHSPINE SCULPIN
5 4 5 TRIGLOPS PINGELI/RIBBED SCULPIN
5 4 6 AGONIDAE (FAMILY)/POACHERS
5 4 7 AGONOMALUS MOZINOI/KELP POACHER
5 4 9 AGONOPSIS VULSA/NORTHERN SPEARNOSE POACHER
5 5 0 PODATHECUS ACIPENSERINUS/STURGEON POACHER
5 5 2 ANOPLAGONUS INERMIS/SMOOTH ALLIGATORFISH
5 5 3 BATHYAGONUS ALASCANUS/GRAY STARSNOUT
5 5 4 BATHYAGONUS INFRASPINATUS/SPINYCHEEK STARSNOUT
5 5 5 XENERETMUS LEIOPS/CUTFIN POACHER
5 5 6 BATHYAGONUS PENTACANTHUS/BIGEYE POACHER
5 5 7 BATHYAGONUS NIGRIPINNIS/BLACKFIN POACHER
5 5 8 BOTHRAGONUS SWANI/ROCKHEAD

5 5 9 STELLERINA XYOSTERNA/PRICKLEBREAST POACHER
5 6 0 HYPSAGONUS QUADRICORNIS/FOURHORN POACHER
5 6 1 OCCELLA IMPI/PIXIE POACHER
5 6 2 OCCELLA VERRUCOSA/WARTY POACHER
5 6 3 SARRITOR FRENATUS/SAWBACK POACHER
5 6 4 ODONTOPYXIS TRISPINOSA/PYGMY POACHER
5 6 5 PALLASINA BARBATA/TUBENOSE POACHER
5 6 6 XENERETMUS LATIFRONS/BLACKTIP POACHER
5 6 7 XENERETMUS TRIACANTHUS/BLUESPOTTED POACHER
5 6 8 CYCLOPTERIDAE (FAMILY)/LUMPFISHES AND SNAILFISHES
5 6 9 CYCLOPTERINAE (SUBFAMILY)/LUMPFISHES
5 7 0 PARALIPARIS ROSACEUS/PINK SNAILFISH
5 7 1 APTOCYCLUS VENTRICOSUS/SMOOTH LUMPSUCKER
5 7 2 ACANTHOLIPARIS OPERCULARIS/SPINY SNAILFISH
5 7 3 CAREPROCTUS GILBERTI/SMALLDISK SNAILFISH
5 7 4 CAREPROCTUS MELANURUS/BLACKTAIL SNAILFISH
5 7 5 CAREPROCTUS OVIGERUM/ABYSSAL SNAILFISH
5 7 6 CAREPROCTUS OREGONENSIS/SMALLFIN SNAILFISH
5 7 7 EUMICROTREMUS ORBIS/PACIFIC SPINY LUMPSUCKER
5 7 8 LIPARINAE (SUBFAMILY)/SNAILFISHES
5 7 9 LIPARIS CALLYODON/SPOTTED SNAILFISH
5 8 0 LIPARIS CYCLOPUS/RIBBON SNAILFISH
5 8 1 PARALIPARIS PAUCIDENS/TOOTHLESS SNAILFISH
5 8 2 LIPARIS DENNYI/MARBLED SNAILFISH
5 8 3 LIPARIS FLORAE/TIDEPOOL SNAILFISH
5 8 4 PARALIPARIS LATIFRONS/BIGPORED SNAILFISH
5 8 5 LIPARIS FUCENSIS/SLIPSKIN SNAILFISH
5 8 6 LIPARIS MUCOSUS/SLIMY SNAILFISH
5 8 7 OSTEODISCUS CASCADIAE/BIGTAILED SNAILFISH
5 8 8 LIPARIS PULCHELLUS/SHOWY SNAILFISH
5 8 9 LIPARISCUS NANUS/PYGMY SNAILFISH
5 9 0 LIPARIS RUTTERI/RINGTAIL SNAILFISH
5 9 1 NECTOLIPARIS PELAGICUS/TADPOLE SNAILFISH
5 9 2 PARALIPARIS CEPHALUS/SWELLHEAD SNAILFISH
5 9 3 PARALIPARIS DEANI/PRICKLY SNAILFISH
5 9 4 LIPARIS GREENI/LOBEFIN SNAILFISH
5 9 5 BOTHIDAE (FAMILY)/LEFTEYE FLOUNDERS
5 9 6 CITHARICHTHYS SORDIDUS/PACIFIC SANDDAB
5 9 7 PLEURONECTIFORMES (ORDER)/FLATFISHES
5 9 8 CITHARICHTHYS STIGMAEUS/SPECKLED SANDDAB
5 9 9 PLEURONECTIDAE (FAMILY)/RIGHTEYE FLOUNDERS
6 0 0 LIPARIS (GENUS)/SNAILFISHES
6 0 2 ATHERESTHES STOMIAS/ARROWTOOTH FLOUNDER
6 0 4 CLIDODERMA ASPERRIMUM/ROUGHSCALE SOLE
6 0 5 EMBASSICHTHYS BATHYBIUS/DEEPSEA SOLE
6 0 7 EOPSETTA JORDANI/PETRALE SOLE
6 1 0 ERREX ZACHIRUS/REX SOLE
6 1 2 HIPPOGLOSSOIDES ELASSODON/FLATHEAD SOLE
6 1 4 HIPPOGLOSSUS STENOLEPIS/PACIFIC HALIBUT
6 1 7 INOPSETTA ISCHYRA/FORKLINE (HYBRID) SOLE
6 1 9 PLEURONECTES ISOLEPIS/BUTTER SOLE
6 2 1 PLEURONECTES BILINEATUS/ROCK SOLE
6 2 3 PLEURONECTES ASPER/YELLOWFIN SOLE
6 2 5 EOPSETTA EXILIS/SLENDER SOLE
6 2 6 MICROSTOMUS PACIFICUS/DOVER SOLE
6 2 8 PLEURONECTES VETULUS/ENGLISH SOLE
6 3 1 PLATICHTHYS STELLATUS/STARRY FLOUNDER
6 3 3 PLEURONICHTHYS COENOSUS/C-O SOLE
6 3 5 PLEURONICHTHYS DECURRENS/CURLFIN SOLE
6 3 6 PSETTICHTHYS MELANOSTICTUS/SAND SOLE
6 3 8 REINHARDTIUS HIPPOGLOSSOIDES/GREENLAND HALIBUT
6 3 9 MOLIDAE (FAMILY)/MOLAS
6 4 0 MOLA MOLA/OCEAN SUNFISH

6 4 1 BATHYLYCHNOPS EXILIS/JAVELIN SPOOKFISH
6 4 2 ALEPOCEPHALIDAE (FAMILY)/SLICKHEADS
6 4 3 TALISMANIA BIFURCATA/THREADFIN SLICKHEAD
6 4 4 HOLTBYRNIA INNESI/INNES' TUBESHOULDER
6 4 5 HOLTBYRNIA LATIFRONS/STREAKLIGHT TUBESHOULDER
6 4 6 MAULISIA ARGIPALLA/PITTED TUBESHOULDER
6 4 7 CYCLOTHONE PALLIDA/TAN BRISTLEMOUTH
6 4 8 CYCLOTHONE PSEUDOPALLIDA/SLENDER BRISTLEMOUTH
6 4 9 CYCLOTHONE SIGNATA/SHOWY BRISTLEMOUTH
6 5 0 GONOSTOMA GRACILE/SLENDER FANGJAW
6 5 1 DANAPHOS OCULATUS/BOTTLELIGHT
6 5 2 STERNOPTYX PSEUDOBSCURA/HIGHLIGHT HATCHETFISH
6 5 3 PHOSICHTHYIDAE (FAMILY)/LIGHTFISHES
6 5 4 ICHTHYOCOCCUS ELONGATUS/SLIM LIGHTFISH
6 5 5 MALACOSTEUS DANAE/SHORTNOSE LOOSEJAW
6 5 6 MALACOSTEUS NIGER/STOPLIGHT LOOSEJAW
6 5 7 BENTHALBELLA LINGUIDENS/LONGFIN PEARLEYE
6 5 8 SYNODONTIDAE (FAMILY)/LIZARDFISHES
6 5 9 SYNODUS LUCIOCEPS/SMALLSCALE LIZARDFISH
6 6 0 PARALEPIS ATLANTICA/DUCKBILL BARRACUDINA
6 6 1 NEOSCOPELIDAE (FAMILY)/BLACKCHINS
6 6 2 NEOSCOPELUS MACROLEPIDOTUS/GLOWINGFISH
6 6 3 MELANONIDAE (FAMILY)/ARROWTAILS
6 6 4 MELANONUS ZUGAMAYERI/ARROWTAIL
6 6 5 OPHIDIIDAE (FAMILY)/CUSKEELS
6 6 6 SPECTRUNCULUS GRANDIS/GIANT CUSKEEL
6 6 7 CETOMIMIDAE (FAMILY)/FLABBY WHALEFISHES
6 6 8 GYRINOMIMUS SP/FLABBY WHALEFISH
6 6 9 ZANIOLEPIDINAE (SUBFAMILY)/COMBFISHES
6 7 0 LIPARIS GIBBUS/DUSKY SNAILFISH
6 7 1 RHINOLIPARIS ATTENUATUS/SLIM SNAILFISH
6 7 2 NAUCRATES DUCTOR/PILOTFISH
6 7 3 SCORPIDINAE (SUBFAMILY)/HALFMOONS
6 7 4 MEDIALUNA CALIFORNIENSIS/HALFMOON
6 7 5 TARACTES ASPER/ROUGH POMFRET
6 7 6 SERIPHUS POLITUS/QUEENFISH
6 7 7 LYCENCHELYS CROTALINA/SNAKEHEAD EELPOUT
6 7 8 LYCODAPUS ENDEMOSCOTUS/DEEPWATER SLIPSKIN
6 7 9 LYCODAPUS PACHYSOMA/STOUT SLIPSKIN
6 8 0 LYCODAPUS PARVICEPS/STUBRAKER SLIPSKIN
6 8 1 TARANETZELLA LYODERMA/GHOSTLY EELPOUT
6 8 2 PACHYCARA BULBICEPS/SNUBNOSE EELPOUT
6 8 3 PACHYCARA GYMNINIUM/NAKEDNAPE EELPOUT
6 8 4 PACHYCARA LEPINIUM/SCALEDNAPE EELPOUT
6 8 5 LUVARIDAE (FAMILY)/LOUVAR
6 8 6 LUVARUS IMPERIALIS/LOUVAR
6 8 7 APHANOPUS CARBO/BLACK SCABBARDFISH
6 8 8 BENTHODESMUS TENUIS/SMALLEYE FROSTFISH
6 8 9 XIPHIIDAE (FAMILY)/SWORDFISHES
6 9 0 XIPHIAS GLADIUS/SWORDFISH
6 9 1 TETRAGONURIDAE (FAMILY)/SQUARETAILS
6 9 2 PHOLIS (GENUS)/GUNNELS
6 9 3 EUTHYNNUS LINEATUS/BLACK SKIPJACK
6 9 4 SCOMBER AUSTRALASICUS/SLIMY MACKEREL
6 9 5 ACANTHOCYBIUM SOLANDRI/WAHOO
6 9 6 ISTIOPHORIDAE (FAMILY)/BILLFISHES
6 9 7 ISTIOPHORUS PLATYPTERUS/SAILFISH
6 9 8 MAKAIRA MAZARA/PACIFIC BLUE MARLIN
6 9 9 TETRAPTURUS ANGUSTIROSTRIS/SHORTNOSE SPEARFISH
7 0 0 TETRAPTURUS AUDAX/STRIPED MARLIN
7 0 1 PETROMYZONTIDAE (FAMILY)/LAMPREYS
7 0 2 LAMPETRA TRIDENTATA/PACIFIC LAMPREY
7 0 3 LAMPETRA RICHARDSONI/WESTERN BROOK LAMPREY

7 0 4 EXOCETIDAE (FAMILY)/FLYING FISHES
7 0 5 CYPSELURUS CALIFORNICUS/FLYING FISH
7 0 6 LOPHOTUS LACEPEDE/CRESTFISH
7 0 7 COREGONINAE (SUBFAMILY)/WHITEFISHES
7 0 8 PROSOPIUM CYLINDRACEUM/ROUND WHITEFISH
7 0 9 PROSOPIUM WILLIAMSONI/MOUNTAIN WHITEFISH
7 1 0 PROSOPIUM COULTERI/PYGMY WHITEFISH
7 1 1 COREGONUS CLUPEAFORMIS/LAKE WHITEFISH
7 1 2 COREGONUS NASUS/BROAD WHITEFISH
7 1 3 COREGONUS SARDINELLA/LEAST CISCO
7 1 4 STENODUS LEUCICHTHYS/INCONNU
7 1 5 COREGONUS ARTEDII/LAKE CISCO
7 1 6 TARACTES RUBESCENS/DAGGER POMFRET
7 1 7 TARACTICHTHYS STEINDACHNERI/SICKLE POMFRET
7 1 8 THYMALLINAE (SUBFAMILY)/GRAYLINGS
7 1 9 THYMALLUS ARCTICUS/ARCTIC GRAYLING
7 2 0 REGALECUS GLESNE/OARFISH
7 2 1 SALVELINUS CONFLUENTUS/BULL TROUT
7 2 2 SALVELINUS NAMAYACUSH/LAKE TROUT
7 2 3 SALVELINUS FONTINALIS/BROOK TROUT
7 2 4 ONCORHYNCHUS CLARKI LEWISI/YELLOWSTONE CUTTHROAT TROUT
7 2 5 TRACHIPTERUS FUKUZAKII/TAPERTAIL RIBBONFISH
7 2 6 TRACHIPTERUS ISHIKAWAE/LOWSAIL RIBBONFISH
7 2 7 TRACHIPTERUS TRACHYPTERUS/RIBBONFISH
7 2 8 DESMODEMA LORUM/WHIPTAIL RIBBONFISH
7 2 9 ZU CRISTATUS/SCALLOPED RIBBONFISH
7 3 0 CATOSTOMIDAE (FAMILY)/SUCKERS
7 3 1 CATOSTOMUS MACROCHEILUS/LARGESCALE SUCKER
7 3 2 CATOSTOMUS COMMERSONI/WHITE SUCKER
7 3 3 CATOSTOMUS CATOSTOMUS/LONGNOSE SUCKER
7 3 4 CATOSTOMUS COLUMBIANUS/BRIDGELIP SUCKER
7 3 5 CATOSTOMUS PLATYRHYNCHUS/MOUNTAIN SUCKER
7 3 6 NOTROPIS HUDSONIUS/SPOTTAIL SHINER
7 3 7 PIMEPHALES PROMELAS/FATHEAD MINNOW
7 3 8 CTENOPHARYNGODON IDELLA/GRASS CARP
7 3 9 CARASSIUS AURATUS/GOLDFISH
7 4 0 TINCA TINCA/TENCH
7 4 1 RICHARDSONIUS BALTEATUS/REDSIDE SHINER
7 4 2 PTYCHOCHEILUS OREGONENSIS/NORTHERN SQUAWFISH
7 4 3 MARGARISCUS MARGARITA/PEARL DACE
7 4 4 MYLOCHEILUS CAURINUS/PEAMOUTH CHUB
7 4 5 PHOXINUS EOS/NORTHERN REDBELLY DACE
7 4 6 PHOXINUS NEOGAEUS/FINESCALE DACE
7 4 7 ACROCHEILUS ALUTACEUS/CHISELMOUTH
7 4 8 PLATYGOBIO GRACILIS/FLATHEAD CHUB
7 4 9 COUESIUS PLUMBEUS/LAKE CHUB
7 5 0 RHINICHTHYS OSCULUS/SPECKLED DACE
7 5 1 RHINICHTHYS FALCATUS/LEOPARD DACE
7 5 2 RHINICHTHYS CATARACTAE/LONGNOSE DACE
7 5 3 HYBOGNATHUS HANKINSONI/BRASSY MINNOW
7 5 4 NOTROPIS ATHERINOIDES/EMERALD SHINER
7 5 5 RHINICHTHYS UMATILLA/UMATILLA DACE
7 5 6 RANZANIA LAEVIS/SLENDER MOLA
7 5 7 LOBOTES SURINAMENSIS/TRIPLETAIL
7 5 8 ICTALURIDAE (FAMILY)/NORTH AMERICAN FRESHWATER CATFISHES
7 5 9 AMEIURUS NEBULOSUS/BROWN BULLHEAD
7 6 0 AMEIURUS MELAS/BLACK BULLHEAD
7 6 1 CORYPHAENIDAE (FAMILY)/DOLPHINFISHES
7 6 2 CORYPHAENA EQUISETIS/POMPANO DOLPHIN
7 6 3 CORYPHAENA HIPPURUS/MAHI MAHI
7 6 4 HIODONTIDAE (FAMILY)/MOONEYES
7 6 5 HIODON ALOSOIDES/GOLDEYE
7 6 6 KYPHOSUS (GENUS)/SEA CHUBS

7 6 7 DIODONTIDAE (FAMILY)/PORCUPINEFISHES
7 6 8 ESOCIDAE (FAMILY)/PIKES
7 6 9 ESOX LUCIUS/NORTHERN PIKE
7 7 0 BANJOS BANJOS/BANJOFISH
7 7 1 GASTEROSTEIDAE (FAMILY)/STICKLEBACKS AND TUBESNOUTS
7 7 2 CULAEA INCONSTANS/BROOK STICKLEBACK
7 7 3 PUNGITIUS PUNGITIUS/NINESPINE STICKLEBACK
7 7 4 LOTIDAE (FAMILY)/HAKES AND BURBOTS
7 7 5 LOTA LOTA/BURBOT
7 7 6 OPLEGNATHIDAE (FAMILY)/KNIFEJAWS
7 7 7 HYPEROGLYPHE JAPONICA/JAPANESE BUTTERFISH
7 7 8 PERCOPSIDAE (FAMILY)/TROUTPERCHES
7 7 9 PERCOPSIS OMISCOMAYCUS/TROUTPERCH
7 8 0 EPHIPPIDAE (FAMILY)/BATFISHES
7 8 1 PLATAX TEIRA/LONGFIN BATFISH
7 8 2 PERCIDAE (FAMILY)/PERCHES
7 8 3 PERCA FLAVESCENS/YELLOW PERCH
7 8 4 STIZOSTEDION VITREUM/YELLOW WALLEYE
7 8 5 POMACENTRIDAE (FAMILY)/DAMSELFISHES
7 8 6 ABUDEFDUF (GENUS)/SERGEANTS
7 8 7 CENTRARCHIDAE (FAMILY)/SUNFISHES
7 8 8 MICROPTERUS DOLOMIEUI/SMALLMOUTH BASS
7 8 9 MICROPTERUS SALMOIDES/LARGEMOUTH BASS
7 9 0 LEPOMIS GIBBOSUS/PUMPKINSEED
7 9 1 POMOXIS NIGROMACULATUS/BLACK CRAPPIE
7 9 2 REMORA BRACHYPTERA/SWORDFISH SUCKER
7 9 3 REMORA REMORA/BLACK REMORA
7 9 4 REMORINA ALBESCENS/WHITE SUCKERFISH
7 9 5 COTTUS ASPER/PRICKLY SCULPIN
7 9 6 COTTUS ALEUTICUS/COASTRANGE SCULPIN
7 9 7 COTTUS RICEI/SPOONHEAD SCULPIN
7 9 8 COTTUS RHOTHEUS/TORRENT SCULPIN
7 9 9 COTTUS COGNATUS/SLIMY SCULPIN
8 0 0 COTTUS BAIRDI/MOTTLED SCULPIN
8 0 1 COTTUS CONFUSUS/SHORTHEAD SCULPIN
8 0 2 MONOCANTHIDAE (FAMILY)/FILEFISHES
8 0 3 ALUTERUS MONOCEROS/LEATHERJACKET
8 0 4 EXOTICA/ORNAMENTAL FISH
8 0 5 GEMPYLIDAE (FAMILY)/SNAKE MACKERELS
8 0 6 GEMPYLUS SERPENS/SNAKE MACKEREL
8 0 7 LEPIDOCYBIUM FLAVOBRUNNEUM/ESCOLAR
8 0 8 RUVETTUS PRETIOSUS/OILFISH
8 0 9 NOMEIDAE (FAMILY)/DRIFTFISHES
8 1 0 CUBICEPS SQUAMICEPS/CIGARFISH
8 1 1 PSENES PELLUCIDUS/BLUEFIN DRIFTFISH
8 1 2 BALISTIDAE (FAMILY)/TRIGGERFISHES
8 1 3 MELICHTHYS NIGER/BLACK DURGON
8 1 4 XANTHICHTHYS MENTO/REDTAIL TRIGGERFISH
8 1 5 TETRAODONTIDAE (FAMILY)/PUFFERFISHES
8 1 6 LAGOCEPHALUS LAGOCEPHALUS/OCEAN PUFFER
8 1 7 ANOPLARCHUS (GENUS)
8 1 8 CHIROLOPHIS (GENUS)
8 1 9 LUMPENINAE (SUBFAMILY)
8 2 0 LOPHOTIDAE (FAMILY)/CRESTFISHES
8 2 1 REGALECIDAE (FAMILY)/OARFISHES
8 2 2 BANJOSIDAE (FAMILY)/BANJOFISHES
8 2 3 OPLEGNATHUS (GENUS)/KNIFEJAWS
8 2 4 LOBOTIDAE (FAMILY)/TRIPLETAILS
8 2 5 OPISTHOCENTRINAE (SUBFAMILY)
8 2 6 ALECTRIINAE (SUBFAMILY)
8 2 7 XIPHISTERINAE (SUBFAMILY)
8 2 8 CUBICEPS BAXTERI/CIGARFISH
8 4 8 NO FISH IN SAMPLE

8 4 9 UNIDENTIFIED ORGANIC MATTER
9 9 9 MISSING SAMPLE

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