

**Classification of fishes from Fishes of the World 5<sup>th</sup> Edition.**

**Nelson, JS, Grande, TC, and Wilson, MVH. 2016.**

This is a more detailed version of the listing in the book's Table of Contents. Order and Family numbers are in parentheses; the page number follows a comma; † indicates extinct taxon. If you spot errors, please let us know at [fishesoftheworldfifthedition@gmail.com](mailto:fishesoftheworldfifthedition@gmail.com). Latest update January 11, 2018.

**PHYLUM CHORDATA, 13**

SUBPHYLUM UROCHORDATA—tunicates, 15

Class ASCIDIACEA—ascidians, 15

Class THALIACEA—salps, 15

    Order PYROSOMIDA, 15

    Order DOLIOLIDIDA, 15

    Order SALPIDA, 15

Class APPENDICULARIA, 15

SUBPHYLUM CEPHALOCHORDATA, 16

    Order AMPHIOXIFORMES—lancelets, 16

        Family BRANCHIOSTOMATIDAE, 16

        Family EPIGONICHTHYIDAE, 16

†SUBPHYLUM CONODONTOPHORIDA—conodonts, 17

    †Class CONODONTA, 17

SUBPHYLUM CRANIATA, 18

INFRAPHYLUM MYXINOMORPHI, 19

    Class MYXINI, 20

        Order MYXINIFORMES (1)—hagfishes, 20

            Family MYXINIDAE (1)—hagfishes, 20

                Subfamily Rubicundinae, 21

                Subfamily Eptatretinae, 21

                Subfamily Myxininae, 21

INFRAPHYLUM VERTEBRATA—vertebrates, 22

    †*Anatolepis*, 22

    Superclass PETROMYZONTOMORPHI, 23

        Class PETROMYZONTIDA, 23

            Order PETROMYZONTIFORMES (2)—lampreys, 23

                †Family MAYOMYZONTIDAE, 24

                Family PETROMYZONTIDAE (2)—northern lampreys, 24

                    Subfamily Petromyzontinae, 24

                    Subfamily Lampetrinae, 25

                Family GEOTRIIDAE (3)—southern lampreys, 25

                Family MORDACIIDAE (4)—southern topeyed lampreys, 26

    †Superclass PTERASPIDOMORPHI, 26

        †Class PTERASPIDOMORPHA, 26

            Subclass ASTRASPIDA, 27

                †Order ASTRASPIDIFORMES, 27

            Subclass ARANDASPIDA, 27

                †Order ARANDASPIDIFORMES, 27

            Subclass HETEROSTRACI, 28

                †Order CARDIPELTIDA, 28

                †Order CORVASPIDIDA, 28

                †Order LEPIDASPIDIDA, 28

                †Order TESSERASPIDIDA, 28

                †Order TRAQUAIRASPIDIFORMES, 28

                †Order TOLYPELEPIDIDA, 28

                †Order CYATHASPIDIFORMES, 28

                    †Family AMPHIASPIDIDAE, 28

- †Family CYATHASPIDIDAE, 29
- †Order PTERASPIDIFORMES, 29
  - †Family ANCHIPTERASPIDIDAE, 29
  - †Family PROTASPIDIDAE, 29
  - †Family PROTOPTERASPIDIDAE, 29
  - †Family PSAMMOSSTEIDAE, 29
  - †Family PTERASPIDIDAE, 29
- †Superclass ANASPIDOMORPHI, 29
  - †Class ANASPIDA, 29
    - †Order ANASPIDIFORMES, 29
- †Superclass THELODONTOMORPHI, 30
  - †Class THELODONTI, 30
    - †Order ARCHIPELEPIDIFORMES, 31
    - †Order FURCACAUDIFORMES—fork-tailed thelodonts, 31
    - †Order THELODONTIFORMES, 31
- †Superclass OSTEOSTRACOMORPHI, 32
  - †Class CEPHALASPIDOMORPHI, 33
    - †Order CEPHALASPIDIFORMES, 33
    - †Order GALEASPIDIFORMES, 34
    - †Order PITURIASPIDIFORMES, 34
- Superclass GNATHOSTOMATA—jawed vertebrates, 34
- †Grade PLACODERMIOMORPHI, 36
  - †Class PLACODERMI, 36
    - †Order PSEUDOPETALICHTHYIFORMES, 37
    - †Order ACANTHOTHORACIFORMES, 37
    - †Order RHENANIFORMES, 37
    - †Order ANTIARCHIFORMES—antiarchs, 37
      - †Suborder Yunnanoleridoidei, 38
        - †Family CHUCHINOLEPIDIDAE, 38
        - †Family YUNNANOLEPIDIDAE, 38
      - †Suborder Bothrioleridoidei, 38
        - †Infraorder Sinolepidida, 38
          - †Family SINOLEPIDAE, 38
        - †Infraorder Euantiarcha, 38
          - †Family MICROBRACHIIDAE, 38
          - †Family BOTHRIOLEPIDIDAE, 38
          - †Family ASTEROLEPIDIDAE, 39
          - †Family GERDALEPIDIDAE, 38
      - †Order PETALICHTHYIFORMES, 39
      - †Order PTYCTODONTIFORMES, 39
      - †Order ARTHRODIRIFORMES—arthrodires, 39
        - †Suborder Actinoleridoidei, 39
          - †Family ACTINOLEPIDIDAE etc., 39
        - †Suborder Phylloleridoidei, 39
          - †Family PHYLLOLEPIDIDAE, 39
        - †Suborder Phlyctaenioidei, 39
          - †Family PHLYCTAENIIDAE, 39
        - †Suborder Brachythoracoidei, 40
          - †Eubrachythoraci, 40
          - †Pachyosteomorpha
          - †Coccosteomorpha, 40
            - †Family BUCHANOSTEIDAE, 40
            - †Family CAMUROPISCIDAE, 40
            - †Family COCCOSTEIDAE, 40

- †Family DINICHTHYIDAE, 40
- †Family DUNKLEOSTEIDAE, 40
- †Family MYLOSTOMIDAE, 40
- †Family PANXIOSTEIDAE, 40
- †Family SELENOSTEIDAE, 40
- †Family TITANICHTHYIDAE, 40
- †Family WUTTAGOONASPIDIDAE, 40

EUGNATHOSTOMATA, 40

GRADE CHONDRICHTHYOMORPHI 40

Class CHONDRICHTHYES—cartilaginous fishes, 40

*Incertae sedis* basal chondrichthyan taxa:

- †*Obtusacanthus*, 43
- †Family PROTODONTIDAE, 43
- †Family KATHEMACANTHIDAE, 43
- †Order Polymerolepidiformes, 44
- †Order Omalodontiformes, 44
  - †Family AZTECODONTIDAE, 44
  - †Family Omalodontidae, 44
- †Order Antarctilamniformes, 44

*Incertae sedis* stem chondrichthyan taxa:

- †Mongolepidida, 45
- †Family Kannathalepididae, 45
- †Family Wellingtonellidae, 45
- †*Pupacampella*, 45
- †*Plesioselachus*, 45
- †*Gogoselachus*, 45
- †Family BANDRINGIDAE, 45
- †Order PHOEBODONTIFORMES, 45
- †Family PHOEBODONTIDAE, 45
- †Family JALODONTIDAE, 45

†Superorder CLADOSELACHIMORPHA, 46

- †Order CLADOSELACHIFORMES, 46
  - †Family CLADOSELACHIDAE, 46
- †Order SYMMORIIFORMES, 46
  - †Family SYMMORIIDAE, 46
  - †Family FALCATIDAE, 46

†Superorder CTENACANTHIMORPHA, 46

- †Order CTENACANTHIFORMES, 46
  - †Family CTENACANTHIDAE, 47
- †Order SQUATINACTIFORMES, 47
  - †Family SQUATINACTIDAE, 47

†Superorder XENACANTHIMORPHA, 47

- †Order BRANSONELLIFORMES, 47
- †Order XENACANTHIFORMES, 47
  - †Family DIPLODOSELACHIDAE, 47
  - †Family XENACANTHIDAE, 47

Crown-group chondrichthyans in two subclasses:

Subclass HOLOCEPHALI, 48

- †Order INIOPTERYGIFORMES, 49
- †Order ORODONTIFORMES, 49
- †Order EUGENEODONTIFORMES, 50
- †Order PETALODONTIFORMES, 50
- †Order DEBEERIIFORMES, 50
- †Order HELODONTIFORMES, 50

- Superorder HOLOCEPHALIMORPHA, 50
  - †Order PSAMMODONTIFORMES, 50
  - †Order COPODONTIFORMES, 50
  - †Order SQUALORAJIFORMES, 51
  - †Order CHONDRENCHELYIFORMES, 51
  - †Order MENASPIIFORMES, 51
  - †Order COCHLIODONTIFORMES, 51
  - Order CHIMAERIFORMES (3)—chimaeras, 51
    - †Suborder Echinochimaeroidei, 51
      - †Family ECHINOCHIMAERIDAE, 51
    - †Suborder Myriacanthoidei, 51
      - †Family CHIMAEROPSIDAE, 51
      - †Family MYRIACANTHIDAE, 51
    - Suborder Chimaeroidei, 51
      - Superfamily Callorhinchoidea, 52
        - Family CALLORHINCHIDAE (5)—ploonose chimaeras, 52
      - Superfamily Chimaeroidea, 52
        - Family RHINOCHIMAERIDAE (6)—longnose chimaeras, 52
        - Family CHIMAERIDAE (7)—shortnose chimaeras or ratfishes, 53
  - Subclass EUSELACHII—sharks, rays, and related fossils, 53
    - †*Acronemus*, 55
    - †Order PROTACRODONTIFORMES, 55
  - †Infraclass HYBODONTA, 55
    - †Order HYBODONTIFORMES, 55
      - †Family HYBODONTIDAE, 56
      - †Family TRISTYCHIIDAE, 56
      - †Family DISTOBATIDAE, 56
      - †Family ACRODONTIDAE, 56
      - †Family POLYACRODONTIDAE, 56
      - †Family LONCHIDIIDAE, 56
      - †Family STEINBACHODONTIDAE, 56
      - †Family PSEUDODALATTIIDAE, 56
      - †Family PTYCHODONTIDAE, 56
      - †Family HOMALODONTIDAE, 56
  - Infraclass ELASMOBRANCHII, 56
    - Division SELACHII—sharks, 58
      - Superorder GALEOMORPHI, 58
        - †Order SYNECHODONTIFORMES, 59
          - †Family PALAEOSPINACIDAE, 59
        - Order HETERODONTIFORMES (4)—bullhead sharks, 59
          - Family HETERODONTIDAE (8)—bullhead sharks, 59
        - Order ORECTOLOBIFORMES (5)—carpet sharks, 59
          - Suborder Parascyllioidei, 60
            - Family PARASCYLLIIDAE (9)—collared carpet sharks, 60
          - Suborder Orectoloboidei, 60
            - Superfamily Orectoloboidea, 60
              - Family BRACHAELURIDAE (10)—blind sharks, 60
              - Family ORECTOLOBIDAE (11)—wobbegongs, 61
            - Superfamily Hemiscyllioidea, 61
              - Family HEMISCYLLIIDAE (12)—bamboo sharks, 61
              - Family GINGLYMOSMATIDAE (13)—nurse sharks, 62
              - Family STEGOSTOMATIDAE (14)—zebra sharks, 62
              - Family RHINCODONTIDAE (Rhincodontidae) (15)—whale sharks, 63
          - Order LAMNIFORMES (6)—mackerel sharks, 63

- †Family OTODONTIDAE, 64
- †Family XIPHODOLAMIIDAE, 64
- †Family CARDABIODONTIDAE, 64
- †Family CRETOXYRHINIDAE, 64
- †Family ARCHAELAMNIDAE, 64
- †Family PSEUDOSCAPANORHYNCHIDAE, 64
- †Family ANACORACIDAE, 64
- †Family PSEUDOCORACIDAE, 64
- Family MITSUKURINIDAE (16)—goblin sharks, 64
- Family ODONTASPIDIDAE (17)—sand tiger sharks, 65
- Family PSEUDOCARCHARIIDAE (18)—crocodile sharks, 65
- Family ALOPIIDAE (19)—thresher sharks, 66
- Family MEGACHASMIDAE (20)—megamouth sharks, 66
- Family CETORHINIDAE (21)—basking sharks, 67
- Family LAMNIDAE (22)—mackerel sharks, 67
- Order CARCHARHINIFORMES (7)—ground sharks, 68
  - Family SCYLIORHINIDAE (23)—cat sharks, 69
  - Family PROSCYLLIIDAE (24)—finback cat sharks, 70
  - Family PSEUDOTRIAKIDAE (25)—false cat sharks, 70
  - Family LEPTOCHARIIDAE (26)—barbeled hound sharks, 70
  - Family TRIAKIDAE (27)—hound sharks, 70
  - Family HEMIGALEIDAE (28)—weasel sharks, 71
  - Family CARCHARHINIDAE (29)—requiem sharks, 71
  - Family SPHYRNIDAE (30)—hammerhead sharks, 72
- Superorder SQUALOMORPHI, 73
  - Series Hexanchida, 73
    - Order HEXANCHIFORMES (Notidanoidei) (8)—six-gill sharks, 73
      - Family CHLAMYDOSELACHIDAE (31)—frilled sharks, 74
      - Family HEXANCHIDAE (32)—cow sharks, 74
  - Series Squalida, 75
    - Order SQUALIFORMES (9)—dogfish sharks, 75
      - Family CENTROPHORIDAE (33)—gulper sharks, 75
      - Family ETMOPTERIDAE (34)—lantern sharks, 75
      - Family SOMNIOSIDAE (35)—sleeper sharks, 76
      - Family OXYNOTIDAE (36)—rough sharks, 76
      - Family DALATIIDAE (37)—kitefin sharks, 77
      - Family SQUALIDAE (38)—dogfish sharks, 77
  - Series Squatinida, 78
    - †Order PROTOSPINACIFORMES, 78
      - Order ECHINORHINIFORMES (10)—bramble sharks, 78
        - Family ECHINORHINIDAE (39)—bramble sharks, 78
    - Order SQUATINIFORMES (11)—angel sharks, 79
      - Family SQUATINIDAE (40)—angel sharks, 79
    - Order PRISTIOPHORIFORMES (12)—saw sharks, 80
      - Family PRISTIOPHORIDAE (41)—saw sharks, 80
- Division BATOMORPHI—rays, 80
  - Order TORPEDINIFORMES (13)—electric rays, 82
    - †Family ARCHAEBATIDAE, 82
      - Family TORPEDINIDAE (42)—torpedo electric rays, 82
      - Family NARCIINIDAE (43)—numbfishes, 83
        - Subfamily Narcininae, 83
        - Subfamily Narkinae, 83
  - Order RAJIFORMES (14)—skates, 84
    - †Family Cyclobatidae, 84

- Family RAJIDAE (44)—skates, 84
  - Subfamily Rajinae, 85
  - Subfamily Arhynchobatinae, 85
- Order PRISTIFORMES (15)—guitarfishes and sawfishes, 85
  - †Family Sclerorhynchidae, 85
  - †Family Ptychotrygonidae, 85
  - Family “RHINOBATIDAE” (45)—guitarfishes, 85
  - Family RHINIDAE (46)—bowmouth guitarfishes, 86
  - Family RHYNCHOBATIDAE (47)—wedgefishes, 87
  - Family PRISTIDAE (48)—sawfishes, 87
- Order MYLIOBATIFORMES (16)—stingrays, 87
  - Suborder Platyrhinoidei, 87
    - Family PLATYRHINIDAE (49)—thornbacks, 87
  - Suborder Myliobatoidei, 88
    - Family ZANOBATIDAE (50)—panrays, 88
    - Family PLESIOBATIDAE (51)—deepwater stingrays, 88
    - Family UROLOPHIDAE (52)—round stingrays, 89
    - Family HEXATRYGONIDAE (53)—sixgill stingrays, 89
    - Family DASYATIDAE (Trygonidae) (54)—whiptail stingrays, 90
    - Family POTAMOTRYGONIDAE (55)—river stingrays, 91
    - Family GYMNRURIDAE (56)—butterfly rays, 92
    - Family UROTRYGONIDAE (57)—American round stingrays, 92
    - Family MYLIOBATIDAE (58)—eagle rays, 93
      - Subfamily Myliobatinae, 93
      - Subfamily Rhinopterinae, 94
      - Subfamily Mobulinae, 94
- Grade TELEOSTOMI, 95
- †Class ACANTHODII—acanthodians, 96
  - Incertae sedis* early-branching acanthodians include:
    - †*Lupopsyrodes*, †*Lupopsyrus*
  - †Order CLIMATIFORMES, 98
    - †Family BROCHOADMONIDAE, 99
    - †Family CLIMATIIDAE, 99
    - †Family GYRACANTHIDAE, 99
    - †Family EUTHACANTHIDAE, 99
  - †Order DIPLACANTHIFORMES, 99
    - †Family CULMACANTHIDAE, 100
    - †Family DIPLACANTHIDAE, 100
    - †Family GLADIOBRANCHIDAE, 100
  - †Order ISCHNACANTHIFORMES, 100
    - †Family ISCHNACANTHIDAE, 100
    - †Family PORACANTHODIDAE, 100
  - †Order ACANTHODIFORMES, 100
    - †Family MESACANTHIDAE, 100
    - †Family CHEIRACANTHIDAE, 100
    - †Family ACANTHODIDAE, 101
- Class OSTEICHTHYES—bony fishes and tetrapods, 101
  - Stem-group osteichthyans include:
    - †*Lophosteus*, †*Andreolepis*, 101
  - †Order DIALIPINIFORMES, 101
- Subclass SARCOPTERYGII—lobe-finned fishes and tetrapods, 102
  - Stem-group sarcopterygians include:
    - †*Psarolepis*, †*Achoania*, †*Guifu*, 103
- Infraclass ACTINISTIA—coelacanths (Coelacanthida), 103

- Order COELACANTHIFORMES (17)—coelacanths, 104
  - †Family MIGUASHAIIDAE, 104
  - †Family DIPLOCERCIDAE, 104
  - †Family HADRONECTORIDAE, 104
  - †Family RHABDODERMATIDAE, 104
  - †Family LAUGIIDAE, 104
  - †Family WHITEIIDAE, 104
  - †Family REBELLATRICIDAE, 104
  - †Family COELACANTHIDAE, 105
  - †Family MAWSONIIDAE, 105
  - Family LATIMERIIDAE (59)—gombessas or coelacanths, 105
- Infraclass ONYCHODONTIDA, 106
  - †Order ONYCHODONTIFORMES, 106
  - †Family ONYCHODONTIDAE, 106
- Infraclass DIPNOMORPHA, 106
  - †Superorder POROLEPIMORPHA, 106
    - †Order POROLEPIFORMES, 106
    - †Family POROLEPIDAE, 107
    - †Family HOLOPTYCHIIDAE, 107
  - Superorder DIPNOI, 107
    - Early, stem-group dipnoans include:
      - †*Youngolepis*, †*Powichthys*, †*Glyptolepis*, 107
      - †Order DIABOLEPIDIFORMES, 107
        - †Family DIABOLEPIDIDAE, 107
      - †Order DIPNORHYNCHIFORMES, 107
        - †Family URANOLOPHIDAE, 107
        - †Family DIPNORHYNCHIDAE, 107
        - †Family CHIRODIPTERIDAE, 107
      - †Order Dipteriformes, 107
        - †Family STOMIAHYKIDAE, 108
        - †Family DIPTERIDAE, 108
        - †Family CHIRODIPTERIDAE, 108
        - †Family RHYNCHODIPTERIDAE, 108
        - †Family PHANEROPLEURIDAE, 108
        - †Family FLEURANTIIDAE, 108
      - †Order CTENODONTIFORMES, 108
        - †Family URONEMIDAE, 108
        - †Family CTENODONTIDAE, 108
    - Order CERATODONTIFORMES (18)—living lungfishes & fossil relatives, 108
      - †Family ARGANODONTIDAE, 109
      - †Family CERATODONTIDAE, 109
      - †Family ASIATOCERATODONTIDAE, 109
      - Family LEPIDOSIRENIDAE (61)—South American lungfishes, 109
        - Family PROTOPTERIDAE (62)—African lungfishes, 109
  - †Infraclass RHIZODONTIDA, 110
    - †Order RHIZODONTIFORMES, 110
      - †Family RHIZODONTIDAE, 110
  - †Infraclass OSTEOLEPIDIDA, 110
    - †Order OSTEOLEPIDIFORMES, 110
      - †Family CANOWINDRIDAE, 110
      - †Family MEGALICHTHYIDAE, 110
      - †Family OSTEOLEPIDIDAE, 110
      - †Family TRISTICHOPTERIDAE, 110
      - †Family RHIZODOPSIDAE, 110

†Infraclass ELPISTOSTEGALIA, 110

  †Order ELPISTOSTEGALIFORMES, 110

    †Family ELPISTOSTEGALIDAE, 110

Infraclass TETRAPODA—tetrapods, 111

Subclass ACTINOPTERYGII—ray-finned fishes, 111

  Early, stem-group actinopterygians include:

    †Family Haplolepidae, 113

    †*Coccolepis*

    †Order CHEIROLEPIDIFORMES, 113

    †Order PALAEONISCIFORMES, 113

      †Family Aeduellidae, 113

      †Family Acrolepidae, 113

      †Family Amblypteridae, 113

      †Family Birgeriidae, 113

      †Family Commentryidae, 113

      †Family Elonichthyidae, 113

      †Family Palaeoniscidae, 113

      †Family Pygopteridae, 113

      †Family Rhabdolepidae, 113

      †Family Rhadinichthyidae, 113

      †Family Aesopichthyidae, 114

      †Family Stegotrachelidae, 114

    †Order DORYPTERIFORMES, 114

      †Family DORYPTERIDAE, 114

    †Order PLATYSOMIFORMES, 114

      †Family PLATYSOMIDAE, 114

      †Family BOBASATRANIIDAE, 114

    †Order TARRASIIFORMES, 115

      †Family TARRASIIDAE, 115

    †Order GUILDAYICHTHYIFORMES, 115

      †Family GUILDAYICHTHYIDAE, 115

    †Order PHANERORHYNCHIFORMES, 115

      †Family PHANERORHYNCHIDAE, 115

    †Order SAURICHTHYIFORMES, 115

      †Family SAURICHTHYIDAE, 115

    †Order REDFIELDIIFORMES, 115

      †Family REDFIELDIIDAE, 115

    †Order PTYCHOLEPIDIFORMES, 115

      †Family PTYCHOLEPIDIDAE, 115

    †Order PHOLIDOPLEURIFORMES, 116

      †Family PHOLIDOPLEURIDAE, 116

    †Order PERLEIDIIFORMES, 116

      †Family CEPHALOXENIDAE, 116

      †Family CLEITHROLEPIDIDAE, 116

      †Family COLOBODONTIDAE, 116

      †Family PERLEIDIDAE, 116

      †Family PLATYSIAGIDAE, 116

    †Order LUGANOIFORMES, 116

      †Family LUGANOIDAE, 116

    †Order PERLEIDIIFORMES, 116

      †Family CEPHALOXENIDAE, 116

      †Family COLOBODONTIDAE, 116

      †Family PLATYSIAGIDAE, 116

      †Family PELTOPLEURIDAE, 116

- †Family CLEITHROLEPIDAE, 116
- †Family PERLEIDIDAE, 116
- †Family THORACOPTERIDAE, 116
- Infraclass CLADISTIA, 116
  - Order POLYPTERIFORMES (19)—bichirs, 116
    - Family POLYPTERIDAE (63)—bichirs, 117
- Infraclass CHONDROSTEI, 118
  - †Order CHONDROSTEIFORMES, 118
    - †Family CHONDROSTEIDAE, 118
  - Order ACIPENSERIFORMES (20)—paddlefishes and sturgeons, 118
    - †Suborder Peipiaosteoiidei
      - †Family PEPIAOSTEIDAE, 118
    - Suborder Acipenseroidei, 118
      - Family POLYODONTIDAE (64)—paddlefishes, 118
        - †Subfamily Protosephurinae, 119
        - Subfamily Polyodontinae, 119
      - Family ACIPENSERIDAE (65)—sturgeons, 119
        - Subfamily Acipenserinae, 120
        - Subfamily Scaphirhynchinae, 120
        - Subfamily Pseudoscaphirhynchinae, 120
        - Subfamily Husinae, 121
- NEOPTERYGII, 121
  - †Order PYCNODONTIFORMES, 121
- Infraclass HOLOSTEI—gars, bowfins, and relatives, 121
  - Division GINGLYMODI, 122
    - †Order DAPEIIDIFORMES, 122
      - †Family DAPEIDIIDAE, 122
    - Order LEPISOSTEIFORMES (21)—gars, 122
      - †Family OBAICHTHYIDAE, 123
      - Family LEPISOSTEIDAE (66)—gars, 123
    - †Order SEMIONOTIFORMES, 123
      - Incertae sedis* in Semionotiformes: †*Sangiorgioichthys*
      - †Family SEMIONOTIDAE, 124
      - †Family CALLIPURBECKIDAE, 124
    - †Order MACROSEMIIFORMES, 124
      - †Family MACROSEMIIDAE, 124
  - Division HALECOMORPHI, 124
    - †Order PARASEMIONOTIFORMES, 125
    - †Order IONOSCOPIFORMES, 125
    - Order AMIFORMES (22)—bowfins, 125
      - †Suborder Caturoidei, 125
        - †Family CATURIDAE, 125
      - †Suborder Amioidei, 125
        - †Family LIODESMIDAE, 125
        - †Family SINAMIIDAE, 125
      - Family AMIIDAE (67)—bowfins, 126
  - Infraclass TELEOSTEOMORPHA, 126
    - Oldest and most primitive teleostean: †*Prohalecites*
    - †Division ASPIDORHYNCHEI, 127
      - †Order ASPIDORHYNCHIFORMES, 127
        - †Family ASPIDORHYNCHIDAE, 127
      - †Order PACHYCORMIFORMES, 127
        - †Family PACHYCORMIDAE, 127
    - Division TELEOSTEI, 128

- †Order PHOLIDOPHORIFORMES, 129
  - †Family PHOLIDOPHORIDAE, 129
- †Order DORSETICHTHYIFORMES, 130
  - †Family DORSETICHTHYIDAE, 130
- †Order LEPTOLEPIDIFORMES, 130
  - †Family LEPTOLEPIDIDAE, 130
- †Order CROSOGNATHIFORMES, 130
  - †Family VARASICHTHYIDAE, 130
  - †Family CROSOGNATHIDAE, 130
  - †Family NOTELOPIDAE, 130
  - †Family PACHYRHIZODONTIDAE, 130
- †Order ICHTHYODECTIFORMES, 131
  - †Family ALLOTHRISSOPIDAE, 131
  - †Family CLADOCYCLIDAE, 131
  - †Family SAURODONTIDAE, 131
  - †Family ICHTHYODECTIDAE, 131
- †Order TSELFATIIFORMES, 131
  - †Family Plethodidae, 132
  - †Family Protobramidae, 132
  - †Family Tselfatiidae, 132
- †Order ARARIPICHTHYIFORMES, 132
  - †Family ARARIPICHTHYIDAE, 132
- Supercohort TELEOCEPHALA—crown-group Teleostei, 132
  - Cohort ELOPOMORPHA, 133
    - Order ELOPIFORMES (23)—tenpounders, 135
      - Family ELOPIDAE (68)—tenpounders (ladyfishes), 135
      - Family MEGALOPIDAE (69)—tarpons, 135
    - Order ALBULIFORMES (24)—bonefishes, 136
      - Family ALBULIDAE (70), 136
    - Order NOTACANTHIFORMES (25)—halosaurs and deep-sea spiny eels, 137
      - Family HALOSAURIDAE (71)—halosaurs, 137
      - Family NOTACANTHIDAE (72)—deep-sea spiny eels, 138
    - Order ANGUILLIFORMES (26)—eels, 139
      - Suborder Protanguilloidei, 139
        - Family Protanguillidae (74)—primitive cave eels, 140
      - Suborder Synaphobranchoidei, 141
        - Family SYNAPHOBANCHIDAE (74)—cutthroat eels, 141
          - Subfamily Simenchelyinae, 141
          - Subfamily Ilyophinae, 141
          - Subfamily Synaphobranchinae, 142
      - Suborder Muraenoidei, 142
        - Family HETERENCHELYIDAE (75)—mud eels, 142
        - Family MYROCONGRIDAE (76)—myroconger eels, 143
        - Family MURAENIDAE (77)—moray eels, 143
          - Subfamily Uropteryginae, 143
          - Subfamily Muraeninae, 143
      - Suborder Chlopsoidei, 144
        - Family CHLOPSIDAE (78)—false morays, 144
      - Suborder Congroidei, 145
        - Family DERICHTHYIDAE (79)—longneck or narrowneck and shorttail eels, 145
        - Family OPHICHTHIDAE (80)—snake eels and worm eels, 145
          - Subfamily Myrophinae, 146
          - Subfamily Ophichthinae, 146
        - Family MURAENESOCIDAE (81)—pike congers, 147

- Family NETTASTOMATIDAE (82)—duckbill eels, 147
- Family CONGRIDAE (83)—conger eels, 147
  - Subfamily Congrinae, 148
  - Subfamily Heterocongrinae, 148
  - Subfamily Bathymyrinae, 148
- Suborder Moringuoidei, 148
  - Family MORINGUIDAE (84)—spaghetti eels, 149
- Suborder Saccopharyngoidei, 149
  - Family CYEMATIDAE (85)—bobtail snipe eels, 149
  - Family MONOGNATHIDAE (86), 150
  - Family SACCOPHARYNGIDAE (87)—swallowers, 150
  - Family EURYPHARYNGIDAE (88)—gulpers or pelican eels, 150
- Suborder Anguilloidei, 151
  - Family NEMICHTHYIDAE (89)—snipe eels, 151
  - Family SERRIVOMERIDAE (90)—sawtooth eels, 151
  - Family ANGUILLIDAE (91)—freshwater eels, 152
- OSTEOGLOSSOCEPHALA, 153**
- Cohort OSTEOGLOSSOMORPHA, 153
  - †Order LYCOPTERIFORMES, 154
    - †Family LYCOPTERIDAE, 154
  - Order HIODONTIFORMES (27)—mooneyes, 155
    - Family HIODONTIDAE (92)—mooneyes, 155
  - Order OSTEOGLOSSIFORMES (28)—bonytongues, 155
    - Family PANTODONTIDAE (93)—butterflyfishes, 156
    - Family OSTEOGLOSSIDAE (94)—osteoglossids or bonytongues, 156
      - Subfamily Heterotidinae, 157
      - Subfamily Osteoglossinae, 157
    - Family NOTOPTERIDAE (95), 158
      - Subfamily Notopterinae, 158
      - Subfamily Xenomystinae, 159
    - Family MORMYRIDAE (96)—elephantfishes, 159
    - Family GYMNAARCHIDAE (97)—abas, 160
- CLUPEOCEPHALA, 160**
- Cohort OTOCEPHALA, 161
- Superorder CLUPEOMORPHA, 162
  - †Order ELLIMICHTHYIFORMES, 163
    - †Suborder Armigatoidei, 163
      - †Family ARMIGATIDAE, 163
    - †Suborder Ellimichthyoidei, 163
      - †Family SORBINICHTHYIDAE, 163
      - †Family PARACLUEPIDAE, 164
        - †Subfamily Scutatospinosinae, 164
        - †Subfamily Thorectichthyinae, 164
        - †Subfamily Elliminae, 164
        - †Subfamily Paraclupeinae, 164
  - Order CLUPEIFORMES (29)—herrings, 164
    - Suborder Denticipitoidei, 165
      - Family DENTICIPITIDAE (98)—denticle herrings, 165
    - Suborder Clupeoidei, 166
      - Family PRISTIGASTERIDAE (99)—longfin herrings, 166
        - Subfamily Pelloninae, 167
        - Subfamily Pristigasterinae, 167
      - Family ENGRAULIDAE (100)—anchovies, 167
        - Subfamily Coiliinae, 168

- Subfamily Engraulinae, 168
- Family CHIROCENTRIDAE (101)—wolf herrings, 169
- Family CLUPEIDAE (102)—herrings (shads, sprats, sardines, pilchards, and menhadens), 169
  - Subfamily Dussumieriinae, 170
  - Subfamily Ehiravinae, 170
  - Subfamily Pellonulinae, 171
  - Subfamily Clupeinae, 171
  - Subfamily Alosinae, 171
  - Subfamily Dorosomatinae, 171
- Superorder ALEPOCEPHALI, 172
  - Order ALEPOCEPHALIFORMES (30)—slickheads and tubeshoulders, 172
    - Family PLATYTROCTIDAE (103)—tubeshoulders, 172
    - Family BATHYLACONIDAE (104)—bathylaconids, 173
    - Family ALEPOCEPHALIDAE (105)—slickheads, 173
- Superorder OSTARIOPHYSI, 174
  - Series Anotophysi, 175
    - Order GÖNORYNCHIFORMES (31)—milkfishes, 175
      - Family CHANIDAE (106)—milkfishes, 176
        - †Subfamily Rubiesichthyinae, 176
        - Subfamily Chaninae, 177
      - Family GONORYNCHIDAE (107)—beaked sandfishes, 177
      - Family KNERIIDAE (108)—knerias and snake mudheads, 178
        - Subfmily Kneriinae, 178
        - Subfamily Phractolaeminae, 178
  - Series Otophysi, 179
    - Subseries Cypriniphysi, 180
      - Order CYPRINIFORMES (32)—carps, loaches, minnows, and relatives, 180
        - Superfamily Cyprinoidea, 181
          - Family CYPRINIDAE (109)—minnows, carps, and loaches, 181
            - Subfamily Danioninae, 182
            - Subfamily Labeoninae, 182
            - Subfamily Cyprininae, 183
            - Subfamily Leuciscinae, 183
            - Subfamily Acheilognathinae, 184
            - Subfamily Gobioninae, 184
            - Subfamily Tincinae, 185
            - Subfamily Opsariichthyinae, 185
            - Subfamily Cultrinae, 185
            - Subfamily Squaliobarbinae, 186
            - Subfamily Xenocyprinae, 186
          - Family PSILORHYNCHIDAE (110)—mountain carps, 186
        - Superfamily Cobitoidea, 186
          - †Family JIANGHANICHTHYIDAE, 186
          - Family GYRINOCHEILIDAE (111)—algae eaters, 187
          - Family CATOSTOMIDAE (112)—suckers, 187
            - Subfamily Myxocyprininae, 187
            - Subfamily Cycleptinae, 188
            - Subfamily Ictiobinae, 188
            - Subfamily Catostominae, 188
              - Tribe Erimyzontini, 189
              - Tribe Catostomini, 189
              - Tribe Thoburniini, 189
              - Tribe Moxostomatini, 189
          - Family BOTIIDAE (113)—botiid loaches, 189

- Family VAILLANTELLIDAE (114)—long-fin loaches, 190
- Family COBITIDAE (115)—loaches, 190
- Family BALITORIDAE (Homalopteridae) (116)—hillstream or river loaches, 191
- Family GASTROMYZONTIDAE (117)—gastromyzontid or sucker loaches, 191
- Family NEMACHEILIDAE (118)—stone loaches, 192
- Family BARBUCCIDAE (120)—fire-eyed loaches, 192
- Family ELLOPOSTOMATIDAE (119)—sturgeon-mouthed loaches, 192
- Family SERPENTICOBITIDAE (121)—serpent loaches, 193
- Subseries Characiphysi, 193
  - Order CHARACIFORMES (33)—characins, 193
    - Suborder Citharinoidei, 194
      - Family DISTICHODONTIDAE (122)—distichodontids, 194
      - Family CITHARINIDAE (123)—citharinids, 195
    - Suborder Characoidei, 195
      - Superfamily Crenuchoidea, 195
        - Family CRENUCHIDAE (124)—South American darters, 195
          - Subfamily Crenuchinae, 195
          - Subfamily Characidiinae, 196
      - Superfamily Alestoidea, 196
        - Family ALESTIDAE (125)—African tetras, 196
        - Family HEPSETIDAE (126)—African pikes, 196
      - Superfamily Erythrinoidae, 197
        - Family ERYTHRINIDAE (127)—trahiras, 197
        - Family PARODONTIDAE (128)—parodontids, 197
        - Family CYNODONTIDAE (129)—cynodontids, 198
        - Family SERRASALMIDAE (130)—pacus, silver dollars, and piranhas, 198
        - Family HEMIODONTIDAE (131)—hemiodontids, 199
          - Subfamily Anodontinae, 199
          - Subfamily Hemiodontinae, 199
            - Tribe Hemiodontini, 199
            - Tribe Bibibranchiini, 200
        - Family ANOSTOMIDAE (132)—toothed headstanders, 200
        - Family CHILODONTIDAE (133)—headstanders, 200
        - Family CURIMATIDAE (134)—toothless characiforms, 201
        - Family PROCHILODONTIDAE (135)—flannel-mouth characiforms, 201
      - Superfamily Characoidea, 202
        - Family LEBIASINIDAE (136)—pencil fishes, 202
          - Subfamily Lebiasininae, 202
          - Subfamily Pyrrhulininae, 203
        - Family CTENOLUCIIDAE (137)—pike-characids, 203
        - Family ACESTRORHYNCHIDAE (138)—acestrorhynchids, 203
          - Subfamily Acestrorhynchinae, 203
          - Subfamily Heterocharacinae, 203
          - Subfamily Roestinae, 203
        - Family CHARACIDAE (139)—characins, 203
          - Subfamily Iguanodectinae, 205
          - Subfamily Agoniatinae, 205
          - Subfamily Clupeacharacinae, 205
          - Subfamily Bryconinae, 205
          - Subfamily Stethaprioninae, 205
          - Subfamily Rhoadsiinae, 205
          - Subfamily Characinae, 205
          - Subfamily Tetragonopterinae, 206
          - Subfamily Aphyocharacinae, 206

- Subfamily Aphyoditeinae, 206
- Subfamily Cheirodontinae, 206
- Subfamily Gymnocharacinae, 206
- Subfamily Stevardiinae, 206
- Family GASTEROPELECIDAE (140)—freshwater hatchetfishes, 206
- Subseries Siluriphysi, 207
  - Order SILURIFORMES (34)—catfishes, 207
    - †Family ANDINICHTHYIDAE, 210
    - Suborder Diplomystoidei, 210
      - †Family BACHMANNIIDAE, 210
      - Family DIPLOMYSTIDAE (141)—velvet catfishes, 210
    - Suborder Hypsidoroidei, 211
      - †Family HYPSIDORIDAE, 211
      - Family CETOPSIDAE (142)—whale catfishes, 211
        - Subfamily Helogeneinae, 142
        - Subfamily Cetopsinae, 143
    - Suborder Loricarioidei, 143
      - Family TRICHOMEYCTERIDAE (143)—pencil catfishes or parasitic catfishes, 212
        - Subfamily Copionodontinae, 213
        - Subfamily Trichogeninae, 213
        - Subfamily Trichomycterinae, 213
        - Subfamily Vandelliinae, 213
        - Subfamily Stegophilinae, 213
        - Subfamily Tridentinae, 214
        - Subfamily Glanapteryginae, 214
        - Subfamily Sarcoglanidinae, 214
      - Family NEMATOGENYIDAE (144)—mountain catfishes, 214
      - Family CALLICHTHYIDAE (145)—callichthyid armored catfishes, 214
        - Subfamily Callichthyinae, 215
        - Subfamily Corydoradinae, 215
      - Family SCOLOPLACIDAE (146)—spiny dwarf catfishes, 215
      - Family ASTROBLEPIDAE (147)—climbing catfishes, 216
      - Family LORICARIIDAE (148)—suckermouth armored catfishes, 216
        - Subfamily Lithogeneinae, 217
        - Subfamily Neoplecostominae, 217
        - Subfamily Hypoptopomatinae, 217
        - Subfamily Loricariinae, 217
        - Subfamily Ancistrinae, 217
        - Subfamily Hypostominae, 217
        - Subfamily Delturinae, 218
      - Subordder Siluroidei, 218
        - Family SILURIDAE (149)—sheatfishes, 218
        - Family AUSTROGLANIDIDAE (150)—rock catfishes, 219
        - Family PANGASIIDAE (151)—shark catfishes, 219
        - Family CHACIDAE (152)—squarehead, angler, or frogmouth catfishes, 220
        - Family PLOTOSIDAE (153)—eeltail catfishes, 220
        - Family RITIDAE (154)—ritas and nanobagrids, 221
        - Family AILIIDAE (155)—Asian “schilbeids”, 221
        - Family HORABAGRIDAE (156)—imperial or sun catfishes, 222
        - Family BAGRIDAЕ (157)—bagrid catfishes, 222
      - Superfamily Sisoroidea, 223
        - Family AKYSIDAE (158)—stream catfishes, 223
          - Subfamily Akysinae, 224
          - Subfamily Parakysinae, 224

- Family AMBLYCIPITIDAE (159)—torrent catfishes, 224
- Family SISORIDAE (160)—sisorid catfishes, 224
  - Subfamily Sisorinae, 225
  - Subfamily Glyptosterninae, 225
- Family ERETHISTIDAE (161)—erethistid catfishes, 225
- Family AMPHILIIDAE (162)—loach catfishes, 226
  - Subfamily Amphiliinae, 226
  - Subfamily Leptoglaninae, 226
  - Subfamily Doumeinae, 226
- Family MALAPTERURIDAE (163)—electric catfishes, 227
- Family MOCHOKIDAE (164)—squeakers or upside-down catfishes, 227
- Family SCHILBEIDAE (165)—schilbeid or butter catfishes, 228
- Family AUCHENOGLANIDIDAE (166)—auchenoglanidids, 228
- Family CLAROTEIDAE (167)—claroteids, 229
- Family LACANTUNIIDAE (168)—Chiapas catfishes, 229
- Superfamily Clarioidea, 230
  - Family CLARIIDAE (169)—airbreathing catfishes, 230
  - Family HETEROPNEUSTIDAE (170)—airsac catfishes, 231
- Superfamily Arioidea, 231
  - Family ANCHARIIDAE (171)—Malagasy catfishes, 231
  - Family ARIIDAE (172)—sea catfishes, 231
- Superfamily Doradoidea, 232
  - Family ASPREDINIDAE (173)—banjo catfishes, 232
    - Subfamily Bunocephalinae, 233
    - Subfamily Aspredininae, 233
    - Subfamily Hoplomyzontinae, 233
  - Family DORADIDAE (174)—thorny catfishes, 233
  - Family AUCHENIPTERIDAE (175)—driftwood catfishes, 234
    - Subfamily Auchenipterinae, 234
    - Subfamily Centromochlinae, 235
- Superfamily Ictaluroidea, 235
  - Family CRANOGLANIDIDAE (176)—armorhead catfishes, 235
  - Family ICTALURIDAE (177)—North American catfishes, 235
- Superfamily Pimelodoidea, 236
  - Family HEPTAPTERIDAE (178)—heptapterids, 236
  - Family PIMELODIDAE (179)—long-whiskered catfishes, 236
  - Family PSEUDOPIMELODIDAE (180)—bumblebee catfishes, 238
- Order GYMNOTIFORMES (35)—Neotropical knifefishes, 238
  - Suborder Gymnotoidei, 238
    - Family GYMNOTIDAE (181)—nakedback knifefishes, 238
  - Suborder Sternopygoidei, 239
    - Superfamily Rhaphichthyoidea, 239
      - Family RHAMPICHTHYIDAE (182)—sand knifefishes, 239
      - Family HYPOPOMIDAE (183)—bluntnose knifefishes, 240
    - Superfamily Apteronotoidea, 240
      - Family STERNOPYGIDAE (184)—glass knifefishes, 240
      - Family APTERONOTIDAE (185)—ghost knifefishes, 241
- Cohort EUTELEOSTEI, 241
  - Order LEPIDOGALAXIIFORMES (36)—salamanderfishes, 242
    - Family LEPIDOGALAXIIDAE (186)—salamanderfishes, 242
- Superorder PROTACANTHOPTERYGII, 243
  - Order SALMONIFORMES (37)—trout, salmon, and whitefish, 244
    - Family SALMONIDAE (187)—trout, salmon, and whitefish, 244
      - Subfamily Coregoninae, 245

- Subfamily Thymallinae, 245
- Subfamily Salmoninae, 246
- Order ESOCIFORMES (38)—pikes, 248
  - †Family PALAEOESOCIDAE, 249
  - Family ESOCIDAE (188)—pikes, 249
  - Family UMBRIDAE (189)—mudminnows, 251
- ZOROTELEOSTEI, 251
- Superorder OSMEROMORPHA, 252
  - Order ARGENTINIFORMES (39)—marine smelts, 252
    - Family ARGENTINIDAE (190)—argentines or herring smelts, 253
    - Family OPISTHOPROCTIDAE (191)—barreleyes or spookfishes, 253
    - Family MICROSTOMATIDAE (192)—pencilsmelts, 253
    - Family BATHYLAGIDAE (193)—deepsea smelts, 254
  - Order GALAXIIFORMES (40)—galaxiiforms, 254
    - Family GALAXIIDAE (194)—galaxiids, 254
      - Subfamily Galaxiinae, 255
      - Subfamily Lovettiinae, 256
      - Subfamily Aplochitoninae, 256
  - Order OSMERIFORMES (41)—freshwater smelts, 256
    - Suborder Osmeroidei, 257
      - Family OSMERIDAE (195)—Northern Hemisphere smelts, 257
      - Family PLECOGLOSSIDAE (196)—Ayu or sweetfish, 257
      - Family SALANGIDAE (197)—icefishes or noodlefishes, 258
    - Suborder Retropinnnoidei, 258
      - Family PROTOTROCTIDAE (198)—southern graylings, 258
      - Family RETROPINNIDAE (199)—southern smelts, 258
  - Order STOMIIFORMES (42)—dragonfishes, 259
    - Suborder Gonostomatoidei, 259
      - Family GONOSTOMATIDAE (200)—bristlemouths, 259
      - Family STERNOPTYCHIDAE (201)—marine hatchetfishes, 260
        - Subfamily Maurolicinae, 260
        - Subfamily Sternoptychinae, 260
      - Family PHOSICHTHYIDAE (202)—lightfishes, 261
      - Family STOMIIDAE (203)—barbeled dragonfishes, 261
        - Subfamily Stomiinae, 262
          - Tribe Stomiini, 262
          - Tribe Chauliodontini, 262
        - Subfamily Melanostomiinae, 263
        - Subfamily Idiacanthinae, 263
        - Subfamily Malacosteinae, 263
  - NEOTELEOSTEI, 264
  - Superorder ATELEOPODOMORPHA, 265
    - Order ATELEOPODIFORMES (43)—jellynose fishes, 265
      - Family ATELEOPODIDAE (204)—jellynose fishes, 265
  - EURYPTERYGII, 265
    - Superorder CYCLOSQUAMATA, 266
      - Order AULOPIFORMES (44)—lizardfishes, 266
        - †Suborder Ichthyotringoidei, 267
          - †Family ICHTHYOTRINGIDAE, 267
          - †Family DERCETIDAE, 267
          - †Family PRIONOLEPIDIDAE, 267
        - †Suborder Halecoidei, 267
          - †Family HALECIDAE, 267
      - Suborder Aulopoidei, 267

- Family SYNODONTIDAE (205)—lizardfishes, 268
  - Subfamily Synodontinae, 268
  - Subfamily Harpadontinae, 268
- Family AULOPIDAE (206)—flagfins, 268
- Family PSEUDOTRICHONOTIDAE (207)—sandiving lizardfishes, 269
- Suborder Paraulopoidei, 269
  - Family PARAULOPIDAE (208)—cucumber fishes, 269
- Suborder Alepisauroidei, 270
  - Superfamily Ipnopoidea, 270
    - Family IPNOPIDAE (209)—deepsea tripod fishes, 270
      - Subfamily Ipnopinae, 270
      - Subfamily Bathysauropsinae, 271
    - Family GIGANTURIDAE (210)—telescopefishes, 271
    - Family BATHYSAUROIDIDAE (211)—largescale deep-sea lizardfish, 271
    - Family BATHYSAURIDAE (212)—deepsea lizardfishes, 272
  - Superfamily Chlorophthalmoidea, 272
    - Family CHLOROPHTHALMIDAE (213)—greeneyes, 272
  - Superfamily Notosudoidea, 273
    - Family NOTOSUDIDAE (214)—waryfishes, 273
  - Superfamily Alepisauroidea, 273
    - Family SCOPELARCHIDAE (215)—pearleyes, 273
    - Family EVERMANNELLIDAE (216)—sabertooth fishes, 274
    - Family SUDIDAE (217)—sudid barracudas, 274
    - Family PARALEPIDIDAE (218)—barracudas, 274
    - †Family ENCHODONTIDAE, 275
      - †Subfamily Cimolichthyinae, 275
      - †Subfamily Enchodontinae, 275
    - Family ALEPISAURIDAE (219)—lancetfishes, 275
    - Family LESTIDIIDAE (220)—naked barracudas, 276
- CTENOSQUAMATA, 276
  - Superorder SCOPELOMORPHA, 276
    - Order MYCTOPHIFORMES (45)—lanternfishes, 276
      - Family NEOSCOPELIDAE (221)—blackchins, 277
      - Family MYCTOPHIDAE (222)—lanternfishes, 277
        - Subfamily Myctophilinae, 278
        - Subfamily Lampanyctinae, 278
- ACANTHOMORPHA, 278
  - †Order CTENOTHRISSIFORMES, 280
- Superorder LAMPTRIMORPHA, 280
  - Order LAMPTRIFORMES (46)—opahs, 280
    - Family VELIFERIDAE (223)—velifers, 281
    - Family LAMPRIDAE (224)—opahs, 282
    - Family LOPHOTIDAE (225)—crestfishes, 283
    - Family RADIICEPHALIDAE (226)—tapetails, 283
    - Family TRACHIPTERIDAE (227)—ribbonfishes, 283
    - Family REGALECIDAE (228)—oarfishes, 284
- EUACANTHOMORPHA, 284
  - Superorder PARACANTHOPTERYGII, 284
    - Order POLYMIIXIFORMES (47)—beardfishes, 285
      - Family POLYMIIXIIDAE (229)—beardfishes, 286
    - †Order SPHENOCEPHALIFORMES, 286
      - †Family SPHENOCEPHALIDAE, 287
    - Order PERCOPSIFORMES (48)—trout-perches, 287
      - Family PERCOPSIDAE (230)—trout-perches, 287

- †Family MCCONICHTHYIDAE, 288
- Family APHREDODERIDAE (231)—pirate perches, 288
- Family AMBLYOPSIDAE (232)—cavefishes, 289
- Order ZEIFORMES (49)—dories, 289
  - †Family Cretazeidae, 290
  - Suborder Cyttodei, 290
    - Family CYTTIDAE (233)—lookdown dories, 290
  - Suborder Zeoidei, 290
    - Family OREOSOMATIDAE (234)—oreos, 290
    - Family PARAZENIDAE (235)—smooth dories, 291
      - Subfamily Parazeninae, 291
      - Subfamily Cyttopsinae, 291
    - Family ZENIONTIDAE (236)—armoreye dories, 291
    - Family GRAMMICOLEPIDIDAE (237)—tinselfishes, 292
      - Subfamily Macrurocyttinae, 292
      - Subfamily Grammicolepidinae, 292
    - Family ZEIDAE (238)—dories, 292
- Order STYLEPHORIFORMES (50)—tube-eyes or thread-tails, 293
  - Family STYLEPHORIDAE (239)—tube-eyes or thread-tails, 293
- Order GADIFORMES (51)—cods and hakes, 293
  - Suborder Melanonoidei, 295
    - Family MELANONIDAE (240)—pelagic cods, 295
  - Suborder Macruroidei, 295
    - Family STEINDACHNERIIDAE (241)—luminous and southern hakes, 295
    - Family BATHYGADIDAE (242)—rattails, 296
    - Family MACROURIDAE (243)—grenadiers (rattails), 296
    - Family TRACHYRINCIDAE (244)—whiptails and trachyrincines, 296
      - Subfamily Macruroidinae, 297
      - Subfamily Trachyrincinae, 297
  - Suborder Gadoidei, 297
    - Family EUCLICHTHYIDAE (245)—eucla cod, 297
    - Family MORIDAE (246)—deepsea cods, codlings, hakelings, 298
    - Family MACRURONIDAE (247)—Southern Hakes, 298
    - Family MERLUCCIIDAE (248)—merlucciid hakes, 298
  - Superfamily Gadoidea, 299
    - Family RANICIPITIDAE (249)—tadpole cods, 299
    - Family BREGMACEROTIDAE (250)—codlets, 300
    - Family MURAENOLEPIDIDAE (251)—eel cods and moray cods, 300
    - Family GADIDAE (252)—cods, 300
      - Subfamily Phycinae, 301
      - Subfamily Gaidropsarinae, 301
      - Subfamily Lotinae, 301
      - Subfamily Gadinae, 302
- Superorder ACANTHOPTERYGII, 302
  - Series Berycida, 303
    - Order HOLOCENTRIFORMES (52)—Squirrelfishes, 304
      - Family HOLOCENTRIDAE (253)—squirrelfishes, 304
        - Subfamily Holocentrinae, 304
        - Subfamily Myripristinae, 305
    - Order TRACHICHTHYIFORMES (53)—Roughies, 305
      - Suborder Anoplogastroidei, 305
        - Family ANOPLOGASTRIDAE (254)—fangtooths, 305
        - Family DIRETMIDAE (255)—spinyfins, 306
      - Suborder Trachichthyoidei, 306

- Family ANOMALOPIDAE (256)—flashlight or lanterneye fishes, 306
- †Family PSEUDOMONOCENTRIDAE, 307
- Family MONOCENTRIDAE (257)—pinecone fishes, 307
- Family TRACHICHYTHYIDAE (258)—roughies, 308
- Order Beryciformes (54)—beryciforms, 308
  - Suborder Stephanoberycoidei, 308
    - Superfamily Stephanoberycoidea, 309
      - Family GIBBERICHTHYIDAE (259)—gibberfishes, 310
      - Family STEPHANOBERYCIDAЕ (260)—pricklefishes, 310
      - Family HISPIDOBERYCIDAЕ (261)—hispidoberyids, 310
    - Superfamily Cetomimoidea, 310
      - Family RONDELETIIDAЕ (262)—redmouth whalefishes, 311
      - Family BARBOURISIIDAЕ (263)—red (redvelvet) whalefishes, 311
      - Family CETOMIMIDAE (264)—flabby whalefishes, 312
  - Suborder Berycoidei, 313
    - Family MELAMPHAIDAE (265)—bigscale fishes, 313
    - Family BERYCIDAE (266)—alfonsinos, 314
- Series Percomorpha, 314
  - Subseries Ophidiida, 315
    - Order OPHIDIIFORMES (55)—cusk-eels, 315
      - Suborder Ophidioidei, 315
        - Family CARAPIDAE (267)—pearlfishes, 316
          - Subfamily Pyramodontinae, 316
          - Subfamily Carapinae, 316
          - Subfamily Tetragondacninae, 317
        - Family OPHIDIIDAE (268)—cusk-eels, 317
          - Subfamily Brotulinae, 317
          - Subfamily Brotulotaeninae, 317
          - Subfamily Ophidiinae, 317
          - Subfamily Neobythitinae, 318
      - Suborder Bythitoidei, 318
        - Family BYTHITIDAE (269)—viviparous brotulas, 318
          - Subfamily Bythitinae, 318
          - Subfamily Brosmophycinae, 319
        - Family APHYONIDAE (270)—aphyonids, blind cusk-eel, 319
        - Family PARABROTULIDAE (271)—false brotulas, 320
    - Subseries Batrachoidida, 320
      - Order BATRACHOIDIFORMES (Haplodoci) (56)—toadfishes, 320
        - Family BATRACHOIDIDAE (272)—toadfishes, 321
          - Subfamily Porichthyinae, 321
          - Subfamily Thalassophryninae, 322
          - Subfamily Batrachoidinae, 322
          - Subfamily Halophryninae, 323
    - Subseries Gobiida, 323
      - Order KURTIFORMES (57)—nurseryfishes and cardinalfishes, 324
        - Family KURTIDAE (273)—nurseryfishes, 324
        - Family APOGONIDAE (274)—cardinalfishes, 324
          - Subfamily Apogoninae, 325
          - Subfamily Pseudamiinae, 326
      - Order GOBIIFORMES (58)—gobies, 326
        - Family RHYACICHTHYIDAE (275)—loach gobies, 327
        - Family ODONTOBUTIDAE (276)—freshwater sleepers, 327
        - Family MILYERINGIDAE (277)—blind cave gobies, 328
        - Family ELEOTRIDAE (278)—spinycheek sleepers, 328

- Family BUTIDAE (279)—butid sleepers, 329
- Family THALASSELEOTRIDAE (280)—ocean sleepers, 329
- Family OXUDERCIDAE (GOBIONELLIDAE) (281)—*Gobionellus*-like & mudskipper gobies, 329
- Family GOBIIDAE (282)—gobies, 331
- Subseries Ovalentaria, 333
  - Family AMBASSIDAE (Chandidae) (283)—Asiatic glassfishes, 334
  - Family EMBIOTOCIDAE (284)—surfperches, 335
  - Family GRAMMATIDAE (285)—basslets, 336
  - Family PLESIOPIDAE (286)—roundheads, 336
    - Subfamily Plesiopinae, 336
    - Subfamily Acanthoclininae, 336
  - Family POLYCENTRIDAE (287)—South American leaffishes, 337
  - Family POMACENTRIDAE (288)—damselfishes, 337
    - Subfamily Amphiprioninae, 338
    - Subfamily Chrominae, 338
    - Subfamily Lepidozyginae, 338
    - Subfamily Pomacentrinae, 338
  - Family PSEUDOCHROMIDAE (289)—dottybacks, 339
    - Subfamily Pseudochrominae, 339
    - Subfamily Pseudoplesiopinae, 340
    - Subfamily Anisochrominae, 340
    - Subfamily Congrogadinae, 340
  - Family OPISTOGNATHIDAE (290)—jawfishes, 341
- Order MUGILIFORMES (59)—mullets, 341
  - Family MUGILIDAE (291)—mullets, 342
- Order CICHLIFORMES (60), 342
  - Family CICHLIDAE (292)—cichlids, 342
  - Family PHOLIDICHTHYIDAE (293)—convict blenny, 345
- Order BLENNIIFORMES (61)—Blennies, 346
  - Family TRIPTERYGIIDAE (294)—triplefin blennies, 346
  - Family DACTYLOSCOPIDAE (295)—sand stargazers, 347
  - Family BLENNIIDAE (296)—combtooth blennies, 348
    - Subfamily Salarinae, 348
    - Subfamily Ablenniinae, 349
  - Family CLINIDAE (297)—kelp blennies, 349
    - Subfamily Ophiclininae, 349
    - Subfamily Clininae, 349
    - Subfamily Myxodinae, 350
  - Family LABRISOMIDAE (298)—labrisomid blennies, 350
  - Family CHAENOPSIDAE (299)—tube blennies, 351
- Order Gobiesociformes (62)—clingfishes, 351
  - Family GOBIESOCIDAE (300)—clingfishes, 352
    - Subfamily Gobiesocinae, 352
    - Subfamily Cheilobranchinae, 353
- Infraseries Atherinomorpha, 353
  - Order ATHERINIFORMES (63)—silversides, 354
    - Suborder Atherinopoidei, 355
      - Family ATHERINOPSIDAE (301)—New World silversides, 355
        - Subfamily Atherinopsinae, 356
          - Tribe Atherinopsini, 356
          - Tribe Sorgentinini, 356
        - Subfamily Menidiinae, 356
          - Tribe Menidiini, 356
          - Tribe Membradini, 357

- Family NOTOCHEIRIDAE (302)—surf silversides, 357
- Suborder Atherinoidei, 357
  - Family ISONIDAE (303)—surf sardines, 357
  - Family MELANOTAENIIDAE (304)—rainbowfishes and blue eyes, 358
    - Subfamily Bedotiinae, 358
    - Subfamily Melanotaeniinae, 359
    - Subfamily Pseudomugilinae, 359
    - Subfamily Telmatherininae, 359
  - Family ATHERIONIDAE (305)—pricklenose silversides, 360
  - Family DENTATHERINIDAE (306)—Mercer’s tusked silverside, 360
  - Family PHALLOSTETHIDAE (307)—priapumfishes, 361
    - Subfamily Phallostethinae, 361
    - Subfamily Gulaphallinae, 362
  - Family AETHERINIDAE (308)—Old World silversides, 362
    - Subfamily Atherinomorinae, 363
    - Subfamily Craterocephalinae, 363
    - Subfamily Bleheratherininae, 363
    - Subfamily Atherininae, 363
- Order BELONIFORMES (64)—needlefishes, 363
  - Suborder Adrianichthyoidei, 363
    - Family ADRIANICHTHYIDAE (309)—adrianichthyids, 364
      - Subfamily Oryziinae, 364
      - Subfamily Adrianichthyinae, 365
  - Suborder Exocoetoidei, 365
    - Superfamily Exocoetoidea, 365
      - Family EXOCOETIDAE (310)—flyingfishes, 365
        - Subfamily Fodiatorinae, 366
        - Subfamily Parexocoetinae, 366
        - Subfamily Exocoetinae, 366
        - Subfamily Cypselurinae, 366
      - Family HEMIRAMPHIDAE (311)—halfbeaks, 366
      - Family ZENARCHOPTERIDAE (312)—viviparous halfbeaks, 367
    - Superfamily Scomberesocoidea, 367
      - Family BELONIDAE (313)—needlefishes, 368
      - Family SCOMBERESOCIDAE (314)—sauries, 369
- Order CYPRINODONTIFORMES (65)—killifishes, 369
  - Suborder Aplocheiloidei, 370
    - Family APLOCHEILIDAE (315)—Asian rivulines, 371
    - Family NOTHOBRANCHIIDAE (316)—African rivulines, 371
    - Family RIVULIDAE (317)—New World rivulines, 371
  - Suborder Cyprinodontoidei, 372
    - Superfamily Funduloidea, 372
      - Family PROFUNDULIDAE (318)—Middle American killifishes, 372
      - Family GOODEIDAE (319)—goodeids, 372
        - Subfamily Empetrichthyinae, 373
        - Subfamily Goodeinae, 373
      - Family FUNDULIDAE (320)—topminnows, 374
    - Superfamily Valencioidea, 374
      - Family VALENCIIDAE (321)—Valencia toothcarps, 374
    - Superfamily Cyprinodontoidea, 374
      - Family CYPRINODONTIDAE (322)—pupfishes, 375
        - Subfamily Cubanichthyinae, 375
        - Subfamily Cyprinodontinae, 375
      - Tribe Orestiini, 375

- Tribe Cyprinodontini, 376
- Superfamily Poecilioidea, 376
  - Family ANABLEPIDAE (323)—four-eyed fishes, 376
    - Subfamily Anablepinae, 376
    - Subfamily Oxyzygonectinae, 377
  - Family POECILIIDAE (324)—livebearers, 378
    - Subfamily Aplocheilichthyinae, 378
    - Subfamily Procatopodinae, 378
      - Tribe Fluviphylacini, 379
      - Tribe Procatopodini, 379
    - Subfamily Poeciliinae, 379
      - Tribe Alfarini, 379
      - Tribe Priapellini, 379
      - Tribe Gambusiini, 380
      - Tribe Heterandrini, 380
      - Tribe Girardini, 380
      - Tribe Poeciliini, 380
      - Tribe Cnesterodontini, 380
      - Tribe Scolichthyini, 380
      - Tribe Xenodexini, 380
- Proposed sister clade to subspecies Ovalentaria
  - Order SYNBRANCHIFORMES (66)—swamp eels, 380
    - Suborder Synbranchoidei, 381
      - Family SYNBRANCHIDAE (325)—swamp eels, 381
    - Suborder Mastacembeloidei, 382
      - Family CHAUDHURIIDAE (326)—earthworm eels, 382
      - Family MASTACEMBELIDAE (327)—freshwater spiny eels, 382
  - Order CARANGIFORMES (67)—jacks, 383
    - Family NEMATISTIIDAE (328)—roosterfishes, 383
    - Family CORYPHAENIDAE (329)—dolphinfishes, 384
    - Family RACHYCENTRIDAE (330)—cobias, 384
    - Family ECHENEIDAE (331)—remoras (sharksuckers), 384
    - Family CARANGIDAE (332)—jacks and pompanos, 385
      - Subfamily Trachinotinae, 386
      - Subfamily Scomberoidinae, 386
      - Subfamily Naucratinae, 387
      - Subfamily Caranginae, 387
    - Family MENIDAE (333)—moonfishes, 387
  - Order ISTIOPHORIFORMES (68)—barracudas and billfishes, 387
    - Family SPHYRAENIDAE (334)—barracudas, 388
    - Family XIPHIIDAE (335)—swordfishes, 389
    - Family ISTIOPHORIDAE (336)—billfishes, 389
  - Order ANABANTIFORMES (69)—labyrinth fishes, 390
    - Suborder Anabantoidei, 390
      - Family ANABANTIDAE (337)—climbing gouramies, 391
      - Family HELOSTOMATIDAE (338)—kissing gouramies, 391
      - Family OSPHRONEMIDAE (339)—gouramies and fighting fishes, 392
        - Subfamily Osphroneminae, 392
        - Subfamily Belontiinae, 392
        - Subfamily Macropodusinae, 392
        - Subfamily Luciocephalinae, 393
        - Subfamily Trichogastrinae, 393
    - Suborder Channoidei, 393
      - Family CHANNIDAE (340)—snakeheads, 394

- Family NANDIDAE (341)—Asian leaffishes, 394
- Family BADIDAE (342)—chameleonfishes, 395
- Family PRISTOLEPIDIDAE (343)—(Malayan) leaffishes, 395
- Order PLEURONECTIFORMES (70)—flatfishes, 395
  - Suborder Psettodoidei, 397
    - Family PSETTODIDAE (344)—spiny turbots, 397
  - Suborder Pleuronectoidei, 397
    - Superfamily Citharoidea, 397
      - Family CITHARIDAE (345)—largescale flounders, 397
    - Superfamily Pleuronectoidea, 398
      - Family SCOPHTHALMIDAE (346)—turbots, 398
      - Family PARALICHTHYIDAE (347)—sand flounders, 398
      - Family PLEURONECTIDAE (348)—righteye flounders, 399
        - Subfamily Hippoglossinae, 399
        - Subfamily Eopsettinae, 400
        - Subfamily Lyopsettinae, 400
        - Subfamily Hippoglossoidinae, 400
        - Subfamily Pleuronectinae, 400
          - Tribe Psettichthyini, 400
          - Tribe Isopettini, 400
          - Tribe Microstomini, 400
          - Tribe Pleuronectini, 400
        - Family BOTRIDAE (349)—lefteye flounders, 400
    - Superfamily Soleoidea, 401
      - Family PARALICHTHODIDAE (350)—measles or peppered flounders, 401
      - Family POECILOPSETTIDAE (351)—bigeye flounders, 401
      - Family RHOMBOSOLEIDAE (352)—rhombosoleids, 401
      - Family ACHIROPSETTIDAE (353)—southern flounders, 402
      - Family SAMARIDAE (354)—crested flounders, 402
      - Family ACHIRIDAE (355)—American soles, 402
      - Family SOLEIDAE (356)—soles, 403
      - Family CYNOGLOSSIDAE (357)—tonguefishes, 404
        - Subfamily Symphurinae, 404
        - Subfamily Cynoglossinae, 404
- Proposed clade sister to all percomorphs except Ophidiida, Batrachoidida, and Gobiida
  - Order SYNGNATHIFORMES (71)—pipefishes and seahorses, 405
    - Suborder Syngnathoidei, 406
      - Superfamily Pegasoidea, 406
        - Family PEGASIDAE (358)—seamoths, 406
      - Superfamily Syngnathoidea, 407
        - Family SOLENOSTOMIDAE (359)—ghost pipefishes, 407
        - Family SYNGNATHIDAE (360)—pipefishes and seahorses, 407
          - Subfamily Syngnathinae, 408
          - Subfamily Hippocampinae, 408
    - Suborder Aulostomoidei, 409
      - Superfamily Aulostomoidea, 409
        - Family AULOSTOMIDAE (361)—trumpetfishes, 409
        - Family FISTULARIIDAE (362)—cornetfishes, 409
      - Superfamily Centriscoidea, 410
        - Family MACRORAMPHOSIDAE (363)—snipefishes, 410
        - Family CENTRISCIDAE (364)—shrimpfishes, 410
        - Family DACTYLOPTERIDAE (365)—flying gurnards, 411
  - Order ICOSTEIFORMES (72)—ragfishes, 412
    - Family ICOSTEIDAE (366)—ragfishes, 412

- Order CALLIONYMIFORMES (73), 412
  - Family CALLIONYMIDAE (367)—dragonets, 412
  - Family DRACONETTIDAE (368)—slope dragonets, 413
- Order SCOMBROLABRACIFORMES (74)—longfin escolars, 413
  - Family SCOMBROLABRACIDAE (369)—longfin escolars, 413
- Order SCOMBRIFORMES (75)—mackerels, 414
  - Suborder Scombroidei, 414
    - Family GEMPYLIDAE (370)—snake mackerels, 415
    - Family TRICHIURIDAE (371)—cutlassfishes, 415
      - Subfamily Aphanopodinae, 416
      - Subfamily Lepidopodinae, 416
      - Subfamily Trichiurinae, 416
    - Family SCOMBRIDAE (372)—mackerels and tunas, 416
      - Subfamily Gasterochismatinae, 417
      - Subfamily Scombrinae, 417
        - Tribe Scombrini, 417
        - Tribe Scomberomorini, 417
        - Tribe Sardini, 417
        - Tribe Thunnini, 417
    - Suborder Stromateoidei, 418
      - Family AMARSIPIDAE (373)—amarsipas, 418
      - Family CENTROLOPHIDAE (374)—medusafishes, 418
      - Family NOMEIDAE (375)—driftfishes, 419
      - Family ARIOMMATIDAE (376)—ariommats, 419
      - Family TETRAGONURIDAE (377)—squaretails, 420
      - Family STROMATEIDAE (378)—butterfishes, 420
- Proposed clade of all 10 remaining percomorph orders
- Order TRACHINIFORMES (76), 421
  - Family CHIASMODONTIDAE (379)—swallows, 421
  - Family CHAMPSODONTIDAE (380)—gapers, 422
  - Family PINGUIPEDIDAE (381)—sandperches, 422
  - Family CHEIMARRICHTHYIDAE (382)—New Zealand torrentfishes, 422
  - Family TRICHONOTIDAE (383)—sanddivers, 423
  - Family CREEDIIDAE (384)—sandburrowers, 423
  - Family PERCOPHIDAE (385)—duckbills, 424
    - Subfamily Percophinae, 424
    - Subfamily Bembropinae, 424
  - Family LEPTOSCOPIDAE (386)—southern sandfishes, 425
  - Family AMMODYTIDAE (387)—sand lances, 425
  - Family TRACHINIDAE (388)—weeverfishes, 426
  - Family URANOSCOPIDAE (389)—stargazers, 426
- Proposed clade of all 9 remaining percomorph orders, 427
- Order LABRIFORMES (77)—wrasses and relatives, 427
  - Family LABRIDAE (390)—wrasses, 428
  - Family ODACIDAE (391)—cales, 429
  - Family SCARIDAE (392)—parrotfishes, 429
- Suggested clade of perciform relatives
- Order PERCIFORMES (78)—perches, 430
  - Suborder Percoidei, 431
    - Superfamily Percoidea, 431
      - Family CENTROPOMIDAE (393)—snooks, 431
      - Family LATIDAE (394)—lates, 432
      - Family GERREIDAE (395)—mojarras, 433
      - Family CENTROGENYIDAE (396)—false scorpionfishes, 433

- Family PERCILIIDAE (397)—southern basses, 433
- Family HOWELLIDAE (398)—oceanic basslets, 434
- Family ACROPOMATIDAE (399)—lanternbellies, 434
- Family EPIGONIDAE (400)—deepwater cardinalfishes, 434
- Family POLYPRIONIDAE (401)—wreckfishes, 435
- Family LATEOLABRACIDAE (402)—Asian seaperches, 435
- Family MULLIDAE (403)—goatfishes, 436
- Family GLAUCOSOMATIDAE (404)—pearl perches, 436
- Family PEMPHERIDAE (405)—sweepers, 437
- Family OPLEGNATHIDAE (406)—knifejaws, 437
- Family KUHLIIDAE (407)—flagtails, 438
- Family LEPTOBRAMIDAE (407a)—beachsalmon, 438
- Family BATHYCLUPEIDAE (408)—bathyclupeids, 438
- Family POLYNEMIDAE (408a)—threadfins, 438
- Family TOXOTIDAE (409)—archerfishes, 438
- Family ARRIPIDAE (410)—Australasian salmon (kahawai), 439
- Family DICHISTIIDAE (411)—galjoen fishes, 439
- Family KYPHOSIDAE (412)—sea chubs, 440
  - Subfamily Girellinae, 440
  - Subfamily Kyphosinae, 440
  - Subfamily Scorpidae, 441
  - Subfamily Microcanthinae, 441
- Family TERAPONTIDAE (413)—grunters or tigerperches, 441
- Family PERCICHTHYIDAE (414)—temperate perches, 442
- Family SINIPERCIDAE (415)—Chinese perches, 442
- Family ENOPLOSIDAE (416)—oldwives, 442
- Family PENTACEROTIDAE (417)—armorheads, 443
- Family DINOPERCIDAE (418)—cavebasses, 443
- Family BANJOSIDAE (419)—banjofishes, 444
- Family CENTRARCHIDAE (420)—sunfishes, 444
  - Subfamily Elassomatinae, 445
  - Subfamily Centrarchinae, 445
  - Subfamily Lepominae, 445
- Family SERRANIDAE (421)—sea basses, 446
  - Subfamily Serraninae, 447
  - Subfamily Anthiinae, 447
  - Subfamily Epinephelinae, 447
    - Tribus Nipponini, 447
    - Tribus Epinephelini, 447
    - Tribus Diploprionini, 447
    - Tribus Liopropomini, 447
    - Tribus Grammistrostomi, 448
- Family PERCIDAE (422)—perches, 448
  - Subfamily Percinae, 448
  - Subfamily Acerinae, 448
  - Subfamily Percarininae, 449
  - Subfamily Luciopercainae, 449
    - Tribus Lucioperce, 449
    - Tribus Romanichthys, 449
  - Subfamily Etheostomatinae, 449
- Family LACTARIIDAE (423)—false trevallies, 450
- Family DINOLESTIDAE (424)—long-finned pikes, 450
- Family SCOMBROPIDAE (425)—gnomefishes, 450
- Family POMATOMIDAE (426)—bluefishes, 451

- Family BRAMIDAE (427)—pomfrets, 451
  - Subfamily Braminae, 451
  - Subfamily Pteraclinae, 452
- Family CARISTIIDAE (428)—manefishes, 452
- Possible relatives of Acanthuriformes
  - Family MONODACTYLIDAE (429)—moonfishes (fingerfishes), 452
  - Family PRIACANTHIDAE (430)—bigeyes (catalufas), 453
- Seven families proposed relationship to Acanthuroidei, Monodactylidae, and Priacanthidae
  - Family LEIognathidae (431)—ponyfishes, slimys, or slippmouths, 453
  - Family CHAETODONTIDAE (432)—butterflyfishes, 454
  - Family POMACANTHIDAE (433)—angelfishes, 455
  - Family MALACANTHIDAE (434)—tilefishes, 456
    - Subfamily Malacanthinae, 456
    - Subfamily Latilinae, 456
  - Family HAEMULIDAE (435)—grunts, 457
  - Family HAPALOGENYIDAE (436)—barbeled grunters, 457
  - Family LUTJANIDAE (437)—snappers, 457
    - Subfamily Etelinae, 458
    - Subfamily Apsilinae, 458
    - Subfamily Paradicichthyinae, 458
    - Subfamily Lutjaninae, 458
  - Family CAESIONIDAE (438)—fusiliers, 458
- Superfamily Cirrhitoidae, 459
  - Family CIRRHITIDAE (439)—hawkfishes, 459
  - Family CHIRONEMIDAE (440)—kelpfishes, 459
  - Family APLODACTYLIDAE (441)—marblefishes, 460
  - Family CHEILODACTYLIDAE (442)—morwongs, 460
  - Family LATRIDAE (443)—trumpeters, 460
- Superfamily Cepoloidea, 461
  - Family CEPOLIDAE (444)—bandfishes, 461
    - Subfamily Cepolinae, 461
    - Subfamily Owstoniinae, 462
- Superfamily Siganoidea, 462
  - Family SCATOPHAGIDAE (445)—scats, 462
  - Family SIGANIDAE (446)—rabbitfishes, 463
- Suborder Notothenioidei, 463
  - Family BOVICHTIDAE (447)—temperate icefishes, 464
  - Family PSEUDAPHRITIDAE (448)—catadromous icefishes, 464
  - Family ELEGINOPSIDAE (449)—Patagonian blennies, 465
  - Family NOTOTHENIIDAE (450)—cod icefishes, 465
  - Family HARPAGIFERIDAE (451)—spiny plunderfishes, 466
  - Family ARTEDIDRACONIDAE (452)—barbeled plunderfishes, 466
  - Family BATHYDRACONIDAE (453)—Antarctic dragonfishes, 466
  - Family CHANNICHTHYIDAE (454)—crocodile icefishes, 467
- Order SCORPAENIFORMES (79)—mail-cheeked fishes, 467
  - Suborder Scorpaenoidei, 468
    - Family SCORPAENIDAE (455)—scorpionfishes (rockfishes), 468
      - Subfamily Sebastinae, 469
        - Tribe Sebastini, 469
        - Tribe Sebastolobini, 469
      - Subfamily Setarchinae, 469
      - Subfamily Neosebastinae, 469
      - Subfamily Scorpaeninae, 469
        - Tribe Scorprenini, 470

- Tribe Pteroini, 470
  - Subfamily Caracanthinae, 470
  - Subfamily Apistinae, 471
  - Subfamily Tetraroginae, 471
  - Subfamily Synanceiinae, 471
    - Tribe Minoini, 471
    - Tribe Choridodactylini, 472
    - Tribe Synanceiimi, 472
  - Subfamily Plectrogeniinae, 473
- Family APLOACTINIDAE (456)—velvetfishes, 473
- Family ESCHMEYERIDAE (457)—coffishes, 473
- Family PATAECIDAE (458)—Australian prawnfishes, 474
- Family GNATHANACANTHIDAE (459)—red velvetfishes, 474
- Family CONGIOPODIDAE (460)—racehorses (pigfishes or horsefishes), 475
- Suborder Platycephaloidei, 475
  - Family TRIGLIDAE (461)—searobins (gurnards), 475
    - Subfamily Prionotinae, 476
    - Subfamily Pterygotriglinae, 476
    - Subfamily Triglinae, 476
  - Family PERISTEDIIDAE (462)—armored searobins, 476
  - Family BEMBRIDAE (463)—deepwater flatheads, 476
  - Family PLATYCEPHALIDAE (464)—flatheads, 477
  - Family HOPLICHTHYIDAE (465)—ghost flatheads, 477
- Suborder Normanichthyoidei, 478
  - Family NORMANICHTHYIDAE (466)—barehead scorpionfishes or mote sculpins, 478
- Suborder Zoarcoidei, 478
  - Family BATHYMASTERIDAE (467)—ronquils, 478
  - Family EULOPHIIDAE (468), 478
  - Family ZOARCIDAE (469)—eelpouts, 479
  - Family STICHAEIDAE (470)—pricklebacks, 480
  - Family CRYPTACANTHODIDAE (471)—wrymouths, 480
  - Family PHOLIDAE (472)—gunnels, 480
  - Family ANARHICHADIDAE (473)—wolffishes, 481
  - Family PTILICHTHYIDAE (474)—quillfishes, 481
  - Family ZAPRORIDAE (475)—prawnfishes, 481
  - Family SCYTALINIDAE (476)—graveldivers, 482
- Suborder Gasterosteoidae, 482
  - Family HYPOPTYCHIDAE (477)—sand eel, 482
  - Family AULORHYNCHIDAE (478)—tubesnouts, 483
  - Family GASTEROSTEIDAE (479)—sticklebacks, 483
    - Family INDOSTOMIDAE (480)—armored sticklebacks, 484
- Suborder Cottoidei, 485
  - Superfamily Anoplopomatoidea, 485
    - Family ANOPLOPOMATIDAE (481)—sablefishes, 485
  - Superfamily Zaniolepidoidae, 486
    - Family ZANIOLEPIDIDAE (482)—combfishes, 486
      - Subfamily Zaniolepidinae, 486
      - Subfamily Oxylebiinae, 486
  - Superfamily Hexagrammoidea, 487
    - Family HEXAGRAMMIDAE (483)—greenlings, 487
      - Subfamily Ophiodontinae, 487
      - Subfamily Hexagramminae, 487
      - Subfamily Pleurogramminae, 488
  - Superfamily Trichodontoidea, 488

- Family TRICHODONTIDAE (484)—sandfishes, 488
- Superfamily Cottoidea, 488
  - Family JORDANIIDAE (485)—longfin sculpin, 488
  - Family RHAMPHOCOTTIDAE (486)—grunt sculpins, 489
  - Family SCORPAENICHTHYIDAE (487)—Cabezon, 489
  - Family AGONIDAE (488)—poachers and searavens, 490
    - Subfamily Hemilepidotinae, 490
    - Subfamily Hemitripterinae, 490
    - Subfamily Bothragoninae, 490
    - Subfamily Hypsagoninae, 490
    - Subfamily Anoplagoninae, 490
    - Subfamily Brachyopsinae, 490
    - Subfamily Agoninae, 491
    - Subfamily Bathyagoninae, 491
  - Family COTTIDAE (489)—sculpins, 491
    - Subfamily Cottinae, 491
    - Subfamily Comephorinae, 492
    - Subfamily Abyssocottinae, 492
  - Family PSYCHROLUTIDAE (490)—fathead sculpins, 493
    - Subfamily Cottunculinae, 493
    - Subfamily Psychrolutinae, 493
  - Family BATHYLUTICHTHYIDAE (491)—Antarctic sculpins, 494
- Superfamily Cyclopteroidea, 494
  - Family CYCLOPTERIDAE (492)—lumpfishes (lumpsuckers), 494
  - Family LIPARIDAE (493)—snailfishes, 495
- Proposed clade of the remaining 6 orders of Percomorpha
  - Order MORONIFORMES (80)—temperate basses, 495
    - Family MORONIDAE (494)—temperate basses, 496
    - Family DREPANEIDAE (495)—sicklefishes, 496
    - Family EPHIPPIDAE (496)—spadefishes, 497
  - Order ACANTHURIFORMES—(81) surgeonfishes and relatives, 497
    - Suborder Sciaenoidei, 498
      - Family EMMELICHTHYIDAE (497)—rovers, 498
      - Family SCIAENIDAE (498)—drums (croakers), 498
    - Suborder Acanthuroidei, 499
      - Family LUVARIDAE (499)—louvar, 500
      - Family ZANCLIDAE (500)—Moorish Idols, 500
      - †Family MASSALONGIIDAE, 501
      - Family ACANTHURIDAE (501)—surgeonfishes, 501
        - Subfamily Nasinae, 502
        - Subfamily Acanthurinae, 502
          - Tribe Prionurini, 502
          - Tribe Zebrasomini, 502
          - Tribe Acanthurini, 502
    - Order SPARIFORMES (82)—breams and porgies, 502
      - Family CALLANTHIIDAE (502)—splendid perches or groppos, 503
      - Family SILLAGINIDAE (503)—sillagos (whittings, smelt-whittings), 503
      - Family LOBOTIDAE (504)—tripletails, 503
    - Proposed clade of three families formerly called the “sparoid lineage”
      - Family NEMIPTERIDAE (505)—threadfin breams, 504
      - Family LETHRINIDAE (506)—emperors or emperor breams, 505
      - Family SPARIDAE (507)—porgies, 505
    - Proposed clade of the last three orders, 506
      - Order CAPROIFORMES (83)—boarfishes, 506

- Family CAPROIDAE (508)—boarfishes, 507
  - Subfamily Antigoniinae, 507
  - Subfamily Caproinae, 507
- Order LOPHIIFORMES (84)—anglerfishes, 508
  - Suborder Lophioidei, 508
    - Family LOPHIIDAE (509)—goosefishes, 508
  - Suborder Antennarioidei, 509
    - Family ANTENNARIIDAE (510)—frogfishes, 509
    - Family TETRABRACHIIDAE (511)—tetrabrachiid frogfishes, 510
    - Family LOPHICHTHYIDAE (512)—lophichthyid frogfishes, 510
    - Family BRACHIONICHTHYIDAE (513)—handfishes (warty angler), 510
  - Suborder Chaunacoidei, 511
    - Family CHAUNACIDAE (514)—coffinfishes or sea toads, 511
  - Suborder Ogcocephaloidei, 511
    - Family OGCOCEPHALIDAE (515)—batfishes, 511
  - Suborder Ceratioidei, 512
    - Family CAULOPHYRNIDAE (516)—fanfins, 513
    - Family NEOCERATIIDAE (517)—spiny seadevils, 513
    - Family MELANOCETIDAE (518)—black seadevils, 514
    - Family HIMANTOLOPHIDAE (519)—footballfishes, 514
    - Family DICERATIIDAE (520)—double anglers, 515
    - Family ONEIRODIDAE (521)—dreamers, 515
    - Family THAUMATICHTHYIDAE (522)—wolftrap anglers, 516
    - Family CENTROPHRYNIDAE (523)—prickly seadevils, 516
    - Family CERATIIDAE (524)—warty seadevils, 516
    - Family GIGANTACTINIDAE (525)—whipnose anglers, 517
    - Family LINOPHYRNIDAE (526)—leftvents, 517
- Order TETRAODONTIFORMES (85)—plectognaths, 518
  - †Suborder Plectocretacicoidei, 519
    - †Family Cretatriacanthidae, 519
    - †Family Plectocretacicidae, 519
    - †Family Protriacanthidae, 519
  - Suborder Triodontoidei, 519
    - Family TRIODONTIDAE (527)—threetooth puffers, 519
  - Suborder Triacanthoidei, 519
    - Family TRIACANTHODIDAE (528)—spikefishes, 520
      - Subfamily Hollardinae, 520
      - Subfamily Triacanthodinae, 520
    - Family TRIACANTHIDAE (529)—triplespines, 520
  - Suborder Ostracioidea, 521
    - Family ARACANIDAE (530)—deepwater boxfishes, 521
    - Family OSTRACIIDAE (531)—boxfishes (cowfishes and trunkfishes), 521
  - Suborder Balistoidei, 522
    - Family BALISTIDAE (532)—triggerfishes, 522
    - Family MONACANTHIDAE (533)—filefishes, 523
  - Suborder Tetraodontoidei, 523
    - Family MOLIDAE (534)—molas, 524
    - Family TETRAODONTIDAE (535)—puffers, 524
      - Subfamily Tetraodontinae, 525
      - Subfamily Canthigastrinae, 525
    - Family DIODONTIDAE (536)—porcupinefishes (burrfishes), 526