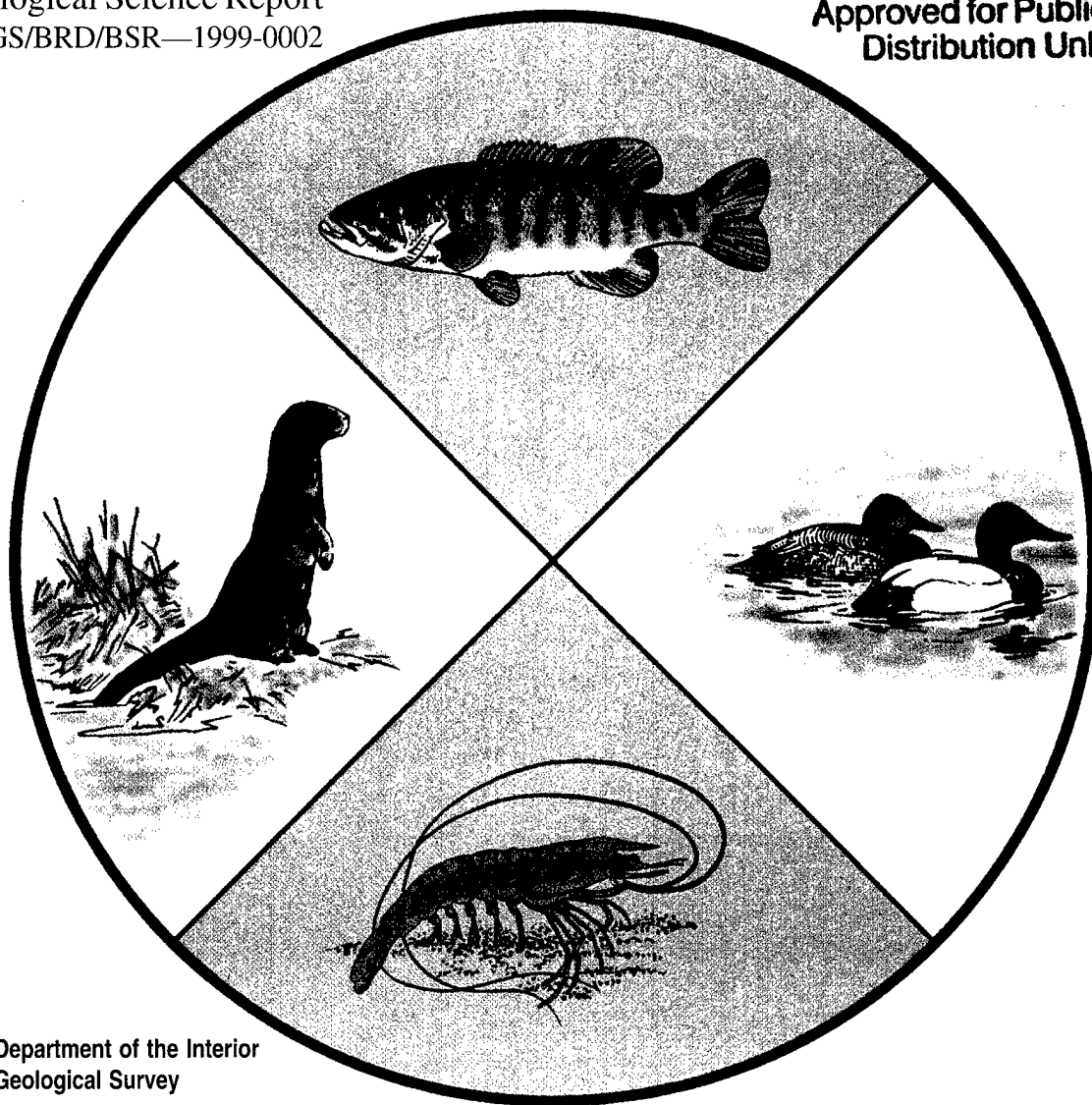


Cumulative Index to Chemicals and to Common and Scientific Names of Species Listed in Contaminant Hazard Reviews 1 Through 34

Biological Science Report
USGS/BRD/BSR—1999-0002

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Cumulative Index to Chemicals and to Common and Scientific Names of Species Listed in Contaminant Hazard Reviews 1 Through 34

Biological Science Report
USGS/BRD/BSR—1999-0002
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Contaminant Hazard Reviews Report 35

By
Ronald Eisler

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Information about the availability of this report and others in the Contaminant Hazard Reviews series is provided on page 66.

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Cumulative Index to Chemicals and to Common and Scientific Names of Species Listed in Contaminant Hazard Reviews 1 Through 34

by
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Abstract. The Contaminant Hazard Reviews (CHR) series—sponsored by the U.S. Geological Survey Patuxent Wildlife Research Center—synthesizes ecotoxicological data for selected environmental contaminants, with emphasis on hazards to native species of flora and fauna. From 1985 through 1998, 34 reviews were published in various report series of the U.S. Department of the Interior on agricultural pesticides (acrolein, atrazine, carbofuran, chlordane, chlorpyrifos, diazinon, diflubenzuron, famphur, fenvalerate, mirex, paraquat, toxaphene), metals and metalloids (arsenic, boron, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, silver, tin, zinc), mammalian biocides (sodium monofluoroacetate), organic industrial and municipal wastes (dioxins, pentachlorophenol, polycyclic aromatic hydrocarbons, polychlorinated biphenyls), mining wastes (cyanide), and ionizing radiations. This current report is a cumulative index to the common and scientific names of all biological species listed in the first 34 reports in the CHR series, with individual species cross-referenced with contaminant hazard review and corresponding page numbers. A similar index for chemicals is included.

Key words: Index, mirex, cadmium, carbofuran, toxaphene, selenium, chromium, polychlorinated biphenyls, dioxins, diazinon, mercury, nickel, polycyclic aromatic hydrocarbons, arsenic, chlorpyrifos, lead, tin, pentachlorophenol, atrazine, molybdenum, boron, chlordane, paraquat, cyanide, fenvalerate, diflubenzuron, zinc, famphur, acrolein, radiation, sodium monofluoroacetate, silver, copper, wildlife, birds, mammals, amphibians, reptiles, fish, invertebrates, plants

Introduction

A series of 34 Contaminant Hazard Reviews (CHR) was published between 1985 and 1998 under the aegis of the Patuxent Wildlife Research Center in direct response to requests for information from environmental specialists of the U.S. Fish and Wildlife Service and other scientists and resource managers in the U.S. Department of the Interior. Each CHR synthesized ecological and toxicological information of a single environmental contaminant, with emphasis on native fishery and wildlife resources. Specifically, reviews were prepared on selected agricultural insecticides, herbicides, animal control agents, metals, metalloids, organic industrial wastes, mining wastes, and ionizing radiations. Financial support for the CHR series was provided by the U.S. Fish and Wildlife Service, the National Biological Survey, the National Biological Service,

and, most recently, the U.S. Geological Survey (Table). Page 66 of this report provides information on obtaining copies of the CHR reports.

This report presents an index for all chemicals and chemical trade names listed in CHR's 1 through 34; a similar index is included for the common and scientific names of all biological species. This publication is the second index to the CHR series. The first index—CHR 16 (Eisler and Corley 1989)—listed the common and scientific names of species in CHR's 1 through 15 but did not include chemicals and chemical trade names. The current index issue—CHR 35—supersedes CHR 16. This index was also prepared at the request of environmental specialists of the U.S. Fish and Wildlife Service and various natural resource managers in the U.S. Department of the Interior. It should also be a useful resource to the many other users of the CHR reviews.

Table. Publications in the Contaminant Hazard Reviews (CHR) series by CHR number, subject, report series and number, and author(s).

CHR No.	Subject	Report series and number ^a	Author(s)
1	Mirex	FWS 85 (1.1)	Eisler (1985a)
2	Cadmium	FWS 85 (1.2)	Eisler (1985b)
3	Carbofuran	FWS 85 (1.3)	Eisler (1985c)
4	Toxaphene	FWS 85 (1.4)	Eisler and Jacknow (1985)
5	Selenium	FWS 85 (1.5)	Eisler (1985d)
6	Chromium	FWS 85 (1.6)	Eisler (1986a)
7	Polychlorinated Biphenyls	FWS 85 (1.7)	Eisler (1986b)
8	Dioxins	FWS 85 (1.8)	Eisler (1986c)
9	Diazinon	FWS 85 (1.9)	Eisler (1986d)
10	Mercury	FWS 85 (1.10)	Eisler (1987a)
11	Polycyclic Aromatic Hydrocarbons	FWS 85 (1.11)	Eisler (1987b)
12	Arsenic	FWS 85 (1.12)	Eisler (1988a)
13	Chlorpyrifos	FWS 85 (1.13)	Odenkirchen and Eisler (1988)
14	Lead	FWS 85 (1.14)	Eisler (1988b)
15	Tin	FWS 85 (1.15)	Eisler (1989a)
16	Index to Species	FWS 85 (1.16)	Eisler and Corley (1989)
17	Pentachlorophenol	FWS 85 (1.17)	Eisler (1989b)
18	Atrazine	FWS 85 (1.18)	Eisler (1989c)
19	Molybdenum	FWS 85 (1.19)	Eisler (1989d)
20	Boron	FWS 85 (1.20)	Eisler (1990a)
21	Chlordane	FWS 85 (1.21)	Eisler (1990b)
22	Paraquat	FWS 85 (1.22)	Eisler (1990c)
23	Cyanide	FWS 85 (1.23)	Eisler (1991)
24	Fenvalerate	FWS 2	Eisler (1992a)
25	Diffubenzuron	FWS 4	Eisler (1992b)
26	Zinc	FWS 10	Eisler (1993)
27	Famphur	NBSY 20	Eisler (1994a)
28	Acrolein	NBSY 23	Eisler (1994b)
29	Radiation	NBS 26	Eisler (1994c)
30	Sodium Monofluoroacetate (1080)	NBS 27	Eisler (1995)
31	Planar PCBs	NBS 31	Eisler and Belisle (1996)
32	Silver	NBS 32	Eisler (1996)
33	Copper	USGS 1997-0002	Eisler (1998a)
34	Nickel	USGS 1998-0001	Eisler (1998b)

^a FWS = Biological Report series of the U.S. Fish and Wildlife Service (CHR 1 through 26); NBSY = Biological Report series of the U.S. National Biological Survey (CHR 27 and 28); NBS = Biological Report series of the U.S. National Biological Service (CHR 29-32); USGS = Biological Science Report series of the U.S. Geological Survey (CHR 33 and 34).

Index to Chemicals

All chemicals, chemical trade names, and other substances with known biological properties listed in CHR's 1 through 34—a total of 1,570—are presented in Section 1. Each listed chemical is followed by a **boldfaced number** between 1 and 34 (this number corresponds to the CHR report number listed in Table) and nonbolded numbers that designate the pages in that report.

Index to Species

Taxonomic nomenclatures for plants and animals are under constant revision. In this report, I elected to conform as much as possible to the systems and spellings used

by Scott and Wasser (1980) for plants, Swain and Swain (1948) for insects, Turgeon et al. (1988) for aquatic mollusks, Williams et al. (1989) for decapod crustaceans, Pratt (1935) and Hyman (1940, 1951a, 1951b, 1955) for miscellaneous invertebrates, Robins et al. (1991) for fishes, Ditmars (1966) for reptiles, Edwards (1974) and Howard and Moore (1991) for birds, and Nowak and Paradiso (1983) for mammals. Individual species are arranged alphabetically by scientific and common name (Section 2). Each scientific name is followed by a **boldfaced number** between 1 and 34 (this number corresponds to the CHR report number listed in Table) and nonbolded numbers that designate the pages in that report.

In total, 2,233 species of animals and plants were cited, of which only 23 (1.03%) were listed in at least 20 CHR reports. The most widely cited species included one species of plant (corn, *Zea mays*), two species of invertebrates (freshwater crustacean, *Daphnia magna*; American oyster, *Crassostrea virginica*), seven species of teleosts (channel catfish, *Ictalurus punctatus*; bluegill, *Lepomis macrochirus*; coho salmon, *Oncorhynchus kisutch*; rainbow trout, *Oncorhynchus mykiss*; fathead minnow, *Pimephales promelas*; brook trout, *Salvelinus fontinalis*; lake trout, *Salvelinus namaycush*), three species of birds (mallard, *Anas platyrhynchos*; domestic chicken, *Gallus* sp.; Japanese quail, *Coturnix japonica*), and ten species of mammals (cow, *Bos* spp.; domestic dog, *Canis familiaris*; guinea pig, *Cavia* spp.; domestic cat, *Felis domesticus*; human, *Homo sapiens*; hamster, *Cricetus* spp.; domestic mouse, *Mus* spp.; domestic sheep, *Ovis aries*; laboratory white rat, *Rattus* spp.; and domestic pig, *Sus* spp.). It is probable that these species are not representative of unusually sensitive or endangered species, but they can be considered appropriate sentinel organisms for many species of free-living wildlife.

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Literature Cited

- Ditmars, R.L. 1966. Reptiles of the world. Macmillan, New York, N.Y. 321 pp. + 89 plates.
- Edwards, E.P. 1974. A coded list of birds of the world. Ernest P. Edwards, Sweet Briar, Va. 174 pp.
- Eisler, R. 1985a. Mirex hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.1), Contaminant Hazard Reviews Report 1. 42 pp.
- Eisler, R. 1985b. Cadmium hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.2), Contaminant Hazard Reviews Report 2. 46 pp.
- Eisler, R. 1985c. Carbofuran hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.3), Contaminant Hazard Reviews Report 3. 36 pp.
- Eisler, R. 1985d. Selenium hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.5), Contaminant Hazard Reviews Report 5. 57 pp.
- Eisler, R. 1986a. Chromium hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.6), Contaminant Hazard Reviews Report 6. 60 pp.
- Eisler, R. 1986b. Polychlorinated biphenyl hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.7), Contaminant Hazard Reviews Report 7. 72 pp.
- Eisler, R. 1986c. Dioxin hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.8), Contaminant Hazard Reviews Report 8. 37 pp.
- Eisler, R. 1986d. Diazinon hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.9), Contaminant Hazard Reviews Report 9. 37 pp.
- Eisler, R. 1987a. Mercury hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.10), Contaminant Hazard Reviews Report 10. 90 pp.
- Eisler, R. 1987b. Polycyclic aromatic hydrocarbon hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.11), Contaminant Hazard Reviews Report 11. 81 pp.
- Eisler, R. 1988a. Arsenic hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.12), Contaminant Hazard Reviews Report 12. 92 pp.
- Eisler, R. 1988b. Lead hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.14), Contaminant Hazard Reviews Report 14. 134 pp.
- Eisler, R. 1989a. Tin hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.15), Contaminant Hazard Reviews Report 15. 83 pp.
- Eisler, R. 1989b. Pentachlorophenol hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.17), Contaminant Hazard Reviews Report 17. 72 pp.
- Eisler, R. 1989c. Atrazine hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.18), Contaminant Hazard Reviews Report 18. 53 pp.
- Eisler, R. 1989d. Molybdenum hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.19), Contaminant Hazard Reviews Report 19. 61 pp.
- Eisler, R. 1990a. Boron hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.20), Contaminant Hazard Reviews Report 20. 32 pp.
- Eisler, R. 1990b. Chlordane hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife

- Service Biological Report 85 (1.21), Contaminant Hazard Reviews Report 21. 49 pp.
- Eisler, R. 1990c. Paraquat hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.22), Contaminant Hazard Reviews Report 22. 28 pp.
- Eisler, R. 1991. Cyanide hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.23), Contaminant Hazard Reviews Report 23. 55 pp.
- Eisler, R. 1992a. Fenvalerate hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 2, Contaminant Hazard Reviews Report 24. 43 pp.
- Eisler, R. 1992b. Diflubenzuron hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 4, Contaminant Hazard Reviews Report 25. 36 pp.
- Eisler, R. 1993. Zinc hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 10, Contaminant Hazard Reviews Report 26. 106 pp.
- Eisler, R. 1994a. Famphur hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. National Biological Survey Biological Report 20, Contaminant Hazard Reviews Report 27. 23 pp.
- Eisler, R. 1994b. Acrolein hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. National Biological Survey Biological Report 23, Contaminant Hazard Reviews Report 28. 29 pp.
- Eisler, R. 1994c. Radiation hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. National Biological Service Biological Report 26, Contaminant Hazard Reviews Report 29. 124 pp.
- Eisler, R. 1995. Sodium monofluoroacetate (1080) hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. National Biological Service Biological Report 27, Contaminant Hazard Reviews Report 30. 47 pp.
- Eisler, R. 1996. Silver hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. National Biological Service Biological Report 32, Contaminant Hazard Reviews Report 32. 44 pp.
- Eisler, R. 1998a. Copper hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Geological Survey Biological Science Report USGS/BRD/BSR--1997-0002, Contaminant Hazard Reviews Report 33. 98 pp.
- Eisler, R. 1998b. Nickel hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Geological Survey Biological Science Report USGS/BRD/BSR--1998-0001, Contaminant Hazard Reviews Report 34. 76 pp.
- Eisler, R., and A.A. Belisle. 1996. Planar PCB hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. National Biological Service Biological Report 31, Contaminant Hazard Reviews Report 31. 75 pp.
- Eisler, R., and J.H. Corley. 1989. Index to common and scientific names of species listed in Contaminant Hazard Reviews 1-15. U.S. Fish and Wildlife Service Biological Report 85 (1.16), Contaminant Hazard Reviews Report 16. 44 pp.
- Eisler, R., and J. Jacknow. 1985. Toxaphene hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.4), Contaminant Hazard Reviews Report 4. 26 pp.
- Howard, R., and A. Moore. 1991. A complete checklist of the birds of the world. Second edition. Academic Press, New York. 622 pp.
- Hyman, L.H. 1940. The invertebrates. Volume 1. Protozoa through ctenophora. McGraw-Hill, New York. 726 pp.
- Hyman, L.H. 1951a. The invertebrates. Volume 2. Platyhelminthes and rhyncocoela. The acoelomate bilateria. McGraw-Hill, New York. 550 pp.
- Hyman, L.H. 1951b. The invertebrates. Volume 3. Acanthocephala, aschelminthes, and entoprocta. The pseudocoelomate bilateria. McGraw-Hill, New York. 572 pp.
- Hyman, L.H. 1955. The invertebrates. Volume 4. Echinodermata. The coelomate bilateria. McGraw-Hill, New York. 763 pp.
- Nowak, R.M., and J.L. Paradiso. 1983. Walker's mammals of the world. Volumes I and II. Johns Hopkins University Press, Baltimore. xlv + 1362 pp.
- Odenkirchen, E.W., and R. Eisler. 1988. Chlorpyrifos hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish and Wildlife Service Biological Report 85 (1.13), Contaminant Hazard Reviews Report 13. 34 pp.
- Pratt, H.S. 1935. A manual of the common invertebrate animals. P. Blakiston's Son and Company, Philadelphia. 854 pp.
- Robins, C.R., R.M. Bailey, C.E. Bond, J.R. Brooker, E.A. Lachner, R.N. Lea, and W.B. Scott. 1991. Common and scientific names of fishes from the United States and Canada. Fifth edition. American Fisheries Society Special Publication 20. 183 pp.
- Scott, T.G., and C.H. Wasser. 1980. Checklist of North American plants for wildlife biologists. The Wildlife Society, 7101 Wisconsin Ave. NW, Washington, DC. 58 pp.
- Swain, R.B., and S.N. Swain. 1948. The insect guide. Doubleday, New York. 261 pp.
- Turgeon, D.D., A.E. Bogan, E.V. Coan, W.K. Emerson, W.G. Lyons, W.L. Pratt, C.F.E. Roper, A. Scheltema, F.G. Thompson, and J.D. Williams. 1988. Common and scientific names of aquatic invertebrates from the United States and Canada: mollusks. American

Fisheries Society Special Publication 16. 227 pp. + 12 plates.
Williams, A.B., L.G. Abele, D.L. Felder, H.H. Hobbs, Jr., R.B. Manning, P.A. McLaughlin, and I.P.

Farfante. 1989. Common and scientific names of aquatic invertebrates from the United States and Canada: decapod crustaceans. American Fisheries Society Special Publication 17. 77 pp. + 4 plates.

Section 1: Index to Chemicals

Chemical and trade names of substances listed in the Contaminant Hazard Reviews (CHR) series. Substances are indexed by **CHR report number** and by page numbers within each CHR report.

- 1068: 21 4.
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Aepyceros melampus: 33 29, 42, 79.

Aeromonas sp.: 5 4.

Agapornis roseicollis: 26 76.

Agaricus bisporus: 25 7.

Agaricus campestris: 32 18.

Agelaius phoeniceus: 1 4, 6, 9; 3 1, 11, 12, 15; 4 6; 7 36, 40; 9 iii, 8, 9, 14; 10 50; 13 13; 14 77; 21 34, 36; 24 8; 27 11, 12; 31 41.

Agosia chrysogaster: 26 59.

Agriolimax reticulatus: 9 25.

Agrobacter sp.: 6 29.

Agropyron cristatum: 30 14.

Agropyron smithii: 5 21.

Agrostis tenuis: 12 22; 22 8.

Agrotis ipsilon: 29 42.

Aix sponsa: 10 31, 40; 29 84; 34 26.

Albacore, *Thunnus alalunga*

Albatross, Laysan, *Diomedea immutabilis*

Albatrosses: 26 19; 33 26.

Alburnus alburnus: 15 46; 24 21.

Alca torda: 31 41, 54.

Alcaligenes sp.: 34 37.

Alces alces: 10 64; 29 48, 56, 62, 63, 104; 33 29; 34 31, 36.

Alces alces gigas: 19 16, 42.

Alcidae: 7 22.

Alcyonia alcyonium: 26 19.

Aldrichetta forsteri: 6 22, 24.

Alectoris chukar: 10 51; 12 57; 13 13.

Alectoris graeca: 30 18.

Alewife, *Alosa pseudoharengus*

Alfalfa, *Medicago sativa*

Algae

Bladder wrack, *Fucus vesiculosus*

Blue-green, *Anabaena flos-aquae*, *Aphanizomenon flos-aquae*, *Microcystis aeruginosa*

Brown, *Ascophyllum nodosum*, *Egregia laevigata*, *Fucus*, *Laminaria*, *Pelvetia canaliculata*

Red, *Champia parvula*, *Plumaria elegans*

Various, *Amphidinium* spp., *Amphora coffeaeformis*,

Anabaena, *Anacystis*, *Ankistrodesmus*, *Asterionella*

formosa, *Asteromonas gracilis*, *Bellerocha*

polymorpha, *Blidingia minima*, *Chara* sp., *Chlamydomonas*, *Chlorella*, *Chlorococcum* sp.,

Chroomonas sp., *Cladophora*, *Coelastrium*

cambricum, *Cricosphaera* sp., *Cyclotella*,

Cylindrotheca fusiformis, *Cymodocea* sp., *Diatoma*

sp., *Dunaliella*, *Enteromorpha*, *Epithemia* sp.,

Exuviella baltica, *Glenodinium halli*, *Gymnodinium*

splendens, *Haslea ostrearia*, *Hymenomonas*

- carterae*, *Isochrysis galbana*, *Microspora* sp.,
Mougeotia sp., *Nannochloris oculata*, *Nitella* spp.,
Nitzschia, *Nostoc muscorum*, *Ochromonas danica*,
Oedogonium, *Olisthodiscus luteus*, *Peridinium*
gatunense, *Phormidium inundatum*, *Platymonas*
subcordiformis, *Plectonema boryanum*, *Polygonum*
sp., *Procentrum micans*, *Prorocentrum maria-*
lehouriae, *Rhizosolenia* sp., *Scenedesmus*,
Schroederella spp., *Scropsiella faeroense*,
Selenastrum capricornutum, *Skeletonema costatum*,
Spirogyra sp., *Symiodinium* sp., *Synedra* sp.,
Tabellaria sp., *Tetraedron* sp., *Tetraselmis chui*,
Thallassiosira, *Tolypothrix*, *Ulothrix* sp., *Ulva* sp.,
Zygnema sp.
- Alligator, *Alligator mississippiensis*
Alligator mississippiensis: 12 32; 26 26; 31 40.
Allium porrum: 11 35.
Allium cepa: 34 20.
Allium sp.: 9 1; 28 3; 34 13, 21.
Allolobophora spp.: 8 17; 29 55; 34 22.
Allorchestes compressa: 19 25; 26 11, 57; 33 52.
Allysum spp.: 34 21, 34, 37, 39.
 Almond, *Prunus amygdalus*
 Almond, bitter, *Prunus dulcis*
Alopex lagopus: 29 63; 30 5, 26, 40; 33 30.
Alosa pseudoharengus: 1 27, 29; 6 12; 12 23; 17 15; 31
 39.
 Alpaca, *Lama pacos*
Alphitobius diaperinus: 27 6, 7.
Amblyomma sp.: 33 17.
Ambloplites rupestris: 10 26; 33 22; 34 25, 43.
Amblyomma americanum: 27 13, 17, 18.
Amblyomma maculatum: 27 13, 17, 18.
Ambystoma jeffersonianum: 33 42.
Ambystoma maculatum: 33 39.
Ambystoma mexicanus: 17 36.
Ambystoma opacum: 10 47; 12 47; 14 72; 26 64; 33 62;
 34 45.
Ambystoma tigrinum: 11 24, 49.
Ameiurus melas: 4 9; 31 25, 33.
Ameiurus nebulosus: 7 12; 8 10, 11, 16; 11 23, 31, 47,
 49; 17 15; 23 22; 25 18, 21; 26 24; 33 23, 57, 72; 34
 25, 33.
Amia calva: 26 24; 28 11.
Ammicola sp.: 6 23.
Ampelisca abdita: 14 67.
Amphidinium spp.: 26 57.
Amphioxus, *Branchiostoma caribaeum*
 Amphipods, *Allorchestes*, *Ampelisca*, *Corophium*,
Crangonyx, *Elasmopus*, *Gammarus*, *Hyaella*,
Orchestia, *Parhallelia*, *Pontoporeia*, *Rhepoxynius*,
Talitrus, *Talorchestia*, *Themisto*
Amphora coffeaeformis: 15 48.
Amrasca biguttula biguttula: 24 14.
Anabaena flos-aquae: 33 3.
Anabaena inequalis: 34 40.
Anabaena spp.: 5 31; 18 14, 26; 19 23, 24; 28 9; 31 51.
Anabas testudineus: 3 8, 20, 21; 34 43.
Anacardium occidentale: 19 22.
Anacystis marina: 32 20.
Anacystis nidulans: 5 31; 20 15; 26 66; 34 40, 47.
Anadara granosa: 33 17.
Anadara trapezium: 33 40.
Ananas comusus: 18 1, 3, 41.
Anarhichas minor: 14 32.
Anas acuta: 3 1; 7 16; 14 2, 42, 75; 30 18.
Anas americana: 3 1; 30 18.
Anas carolinensis: 3 1; 29 82.
Anas clypeata: 7 16; 2 1, 34; 29 82.
Anas discors: 10 32; 21 34; 26 27, 43; 29 82.
Anas fulvigula: 14 42.
Anas platyrhynchos: 1 6, 7, 9, 15, 31; 2 iii, 16, 24, 30,
 34; 3 11, 12, 14; 4 8, 12, 17; 5 20, 29, 38, 39; 7 16,
 32, 36, 40, 41, 52; 8 23; 9 iv, 1, 9, 12, 14; 10 33, 50,
 51, 53, 62, 63, 71; 11 50; 12 57; 13 12, 14, 15, 22, 24;
 14 12, 41, 42, 51, 73, 75-77, 79, 86; 15 35, 49, 50, 52;
 17 21, 38; 18 34; 20 19, 20, 28; 21 17, 18, 27, 34; 22
 7, 14, 16; 23 29; 25 24, 25; 26 27, 43, 73, 75, 76, 85;
 27 9-12; 28 13, 14; 29 33, 83, 84, 105; 30 11, 16, 18,
 24; 31 52; 33 25, 42, 73; 34 14, 26, 35, 47, 61, 64.
Anas rubripes: 1 31; 2 24; 4 17; 6 14, 27, 37, 38; 7 16; 9
 1; 10 62; 12 32; 14 2, 42, 51, 77; 21 18, 27; 27 12; 33
 25, 42; 34 27.
Anas spp.: 5 20, 26, 38; 9 iii, 1, 8, 14; 11 1; 12 32, 76;
 13 15; 14 12, 13, 77; 21 36; 26 9, 11, 72, 90; 33 25,
 73.
Anas strepera: 14 51; 34 27.
Anas superciliosa: 30 16, 18, 23.
Anastrepha ludens: 20 13, 14.
Anastrepha suspensa: 29 70, 71.
 Anchovetta, *Cetengraulis mysticetus*
 Anchovy
 Adriatic, *Engraulis encrasicolus*
 Northern, *Engraulis mordax*
 Other, *Engraulidae*
Ancylus fluviatilis: 18 32, 33; 26 54.
Andropogon scoparius: 5 21.
 Anemone
 Plumose, *Metridium senile*
 Sea, *Anemonia viridis*, *Anthopleura xanthogrammica*
Anemonia viridis: 33 49, 69.
Anguilla anguilla: 8 12; 14 72; 17 35.
Anguilla rostrata: 8 11; 29 29; 31 37; 34 43.
Anguilla sp.: 1 27; 5 6, 37; 31 32.
Anguilla vulgaris: 10 61.
 Anhinga, *Anhinga anhinga*
Anhinga anhinga: 1 31.
Ankistrodesmus falcatus: 12 45; 15 6, 39, 46; 29 71.

- Ankistrodesmus* sp.: 13 18.
 Annelids, *Nereis*, *Tubifex*
Anocentor nitens: 27 6.
Anodonta anatina: 15 40, 44; 34 23.
Anodonta cygnea: 25 13, 20; 26 11; 33 8, 49.
Anodonta grandis: 33 17, 40, 49.
Anodonta nuttalliana: 26 67.
Anodonta piscinalis: 33 17, 35.
Anomalocera sp.: 26 69.
Anopheles quadrimaculatus: 30 15.
Anopheles stephensi: 24 15.
Anser anser: 14 51; 29 33; 31 52.
Anser spp.: 9 iii, 1, 14; 12 76; 18 36; 26 27; 33 26.
 Ant
 Big-head, Formicidae
 Fire, *Solenopsis invicta*
 Harvester, *Pogonomyrmex* spp.
 Various, Formicidae, *Liometopum occidentale*,
 Veromessor andrei
 Antechinus
 Brown, *Antechinus stuartii*
 Dusky, *Antechinus swainsonii*
Antechinus stuartii: 30 26.
Antechinus swainsonii: 30 26.
 Antelope, Antilopinae
Anthodidaris crassispina: 6 37; 14 67; 20 16; 26 59.
Anthonomus grandis: 12 6; 20 14; 25 1, 2, 8, 10, 32.
Anthopleura xanthogrammica: 29 72.
Antilocapra americana: 6 14, 17; 29 42.
 Antilopinae: 5 26; 23 12; 26 31.
Antimora rostrata: 1 24; 10 26; 32 19.
 Anurans: 10 47.
Apeltes quadracus: 5 34.
Apheloria corrugata: 23 15.
Apheloria kleinpeteri: 23 15.
Apheloria spp.: 23 20.
 Aphids
 Black bean, *Aphis fabae*
 Various, *Lipaphis erysimi*, *Macrosiphium gei*
Aphinizomenon flos-aquae: 33 3.
Aphis fabae: 33 46.
Apis cerama: 24 15.
Apis mellifera: 9 1, 13; 12 42, 44; 20 14; 22 7, 8; 24 14,
 15, 37; 25 1, 2, 7, 8, 32; 26 18, 40; 30 15, 41; 33 16.
Apis spp.: 3 8, 17; 9 iii; 13 22; 14 29; 29 52.
Apium graveolans: 4 1; 24 3; 34 20, 34, 39.
Aplexa hypnorium: 28 10.
Aplodinotus grunniens: 10 26; 21 12.
Aplodontia rufa: 8 16; 19 20.
Apodemus flavicollis: 26 37.
Apodemus sylvaticus: 10 35; 14 42; 33 30.
Aporrectodea rosea: 33 35.
Aporrectodea tuberculata: 26 51.
 Apple, *Malus*
 Apricot, *Prunus armenaica*
Apteryx spp.: 30 24.
Aquila audax: 30 18, 23, 24, 36.
Aquila chrysaetos: 23 4; 26 30, 76; 30 4, 19, 24; 31 41.
Aquila heliaca adalberti: 31 41, 45.
Aquipecten irradians: 2 28.
Ara araruana: 26 76.
Arabidopsis thaliana: 29 48.
Arachis hypogea: 3 1, 19; 4 19; 20 11; 24 3; 30 14.
 Arachnids: 3 26; 5 5; 14 32; 15 10, 15.
Aramus guarauna: 4 7.
Araneus umbricatus: 14 48.
Arbacia lixula: 14 29; 32 26.
Arbacia punctulata: 7 48; 34 42.
Arbutus menziesii: 20 12.
Arctica islandica: 33 17; 34 23.
Arctocephalus pusillus: 10 35.
Arcularia gibbosula: 10 24.
Ardea cinerea: 10 2, 54; 31 41.
Ardea herodias: 7 16; 10 32; 21 18; 31 41, 60.
Arenicola cristata: 1 8; 15 44, 47, 48.
Arenicola marina: 26 23; 29 27.
Argiope aurantia: 33 16.
Argopecten irradians: 10 48; 26 54; 32 22; 33 49, 70.
Arianta arbustorum: 34 16.
Arion spp.: 26 19, 50-52.
Arius felis: 4 6; 11 48.
 Armadillos: 14 99.
Artemia franciscana: 33 10.
Artemia salina: 12 55; 25 14; 26 57; 29 72.
Artemia sp.: 29 1; 32 25.
Artemisia tridentata: 6 13; 20 8.
Arthrobacter sp.: 6 29; 17 11.
Arundinaria spp.: 23 15.
Arvicola terrestris: 22 2.
Ascophyllum nodosum: 2 4; 6 9; 26 52, 66; 33 15; 34 22.
Asellus communis: 23 21; 26 69.
Asellus sp.: 10 23; 14 60; 17 28; 22 10.
 Ash, mountain, *Sorbus aucuparia*
Asio flammeus: 31 41.
Asio otus: 7 16.
 Asparagus, *Asparagus officinale*
Asparagus officinale: 5 21.
 Aspen
 Largetooth, *Populus grandidentata*
 Trembling, *Populus tremuloides*
 Various, *Populus* sp.
Aspergillus clavatus: 34 39.
Aspergillus flavus: 34 39.
Aspergillus fumigatus: 30 8.
Asplanchna brightwelli: 29 64.
Asplanchna sp.: 25 23.
 Ass, domestic, *Equus asinus*
Astacus astacus: 33 20.

- Astacus fluviatilis*: 10 61; 17 28.
 Aster, *Aster*, *Astragalus*
Aster spp.: 5 6, 21.
 Aster, tansy, *Machaeranthera* spp.
Asterias forbesi: 6 22; 34 42.
Asterias rubens: 19 26; 26 59; 34 24.
Asterias sp.: 26 45.
Asterionella formosa: 2 21.
 Asteroid, *Echinus esculentus*
Asteromonas gracilis: 15 38.
Astragalus argillosus: 5 21.
Astragalus beathii: 5 21.
Astragalus bisulcatus: 5 21.
Astragalus confertiflorus: 5 21.
Astragalus crotulariae: 5 21.
Astragalus racemosus: 5 25.
Astragalus spp.: 5 6, 21, 22, 25.
Astraliuim rogosum: 6 33.
Astyanax bimaculatus: 17 20.
Ateles geoffroyi: 30 26.
Athene cunicularia: 23 4, 35; 30 24.
Atherinasoma microstoma: 6 22.
Atherinops affinis: 33 56, 72.
Atherix sp.: 4 9; 24 17.
Atriplex spp.: 5 6, 21.
 Auks, Alcidae
Aulosira fertissima: 18 14.
Aurelia aurita: 29 72.
Australorbis glabratus: 15 46, 47; 17 25; 28 10.
Australorbis sp.: 32 22.
Austropotamobius pallipes: 26 69.
Avena sativa: 5 21; 14 56; 18 12, 14; 22 8; 24 36; 32 20;
 34 34, 39.
 Avocet, American, *Recurvirostra americana*
Aythya affinis: 2 9; 7 16; 14 42.
Aythya americana: 14 42; 33 26.
Aythya collaris: 34 27.
Aythya ferina: 14 51.
Aythya fuligula: 14 51.
Aythya marila: 31 41; 32 16; 34 27.
Aythya spp.: 12 32.
Aythya valisineria: 4 7; 6 14; 7 17; 14 2, 35, 36, 52, 103;
 21 18; 33 26, 42; 34 27.
Azotobacter vinelandii: 25 7.
Babesia caballi: 27 6.
 Baboon, *Papio anubis*
Bacillus cereus: 34 37.
Bacillus spp.: 5 4.
Bacillus subtilis: 6 30; 17 41.
 Bacteria, *Actinomycetes* sp., *Aeromonas* sp., *Agrobacter*
 sp., *Alcaligenes* sp., *Arthrobacter* sp., *Aulosira*
fertissima, *Azotobacter vinelandii*, *Bacillus*,
Clostridium postorianum, *Escherichia coli*, *Flavobac-*
terium sp., *Klebsiella pneumoniae*,
Methanobacterium sp., *Oscillatoria* sp.,
Photobacterium phosphoreum, *Pseudomonas* spp.,
Salmonella, *Streptococcus*, *Tolypothrix*
 Badger, *Taxidea taxus*
Baetis pygmaeus: 25 21.
Baetis sp.: 18 32.
Baetis thermicus: 33 6, 20, 70.
Balaenoptera physalis: 12 33.
Balanus amphitrite: 26 21.
Balanus balanoides: 26 21, 68.
Balanus eburneus: 25 14, 21; 28 10.
Balanus sp.: 6 35; 15 44; 26 41.
Balistoides viridescens: 26 25.
 Bamboo, *Arundinaria* spp., *Bambusa* spp.,
Dendrocalamus spp.
Bambusa spp.: 23 3, 12, 15.
 Bandicoot
 Golden, *Isoodon auratus barrowensis*
 Gunn's, *Perameles gunni*
 Long-nosed, *Perameles nasuta*
 Northern brown, *Isoodon macrourus*
 Southern brown, *Isoodon obesulus*
 Barb, Thai silver, *Puntius gonionotus*
 Barley, *Hordeum vulgare*
 Barnacle, *Balanus*, *Elminius*, *Semibalanus*
Barnardius zonarius: 30 19.
 Barn-owl, common, *Tyto alba*
 Bass
 Barred sand, *Paralabrax nebulifer*
 Black sea, *Centropristes striata*
 European sea, *Dicentrarchus labrax*
 Kelp, *Paralabrax clathratus*
 Largemouth, *Micropterus salmoides*
 Rock, *Ambloplites rupestris*
 Sea, *Lateolabrax japonicus*
 Smallmouth, *Micropterus dolomieu*
 Striped, *Morone saxatilis*
 Various, *Micropterus*
 White, *Morone chrysops*
 Bat
 Big brown, *Eptesicus fuscus*
 Common pipistrelle, *Pipistrellus pipistrellus*
 Dutch pond, *Myotis dasycneme*
 Eastern big-eared, *Plecotus phyllotis*
 Gray, *Myotis grisescens*
 Greater horseshoe, *Rhinolophus ferrumequinum*
 Indiana, *Myotis sodalis*
 Little brown, *Myotis lucifugus*
 Schreiber's, *Miniopterus schreibersi*
 Southeastern, *Myotis austroriparius*
 Bats: 14 3, 44, 53, 99; 17 2; 21 23; 23 4; 31 46.
 Bean
 Buck, *Menyanthes trifoliata*
 Castor, *Ricinus communis*

- Green, *Phaseolus vulgaris*
 Jack, *Canavalia* sp.
 Lima, *Phaseolus lunatus*
 Various, *Phaseolus* sp., *Vicia faba*
- Bear, polar, *Ursus maritimus*
 Bears: 23 12.
- Beaver
 Common, *Castor canadensis*
 Mountain, *Aplodontia rufa*
- Becium homblei*: 33 39.
- Bee
 Alfalfa leaf cutter, *Megachile rotundata*
 Alkali, *Nomia melanderi*
 Bumble, *Bombus* spp.
 Cuckoo bumble, *Psithyrus bohemicus*
 Honey, *Apis mellifera*
 Indian hive, *Apis cerama*
- Beet, *Beta vulgaris*
- Beetle
 Aquatic, *Hydrophilus triangularis*, *Laccophilus* spp.,
Thermonectes basillaris, *Tropisternus lateralis*
 Burying, *Nicrophorus tomentosus*
 Colorado potato, *Leptinotarsa decemlineata*
 Convergent lady, *Hippodamia convergens*
 Ground, *Calosoma* sp.
 Leaf, *Paropsis atomaria*
 Sawtoothed grain, *Oryzaephilus surinamensis*
 Tiger, *Megacephala virginica*
 Various, *Cotesia melanoscela*, *Dendroides* sp.,
Diachasmimorpha longicaudata, *Perga dorsalis*
 Yellow mealworm, *Tenebrio molitor*
- Bellerochea polymorpha*: 20 16.
Bemisia tabaci: 24 14.
Berardius bairdii: 31 28.
Beroe cucumis: 20 9.
- Berry
 Bil, *Vaccinium myrtillus*
 Bog whortle, *Vaccinium uliginosum*
 Cow, *Vaccinium vitis-idaea*
- Beta vulgaris*: 7 29; 12 43; 19 22; 20 12; 22 2, 24; 34 34, 39.
Beta vulgaris cicla: 14 25; 15 28.
- Bettong
 Brush-tailed, *Bettongia penicillata*
 Burrowing, *Bettongia leseur*
- Bettongia leseur*: 30 26.
Bettongia penicillata: 30 30.
Betula nana: 29 54.
Betula papyrifera: 34 20.
Betula sp.: 29 48, 50, 56.
 Bilberry, *Vaccinium* sp.
 Bilby, greater, *Macrotus lagotis*
 Billfishes: 10 40.
- Biomphalaria* spp.: 15, 16, 38-41, 45-47; 22 9; 26 54; 28 11; 33 50.
- Birch
 Dwarf, *Betula nana*
 Paper, *Betula papyrifera*
 Various, *Betula* sp.
- Birgus latro*: 29 43.
- Bison
 American, *Bison bison*
 European, *Bison bonasus*
- Bison bison*: 33 30.
Bison bonasus: 33 30.
Blaberus giganteus: 29 70.
- Blackbird
 Brewer's, *Euphagus cyanocephalus*
 Common, *Turdus merula*
 Red-winged, *Agelaius phoeniceus*
- Blackfish
 Common, *Gadopsis marmoratus*
 Largescale, *Girella punctata*
- Blackfly, *Simulium* sp.
- Blacktail, *Diplodus sargus*
- Blarina brevicauda*: 2 13, 25; 3 17; 14 43, 47, 52, 53; 26 38; 29 84.
Blattella germanica: 13 1; 20 13, 14; 22 9; 25 8.
 Bleak, *Alburnus alburnus*
Blepharisma undulans: 24 14.
Blidingia minima: 14 25.
Blissus leucopterus listus: 13 22.
- Bloater, *Coregonus hoyi*
- Blueberry
 Common, *Vaccinium pallidum*
 Lowbush, *Vaccinium angustifolium*
- Bluebird, eastern, *Sialia sialis*
- Bluefish, *Pomatomus saltatrix*
- Bluegill, *Lepomis macrochirus*
- Bluestem, little, *Andropogon scoparius*
- Boar, wild, *Sus scrofa*
- Bobcat, *Lynx rufus*
- Bobwhite, common, *Colinus virginianus*
- Boleophthalmus dussumieri*: 5 36; 6 20, 31.
- Boll weevil, *Anthonomus grandis*
- Bollworm, Lepidoptera
- Bolti, *Tilapia zilli*
- Bombina variegata*: 33 25.
Bombus spp.: 33 16.
Bombyx mori: 12 11; 29 70, 71.
Bonasa umbellus: 14 37; 15 32; 29 32, 41; 32 16; 33 26; 34 27, 35.
- Booby
 Brown, *Sula leucogaster*
 Red-footed, *Sula sula*
 Various, *Sula*
- Boophilus* spp.: 27 13.

- Boreogadus saida*: 31 34.
Bos bovis: 2 13; 3 24; 6 40, 41; 7 54; 8 1; 12 2, 33, 62; 14 43, 53; 15 32; 21 23, 37; 25 2, 3.
Bos indicus: 27 1, 3, 12, 14, 16.
Bos spp.: 1 33; 3 15, 24; 4 8, 18, 19; 5 1, 26, 28, 29, 39, 41, 44; 6 4, 41; 7 54; 8 13; 12 11, 12, 62, 63, 72, 73; 13 12, 16; 14 3, 12, 14, 48, 53, 57, 88, 89, 99, 103, 104; 15 64; 17 2, 42-44, 54; 18 36, 37; 19 iii, 1, 5, 6, 16, 17, 19, 21, 22, 30-33, 41, 42, 44, 46; 20 4, 10, 21, 26; 21 5, 24, 42; 22 4, 17, 23; 23 4, 12, 33, 36; 24 10, 29, 30, 36; 25 27-29, 32; 26 3, 9, 10, 12, 15, 31, 44, 46-48, 78, 85, 86, 90, 91; 27 1-3, 6, 9, 11-16, 19, 20; 28 15, 16; 29 35, 42, 43, 48-53, 56, 59-61, 63, 64, 67, 84; 30 26, 37; 33 4, 8, 9, 12, 30, 43, 44, 65, 74, 77, 79, 80; 34 1, 8, 9, 28, 30, 37, 38, 49, 57-59, 62, 65.
Bos taurus: 27 12; 30 2.
Bosmina longirostris: 12 45; 25 22, 23; 33 53.
Bosmina longispina: 29 54.
Bothromestoma sp.: 25 23.
Bothrops jararaca: 26 12.
Bouteloua dactyloides: 5 21.
Bovicola crassipes: 27 16.
Bovicola limbatus: 25 29; 27 16.
Bowdleria punctata: 30 25.
Bowfin, *Amia calva*
Brachidontes exustus, see *Ischadium recurvum*
Brachionus calyciflorus: 33 49.
Brachionus plicatilis: 7 46.
Brachydanio rerio: 5 30; 10 58; 14 60; 22 12; 26 11, 71; 34 43.
Brachytheций rivulare: 14 24.
Brachytheций salebrosum: 34 34.
Branchiostoma caribaeum: 15 45; 24 21.
Brant, *Branta bernicla*
Brant, Atlantic, *Branta bernicla hrota*
Branta bernicla: 9 1.
Branta bernicla hrota: 14 51.
Branta canadensis: 3 1; 7 17; 9 1; 13 13; 14 2, 51; 27 12; 30 6.
Branta canadensis leucoparidea: 30 5, 40.
Branta canadensis maxima: 26 42, 76.
Branta canadensis minima: 21 19.
Branta canadensis moffitti: 29 32, 41.
Brassica juncea: 18 13, 14.
Brassica napus: 22 8.
Brassica oleracea acephalia: 11 35.
Brassica oleracea botrytis: 4 1; 11 35; 24 6, 10.
Brassica oleracea capitata: 9 5; 11 35; 25 7; 30 14; 34 21, 22, 34, 39.
Brassica oleracea gemmifera: 11 35.
Brassica oleracea italica: 4 1; 20 12.
Brassica rapa: 7 29; 32 20.
Brassica spp.: 19 22; 24 3; 25 7; 32 20.
Brevoortia tyrannus: 15 45; 26 36, 42.
Briareum spp.: 21 9.
Brittle star, *Ophioderma brevispina*
Broadleaf, *Griselinia littoralis*
Broccoli, *Brassica oleracea italica*
Brome, *Bromus* spp.
Bromus inermis: 7 11; 19 22.
Bromus japonicum: 26 38; 33 37.
Bromus spp.: 14 25.
Broomweed, *Gutierrezia* spp., *Haplopappus* spp.
Brugia pahangi: 12 12.
Bruguiera caryophylloides: 15 28.
Brussels sprout, *Brassica oleracea gemmifera*
Bryoria fuscescens: 29 56.
Bryozoans, *Bugula*, *Victorella*, *Watersipora*
Bubalus sp.: 5 1; 14 3; 33 30, 78.
Bubo bubo: 10 33, 41; 31 41.
Bubo sp.: 10 41.
Bubo virginianus: 1 32; 7 17; 21 19, 28; 27 1, 6, 12; 30 19, 23.
Bubulcus ibis: 1 32.
Buccinum striatissimum: 12 27, 35.
Buccinum undatum: 33 17; 34 23.
Bucephala clangula: 21 19; 31 52; 34 28.
Budworm, western spruce, *Choristoneura occidentalis*
Buffalo (fish)
Bigmouth, *Ictiobus cyprinellus*
Smallmouth, *Ictiobus bubalus*
Buffalo (mammal)
Indian, *Bubalus* sp.
Water, *Bubalus* sp.
Bufo americanus: 33 63, 72; 34 35.
Bufo arenarum: 21 30; 26 10; 34 8.
Bufo bufo: 10 30; 21 34; 33 25.
Bufo fowleri: 20 16, 17; 24 9; 33 63; 34 46.
Bufo marinus: 33 25, 42.
Bufo regularis: 34 46.
Bufo sp.: 8 10; 33 38.
Bufo terrestris: 8 8.
Bufo valliceps: 29 81.
Bufo woodhousei fowleri: 22 13.
Bufo vulgaris: 20 17.
Bug
Assassin, *Acholla multispinosa*
Bed, *Cimex lectularius*
Bigeyed, *Geocoris punctipes*
Chinch, *Blissus leucopterus listus*
Lady, *Coccinella septempunctata*
Lygus, Lygaeidae
Milkweed, *Oncopeltus fasciatus*
Sow, *Asellus*, *Porcellio*
Bugula neritina: 26 57.
Bulinus spp.: 15 16; 22 9; 28 11; 33 50.
Bull, *Bos* spp.
Bullfrog, *Rana catesbeiana*

Bullhead

Black, *Ameiurus melas* (formerly *Ictalurus melas*)Brown, *Ameiurus nebulosus* (formerly *Ictalurus nebulosus*)

Bunting

Indigo, *Passerina cyanea*Lark, *Calamospiza melanocorys*Lazuli, *Passerina amoena**Bupalus* sp.: 33 16, 39.*Bursaphelenchus xylophilus*: 9 25, 28.*Busycon canaliculatum*: 33 17, 50, 70.*Buteo buteo*: 26 30; 31 41.*Buteo jamaicensis*: 10 54; 27 9, 12.*Buteo lagopus*: 30 19, 23; 31 41.*Buteo lineatus*: 3 1, 17; 21 28.*Buteo regalis*: 30 19, 23.*Buteo* sp.: 10 41.*Butorides striatus*: 1 32; 4 7; 7 17; 14 40.*Butorides virescens*: 5 20.*Butorides virescens virescens*: 24 8.Butterfly, large white, *Pieris brassicae*

Buzzard

Common, *Buteo buteo*Honey, *Pernis apivorus*Cabbage, *Brassica oleracea capitata*Cabezon, *Scorpaenichthys marmoratus**Cabomba* spp.: 23 21.*Cacatua galerita*: 30 19, 23.*Cacatua roseicapilla*: 30 16, 19.Caddisfly, *Triaenodus tardus**Caenorhabditis elegans*: 32 22; 33 46, 49, 69.*Cajanus* sp.: 23 15.*Calamospiza melanocorys*: 9 29.*Calamus bajonado*: 33 22.*Calanus marshallae*: 19 25, 28.*Calcarius mccownii*: 30 23.*Calcarius ornatus*: 9 29; 30 23.*Calidris alba*: 33 27.*Calidris alpina*: 21 19.*Calidris canutus*: 14 37.*Calidris* sp.: 26 27.*Callaeas cinera*: 30 25.*Callibaetes skokianus*: 17 28.*Callibaetes* sp.: 25 12.*Callinectes sapidus*: 1 8; 4 10; 5 33; 6 22; 12 28; 13 19, 21; 18 1; 21 30; 25 14, 21; 26 9, 35; 29 72; 32 18.*Callinectes similis*: 33 53.*Callipepla californica*: 4 12; 12 56, 57; 21 34, 35; 30 16, 19.*Callipepla gambeli*: 30 21.*Callithrix jacchus*: 9 1, 13; 12 73; 15 56; 29 94; 31 55.*Callorhinus ursinus*: 2 10; 10 43.*Calluna vulgaris*: 12 22; 29 56.*Caloenas snicobarica*: 26 27, 76.*Calosoma* sp.: 24 8, 14.*Cambarus bartoni*: 33 8, 53; 34 34.*Cambarus latimanus*: 2 21.*Cambarus longulus longirostris*: 29 79.*Cambarus* sp.: 14 29.Camel, Bactrian, *Camelus bactrianus**Camelus bactrianus*: 33 30, 45, 80.*Campanularia flexuosa*: 15 44; 33 49.*Campeloma decisum*: 33 50.Canary, *Serinus canarius**Canavalia* sp.: 23 15; 34 37.*Cancer anthonyi*: 10 20.*Cancer irroratus*: 2 6; 6 10, 34; 11 27; 32 15.*Cancer magister*: 3 10, 11; 5 33; 6 35; 10 48; 11 38; 12 28, 50; 14 67; 20 9; 21 30.*Canis aureus*: 30 5.*Canis familiaris*: 3 13; 9 8, 14, 16, 26; 10 55; 12 4, 11, 63; 13 16; 14 iii, 44, 55, 87, 90, 99; 15 1, 4, 53, 60, 61, 64, 68; 17 44; 18 36, 37, 42; 20 4, 21, 22, 25, 26; 21 2, 5, 24, 37, 42, 43; 22 2, 16, 17, 22; 23 3, 9, 10, 12, 35, 36, 45; 24 13, 29, 30, 36; 25 2, 27, 29; 26 3, 9, 10, 31, 78, 82, 86; 28 16; 29 35, 42, 67, 84, 85, 94, 95; 30 2, 9, 25, 26, 38-40; 31 16, 33, 47, 60; 32 8, 9, 31, 32; 33 8, 30, 43, 44; 34 2, 7, 8, 11, 30, 49, 50, 57, 59, 65.*Canis familiaris dingo*: 30 2, 5, 6, 24-26, 38.*Canis familiaris familiaris*: 29 5, 9.*Canis latrans*: 2 13; 6 15; 23 4, 12, 35-37; 29 16, 36; 30 1-5, 24, 27, 30, 38, 39, 41; 33 30.*Canis lupus*: 29 62; 30 4, 5.*Canis mesomelas*: 30 5.*Canis* sp.: 1 6, 7, 10; 3 16; 4 8, 18; 5 5, 26; 6 19, 27, 39; 7 iv, 58, 60; 8 1, 25; 9 13, 24; 10 12; 12 73; 30 4, 5, 10-12, 36; 34 62.Canvasback, *Aythya valisineria**Capitella capitata*: 6 22, 36; 10 48; 26 58.*Capra hircus*: 4 12; 13 14; 30 3; 33 31; 34 29, 50.*Capra* sp.: 1 3; 4 8; 8 1, 12; 12 11, 63; 14 90, 99; 21 37; 22 16, 17; 23 4, 10, 33; 25 29; 26 31, 44, 48, 86, 91; 27 16, 20; 29 58, 63, 64, 93, 94; 30 1, 4, 5, 7, 14, 27; 33 74; 34 1, 30, 37, 38, 65.*Capreolus capreolus*: 10 35; 29 59; 33 31.*Capreolus* sp.: 29 38; 29 56.*Carassius auratus*: 1 8, 13; 4 9, 14, 15; 5 32, 35; 6 21, 32; 7 12; 9 10; 10 61; 12 47, 53, 81; 14 64; 15 46; 17 35; 20 17; 21 29, 32, 33; 28 11; 29 28, 64; 33 57, 72; 34 43, 47.*Carassius carassius*: 29 48.*Carassius carassius grandoculis*: 15 44.*Carcharhinus longimanus*: 12 30; 33 22; 34 25.*Carcharhinus* spp.: 10 29.*Carcharodon carcharius*: 21 11.*Carcinus maenas*: 15 45; 19 25; 26 69; 29 72, 73; 33 6, 9, 53, 71; 34 24.

- Carcinus mediterraneus*: 33 41.
 Cardinal, *Richmondia cardinalis*
Carduelis chloris: 30 25.
Caretta caretta: 1 24; 7 15, 32; 10 30.
Carex spp.: 29 56.
 Caribou, *Rangifer tarandus*
 Carnation, *Dianthus* sp.
 Carp
 Common, *Cyprinus carpio*
 Indian, *Saccobranchnus fossilis*
 Round Crucian, *Carassius carassius grandoculus*
 Various, *Carassius*, *Cyprinus carpio communis*
Carpiodes carpio: 21 12.
Carpocapsa pomonella: 12 6.
Carpodacus mexicanus: 3 12.
 Carrot, *Daucus* sp.
Carthamus tinctorius: 22 2.
Carya illinoensis: 26 3, 45.
 Cashew, *Anacardium occidentale*
 Cassava, *Manihot esculenta*
Cassia spp.: 4 19; 14 25, 56.
Cassiope sp.: 34 32.
Castanea sp.: 29 61.
Castilleja spp.: 5 6, 21.
Castor canadensis: 5 23; 10 36, 43; 15 32; 29 35, 42; 34 29, 35, 36.
 Cat
 Bob, *Lynx rufus*
 Domestic, *Felis domesticus*
 Eastern native, *Dasyurus viverrinus*
 Feral, *Felis catus*
 Northern native, *Dasyurus hallucatus*
 Tiger, *Dasyurus maculatus*
 Caterpillar
 Eastern tent, *Malacosoma americanum*
 Gypsy, *Porthetria dispar*
 Saltmarsh, *Estigmene acrea*, *Estigmene* sp.
 Various, *Erannis defoliara*, *Operophtera brumata*,
 Plutella xylostella, *Spodoptera*, *Tortrix viridana*
 Catfish
 African, *Mystus vittatus*
 African sharp-tooth, *Clarias gariepinus*
 Air-breathing, *Clarias batrachus*, *Clarias lazera*
 Blue, *Ictalurus furcatus*
 Channel, *Ictalurus punctatus*
 Flathead, *Pylodictis olivaris*
 Indian, *Heteropneustes fossilis*
 Sea, *Arius felis*
 Various, *Clarias* sp., *Cnidoglanis macrocephalus*,
 Ictalurus, *Mystus vittatus*
Catharacta skua: 5 15.
Catharacta spp.: 10 41.
Cathartes aura: 23 29; 26 27, 43; 30 19, 23; 34 28.
Catostomus columbianus: 29 28.
Catostomus commersoni: 5 32; 6 26; 8 11; 11 33; 12 23;
 14 63; 17 35; 26 23, 24, 42; 28 11; 31 33; 33 22, 34,
 57, 72; 34 25.
Catostomus macrocheilus: 29 28.
 Cattail, *Typha latifolia*
 Cattle, *Bos* spp.
 Cauliflower, *Brassica oleracea botrytis*
Cavia cobaya: 2 iii, 19; 3 13; 6 18, 27, 39; 9 14; 14 90.
Cavia porcellus: 13 14; 17 44.
Cavia sp.: 3 16; 8 24, 25, 26; 11 1; 12 63; 14 14; 15 8,
 52, 55, 57-59, 61, 64, 68; 17 5; 19 31, 33, 34, 41, 46;
 20 4, 22, 25; 21 37; 22 2, 4, 16, 17, 23, 24; 23 8, 10,
 35; 24 13; 26 12, 48, 78, 79, 86, 90; 28 15, 16, 23; 29
 64, 67, 84, 85, 94, 97; 30 11, 27, 37; 32 31, 32; 33 9,
 44, 80; 34 7, 11, 12, 30, 50, 57-59.
Cebus apella: 29 85.
 Cedar, eastern red, *Juniperus virginiana*
 Celery, *Apium graveolans*
 Centipede, *Lithobius variegatus*
Centropristis striata: 12 30.
 Cephalopods: 26 20.
Cephenomyia trompe: 27 6, 18.
Cerastoderma edule: 33 40.
Ceratitidis capitata: 29 70, 71.
Ceratophyllum demersum: 12 22.
Ceratophyllum sp.: 8 19; 28 8, 10.
 Ceratopogonidae: 2 28.
Ceratopteris richardii: 22 8.
Ceriodaphnia dubia: 33 53; 34 41, 64.
Ceriodaphnia lacustris: 24 17.
Ceriodaphnia reticulata: 17 24; 26 57, 84.
Ceriodaphnia sp.: 25 22.
 Cervidae: 4 18; 5 26; 23 12.
Cervus canadensis: 6 15, 17.
Cervus elephus: 26 32, 43; 29 59; 30 6, 7, 14; 33 31.
Cervus sp.: 2 13; 23 33.
Ceryle alcyon: 7 17.
 Cetaceans: 26 33.
Cetengraulis mysticetus: 20 9.
Cetraria nivalis: 34 32.
 Chachalaca, gray-headed, *Ortalis cinereiceps*
Chaenocephalus aceratus: 32 15; 33 22; 34 25.
 Chaetognath, *Sagitta elegans*
 Chaetognaths: 26 23, 40.
Champia parvula: 12 49, 53.
Channa punctatus: 3 21; 6 31; 9 10; 10 59; 26 60; 33 57.
Chaoborus astictopus: 25 22.
Chaoborus punctipennis: 7 45.
Chaoborus sp.: 1 8; 4 9.
 Char, Arctic, *Salvelinus alpinus*
Chara sp.: 17 22; 22 3, 10; 28 8, 13.
Charadrius vociferus: 27 9.
 Chard, Swiss, *Beta vulgaris cicla*
Chelon labrosus: 12 51.

- Chelonia mydas*: 1 24; 7 15, 32.
Chelydra serpentina: 7 10, 15, 27, 31, 32; 29 32; 31 38-40.
Chenonetta jubatta: 30 20.
Chenopodium album: 18 15.
 Cherry
 Black, *Prunus serotina*
 Red, *Prunus avium*
 Chestnut, *Castanea* sp.
 Chickadee
 Black-capped, *Parus atricapillus*
 Mountain, *Parus gambeli*
 Chicken
 Attwater's greater prairie, *Tympanuchus cupido attwateri*
 Domestic, *Gallus gallus*, *Gallus* sp.
 Prairie, *Tympanuchus cupido*
Chilomonas paramacium: 6 30.
Chinocetes bairdii: 12 28.
 Chipmunk
 Common, *Eutamias townsendii*
 Eastern, *Tamias striatus*
 Various, *Tamias* spp.
Chiracanthium mildei: 24 14.
 Chironomid, *Chironomus*, *Glyptotendipes*,
 Goeldichironomus holoprasinus, *Labrundinia pilosella*, *Psectocladius* sp., *Tanytus grodhausi*
 Chironomidae: 2 28; 13 19, 20; 17 15.
Chironomus decorus: 25 10, 12, 22.
Chironomus ninevah: 33 56.
Chironomus plumosus: 4 11, 15; 7 11, 29; 25 12.
Chironomus riparius: 17 5, 25; 18 27.
Chironomus sp.: 18 32; 33 56.
Chironomus tentans: 6 30; 18 27; 24 17, 18.
 Chiselmouth, *Acrocheilus alutaceus*
 Chitons: 26 20.
Chlamydomonas reinhardtii: 6 30; 14 58; 24 17; 33 48.
Chlamydomonas spp.: 6 33; 21 30; 33 48.
Chlamys ferrei nipponensis: 10 13.
Chlamys operculis: 33 17; 34 23.
Chlamys varia: 32 22.
Chlorella pyrenoidosa: 9 19; 17 22; 18 26; 20 15.
Chlorella sp.: 18 24; 23 21; 31 49; 32 21; 33 48, 69.
Chlorella vulgaris: 2 27, 28; 6 30; 11 26, 54; 15 38; 18 14; 19 24; 29 71.
Chloris gayana: 20 12.
Chlorococcum sp.: 22 10.
 Chlorophyte, *Hydrodictyon*, *Oedogonium*
Choerodon azurio: 10 14.
Chondrus crispus: 12 23, 26.
Chorioptes bovis: 24 16.
Choristoneura occidentalis: 12 42, 44.
 Chromide, orange, *Etioplus maculatus*
Chroomonas sp.: 12 21.
Chrysanthemum, *Chrysanthemum*
Chrysanthemum cinariaefolium: 24 2.
Chrysanthemum sp.: 5 5.
Chrysemys scripta: 1 21.
Chrysopa carnea: 10 25; 24 15; 25 8.
Chrysopa oculata: 25 10.
 Chukar, *Alectoris chukar*, *A. graeca*
Chydorus sphaericus: 33 53.
 Cicada, 17-year, *Magicicada* spp.
Cicer arietinum: 18 13.
Cichlasoma bimaculatum: 17 20.
Cichlasoma cyanoguttatum: 26 60.
Cichlasoma facetum: 7 45.
Cichlasoma sp.: 21 29.
 Cichlid
 Texas, *Cichlasoma cyanoguttatum*
 Various, *Cichlasoma*
Ciconia ciconia: 31 41.
Cimex lectularius: 27 18.
Cinclus cinclus: 31 41, 45.
Ciona intestinalis: 33 22.
Cipangopaludina japonica: 24 18.
Cipangopaludina malleata: 9 20.
Circus approximans: 30 25.
Circus cyaneus: 30 20, 23.
Citellus spp.: 30 27.
Citharichthys stigmaeus: 6 23, 37; 15 45.
Citrus limonia osbeck: 20 12.
Citrus paradisi: 24 14.
Citrus sinensis: 33 45, 78.
Citrus tachibana: 10 21.
Claassenia sp.: 4 9; 13 7.
Cladina spp.: 29 56.
 Cladoceran, *Bosmina*, *Ceriodaphnia*, *Chydorus sphaericus*, *Daphnia*, *Moina irritata*, *Simocephalus*
Cladonia alpestris: 29 23.
Cladonia uncialis: 26 51.
Cladophora glomerata: 23 21; 28 9; 29 76.
Cladophora sp.: 14 25; 17 15; 28 8.
 Clam
 Asiatic, *Corbicula fluminea*
 Blood, *Anadara granosa*
 False quahog, *Pitar morrhuanus*
 Giant, *Tridacna derasa*, *Tridacna maxima*
 Hardshell or Quahog, *Mercenaria mercenaria*
 Pullet-shell, *Venerupis pallustrata*
 Razor, *Ensis minor*
 Short-necked, *Tapes phillippinarum*
 Softshell, *Mya arenaria*
 Southern quahog, *Mercenaria campechiensis*
 Surf, *Spisula solidissima*
 Various, *Donax*, *Glebula rotundata*, *Hormomya mutabilis*, *Lamellidens marginalis*, *Macoma*, *Margaretifera margaretifera*, *Paphia undulata*,

- Potamocorbula amurensis*, *Rangia cuneata*,
Scrobicularia plana, *Sphaerium* sp., *Strophites*
rugosus, *Tapes*, *Tellina tenuis*, *Villorita cyprinoides*
Clams: 2 11; 6 5, 33; 7 8, 27, 47; 18 32; 19 28; 20 9; 21
8; 26 20; 34 32, 36.
Clarias batrachus: 3 21.
Clarias gariepinus: 26 24; 33 22, 35, 57.
Clarias lazera: 26 11, 60.
Clarias sp.: 33 57.
Clethrionomys glareolus: 14 44; 26 32, 37, 38, 86, 91;
29 48, 57; 33 31, 42; 34 36.
Clethrionomys rufocanus: 33 42.
Clethrionomys rutilus: 34 36.
Clibanarius olivaceus: 26 57.
Clinocardium nuttali: 3 10.
Clistoronia magnifica: 25 12; 34 41.
Cloeon dipterum: 22 11.
Clostridium posterianum: 34 37.
Clover, *Lotus* sp., *Melilotus* sp., *Trifolium* sp.
Clupea harengus: 21 11; 26 24, 60, 71, 85.
Clupea harengus harengus: 21 11; 26 60.
Clupea harengus pallasi: 15 31; 33 57.
Cnemidophorus sexlineatus: 8 8.
Cnemidophorus tigris: 29 81.
Cnidoglanis macrocephalus: 12 56.
Coccinella septempunctata: 33 36.
Cochliomyia hominivorax: 29 70.
Cockatoo, sulphur-crested, *Cacatua galerita*
Cockles, *Anadara*, *Clinocardium*, *Cerastoderma*
Cockroach
American, *Periplaneta americana*
German, *Blattella germanica*
Various, *Blaberus giganteus*
Cod
Arctic, *Boreogadus saida*
Atlantic, *Gadus morhua*
Hump rock, *Notothenia gibberifrons*
Tom, *Microgadus tomcod*
Coelastrum cambricum: 29 71.
Coenobita sp.: 29 43.
Coffee, *Coffea arabica*
Coffea arabica: 34 20, 30.
Coleoptera: 1 21; 3 26; 4 19; 6 42; 8 8; 12 42; 13 18, 14
9, 57.
Colinus virginianus: 1 7, 9, 16, 18, 21; 3 12, 24; 4 8, 12,
17, 18; 7 17, 40, 52; 8 23; 9 iv, 14, 23, 50, 51; 12 56,
58; 13 12, 14, 15; 14 77; 18 35; 21 35, 36; 22 7, 14,
16; 24 27, 28; 29 33, 84; 30 16, 20; 31 52.
Colisa fasciata: 34 43.
Collard, *Brassica* spp.
Collembola: 3 17, 26; 18 13.
Collembolid, *Onchiurus*
Colluricincla harmonica: 30 20.
Colpoda cucullus: 24 14.
Colpoda steini: 33 46.
Colpophyllia spp.: 21 9.
Columba livia: 2 24; 3 12; 7 54; 10 51, 53, 63; 13 13; 14
7, 78, 82; 21 34; 23 30; 30 20; 31 54.
Columba sp.: 15 50; 23 10.
Colymbus arcticus (formerly *Gavia arctica*): 7 22.
Comandra spp.: 5 6, 21.
Comber, painted, *Serranus cabrilla*
Comptonia peregrina: 34 20.
Compylium polyanum: 34 20.
Condor
Andean, *Vultur gryphus*
California, *Gymnogyps californianus*
Contarina medicaginis: 24 15.
Contopus virens: 25 24.
Coontail, *Ceratophyllum demersum*
Coot
American, *Fulica americana*
Red-knobbed, *Fulica cristata*
Copepods, *Acartia*, *Anomalocera* sp., *Calanus*
marshallae, *Cyclops* spp., *Diatomus*, *Eucyclops*,
Eudiaptomus padanus, *Eurytemora affinis*,
Mesocyclops thermocyclopoides, *Nitroca spinipes*,
Pseudodiaptomus coronatus, *Temora* spp., *Tigriopus*,
Tisbe, *Tropocyclops prasinus mexicanus*
Coptotermes formosanus: 19 23.
Coptotermes heimi: 25 8.
Coptotermes spp.: 33 47.
Coragyps atratus: 23 30; 30 20.
Coral, *Alcyonia alcyonium*, *Briareum* spp., *Colpophyllia*
spp., *Diploria*, *Gorgonia* spp., *Montastrea annularis*,
Porites spp., *Pseudopterogorgia* spp., *Siderastrea*
spp.
Corals: 14 3; 19 14; 20 9, 10; 21 8; 32 13; 33 36; 34 23.
Corbicula fluminea: 5 16; 21 9; 26 54; 32 22; 33 50, 70.
Corbicula manilensis: 3 22.
Corbicula sp.: 32 13.
Coregonus clupeaformis: 15 31; 21 11; 33 22; 34 25.
Coregonus fera: 18 33.
Coregonus hoyi: 31 24, 36; 33 22.
Coregonus spp.: 14 32, 50.
Corixid, *Sigara*
Cormorant
Blue-eyed, *Phalacrocorax atriceps*
Double-crested, *Phalacrocorax auritus*
Various, *Phalacrocorax* spp.
Corn, *Zea mays*
Corophium volutator: 12 50; 33 53.
Cortinarius spp.: 10 21.
Corvidae: 10 12, 63.
Corvus bennetti: 30 20, 23, 24.
Corvus brachyrhynchos: 13 13; 27 12.
Corvus corax: 26 27, 43; 34 28.
Corvus corone: 29 33.

- Corvus coronoides*: 30 20, 24.
Corvus mellori: 30 20.
Corvus monedula: 10 54.
Corvus orru: 30 24.
Corvus spp.: 23 4.
Costia sp.: 33 3.
Cotesia melanoscela: 25 10.
 Cotton, *Gossypium hirsutum*
 Cottontail
 Desert, *Sylvilagus audubonii*
 Eastern, *Sylvilagus floridanus*
Cottus bairdi: 18 32; 32 26.
Coturnix coturnix: 1 6, 9; 9 14; 10 50, 51-53; 12 56; 14 86; 29 82.
Coturnix japonica: 1 6, 7; 2 24; 3 11, 12, 14, 22; 4 8; 5 26, 27, 29; 7 40, 52, 53; 9 iii, 9; 10 51, 52, 62; 13 13, 15; 14 78; 15 8, 50-52; 17 38, 57; 18 35; 21 35, 36; 22 14, 15; 23 30; 24 26-28; 26 13, 46, 73, 85; 27 9, 10; 30 20; 31 51, 52, 54; 34 47, 48.
Coturnix risoria: 13 15; 34 47, 48.
 Cow, *Bos bovis*
 Cowbird, brown-headed, *Molothrus ater*
 Cowpea, *Vigna* sp.
 Coyote, *Canis latrans*
 Crab
 Alaskan king, *Paralithodes camtschatica*
 Alaskan snow, *Chionocetes bairdii*
 Blue, *Callinectes sapidus*
 Coconut, *Birgus latro*
 Drift-line, *Sesarma cinereum*
 Dungeness, *Cancer magister*
 Fiddler, *Uca pugnator*
 Green, *Carcinus maenas*
 Hermit, *Clibanarius olivaceus*, *Coenobita* sp.,
 Eupagurus bernhardus, *Pagurus*
 Horseshoe, *Limulus polyphemus*
 Lesser blue, *Callinectes similis*
 Mud, *Rithropanopeus harrissii*, *Neopanope texana*
 Rock, *Cancer irroratus*
 Soldier, *Mictyris longicarpus*
 Stone, *Menippe mercenaria*
 Various, *Carcinus mediterraneus*, *Dorippe granulata*,
 Neptunus pelagicus, *Paragrapsus quadridentatus*,
 Podophthalmus vigil, *Portunus pelagicus*, *Sesarma*
 Crabs: 3 8; 5 27; 6 5, 35; 7 28; 12 29, 81; 15 11, 35; 26 1; 31 23; 33 36.
 Crane
 Lesser sandhill, *Grus canadensis canadensis*
 Sandhill, *Grus canadensis*
Crangon allmanni: 34 24.
Crangon crangon: 2 16; 12 29; 14 66, 67; 15 44; 33 53.
Crangon septemspinosa: 21 30; 24 18.
Crangonyx pseudogracilis: 17 28.
 Crappie
 Black, *Pomoxis nigromaculatus*
 White, *Pomoxis annularis*
Crassostrea commercialis: 2 4; 26 20.
Crassostrea gigas: 2 4; 5 33; 6 33; 10 13; 12 50; 15 27, 29, 34, 41; 17 4; 20 15; 26 41, 54, 55, 67, 84; 29 22; 32 2, 29; 33 4, 9, 17, 41, 50, 72, 73; 34 23.
Crassostrea madrasensis: 33 35.
Crassostrea spp.: 12 27; 14 71; 23 21; 31 23.
Crassostrea virginica: 2 27, 28; 4 10, 14-16; 5 11; 6 24, 33; 7 44, 45; 10 47; 11 27, 32, 36, 40, 42, 48; 12 27, 51, 54; 14 65; 15 11, 29, 44; 17 23, 52; 18 1, 30; 19 25; 21 8, 9, 30; 22 11; 24 18; 26 20, 35, 40, 55, 66; 28 10; 29 25; 31 23, 34; 32 13, 18, 22, 23, 29; 33 18, 40, 41, 50, 73; 34 23, 40.
Crataegus spp.: 14 28.
 Crawfish, *Cambarus* spp.
 Crayfish
 Red, *Procambarus clarki*
 Rusty, *Orconectes rusticus*
 Various, *Astacus*, *Austropotamobius pallipes*,
 Cambarus, *Orconectes*, *Pacifastacus* sp.,
 Procambarus
 Crayfishes: 3 1; 10 43, 64; 11 33; 19 28; 31 32; 34 32, 36, 37.
Crepidula fornicata: 10 48, 58, 59; 32 23; 34 23.
Cricetomys gambianus: 23 37.
Cricetus spp.: 2 31; 3 25; 6 27, 39; 8 24-26; 9 25; 11 1, 55; 12 10, 12, 35, 37-39, 64; 13 12; 15 56; 17 44, 54; 19 41; 21 37; 22 18; 24 30; 25 27; 26 14, 15; 28 24; 29 85, 94, 95; 30 27; 33 8; 34 8, 10-14, 30, 50, 57.
 Cricket, *Acheta*, Gryllidae
Cricosphaera sp.: 26 52.
Cricotopus spp.: 25 12.
Cristigera sp.: 14 67; 26 53.
 Croaker, Atlantic, *Micropogonias undulatus*
 Crocodile, American, *Crocodylus acutus*
Crocodylus acutus: 1 24; 10 30; 12 32; 21 17, 27; 33 25, 38.
Crocothemis erythryuaea: 13 7.
Crotaphytus wislizenii: 29 80, 81.
 Crow
 American, *Corvus brachyrhynchos*
 Australian, *Corvus orru*
 Carrion, *Corvus corone*
 Little, *Corvus bennetti*
Cryptococcus terreus: 34 40.
Cryptotis parva: 34 29.
Ctenocephalides spp.: 13 6.
Ctenochaetus strigosus: 26 25.
 Ctenophore, *Beroe cucumis*, *Pleurobrachia pileus*
 Ctenophores: 26 35.
 Cucumber, *Cucumis sativus*
Cucumis sativus: 18 12; 24 3; 33 45.

- Cucurbita* spp.: 24 3; 28 7.
Culex fatigans: 5 31.
Culex pipiens pipiens: 24 18; 25 12.
Culex pipiens quinquefasciatus: 11 42; 17 20; 25 8, 12.
Culex quinquefasciatus: 24 18.
Culex spp.: 7 45, 47; 13 17, 24; 24 18.
Culex tarsalis: 25 23.
Cunner, *Tautoglabrus adpersus*
Cunninghamella blakesleeana: 34 39.
Cunninghamella elegans: 11 34.
Curlew
 Eurasian, *Numenius arquata*
 Long-billed, *Numenius americanus*
Currawong, pied, *Strepera graculina*
Cuterebra spp.: 27 16, 17, 20.
Cutworm, Lepidoptera
Cuttlefish, *Sepia officinalis*
Cyanea capillata: 33 16.
Cyanocitta cristata: 21 19; 29 33, 84.
Cyclops spp.: 25 22, 23, 32; 34 41.
Cyclopterus lumpus: 34 25.
Cyclotella cryptica: 25 11.
Cyclotella meneghiniana: 18 19.
Cygnus buccinator: 14 2, 51; 26 27.
Cygnus columbianus: 14 51.
Cygnus olor: 14 2, 37, 51; 33 42.
Cylindrotheca fusiformis: 20 14.
Cymodocea sp.: 34 22.
Cynodon dactylon: 12 40; 19 12.
Cynodon plectostachyus: 23 15, 33.
Cynomys ludovicianus: 23 4; 30 27, 28, 31, 39.
Cynomys spp.: 30 1, 3, 4, 37, 38.
Cynoscion nebulosus: 4 6; 33 23; 34 26.
Cynthia claudicans: 32 15.
Cypericercus sp.: 25 21.
Cypicerus sp.: 25 14.
Cypridopsis sp.: 25 14, 23.
Cyprinion macrostomus: 34 33.
Cyprinodon macularis: 24 21.
Cyprinodon variegatus: 3 8, 10, 11, 21; 4 10, 11, 16; 5 34; 7 39, 48, 50, 51, 57; 9 11, 19, 21, 22; 11 38; 13 9, 10; 15 6, 42, 43, 48; 17 33, 34; 18 31; 19 26; 21 32; 24 21; 32 26.
Cyprinotus sp.: 25 21.
Cyprinus carpio: 4 9; 5 17, 32, 35-37; 7 14, 33; 8 8, 9, 12; 12 24; 14 33; 15 39; 17 31, 52; 20 9; 21 11-13, 32; 22 7, 9, 12; 24 6, 21; 26 10, 42; 29 29, 73, 76; 32 26; 33 57; 34 43, 47.
Cyprinus carpio communis: 34 43.
Cypselurus cyanopterus: 31 24.
Cyrinofus sp.: 25 22.
Cystophora cristata: 26 32.
Dab, *Limanda limanda*
Dace
 Longfin, *Agosia chrysogaster*
 Pearl, *Semotilus margarita*
 Speckled, *Rhinichthys osculus*
 Various, *Phoxinus*
Dacelo novaguineae: 30 20.
Dacryodes excelsa: 29 68.
Dactylus glomerata: 22 8.
Dama sp.: 29 38.
Damalina bovis: 27 15.
Damsel flies, Odonata
Daphnia galeata mendotae: 2 21; 24 18, 19; 26 57, 84.
Daphnia hyalina: 22 11; 34 41.
Daphnia laevis: 25 22.
Daphnia longispina: 15 46, 47.
Daphnia magna: 2 17, 21, 27; 4 9, 11, 14, 15; 5 31; 6 20, 23, 26, 30; 7 37, 44, 45, 51; 8 19; 9 10, 19; 10 46, 49; 11 40-42; 12 45; 13 6, 7; 14 12, 13, 58, 59, 71; 15 5, 38, 44, 47; 17 20, 26; 18 27; 20 16; 21 30; 22 11; 23 21; 24 19; 25 14, 15; 26 11, 45, 57, 84; 28 11; 29 78; 30 15; 31 49; 32 24; 33 47, 54, 70; 34 41.
Daphnia pulex: 2 21; 4 9; 5 31; 9 10; 11 40-44; 12 46; 21 31, 33; 22 11; 23 21; 24 19; 26 45, 57; 29 73; 33 54.
Daphnia pulicaria: 18 33; 33 54; 34 42.
Daphnia sp.: 1 4, 8, 12; 3 22; 4 7; 5 36; 6 25; 14 72; 18 32; 26 71; 32 24; 33 47, 54.
Daphnids: 11 45, 48; 14 57; 25 15; 26 13; 34 46.
Dasyuroides byrnei: 30 28.
Dasyurus hallucatus: 30 28, 38.
Dasyurus maculatus: 30 9, 28, 37.
Dasyurus spp.: 30 28, 41.
Dasyurus viverrinus: 30 11, 28, 37.
Date, *Phoenix dactylifera*
Daucus sp.: 9 5; 14 56.
Deer
 Black-tailed, *Odocoileus hemionus columbianus*
 Fallow, *Dama* spp.
 Mule, *Odocoileus hemionus*
 Red, *Cervus elephus*
 Roe, *Capreolus capreolus*
 Various, *Capreolus* sp., Cervidae
 White-tailed, *Odocoileus virginianus*
Delphinapterus leucas: 31 22, 28, 34.
Dendroaster excentricus: 26 59, 85.
Dendrocalamus spp.: 23 15.
Dendrocygna bicolor: 3 11, 12; 4 12; 10 51.
Dendrodrilus rubidus: 26 18, 39.
Dendroica spp.: 25 24.
Dendroica townsendi: 25 25.
Dendroides sp.: 26 38.
Dermacentor andersoni: 27 8.
Dermacentor variabilis: 27 13, 17, 18.
Deroceas caruane: 26 19.

- Deroceras reticulatum*: 26 18, 40.
Deschampsia flexuosa: 29 56; 33 14, 34, 39; 34 20.
Diachasmimorpha longicaudata: 29 71.
Dianthus sp.: 5 5.
Diaptomus oregonensis: 24 19.
Diaptomus sp.: 22 11; 25 22.
Diatoma sp.: 26 66.
Dicentrarchus labrax: 33 72.
Dichapetalum cymosum: 30 2, 13.
Dichapetalum spp.: 30 2, 13.
Dichapetalum toxicarium: 30 2.
Dickcissel, *Spiza americana*
Dicranum scoparium: 10 21.
Didelphis virginiana: 30 28, 39.
Digitaria sanguinalis: 12 6.
Dingo, *Canis familiaris dingo*
Diomedea immutabilis: 14 3.
Diplopoda, Millipedes
Diplodus sargus: 10 26.
Diploria spp.: 21 9.
Diploria strigosa: 7 47.
Dipodomys heermanni: 30 38.
Dipodomys heermanni morroensis: 30 40.
Dipodomys spp.: 30 5, 28, 36.
Dipper, *Cinclus cinclus*
Dog
Black-tailed prairie, *Cynomys ludovicianus*
Domestic, *Canis familiaris*
Prairie, *Cynomys* spp.
Wild, *Canis familiaris familiaris*
Dogfish
Lesser spotted, *Scyliorhinus caniculus*
Smooth, *Mustelus canis*
Spiny, *Squalus acanthias*
Dolphin
Bottle-nosed, *Tursiops truncatus*
La Plata River, *Pontoporia blainvellei*
Pacific white-sided, *Lagenorhynchus obliquidens*
Striped, *Stenella coeruleoalba*
Various, *Tursiops geophysus*
White-beaked, *Lagenorhynchus albirostris*
Donax sp: 33 50, 72.
Donax venustus: 10 24.
Donkey, *Equus asinus*
Dorippe granulata: 33 20.
Dorosoma cepedianum: 4 6, 7; 18 32; 26 36.
Dorosoma petenense: 4 7; 5 18; 26 36.
Dorosoma spp.: 21 11.
Dove
Laughing, *Streptopelia senegalensis*
Mourning, *Zenaida macroura*
Ringed turtle-, *Streptopelia risoria*
Ring-necked, *Streptopelia capicola*
Rock, *Columba livia*
Dragon, bearded, *Pogona barbatus*
Dreissena polymorpha: 31 32, 49, 51; 32 23; 33 18, 40, 50.
Drill, oyster, *Ocenebra erinacea*
Dromaius novaehollandiae: 30 20, 23.
Drosophila melanogaster: 10 68; 28 1, 7, 8; 29 1; 33 4, 46; 34 13.
Drosophila sp.: 29 48.
Drum
Freshwater, *Aplodinotus grunniens*
Red, *Sciaenops ocellatus*
Duck
American black, *Anas rubripes*
American wood, *Aix sponsa*
Fulvous whistling, *Dendrocygna bicolor*
Maned, *Chenonetta jubata*
Mottled, *Anas fulvigula*
Pacific black, *Anas superciliosa*
Ring-necked, *Aythya collaris*
Tufted, *Aythya fuligula*
Various, *Anas*, *Tadorna tadorna*
Duckweed, *Lemna media*, *Lemna minor*
Dugesia sp.: 10 49, 58; 17 26; 21 31; 25 11.
Dunaliella bioculata: 28 9.
Dunaliella marina: 12 55.
Dunaliella salina: 33 48.
Dunaliella tertiolecta: 14 65; 17 22; 22 10; 26 67; 33 48.
Dunlin, *Calidris alpina*
Dunnart
Fat-tailed, *Sminthopsis crassicaudata*
Stripe-faced, *Sminthopsis macroura*
Dunnock, *Prunella modularis*
Dysdera crocata: 26 51.
Eagle
Australian little, *Hieraetus morphnoides*
Bald, *Haliaeetus leucocephalus*
Booted, *Hieraetus pennatus*
Golden, *Aquila chrysaetos*
Imperial, *Aquila heliaca adalberti*
Wedge-tailed, *Aquila audax*
White-tailed sea-, *Haliaeetus albicilla*
Earthworm
Australian, *Lumbricus* sp.
Various, *Allolobophora* spp., *Aporrectodea*, *Dendrodrilus rubidus*, *Eisenia*, *Eisenoides carolinensis*, *Lumbricus*, *Octochaetus pattoni*
Earthworms: 3 1, 8, 17, 18; 5 6, 22, 27, 38; 6 5, 14, 25; 8 12; 12 44; 14 22, 29, 48, 57; 18 13; 21 2, 29; 22 1, 9; 26 18, 50, 83; 30 15, 39, 46; 33 78; 34 34, 36.
Echinodermata: 6 36; 10 59; 15 37; 26 59, 65; 34 38, 65.
Echinoid, *Echinometra*
Echinometra lucunter: 34 25.
Echinometra mathaei: 33 56.

- Echinus esculentus*: 2 7.
Echium sp.: 33 10.
Ecklonia radiata: 12 35.
Ectomyeloides ceratoniae: 29 71.
Eel
 American, *Anguilla rostrata*
 Electric, *Electrophorus electricus*
 European, *Anguilla anguilla*
Eels, *Anguilla*
Eggplant, *Solanum melongena*
Egria laevigata: 14 71.
Egret
 Cattle, *Bubulcus ibis*
 Little, *Egretta garzetta*
Egretta garzetta: 26 27.
Eichornia crassipes: 10 21; 23 21, 26.
Eichornia sp.: 28 8.
Eider, common, *Somateria mollissima*
Eisenia andrei: 33 43, 46.
Eisenia fetida: 3 18; 6 14; 10 57, 68; 26 51; 30 5; 33 36, 46, 69; 34 39.
Eisenia rosea: 14 29.
Eisenoides carolinensis: 14 29.
Elaphe obsoleta: 29 31.
Elasmopus pecteniscrus: 11 38.
Elderberry, *Sambucus* spp.
Electrophorus electricus: 22 9.
Eledone cirrhosa: 32 13; 33 19.
Elephant, Indian, *Elephas maximus*
Elephas maximus: 26 32.
Elk, *Cervus canadensis*, *Cervus elaphus*, *Cervus* sp.
Elm, *Ulmus americana*
Elminius modestus: 26 11, 68; 32 15.
Elodea canadensis: 3 22; 14 70; 18 20; 22 10; 28 2, 9; 32 21; 33 3.
Elodea sp.: 3 21; 8 19; 20 8; 28 4, 8.
Elsholtzia spp.: 33 39.
Emblema temporalis: 30 21, 23.
Emu, *Dromaius novaehollandiae*
Engraulidae: 14 34.
Engraulis encrasicolus: 33 23.
Engraulis mordax: 26 42.
Engraulis sp.: 29 73.
Enhydra lutris: 2 10.
Ensis minor: 17 24.
Enteromorpha intestinalis: 28 10; 33 34.
Enteromorpha linza: 14 25.
Enteromorpha sp.: 15 28; 17 22; 33 3, 73.
Entosiphon sulcatum: 14 59.
Eopsetta grigorjewi: 12 30.
Epeorus latifolium: 26 58, 69, 84.
Ephemerella grandis: 32 25.
Ephemerella sp.: 2 17, 28; 24 19.
Ephemerella walkeri: 28 11.
Ephydatia fluviatilis: 26 45, 53, 84, 90.
Epicoccum nigrum: 18 13.
Epilobium angustifolium: 29 56.
Epithemia sp.: 18 25.
Epirimerus pyri: 24 14.
Eptesicus fuscus: 7 23, 34; 14 44; 26 32.
Equisetum sp.: 29 50.
Equus asinus: 26 12; 29 94.
Equus asinus X *E. caballus*: 26 12; 30 28.
Equus caballus: 1 33; 5 1, 26, 28, 29, 44; 8 1, 26; 12 65; 14 iii, 3, 44, 48, 53, 55, 87, 90, 91, 99, 104; 18 36; 19 17, 19, 21, 31, 34, 41, 42; 23 4, 33; 26 3, 9, 12, 32, 43, 44, 77, 79, 86, 90; 30 14, 28, 36; 33 31, 43, 65, 74; 34 29, 30.
Erannis defoliaria: 31 39.
Eremophila alpestris: 4 12; 9 29; 13 17, 22, 23; 24 8; 26 76; 30 23.
Erethizon dorsatum: 2 13; 30 28; 33 31.
Erignathus barbatus: 29 34.
Erithacus rubecula: 7 53; 27 9.
Erolia spp.: 3 1, 27.
Erpobdella octoculata: 26 23, 58, 59, 70.
Escherichia coli: 8 17; 17 41; 22 6, 8; 26 53; 28 8; 29 78; 32 21, 31; 34 12.
Eschrichtius robustus: 33 27.
Esox lucius: 5 32; 6 26; 8 20, 28; 10 26, 40, 61; 11 42, 46; 12 24; 14 64; 21 11, 26; 29 29, 50, 61; 31 38; 33 23, 57; 34 25, 47.
Esox masquinongy: 34 25.
Esox niger: 8 16; 34 25.
Esox sp.: 34 25, 47.
Estigmene acrea: 3 22, 23; 25 21.
Etroplus maculatus: 43 44.
Eucalyptus cladocalyx: 23 33.
Eucalyptus viminalis: 23 33.
Eucyclops agillis: 2 21.
Eucyclops sp.: 22 11.
Eudiaptomus padanus: 26 57; 34 42.
Euglena, *Euglena gracilis*
Euglena gracilis: 19 24; 25 19; 26 18, 45, 66; 29 71; 33 48, 69.
Eulimnadia spp.: 25 15.
Eumetopias jubata: 26 32, 44.
Eupagurus bernhardus: 19 25; 26 22.
Euphagus cyanocephalus: 30 21, 23.
Euphausia pacifica: 19 25, 28.
Euphausia superba: 21 9; 26 22; 33 21.
Euphausiid, *Euphausia*, *Meganyctiphanes*
Eurotium sp.: 22 8.
Eurycea bislineata: 33 63.
Eurytemora affinis: 11 38, 39; 12 51; 15 41; 25 15.
Eutamias townsendii: 14 44.
Euthynnus pelamis: 34 25.
Exuviella baltica: 21 30.

- Fabrea salina*: 32 22.
Falco bevigora: 30 24.
Falco cenchroides: 30 24.
Falco columbarius: 1 32; 31 42.
Falco mexicanus: 14 78,79.
Falco naumanni: 33 26.
Falco peregrinus: 1 32; 7 52; 10 33; 14 38; 21 19; 26 30; 31 39, 42.
Falco rusticolus: 10 33, 41; 31 42.
Falco sp.: 10 41.
Falco sparverius: 1 9, 16; 7 50; 14 13, 79, 80, 103; 22 7, 14-16; 23 30; 24 27; 31 51, 52.
Falco tinnunculus: 7 17; 10 54; 31 42.
Falcon
Brown, *Falco bevigora*
Peregrine, *Falco peregrinus*
Prairie, *Falco mexicanus*
Swedish gyr, *Falco rusticolus*
Fasciola hepatica: 22 11.
Felis cattus: 30 5, 6, 28, 37.
Felis domesticus: 3 13; 4 8; 6 27; 8 1; 10 12, 15, 36, 54, 55, 64, 65, 68, 74; 12 65; 14 91, 99; 15 61; 17 2, 46; 19 35, 41, 46; 20 25; 21 2, 24; 22 4, 16, 18, 23, 24; 23 35, 45; 24 31, 36; 26 3, 9, 77, 79, 87; 28 16; 30 2, 12, 38, 40, 41; 31 16, 33; 34 12, 30, 49, 50, 59.
Felis lynx: 29 63.
Fern
Ostrich, *Matteuccia struthiopteris*
Sweet, *Comptonia peregrina*
Ferns: 33 14.
Fernbird, *Bowdleria punctata*
Ferret
Black-footed, *Mustela nigripes*
Domestic, *Mustelus putorius*
European, *Mustela putorius furo*
Fescue, *Festuca arundinacea*
Festuca arundinacea: 6 13; 22 8.
Festuca rubra: 14 25; 22 8.
Festuca sp.: 34 20.
Finch
Green, *Carduelis chloris*
House, *Carpodacus mexicanus*
Zebra, *Peophila guttata*
Fir
Douglas, *Pseudotsuga menziesii*
True, *Abies* spp.
Firetail, red-browed, *Emblema temporalis*
Fish
Atlantic guitar, *Rhinobatis lentiginosus*
Benthic, *Trematomus bernacchii*
Cypriniform, *Labeo rohita*
Goat, *Upeneus* spp.
Harlequin, *Rasbora heteromorpha*
Jelly, *Cyanea*
Lump, *Cyclopterus lumpus*
Margined flying, *Cypselurus cyanopterus*
Monk, *Squatina squatina*
Parrot, *Scarus* spp.
Rabbit, *Siganus* spp.
Scorpion, *Scorpaena* spp.
Star, *Asterias rubens*
Surgeon, *Ctenochaetus strigosus*
Tile, *Lopholatilus chamaeleonticeps*
Trigger, *Balistoides* spp.
Various, *Cyprinion macrostomus*, *Lates* sp., *Stolothrissa* sp.
Flagfish, *Jordanella floridae*
Flatworm, *Dugesia* sp.
Flamingo
Greater, *Phoenicopterus ruber*
Various, *Phoenicopterus ruber roseus*
Flavobacterium sp.: 5 4; 17 11.
Flax, *Linum* spp.
Fleas, *Ctenocephalides* spp., Siphonaptera
Florida coerulea: 24 8.
Flounder
Baltic or European, *Platichthys flesus*
Roundnose, *Eopsetta grigorjewi*
Southern, *Paralichthys lethostigma*
Summer, *Paralichthys dentatus*
Various, *Limanda* sp., *Paralichthys* sp., *Pleuronectes*, *Scophthalmus*
Windowpane, *Scophthalmus aquosus*
Winter, *Pleuronectes* (formerly *Pseudopleuronectes*) *americanus*
Witch, *Glyptocephalus cynoglossus*
Yellowtail, *Pleuronectes ferruginea* (formerly *Limanda limanda*)
Fluke, liver, *Fasciola hepatica*
Fly
Black, *Simulium vittatum*
Bot, *Hypoderma* spp.
Caddis, *Clistoronia magnifica*, *Hydropsyche bettani*, *Philarctus quaeris*
Caribbean fruit, *Anastrepha suspensa*
Crane, *Platycentropus radiatus*, *Tipula*
Damsel, *Ischnura*
Dragon, *Crocothemis erythryuaea*, *Macromia* sp., *Orthemis* sp., *Pantala*, *Pseudagrion* spp.
Face, *Musca autumnalis*
Fruit, *Anastrepha*, *Drosophila*
Horn, *Haematobia irritans*, Muscidae
House, *Musca domestica*, *Musca* sp.
Leafmining, *Liriomyza trifolii*
May, *Baetis*, *Callibaetes*, *Cloeon dipterum*, *Epeorus latifolium*, *Ephemerella*, *Hexagenia*, *Isonychia bicolor*, *Leptophlebia* sp., *Siphonurus lacustris*, *Stenonema* sp.

- Mediterranean fruit, *Ceratitis capitata*
 Reindeer nostril, *Cephenomyia trompe*
 Reindeer warble, *Oedemagena tarandi*
 Rhagionid, *Atherix* sp.
 Rodent bot, *Cuterebra* spp.
 Screw-worm, *Cochliomyia hominivorax*
 Sheep blow, *Lucilia cuprina*
 Snipe, *Atherix* sp.
 Stable, *Stomoxys calcitrans*
 Stone, *Claassenia* sp., *Isoperla* sp., *Leuctra* sp.,
Paragnetina media, *Pteronarcella badia*,
Pteronarcys, *Skwala* sp.
 Warble, *Hypoderma* spp.
 White, *Bemisia tabaci*
- Flycatcher
 Ash-throated, *Myiarchus cinerascens*
 Great crested, *Myiarchus crinitus*
- Flyingfish, margined, *Cypselurus cyanopterus*
Folsomia candida: 22 9.
Fontinalis antipyretica: 23 21.
Fontinalis squamosa: 26 18.
- Formicidae: 1 20; 5 6, 38.
- Fox
 Arctic, *Alopex logopus*
 Desert kit, *Vulpes macrotis arsipus*
 Gray, *Urocyon cinereoargenteus*
 Kit, *Vulpes macrotis*
 Red, *Vulpes vulpes*
 San Joaquin kit, *Vulpes macrotis mutica*
 Various, *Vulpes* sp.
- Foxtail
 Giant, *Setaria faberii*
 Various, *Setaria* sp.
- Fragaria vesca*: 3 4.
Fratrercula spp.: 2 15; 21 19, 20.
- Frog
 Bull, *Rana catesbeiana*
 Cricket, *Acris* sp.
 European, *Rana temporaria*
 Gray tree, *Hyla versicolor*
 Green, *Rana clamitans*
 Green tree, *Hyla cinerea*
 Leap, *Rana dalmutina*
 Leopard, *Rana pipiens*, *Rana sphenoccephala*
 Northern cricket, *Acris crepitans*
 Northern leopard, *Rana pipiens pipiens*
 South African clawed, *Xenopus laevis*
 Southern gray tree, *Hyla chrysoscelis*
 Southern leopard, *Rana utricularia*
 Spotted grass, *Limnodynastes tasmaniensis*
 Tree, *Hyla* sp.
 Various, *Adelotus brevis*, *Limnodynastes peroni*,
Litoria, *Pseudis paradoxa*, *Rana*
 Western chorus, *Pseudacris triseriata*
- Frogs: 3 1, 22; 13 22; 22 7; 26 15; 29 67; 30 17.
- Fruitworm, Lepidoptera
Fucus disticus: 14 26; 26 36.
Fucus serratus: 26 84.
Fucus spp.: 11 32; 12 26; 26 52.
Fucus vesiculosus: 2 4; 6 9; 12 26, 53; 14 26; 29 22, 24;
 34 22.
Fulica americana: 5 20, 38; 21 34; 29 32, 41; 34 28.
Fulica cristata: 33 36, 42.
 Fulmars: 26 30.
Fundulus diaphanus: 34 44.
Fundulus heteroclitus: 2 28, 30, 31; 5 27; 6 23; 10 61;
 13 19; 14 68; 15 45; 24 21; 25 17; 26 60, 66, 71, 72;
 27 8; 29 29; 31 37; 32 26; 33 23, 57; 34 44.
Fundulus kansae: 5 36.
Fundulus similis: 4 16; 11 40; 13 8; 17 34; 22 12.
- Fungi: 5 20; 12 9; 14 24, 57; 15 10, 15; 18 13; 20 1-3,
 10; 26 38; 28 11; 29 51; 30 8; 33 14; 34 38, 39.
- Fungus, *Achyla* sp., *Aspergillus*, *Cortinarius* spp.,
Cunninghamella, *Epicoccum nigrum*, *Eurotium* sp.,
Fusarium spp., *Helminthosporium* sp., *Ophiobolus*
 sp., *Penicillium* spp., *Phomopsis leptostromiformes*,
Rhizoctonia solani, *Rhizopus* sp., *Saprolegnia* sp.,
Sclerotium rolfsii, *Thielaviopsis basicola*, *Tricho-*
derma viride
Fusarium spp.: 18 13; 22 8; 23 19; 30 8, 9.
Gadopsis marmoratus: 10 27.
Gadus morhua: 2 8; 7 8, 12, 47; 12 31; 15 31; 21 14; 29
 55, 78; 31 16, 24, 34, 38; 32 15, 19; 33 23; 34 25.
- Gadwall, *Anas strepera*
 Galah, *Cacatua roseicapilla*
Galeorhinus galeus: 34 35.
Galleria melonella: 3 17.
- Gallinule, purple, *Porphyryla martinica*
Gallus spp.: 1 5, 9, 15, 19; 2 iii, 24, 31; 3 11, 23, 24; 4
 17; 5 1, 29, 38; 6 18, 19, 27, 37; 7 36, 50, 53, 60; 8 1,
 23, 28; 9 iv, 1, 6, 9, 14, 19, 23; 10 1, 51, 53, 61, 62,
 74; 12 4, 6, 56, 58, 59, 61, 76, 77; 13 10, 12, 15; 14
 13, 14, 80, 81, 86; 15 8, 32, 50, 51; 17 2, 13, 16, 38-
 40, 57; 18 33, 34; 19 1, 16, 29, 30; 20 5, 18, 19, 28;
 21 20, 34-36; 22 7, 14-16; 23 2, 29-32, 47; 24 10, 28;
 25 6, 24-27, 32; 26 9-11, 27, 28, 43, 45, 72-76, 85,
 90; 27 6, 10, 11; 28 13-15; 29 65, 67, 82-84; 30 21;
 31 1, 10, 42, 48, 51-54; 32 9, 30, 31; 33 8, 44, 48, 73,
 78, 89; 34 1, 10, 14, 28, 30, 37, 38, 48, 61, 65.
- Gambusia affinis*: 1 12; 2 28; 3 9; 5 18, 32, 36, 37; 8 21;
 11 38, 42, 46; 13 9, 18; 14 34; 17 20; 20 8, 17; 21 29;
 22 12; 24 8, 21; 25 17, 18, 21; 26 60, 71, 72; 28 11;
 32 26.
- Gambusia holbrooki*: 29 22, 29.
Gammarus duebeni: 10 49; 26 57, 58, 69.
Gammarus fasciatus: 9 10; 18 27; 21 31; 22 11.
Gammarus lacustris: 13 6, 7; 29 54.
Gammarus oceanicus: 15 43.

- Gammarus pseudolimnaeus*: 7 37, 45; 10 46, 61; 11 37; 12 46, 53; 14 59; 17 27, 28; 18 32; 23 21; 24 19; 25 15; 31 49; 32 25; 33 47, 54.
- Gammarus pulex*: 23 20, 21; 26 10; 33 54.
- Gammarus* spp.: 1 4, 8; 4 9, 11; 6 20; 7 51; 18 32; 19 25; 29 78; 34 42.
- Gannet, northern, *Morus bassanus*, *Sula bassanus*
- Gar
- Longnose, *Lepistosteus osseus*
- Spotted, *Lepistosteus oculatus*
- Garra rufa*: 34 33.
- Gasterosteus aculeatus*: 2 17; 4 10; 14 64; 21 32; 26 12, 72; 32 26.
- Gastrolobium grandiflorum*: 30 14.
- Gastrolobium* spp.: 30 2, 13, 16.
- Gastrophryne carolinensis*: 10 47; 12 44, 47, 81; 26 64, 72, 84; 33 63; 34 40, 46, 64.
- Gastropods: 3 24; 4 7; 5 27, 36; 6 12; 12 53, 81; 14 31.
- Gavia arctica*: 7 22.
- Gavia immer*: 5 19; 10 63; 14 38; 34 28.
- Gazelle, Antilopinae
- Geissosis prainosa*: 34 21.
- Gelochelidon nilotica*: 31 42.
- Geocoris punctipes*: 25 10.
- Geomys breviceps*: 30 29.
- Geomys bursarius*: 23 35.
- Geomys floridanus*: 30 29.
- Geomys personatus*: 30 25.
- Geomys* spp.: 30 1, 3.
- Geranium, *Geranium* spp.
- Geranium* spp.: 28 8.
- Gerbil, *Gerbillus* sp., *Meriones*
- Gerbillus* sp.: 15 56; 29 94.
- Geukensia demissa*: 22 9, 11; 31 37.
- Gifblaar, *Dichapetalum cymosium*
- Gillia altilis*: 17 27.
- Ginger, *Zingiber officinale*
- Girella punctata*: 10 14.
- Glebula rotundata*: 3 22, 23.
- Glenodinium halli*: 26 52, 85.
- Globicephala macrorhynchus*: 2 10; 5 15.
- Globicephala melaena*: 21 24; 26 33; 33 28.
- Glossiphonia complanata*: 18 28.
- Glycera dibranchiata*: 23 8.
- Glycine max*: 2 12; 4 19; 12 39, 40, 43; 14 48, 56; 18 1, 12, 15; 20 12; 22 2, 8; 23 8; 24 3, 10, 36; 25 7; 30 14; 32 20; 33 45; 34 9, 37, 39.
- Glyptocephalus cynoglossus*: 12 66.
- Glyptotendipes barbipes*: 7 47.
- Glyptotendipes paripes*: 25 12.
- Gnat, *Chaoborus* spp.
- Gnatcatcher, blue-gray, *Polioptila caerulea*
- Goat, domestic, *Capra hircus*, *Capra* sp.
- Goatfish, *Mullus*, *Upeneus*
- Goby
- Edible, *Boleophthalmus dussumieri*
- Lizard, *Rhinogobius flumineus*
- Various, *Acanthogobius flavimanus*
- Godwit, bar-tailed, *Limosa lapponica lapponica*
- Goeldichironomus holoprasinus: 25 13.
- Goldeneye, common, *Bucephala clangula*
- Goldenrod, *Solidago graminifolia*
- Goldfish, *Carassius auratus*
- Gonatopsis borealis*: 21 9.
- Goose
- Aleutian Canada, *Branta canadensis leucoparidea*
- Cackling Canada, *Branta canadensis minima*
- Canada, *Branta canadensis*, *Branta canadensis moffitti*
- Giant Canada, *Branta canadensis maxima*
- Greylag, *Anser anser*
- Various, *Anser* spp.
- Goosefish, *Lophius piscatorius*
- Gopher
- Breviceps pocket, *Geomys breviceps*
- Texas pocket, *Geomys personatus*
- Tuza pocket, *Geomys floridanus*
- Various, *Geomys*, *Thomomys* sp.
- Gopherus polyphemus*: 29 32.
- Gorilla, *Gorilla gorilla gorilla*
- Gorilla gorilla gorilla*: 26 33.
- Gorgonia* spp.: 21 9.
- Goshawk
- Brown, *Accipiter fasciatus*
- Various, *Accipiter gentilis*
- Gossypium hirsutum*: 3 19, 23; 4 iii, 1, 3, 4, 19; 12 6, 14, 39; 20 11, 13; 22 2, 24; 24 2, 3, 6, 8, 36; 25 7; 28 7.
- Gourami, giant, *Colisa fasciata*
- Grackle
- Common, *Quiscalus quiscula*
- Great-tailed, *Quiscalus mexicanus*
- Grallina cyanoleuca*: 30 21, 24.
- Gram, *Cicer arietinum*
- Grape, *Vitis* sp.
- Grapefruit, *Citrus paradisi*
- Grass
- Arrow, *Triglochin* spp.
- Bahia, *Paspalum notatum*
- Barley, *Hordeum glaucum*
- Bent, *Agrostis tenuis*
- Blue, *Poa annua*
- Brome, *Bromus inermis*, *Bromus* spp.
- Buffalo, *Bouteloua dactyloides*
- Colonial bent-, *Agrostis tenuis*
- Common Bermuda, *Cynodon dactylon*
- Crested wheat, *Agropyron cristatum*
- Crab, *Digitaria sanguinalis*
- Eel, *Zostera* spp.

- Hair, *Deschampia flexuosa*
 Johnson, *Sorghum halepense*
 Kentucky blue, *Poa pratensis*
 Marsh, *Spartina* sp.
 Orchard, *Dactylus glomerata*
 Perennial rye, *Lolium perenne*
 Red fescue, *Festuca rubra*
 Redhead, *Potamogeton perfoliatus*
 Reed canary, *Phalaris arundinacea*
 Rhodes, *Chloris gayana*
 Saltmarsh, *Spartina alterniflora*
 Sea, *Heterozostera tasmanica*
 Shoal, *Halodule wrightii*
 Star, *Cynodon plectostachyus*
 Sudan, *Sorghum sudanense*
 Turtle, *Thalassia testudinum*
 Western wheat, *Agropyron smithii*
 Widgeon, *Ruppia maritima*
- Grasshopper
 Various, *Oxya velox*
 Western, *Melanoplus* spp.
- Grasshoppers: 4 7, 19; 9 iv, 29; 22 16; 24 9; 33 10, 79, 80.
- Grayling, Arctic, *Thymallus arcticus*
- Grebe
 Eared, *Podiceps nigricollis*
 Great crested, *Podiceps cristata*
 Pied-billed, *Podilymbus podiceps*
 Western, *Aechmophorus occidentalis*
- Grebes, Podicipediformes
- Greenfinch, *Carduelis chloris*
- Grindelia* spp.: 5 6.
Grindelia squarrosa: 5 21.
Griselinia littoralis: 30 6, 9.
 Groundnut, *Arachis hypogea*
- Grouse
 Black, *Tetrao tetrix*
 Ruffed, *Bonasa umbellus*
 Sharp-tailed, *Tympanuchus phasianellus*
- Grunion, California, *Leuresthes tenuis*
- Grus canadensis*: 13 13; 14 2; 27 12.
Grus canadensis canadensis: 4 12.
 Gryllidae: 1 21; 6 42.
 Guava, *Psidium gaujva*
- Gudgeon, topmouth, *Pseudorasbora parva*
- Gull
 Audouin's, *Larus audouinii*
 California, *Larus californicus*
 Common black-headed, *Larus ridibundus*, *L. r. ridibundus*
 Franklin's, *Larus pipixcan*
 Glaucous, *Larus hyperboreus*
 Glaucous-winged, *Larus glaucescens*
 Great black-backed, *Larus marinus*
 Grey, *Larus modestus*
 Herring, *Larus argentatus*
 Kelp, *Larus dominicanus*
 Laughing, *Larus atricilla*
 Lesser black-backed, *Larus fuscus*
 Ring-billed, *Larus delawarensis*
 Various, *Larus*
 Yellow-legged herring, *Larus cachinnans*
- Gulo gulo*: 29 63.
- Gum
 Manna, *Eucalyptus viminalis*
 Sugar, *Eucalyptus cladocalyx*
- Gumweed, *Grindelia* spp., *Grindelia squarrosa*
- Guppy, *Poecilia reticulata*
- Gutierrezia* spp.: 5 6, 21.
Gymnodinium splendens: 26 52, 53.
Gymnogyps californianus: 14 3; 23 4, 31; 26 28, 43; 30 4, 40; 34 28.
Gymnorhina tibicen: 30 7, 21, 24.
 Haddock, *Melanogrammus aeglefinus*
Haemaphysalis longicornis: 27 6.
Haematobia irritans: 13 16; 24 36; 25 6; 27 6.
Haematopinus eurysternus: 27 6, 15.
Haematopinus spp.: 27 6.
Haematopus ostralegus: 5 14; 29 34, 41, 58; 33 27.
 Hagfish, Atlantic, *Myxine glutinosa*
- Hake
 Argentinian, *Merluccius merluccius hubbsi*
 Blue, *Antimora rostrata*
 Pacific, *Merluccius productus*
 Red, *Urophycus chuss*
- Halfbeak, *Hemiramphus marginatus*
- Haliaeetus albicilla*: 10 63; 26 28; 31 40, 42, 45.
Haliaeetus leucocephalus: 1 31; 7 17, 32, 52; 10 33, 41, 74; 14 2, 38, 51, 74, 81, 103; 21 20, 21, 27; 23 4; 26 28; 27 12; 30 4; 33 26.
Haliaeetus sp.: 10 41.
Haliastur sphenurus: 30 24.
 Halibut, Atlantic, *Hippoglossus hippoglossus*
Halichoeres grypus: 10 43; 21 24; 26 33; 29 34, 42; 31 28, 34; 33 28; 34 32.
Halichondria sp.: 34 23.
Haliotis cracherodii: 33 50.
Haliotis rufescens: 2 5; 6 9; 14 71; 26 55; 32 13; 33 50; 34 23.
Haliotis tuberculata: 34 23.
Halobates spp.: 34 24.
Halocynthia roretzi: 34 25.
Halodule wrightii: 18 22.
- Hamster
 Chinese or Syrian, *Cricetus* spp.
 Golden, *Cricetus* spp.
 Syrian golden, *Mesocricetus auratus*
Haplopappus spp.: 5 21.

- Hardy head, small-mouthed, *Atherinasoma microstoma*
- Hare
 Blue, *Lepus timidus*
 Brown, *Lepus capensis*
 European, *Lepus europaeus*
 Snowshoe, *Lepus americanus*
- Harrier, northern, *Circus cyaneus*
- Haslea ostrearia*: 33 72.
- Hawk
 Australian harrier, *Circus approximans*
 Cooper's, *Accipiter cooperii*
 Ferruginous, *Buteo regalis*
 Pigeon, *Falco columbarius*
 Red-shouldered, *Buteo lineatus*
 Red-tailed, *Buteo jamaicensis*
 Rough-legged, *Buteo lagopus*
 Sharp-shinned, *Accipiter striatus*
 Various, *Falco*
- Hawthorn, *Crataegus* spp.
- Heather, Scotch, *Calluna vulgaris*
- Hediste diversicolor*: 33 56.
- Helianthus* spp.: 4 iv, 21; 20 11, 12; 22 24.
- Heliotropium* sp.: 33 10.
- Helisoma campanulata*: 12 46.
- Helisoma* sp.: 8 19; 28 13.
- Helisoma trivolvis*: 13 7; 24 19.
- Helix aspersa*: 3 23; 26 52.
- Helix pomatia*: 29 78.
- Helix* spp.: 14 57.
- Helminthosporium* sp.: 22 8.
- Helobdella stagnalis*: 18 28.
- Hemicentrotus* sp.: 6 37.
- Hemichromus bimaculatus*: 15 46.
- Hemifusus* spp.: 12 27, 81.
- Hemiramphus marginatus*: 26 25.
- Hen, guinea, *Gallus* sp.
- Hermione hystrix*: 6 35, 36.
- Heron
 Black-crowned night-, *Nycticorax nycticorax*
 Gray, *Ardea cinerea*
 Great blue, *Ardea herodias*
 Green-backed, *Butorides virescens virescens*
 Green-backer (also known as Green, or Striated),
Butorides striatus
 Little blue, *Florida coerulea*
 Little green, *Butorides virescens*
 Yellow-crowned night-, *Nycticorax violaceus*
- Herring
 Atlantic, *Clupea harengus harengus*
 Baltic, *Clupea harengus*
 Pacific, *Clupea harengus pallasi*
- Heteropneustes fossilis*: 21 32; 33 57, 72.
- Heterotermes indicola*: 25 8, 9.
- Heterotermes* spp.: 33 47.
- Heterozostera tasmanica*: 33 69.
- Hexagenia bilineata*: 11 38; 31 23.
- Hexagenia limbata*: 31 23.
- Hexagenia* sp.: 5 16; 9 19; 11 41; 31 23, 34.
- Hieraeus morphnoides*: 30 24.
- Hieraeus pennatus*: 26 30; 31 42.
- Himantopus mexicanus*: 5 20.
- Hinnites multirugosus*: 10 20.
- Hippodamia convergens*: 25 10.
- Hippoglossoides elassodon*: 31 36.
- Hippoglossus hippoglossus*: 15 31.
- Hirundo neoxena*: 30 25.
- Hirundo nigricans*: 30 25.
- Hirundo rustica*: 14 38, 39, 52; 29 32, 33, 41.
- Hog, *Sus* spp.
- Hogchoker, *Trinectes maculatus*
- Holmesimysis costata*: 33 54.
- Holothurian, sea cucumber, *Holothuria mexicana*,
Stichopus
Holothuria mexicana: 34 32.
- Homalium* spp.: 34 21, 34.
- Homalothecium sericium*: 29 51.
- Homarus americanus*: 2 7, 29; 10 24; 11 27, 31, 32; 12
 29, 35; 14 67; 15 29, 44; 21 9; 24 19; 26 22, 58, 68;
 32 15, 25; 33 54; 34 24.
- Homarus gammarus*: 26 69.
- Homarus vulgaris*: 33 21.
- Homo sapiens*: 1 iii, 1, 18, 27, 30, 33; 2 1, 16, 26, 27,
 31-34; 3 iii, 3, 15, 16, 25, 27; 4 iii, iv, 4, 13, 14, 18,
 20, 21; 5 iv, 1, 2, 5-7, 26, 27, 40-44; 6 iii, 1, 14, 18,
 27, 38, 41, 46; 7 iii, 1, 5, 33, 54, 55, 57-59, 61; 8 iii,
 1-3, 16, 24, 28; 9 iii, 1, 18; 10 iii, 1, 2, 4, 10-12, 17,
 40, 44, 54, 56, 62-65, 67-69, 72, 74; 11 iv, 1, 2, 9, 10,
 12, 25, 40, 50, 51, 58-60, 62, 63; 12 iii, iv, 1-5, 12,
 14, 20, 35, 37, 38, 61, 65, 72-74, 77, 81; 13 1, 24; 14
 iii, 1, 2, 5, 7, 11-14, 86, 104-108; 15 1-4, 12, 34, 56,
 63, 65, 66, 68, 69; 17 iv, 1, 2, 16, 40, 41, 44-46, 54,
 55, 57; 18 iv, 7, 42; 19 1, 4, 17, 31, 32, 41-44, 47-49;
 20 1, 2, 4, 5, 9, 10, 21-23, 26-28; 21 2, 4-6, 24, 25,
 28, 36, 37, 43, 44; 22 2, 4, 5, 16, 18, 22-24; 23 1, 3, 9,
 11, 15, 16, 33-35, 37-39, 46, 48, 49; 24 36-39; 25 2,
 32; 26 3-5, 8, 11-15, 33, 43-47, 77, 79, 80, 82, 87, 90,
 91; 27 3, 12, 19, 21; 28 1-4, 15-17, 23-27; 29 2, 4, 10-
 12, 15, 36, 41-43, 47, 48, 51, 53, 60, 61, 65, 67, 85-
 87, 93-105; 30 2-4, 12, 13, 24, 29, 36, 40; 31 16, 33,
 47, 48, 58, 59, 61; 32 2-5, 8, 9, 12, 16, 17, 31, 32, 34,
 35, 37; 33 4, 7, 10, 11, 31, 32, 43, 44, 65, 73, 77, 79-
 81; 34 1-5, 7, 8, 10-14, 29, 30, 34, 36-39, 50, 51, 56-
 66.
- Honeybee, *Apis mellifera*, *Apis* spp.
- Hoopoe, *Upupa epops*
- Hop, *Humulus* spp.
- Hoplias* sp.: 29 39.
- Hoplosternum littorale*: 17 20.

- Hordeum glaucum*: 22 8.
Hordeum vulgare: 12 39; 18 14; 19 12; 20 11, 12; 22 2, 8; 24 36; 26 50, 51; 29 49.
Hormomya mutabilis: 10 13.
 Hornworm, tobacco, *Manduca sexta*
 Horse, *Equus caballus*
 Horsetails, *Equisetum* sp.
 Human, *Homo sapiens*
Humulus spp.: 22 24.
 Hyacinth, water, *Eichornia crassipes*
Hyalella azteca: 5 31; 11 45; 21 29, 31; 25 15, 22; 32 25; 33 47, 54; 34 42.
Hyalella sp.: 29 78.
Hybanthus spp.: 34 21, 34.
 Hydra, *Hydra oligactis*, *Hydra* sp.
Hydra oligactis: 7 37; 25 11.
Hydra sp.: 1 8; 17 24.
Hydrilla verticillata: 33 73.
Hydrodictyon reticulatum: 6 30.
Hydrodictyon spp.: 28 8.
 Hydroid, *Campanularia flexuosa*
Hydromys chrysogaster: 30 29.
Hydrophilus triangularis: 25 12.
Hydropsyche bettani: 25 21.
Hydrurga leptonyx: 32 17; 33 28.
Hyla chrysoscelis: 33 63.
Hyla cinerea: 24 9.
Hyla crucifer: 34 35.
Hyla sp.: 10 47.
Hyla versicolor: 33 25; 34 26, 35.
Hylocichla mustelina: 25 24.
Hymenomonas carterae: 12 54.
Hypnum cupressiforme: 11 25, 26; 14 24; 19 12; 33 14; 34 20.
Hypoderma bovis: 27 14.
Hypoderma lineatum: 27 14, 20.
Hypoderma spp.: 27 2, 6, 9, 15.
Hypogymnia physodes: 10 21.
Hystrix indica: 30 5.
 Ibis, white-faced, *Plegadis chihi*
 Icefish, blackfin, *Chaenocephalus aceratus*
Ichthyophthirius sp.: 33 3.
Ictalurus furcatus: 4 6, 7; 21 12; 26 36; 31 25.
Ictalurus melas, see *Ameiurus melas*
Ictalurus punctatus: 1 7, 8; 2 20; 3 9; 4 4, 6, 9, 11, 14, 15, 16; 5 18, 32, 35; 6 26; 7 38; 8 9, 11, 12, 22; 10 28, 46; 12 25, 47; 13 9; 14 63; 15 45; 17 20, 34; 18 32; 20 17; 21 12, 13, 32; 22 12, 13; 24 22, 26; 25 18; 26 11, 72, 84; 31 25, 51; 33 58; 34 40, 44.
Ictalurus spp.: 8 16; 29 29.
Ictiobus bubulus: 21 12.
Ictiobus cyprinellus: 21 12.
Illex illecebrosus argentinus: 31 23.
Ilyanassa obsoleta: 33 19.
 Impala, *Aepyceros melampus*
Indoplanorbis exustus: 9 20.
Ipomoea batatas: 9 1; 23 3, 12; 29 23.
Ipomoea sp.: 24 3; 28 8, 10.
Ischadium recurvum: 26 35; 32 18.
Ischnura sp.: 2 28.
Ischnura verticalis: 7 37.
Isochrysis galbana: 22 10; 24 17; 26 53.
Isonychia bicolor: 32 25, 30.
Isodon auratus barrowensis: 30 29.
Isodon macrourus: 30 29.
Isodon obesulus: 30 29.
Isoperla sp.: 10 23.
 Isopod, *Asellus* sp.
Isurus oxyrinchus: 12 31; 26 25.
Jacana jacana: 17 40.
 Jacana, wattled, *Jacana jacana*
 Jackal
 Asiatic, *Canis aureus*
 Black-backed, *Canis mesomelas*
 Jackdaw, *Corvus monedula*
 Jackrabbit, black-tailed, *Lepus californicus*
 Jararaca, *Bothrops jararaca*
 Jassid, *Amrasca* sp.
 Jay, blue, *Cyanocitta cristata*
 Jellyfish, *Aurelia* spp.
 Jewelfish, *Hemichromis bimaculatus*
 Jird, tristram, *Meriones tristrami*
Jordanella floridae: 5 32; 9 10, 22; 12 47, 55; 26 60, 84; 32 26.
Juga plicifera: 25 13; 34 41.
Juniperus virginiana: 22 8.
Jussiaea sp.: 28 8.
 Kakapo, *Strigops habroptilus*
 Kale, *Brassica oleracea acephala*
 Kangaroo
 Eastern gray, *Macropus giganteus*
 Red, *Macropus rufus*
 Western gray, *Macropus fuliginosus*
Kelletia kelletia: 10 20.
 Kelp
 Brown, *Ecklonia radiata*
 Giant, *Macrocystis pyrifera*
 Kestrel
 American, *Falco sparverius*
 Australian, *Falco cenchroides*
 Lesser, *Falco naumanni*
 Various, *Falco tinnunculus*
 Killdeer, *Charadrius vociferus*
 Killifish
 Banded, *Fundulus diaphanus*
 Diamond, *Adinia xenica*
 Freshwater, *Fundulus kansae*
 Longnose, *Fundulus similis*

- Kingfisher, belted, *Ceryle alcyon*
 Kinglet, golden-crowned, *Regulus satrapa*
Kinosternon sabrubrum: 29 32.
 Kite
 Black, *Milvus migrans*
 Snail, *Rostrhamus sociabilis*
 Whistling, *Haliastur sphenurus*
 Kittiwake, black-legged, *Rissa tridactyla*
 Kiwi, *Apteryx* spp.
Klebsiella pneumoniae: 12 73; 28 23.
 Knifejaw, striped, *Oplegnathus fasciatus*
 Knot, red, *Calidris canutus*
 Knotted wrack, *Ascophyllum nodosum*
 Kokako, *Callaeas cinera*
Kogia breviceps: 33 28.
Konosirus punctatis: 21 15.
 Kookaburra, laughing, *Dacelo novaeguineae*
 Kowari, *Dasyuroides byrnei*
 Krill, *Euphausia superba*
 Krobia, *Cichlasoma bimaculatum*
 Kwi kwi, *Hoplosternum littorale*
Labeo rohita: 26 60.
Labrundinia pilosella: 18 32.
Laccophilis spp.: 25 12.
 Lacewing
 Common green, *Chrysopa carnea*
 Various, *Chrysopa oculata*
Lactarius spp.: 29 55.
Lactuca sativa: 11 25, 26, 35; 14 26, 57; 19 45; 22 2; 23 19; 30 14; 32 20; 34 21, 22, 39.
Lactuca spp.: 2 12; 4 1; 19 22; 24 3, 6.
Lagarosiphon major: 12 69.
Lagenorhynchus albirostris: 21 25; 26 33.
Lagenorhynchus obliquidens: 31 28.
Lagodon rhomboides: 1 7, 12; 4 10; 5 34; 7 39, 46; 17 32; 21 32; 29 73.
Lagopus lagopus: 10 41; 14 81, 82; 29 58; 33 8, 9, 26; 34 28.
Lagopus mutus: 10 41; 14 100.
Lagostrophus fasciatus: 30 30.
Lama pacos: 33 43.
Lamellidens marginalis: 21 31; 33 51; 34 41.
Laminaria digitata: 12 26; 26 53.
Laminaria hyperborea: 12 27; 26 53.
 Lamprey, Petromyzontidae, *Petromyzon marinus*
Lanistes carinatus: 13 7.
Lanius ludovicianus: 31 42.
 Lanternfishes, Myctophidae
Laomedea loveni: 2 23.
 Lark
 Australian magpie-, *Grallina cyanoleuca*
 Eastern meadow, *Sturnella magna*
 Horned, *Eremophila alpestris*
 Southern meadow, *Sturnella magna argutula*
 Western meadow, *Sturnella neglecta*
Larus argentatus: 1 26-29, 32; 4 6; 5 15; 7 19; 8 1, 8, 13, 16, 23; 10 34; 21 21; 29 42; 31 15, 39, 42, 43, 53, 60; 34 28, 32.
Larus atricilla: 2 9; 4 6.
Larus audouinii: 31 43, 45.
Larus cachinnans: 31 43, 45.
Larus californicus: 10 34.
Larus delawarensis: 4 6; 7 33, 36.
Larus dominicanus: 33 27.
Larus fuscus: 6 14; 32 16; 33 26; 34 28.
Larus glaucescens: 21 21.
Larus hyperboreus: 26 28.
Larus marinus: 1 32; 21 21; 29 33.
Larus modestus: 33 27.
Larus pipixcan: 4 6; 33 27.
Larus ridibundus: 29 33, 41; 31 53.
Larus ridibundus ridibundus: 29; 58, 82.
Larus spp.: 33 26.
Lasallia papulosa: 26 19, 51.
Lasiorhinus latifrons: 30 29, 38.
Laspeyresia pomonella: 24 14.
Lateolabrax japonicus: 21 15.
Lates sp.: 33 23.
 Laurel, cherry, *Prunus laurocerasus*
Lecanora conizaeoides: 14 48.
Ledum sp.: 10 21; 34 30, 36.
 Leech, *Erpobdella*, *Glossiphonia*, *Helobdella*
 Leeches: 3 1; 5 6, 37; 9 19.
 Leek, *Allium porrum*
Leiopotherapon unicolor: 26 61, 71.
Leiostomus xanthurus: 4 15; 7 39, 46; 18 31; 26 36, 61, 65; 33 58; 34 44.
 Lemming, *Lemmus* sp.
Lemmus sp.: 33 42; 34 36.
Lemna media: 15 46.
Lemna minor: 6 30; 17 23, 52; 18 25; 20 15, 16; 22 10; 32 21; 33 3; 34 22.
Lemna sp.: 33 69.
 Lemon, *Citrus limonia osbeck*
Lens esculenta: 18 13; 26 8.
 Lentil, *Lens esculenta*
 Lepidoptera: 3 26; 4 1, 19; 14 30; 30 15.
Lepisosteus oculatus: 4 7; 26 36.
Lepisosteus osseus: 23 22, 27.
Lepomis auritis: 29 78.
Lepomis cyanellus: 3 9; 4 9; 5 18, 30, 35; 12 25, 55; 13 20; 22 12; 23 27; 33 58, 72.
Lepomis gibbosus: 6 12; 7 12; 10 28; 44 44.
Lepomis gulosus: 26 24.
Lepomis humilis: 26 24; 33 36.
Lepomis macrochirus: 1 8, 12, 13; 2 31; 3 9; 4 7, 9; 5 17, 32, 37; 6 21, 26, 31, 41; 7 37; 9 8, 10; 11 37, 40-

- 43, 45; 12 25, 47, 53, 55, 75; 13 8, 18, 20; 14 33, 63; 15 45; 17 20, 32; 18 28, 29, 32; 19 26; 20 9, 17, 27; 21 15, 29, 32, 33; 22 12, 13; 23 22, 26; 24 22; 25 18, 20, 22; 26 61, 71; 27 8; 28 12, 13; 29 67, 73, 79; 30 15; 32 26, 30; 33 58, 72; 34 32, 44.
- Lepomis megalotis*: 14 33.
- Lepomis microlophus*: 4 9; 26 25; 34 32.
- Lepomis punctatus*: 8 8.
- Leptinotarsa decemlineata*: 12 5.
- Leptonychotes weddelli*: 7 34; 21 25; 32 17; 33 8, 9, 28.
- Leptophlebia* sp.: 25 21.
- Lepus americanus*: 29 42; 34 30.
- Lepus californicus*: 29 16, 36, 42; 30 29.
- Lepus capensis*: 29 59.
- Lepus europaeus*: 7 24; 14 82; 22 23.
- Lepus* sp.: 1 6; 3 15; 4 8; 5 28; 6 27, 38, 39; 7 42, 54, 55; 8 1, 12, 13, 24-26; 9 13, 16; 10 64; 11 1, 12; 12 72, 73; 14 91; 15 58, 59, 61; 22 16, 18; 29 38; 30 2, 5.
- Lepus timidus*: 29 59.
- Lerista pectorittata*: 21 33.
- Lethrinus* spp.: 26 25.
- Lettuce
Common, *Lactuca sativa*, *Lactuca* spp.
Sea, *Ulva lactuca*
- Leuciscus hakonensis*: 25 23.
- Leuciscus idus melanotus*: 15 40, 46.
- Leucospius delineatus*: 2 27.
- Leuctra* sp.: 32 25.
- Leuresthes tenuis*: 13 6, 8, 11; 24 22.
- Lichens, *Bryoria fuscescens*, *Cetraria nivalis*,
Cladina spp., *Cladonia*, *Compylium polyanum*,
Hypogymnia physodes, *Lasallia papulosa*,
Lecanora conizaeoides, *Parimelia baltimorensis*,
Ramalina fraxinea, *Umbilicaria* sp.
- Lily
Water, *Nuphar luteum*
Yellow pond, *Nuphar* sp.
- Limanda* sp.: 12 35.
- Limnodrilus hoffmeisteri*: 3 10; 15 27; 29 78.
- Limnodrilus* sp.: 11 45; 33 41.
- Limnodynastes peroni*: 22 13.
- Limnodynastes tasmaniensis*: 30 17.
- Limosa lapponica lapponica*: 29 34.
- Limpet
Common, *Patella vulgata*
Slipper, *Crepidula fornicata*
Various, *Acmaea digitalis*, *Littorina littorea*, *Patella caerulea*
- Limpkin, *Aramus guarana*
- Limulus polyphemus*: 25 13; 26 45.
- Linognathus vituli*: 27 6, 15.
- Linseed, *Linum* sp.
- Linum* sp.: 23 3, 12, 14, 19.
- Liometopum occidentale*: 30 24.
- Lipaphis erysimi*: 24 14.
- Liriodendron tulipifera*: 25 24.
- Liriomyza trifolii*: 29 71.
- Lissorhopterus oryzophilus*: 25 23.
- Lithobius variegatus*: 14 57.
- Litoria caerulea*: 21 33.
- Litoria peronii*: 21 33.
- Littorina littorea*: 2 5; 6 10; 12 28; 26 55, 67; 32 7, 13.
- Lizard
Blotched blue-tongued, *Tiliqua nigrolutea*
Leopard, *Crotaphytus wislizenii*
Shingle-back, *Tiliqua rugosa*
Side-blotched, *Uta stansburiana*
Spiny tailed, *Uromastix hardwickii*
Western whiptail, *Cnemidophorus tigris*
- Loach
Stone, *Noemacheilus barbatulus*
Various, *Misgurnis fossilis*, *Noemacheilus barbatulus*
- Lobodon carcinophagus*: 32 17; 33 28.
- Lobster
American, *Homarus americanus*
Caribbean spiny, *Panulirus argus*
Spiny, *Nephrops norvegicus*, *Panulirus*
Various, *Homarus*
Western rock, *Panulirus cygnus*
- Lobsters: 6 35; 11 32; 12 29, 81.
- Locoweed, *Astragalus* spp.
- Loligo vulgaris*: 12 28.
- Lolium perenne*: 7 11; 18 41; 19 13; 22 8; 29 51, 60, 61.
- Longspur
Chestnut-collared, *Calcarius ornatus*
McCown's, *Calcarius mccownii*
- Loon
Arctic, *Gavia arctica*
Common, *Gavia immer*
- Lophius piscatorius*: 6 37.
- Lophodytes cucullatus*: 7 19; 34 28.
- Lopholatilus chamaeleonticeps*: 31 25, 26, 38; 34 35.
- Lotus* sp.: 19 11.
- Louse
Angora goat biting, *Bovicola limbatus*
Cattle, *Haematopinus* spp.
Cattle-biting, *Damalina bovis*
Hairy goat, *Bovicola crassipes*
Long-nosed cattle, *Linognathus vituli*
Short-nosed cattle, *Haematopinus eurysternus*
Wood, *Oniscus asellus*, *Porcellio*
- Lovebird, peach-faced, *Agapornis roseicollis*
- Lucilia cuprina*: 25 30.
- Lugworm, *Arenicola cristata*
- Luidia clathrata*: 32 15.
- Lumbriculus variegatus*: 33 56, 71; 34 42.
- Lumbricus herculeus*: 3 18.
- Lumbricus rubellus*: 8 17; 26 18, 38, 39; 29 55; 33 35.

- Lumbricus* sp.: 3 18.
Lumbricus rubellus: 33 16, 37, 47, 69.
Lumbricus terrestris: 3 18; 14 30; 22 7; 33 47.
 Lungfish: 23 27.
Lupinus spp.: 33 74.
Lutianus fulvivflamma: 26 25.
Lutianus griseus: 11 43.
Lutjanus griseus: 11 43.
Lutra canadensis: 5 23; 7 10, 24, 33, 34; 10 36, 43, 54, 55, 64; 21 25; 34 30.
Lutra lutra: 26 43; 31 46, 47.
Lycastis ouanaryensis: 33 21.
Lycium andersonii: 20 8.
Lycopersicon esculentum: 4 1; 10 25; 11 35; 20 8; 21 5; 22 2; 24 3, 6, 10; 28 7, 8; 32 20; 33 14.
Lycosa sp.: 25 23.
 Lygaeidae: 4 1.
Lymnatria dispar: 20 14; 25 1, 2, 9, 21, 25; 33 45, 47, 78.
Lymnaea calliaudi: 22 9.
Lymnaea palustris: 14 59.
Lymnaea peregra: 14 72.
Lymnaea stagnalis: 15 39; 17 26.
Lymnaea sp.: 15 45; 17 25, 26; 22 10; 26 55; 28 13.
 Lynx, *Felis lynx*
Lynx rufus: 10 36; 23 12; 29 36; 30 29, 38, 41.
Lysmata caudata: 5 37.
Lysmata seticaudata: 5 13; 12 54, 55.
Lytechinus pictus: 26 45; 34 42.
Lytechinus variegatus: 34 32.
Macaca fascicularis: 14 94; 15 56.
Macaca fuscata: 22 18.
Macaca iris: 14 94.
Macaca mulatta: 1 17; 3 8, 15; 7 iv, 54, 55, 58, 60; 8 25, 26; 10 54, 55, 65; 14 95; 17 40, 41, 46; 26 33, 48, 87; 29 87, 96; 30 12, 29, 39; 31 1, 48, 55, 61.
Macaca sp.: 3 16; 10 66; 12 66; 20 23; 21 37; 23 39, 46; 34 62.
 Macadamia nut, *Macadamia* sp.
Macadamia sp.: 18 3, 41.
 Macaw, blue and gold, *Ara araruana*
Machaeranthera spp.: 5 6.
 Mackerel
 Atlantic, *Scomber scomber*
 King, *Scomberomorus cavalla*
 Spanish, *Scomberomorus maculatus*
Macoma balthica: 12 51; 14 86; 26 20, 65; 29 21; 32 13, 29; 33 10, 19, 40, 51.
Macoma liliana: 33 51.
Macoma nasuta: 3 10; 31 51; 32 13.
Macrobrachium hendersonianum: 26 68.
Macrobrachium lamarrei: 6 20, 30.
Macrobrachium rosenbergerii: 1 4; 33 55.
Macrobrachium rude: 33 55.
Macrobrachium sp.: 34 33.
Macrocystis pyrifera: 6 33; 34 40.
Macromia sp.: 7 37.
Macronectes giganteus: 32 16; 33 26; 34 27.
 Macrophytes, aquatic, *Cabomba* spp., *Chara* sp., *Elodea*, *Lemna*, *Myriophyllum*, *Polygonum* sp., *Potamogeton*, *Ruppia*, *Spirodella oligorrhiza*, *Typha latifolia*, *Zannichellia* sp., *Zostera*
Macropus agilis: 30 29.
Macropus eugenii: 30 29.
Macropus fuliginosus: 30 30.
Macropus giganteus: 30 30.
Macropus irma: 30 30.
Macropus rufogriseus: 30 5-7, 30, 37.
Macropus rufus: 30 30.
Macrosiphium gei: 10 25.
Macrotus lagotis: 30 30.
 Madrone, *Arbutus menziesii*
Magacicada spp.: 33 16, 39.
 Magpie
 Australian, *Gymnorhina tibicen*
 Black-billed, *Pica pica*
 Yellow-billed, *Pica nuttalli*
 Mahoe, *Meliccytus ramiflorus*
Makaira indica: 2 8; 5 14; 10 28.
Makaira nigricans: 5 14; 10 28; 33 23.
Malacosoma americanum: 14 30, 48.
 Mallard, *Anas platyrhynchos*
Malus domestica: 23 3, 4.
Malus malus: 5 5; 12 6; 15 65, 69; 20 8.
Malus spp.: 23 15; 24 3, 6, 38; 25 7; 26 5.
Malus sylvestris: 12 22; 23 4, 10.
Mamestra brassicae: 25 9.
 Manatee, *Trichechus manatus*
Manduca sexta: 9 25.
Mangifera indica: 29 68.
 Mango, *Mangifera indica*
 Mangrove, *Bruguiera*, *Rhizophora*
Manihot esculenta: 23 2-4, 9, 13-15, 19, 31, 34, 35, 37, 45.
 Maple
 Bigleaf, *Acer macrophyllum*
 Red, *Acer rubrum*
Margaretifera margaretifera: 19 26.
 Marlin
 Black, *Makaira indica*
 Blue, *Makaira nigricans*
 Marmoset, *Callithrix jacchus*
 Marmot, *Marmota flaviventris*
Marmota flaviventris: 19 20.
Marmota monax: 5 23; 15 32; 33 32.
Marphysa sanguinea: 32 15.
 Marsupials: 30 1-41.
 Marten, *Martes martes*

- Martes martes*: 10 64; 30 30.
 Martin
 Purple, *Progne subis subis*
 Tree, *Hirundo nigricans*
Mastotermes darwinensis: 1 20, 33.
Matteuccia struthiopteris: 7 44.
 Meadowlark, *Sturnella* spp.
 Mealworm, lesser, *Alphitobius diaperinus*
 Medaka, *Oryzias latipes*
Medicago lupulina: 19 12.
Medicago sativa: 3 iii, 1, 23, 27, 28; 4 1, 18; 9 1; 10 21;
 12 22, 39; 18 12; 19 12; 20 11, 12; 21 4, 5; 22 3, 8,
 23, 24; 24 8, 16; 28 7; 29 51; 30 14; 33 43; 34 39, 61.
Megacephala virginica: 23 20.
Meganyctiphanes norvegica: 5 12, 37; 26 22; 33 21.
Megachile rotundata: 24 15, 16, 37.
Melanitta perspicillata: 32 16; 33 27, 42.
Melanoides sp.: 34 33.
Melanperes formicivorus: 30 24.
Melanogrammus aeglefinus: 5 34; 10 48; 29 78.
Melanoplus spp.: 12 56.
Meleagris gallopavo: 4 7; 9 iii, 8, 14; 12 4, 56, 59, 76,
 77; 13 10, 12, 15; 14 2; 15 8; 19 1, 29, 30; 22 16; 23
 4; 26 9, 10, 28, 43, 46, 73; 28 3; 30 21; 31 53, 54; 32
 9, 30; 33 27, 44, 48, 73, 80; 34 28.
Melicytus ramiflorus: 30 14.
Melilotus sp.: 19 6.
Melomys burtoni: 30 30.
Melospiza melodia: 25 24.
 Menhaden, Atlantic, *Brevoortia tyrannus*
Menidia beryllina: 13 8, 11; 24 22.
Menidia menidia: 5 34; 6 22; 13 8, 11; 24 22; 32 26; 33
 58; 34 44.
Menidia peninsula: 13 8, 11; 24 22; 26 61; 33 58; 34 44.
Menippe mercenaria: 12 29; 25 15.
Menyanthes trifoliata: 29 56, 57.
Mephitis mephitis: 30 30, 39.
Mercenaria campechiensis: 26 67.
Mercenaria mercenaria: 4 10; 6 10, 33; 10 47; 11 40; 12
 28; 26 55, 65; 32 23, 29; 33 51; 34 23, 41.
 Merganser
 Common, *Mergus merganser*
 Hooded, *Lophodytes cucullatus*
 Red-breasted, *Mergus serrator*
Mergus merganser: 7 19.
Mergus serrator: 5 20; 7 19; 21 21; 23 32; 26 29; 29 34;
 31 39, 43.
Mergus spp.: 7 22.
Meriones hurrianae: 21 37.
Meriones tristrami: 30 30.
Meriones unguiculatus: 12 12.
Merlangius merlangius: 29 78.
 Merlin, *Falco columbarius*
Merluccius merluccius hubbsi: 31 26.
Merluccius productus: 26 26.
Mesocricetus auratus: 28 17, 23.
Mesocyclops thermocyclopoidea: 25 15.
Mesotoma sp.: 25 23.
Metamysidopsis elongata: 15 44.
Metapenaeus ensis: 33 55.
Methanobacterium sp.: 34 37.
Metridium senile: 26 19.
 Mice
 Deer, *Peromyscus maniculatus*
 Field, *Microtus arvalis*
 White-footed, *Peromyscus leucopus*
Microcystis aeruginosa: 14 58; 23 21; 33 3.
Microgadus tomcod: 11 47.
Microgogonias undulatus: 6 37; 26 36; 34 26.
Micropterus dolomieu: 8 11; 12 25; 14 33, 64; 22 12; 34
 26.
Micropterus ochrooaster, see *Microtus ochrogaster*
Micropterus salmoides: 4 7, 9, 15; 5 17, 37; 6 41; 7 12;
 10 28, 46; 11 45; 12 25; 13 20; 17 20, 31, 52; 20 27;
 21 33; 23 22; 26 25; 28 12; 29 29, 78; 31 33; 32 26,
 30; 34 26, 32, 40, 44.
Micropterus sp.: 28 13.
Microspora sp.: 26 66.
Microstomus pacificus: 34 26.
Microtermes obesi: 21 28.
Microtermes spp.: 33 47.
Microtus agrestis: 5 6, 23; 22 23; 26 36, 37.
Microtus arvalis: 8 12, 16; 22 23.
Microtus guentheri: 30 31.
Microtus haydeni: 30 31.
Microtus miurus: 29 88.
Microtus oregoni: 29 88.
Microtus ochrogaster: 1 5, 7, 11, 18, 30, 33; 14 44.
Microtus pennsylvanicus: 2 13; 14 47; 24 9; 29 88; 30
 31; 33 37; 34 30.
Microtus pinetorum: 14 91; 29 88, 89, 96.
Microtus spp.: 30 41; 33 42.
Mictyris longicarpus: 33 71.
 Midge
 Flower, *Contarina medicaginis*
 Phantom, *Chaoborus puntipennis*
 Various, *Chaoborus*, *Chironomus*, *Cricotopus* spp.,
 Procladius sp., *Tanytarsus*
 Midshipman, plainfin, *Porichthys notatus*
 Milkvetch, *Astragalus* spp.
 Millet, *Panicum millaceum*
 Millipede, *Apheloria* spp.
 Millipedes: 3 26; 14 30, 48; 23 14, 20; 26 39; 30 15.
 Milo, *Sorghum* spp.
Milvus migrans: 26 30; 30 21, 24; 31 43.
Mimus polyglottos: 12 56.
Miniopterus schreibersi: 31 47.
 Mink, *Mustela vison*

Minnow

Cyprinid, *Phoxinus, Puntius*
 Eastern mud, *Umbra pygmaea*
 Fathead, *Pimephales promelas*
 Mud, *Umbra limi*
 Sheepshead, *Cyprinodon variegatus*
 Various, *Leuciscus, Poeciliopsis* spp.

Mint plant

Copper, *Aeolanthus biformifolius*
 Various, *Aeolanthus* sp., *Elsholtzia* spp.

Misgurnis fossilis: 15 39.

Mite

European red, *Panonychus ulmi*
 McDaniel spider, *Tetranychus mcdanieli*
 Northern fowl, *Ornithonyssus sylvilarum*
 Oribatid, *Platynothrus peltifer*
 Pear rust, *Epirimerus pyri*
 Two-spotted spider, *Tetranychus urticae*
 Various, *Choriopetes bovis, Typhlodromus* sp.

Mizuhopecten yessoensis: 33 51.

Mnesampla privata: 30 15.

Mockingbird, northern, *Mimus polyglottos*

Mohoua ochrocephala: 30 25.

Moina irrasa: 33 55.

Mole, *Talpa europaea*

Molly, shortfin, *Poecilia mexicana*

Molothrus ater: 3 12; 7 36, 40; 10 54; 12 56, 59; 21 34, 36; 24 8; 27 12.

Monitor

Gould's, *Varanus gouldi*
 Lace, *Varanus varius*

Monkey

Black-handed spider, *Ateles geoffroyi*
 Cynomolgus, *Macaca* spp.
 Japanese, *Macaca fuscata*
 Rhesus, *Macaca mulatta*
 Marmoset, cotton top, *Callithrix jacchus*
 Squirrel, *Saimiri sciurea, Saimiri* spp.
 Various, *Cebus apella*

Monkeys: 4 18; 5 26; 7 55; 8 24, 28, 29; 9 iii, 27; 11 1; 14 iii, 3, 87, 99, 108; 15 4, 61; 22 5, 16; 24 13; 26 10, 46, 91; 28 23; 29 67, 93, 94; 30 11, 12, 36; 31 59, 60; 32 8, 9, 31, 32; 33 74; 34 51.

Montastrea annularis: 14 31; 21 9.

Moose, *Alces alces*

Morethia boulengeri: 21 33.

Morning glory, *Ipomoea* sp.

Morone americana: 29 29; 33 41; 34 44.

Morone chrysops: 21 12; 34 33.

Morone saxatilis: 2 8, 17, 23; 4 10; 5 14; 6 21; 7 13, 31, 47, 60; 10 28, 40, 59; 12 26, 31; 13 6, 7; 18 1; 21 33; 26 61; 29 29; 31 20, 26, 37, 51; 32 15; 33 58; 34 44.

Morus bassanus: 31 44.

Mosquito, *Aedes, Anopheles, Culex, Psorophora*

Mosquitofish, *Gambusia affinis, Gambusia holbrooki*
 Moss

Irish, *Chondrus crispus*

Sphagnum, *Sphagnum* sp.

Various, *Brachythecium, Fontinalis, Homalothecium sericium, Hypnum cupressiforme, Pleurozium schreberi, Rhacomitrium* sp., *Rhynchostegium riparioides, Tamenthypnum* sp.

Moth

Cabbage, *Mamestra brassicae*

Codling, *Carpocapsa pomonella, Laspeyresia pomonella*

Diamondback, *Plutella xylostella*

Douglas fir tussock, *Orgyia pseudotsugata*

Greater wax, *Galleria melonella*

Gypsy, *Lymantria dispar, Porthetria dispar*

Pine, *Bupalus* spp.

Pineapple gummosis, see Lepidoptera

Pine noctuid, *Panolis flammea*

Various, *Ectomyelois ceratoniae*

Zygaenid, *Zygaena filipendulae, Z. trifolii*

Mougeotia sp.: 18 25; 26 66; 33 3.

Mouse

Beach, or Oldfield, *Peromyscus polionotus*

Deer, *Peromyscus maniculatus, Peromyscus* spp.

Domestic, *Mus* spp.

Eastern harvest, *Reithrodontomys humulus*

Field, *Microtus arvalis*

Great Basin pocket, *Perognathus parvus*

House, *Mus musculus*

Little pocket, *Perognathus longimembris*

Long-tailed, *Pseudomys higginsii*

Meadow, *Microtus haydeni*

Mitchell's hopping, *Notomys mitchelli*

Plains, *Pseudomys australis*

Pocket, *Perognathus inornatus*

Salt marsh harvest, *Reithrodontomys raviventris*

Sandy inland, *Pseudomys hermannsburgensis*

Spinifex hopping, *Notomys alexis*

Western chestnut, *Pseudomys nanus*

Western harvest, *Reithrodontomys megalotis*

Western jumping, *Zapus princeps*

White-footed, *Peromyscus leucopus*

Wood, *Apodemus sylvaticus*

Yellow-necked field, *Apodemus flavicollis*

Mouth brooder, southern, *Pseudocrenilabrus philander*

Moxostoma duquesnei: 14 33.

Mudalia potosensis: 11 38.

Mudpuppy, *Necturus maculosus*

Mugil cephalus: 1 15; 4 6; 12 31; 13 8; 17 36; 21 33; 22 12; 24 22; 31 26.

Mugil curema: 26 36.

Mule, *Equus asinus* X *Equus caballus*

- Mullet
 Gray, *Chelon labrosus*
 Striped, *Mugil cephalus*
 Yellow-eye, *Aldrichetta forsteri*
 Various, *Rhinomugil corsula*
 White, *Mugil curema*
Mullus barbatus: 15 27; 31 26; 33 23.
 Mummichog, *Fundulus heteroclitus*
Murex brandaris: 22 10.
 Murre
 Common, *Uria aagle*
 Thick-billed, *Uria lomvia*
 Murrelet, *Channa punctatus*
Mus musculus: 24 8; 29 48, 89; 30 31; 33 36; 34 30.
Mus musculus domesticus: 29 52, 62.
Mus spp.: 1 4, 6, 7, 10; 2 24, 26, 31; 3 11, 13, 24, 25; 4 8, 18; 5 39; 6 27, 38, 39, 44; 7 41, 49, 55; 8 24-27; 9 iv, 8, 13, 16, 18, 24-26; 10 67; 11 1, 51-56, 62, 63; 12 12, 36, 38, 66, 73; 14 iii, 12, 53, 55, 87, 92, 99, 104; 15 4, 8, 10, 52-55, 57, 59-61, 64, 65; 17 41, 47, 54; 18 36, 37; 19 35, 41; 20 5, 23, 25; 21 2, 33, 34, 36, 38, 42; 22 2, 16, 19, 22, 23; 23 11, 35, 39, 40; 25 2, 27, 29; 26 11, 12, 14, 48, 77, 80, 82, 88, 91; 27 1, 3, 7, 12, 16, 17, 20; 28 7, 15, 17, 18, 23, 24; 29 65-67, 84, 89, 90; 30 6, 12, 31, 36, 39, 42; 31 54-56, 58, 59, 61; 32 31-33; 33 8, 10, 32, 44, 66, 75; 34 6, 9, 12-14, 35, 49, 51, 57, 59, 62, 64.
Musca autumnalis: 24 36; 25 6, 28.
Musca domestica: 3 17, 18; 9 13; 20 13, 14; 24 15, 16, 36; 25 7, 10, 28, 32; 27 7.
Musca sp.: 3 23; 21 33.
 Muscidae: 1 21; 9 iii, 1, 3; 13 1.
 Mushroom, *Agaricus*, *Lactarius*
 Muskellunge, *Esox masquinongy*
 Muskox, *Ovibus moschatus*
 Muskrat, *Ondatra zibethicus*
 Mussel
 Brown, *Perna indica*
 Common, *Mytilus edulis*
 Duck, *Anodonta anatina*, *A. nuttalliana*
 Green-lipped, *Perna viridis*
 Hooked, *Ischadium recurvum* (formerly *Brachidontes exustus*)
 Lagoon, *Mytella strigeta*
 Lake, *Anodonta piscinalis*
 Ribbed, *Geukensia demissa*
 Various, *Amblema* sp., *Anodonta*, *Mytilus*, *Perna*, *Villosa iris*
 Zebra, *Dreissena polymorpha*
 Mussels: 5 16; 6 88; 10 61; 11 25, 28; 12 53; 15 20, 37; 20 9; 26 20; 31 24; 33 36, 70.
 Mustard, *Brassica juncea*
Mustela nigripes: 30 4.
Mustela putorius: 23 45; 29 90; 30 31, 38, 40; 31 46-48.
Mustela putorius furo: 7 41, 43, 54; 10 64; 14 99; 26 3, 77, 80, 88; 30 31, 39.
Mustela vison: 7 iv, 10, 24, 33, 41-43, 53, 54, 58, 60, 61; 10 37, 43, 54-56, 64, 66, 74; 26 46, 49, 88, 91; 30 9, 13; 31 1, 46, 48, 56-58, 61; 32 39, 40; 33 45, 66, 80; 34 30, 31, 35.
Mustelus antarcticus: 12 35.
Mustelus canis: 6 11; 32 15.
Mya arenaria: 6 33, 34; 10 25, 47; 11 27, 29, 32; 14 52, 66; 15 45; 17 13; 26 56, 66, 67; 32 13, 23; 33 48, 51; 34 41, 47.
Myiarchus cinerascens: 30 24.
Myiarchus crinitus: 25 24; 29 82, 83.
 Myctophidae: 14 100.
Myocastor coypus: 30 32.
Myotis austroriparius: 26 34.
Myotis dasycneme: 17 16.
Myotis grisescens: 7 24; 21 25, 28; 26 34.
Myotis lucifugus: 7 25, 34; 14 44, 53; 21 28.
Myotis sodalis: 25 9.
Myotis spp.: 14 44.
Myoxocephalus quadricornis: 21 15.
Myoxocephalus scorpius: 2 9.
Myriophyllum sp.: 18 23; 20 8; 23 21; 33 15.
Myriophyllum spicatum: 6 30; 18 16, 21, 22; 22 10; 33 3.
 Mysidaceans, *Mysidopsis*, *Mysis relicta*, *Praunus flexuosus*
Mysidopsis bahia: 4 10, 15; 5 33; 6 26; 9 11, 22; 10 48, 59; 12 51; 13 6, 7; 14 66; 15 45; 17 27; 18 29; 19 26; 23 22; 24 19, 20, 26; 25 15, 16; 26 58; 32 25; 33 55; 34 42.
Mysidopsis bigelowi: 34 42.
Mysidopsis formosa: 34 42.
Mysidopsis spp.: 2 16, 23; 7 27.
Mysis relicta: 7 11, 29; 21 9; 26 41, 69; 31 49, 51.
Mystus gulo: 26 26.
Mystus vittatus: 3 9, 20, 21; 24 22.
Mytella strigata: 33 19.
Mytilus californianus: 10 25, 43; 11 48; 26 67; 32 13, 14, 18.
Mytilus edulis: 2 5; 3 10; 5 12; 6 10, 34; 10 25, 48; 11 28, 32, 45; 12 28, 51; 14 31, 65, 66; 15 30, 41, 42, 48; 17 13, 15; 19 26, 28; 23 14, 22; 26 13, 20, 36, 41, 56, 66, 67; 28 4, 11; 29 22, 25, 26; 31 21, 23, 24, 34; 32 14, 23, 24, 29; 33 19, 40, 51, 70; 34 23, 41.
Mytilus edulis aoteanus: 19 14; 32 14.
Mytilus edulis planulatus: 2 5.
Mytilus galloprovincialis: 5 12, 30, 37; 12 53; 29 54; 32 24; 33 35, 52.
Mytilus smaragdium: 33 19.
Mytilus spp.: 28 13; 31 23; 33 19, 40, 69.
Myxine glutinosa: 11 47.
 Nais sp.: 6 23.

- Najas* spp.: 28 8, 10.
Najas guadalupensis: 14 71.
Nannochloris oculata: 18 22.
Nassarius obsoletus: 12 51; 15 45, 49; 26 56; 32 13, 24; 33 73; 34 41.
Nassarius sp.: 34 24.
Natrix sp.: 5 17; 29 78.
Navicula sp.: 14 70; 26 66; 34 40.
Neanthes arenaceodentata: 6 22, 24, 26, 36; 11 37-39, 43; 14 66; 17 27; 21 10; 26 59, 70; 29 73.
Necturus maculosus: 23 8; 26 10; 29 80.
Necturus sp.: 29 80.
Nematode, *Acrobeloides* sp., *Brugia pahangi*,
Bursaphelenchus xylophilus, *Caenorhabditis elegans*,
Panagrellus redivivus, *Parafilaria bovicola*
Nematodes: 9 iii, 1; 15 15; 33 35.
Neopanope texana: 18 31.
Neophocaena phocaenoides: 31 28, 29.
Neotoma albigula: 30 32.
Neotoma intermedia: 30 32.
Neotoma lepida: 30 38.
Nephrops norvegicus: 10 24; 33 55.
Nephtys hombergi: 2 7.
Neptunus pelagicus: 10 13.
Nereis diversicolor: 2 7; 6 10; 26 23, 42, 59, 66, 70; 29 27, 79; 32 15; 33 27, 56, 71; 34 24, 32, 42.
Nereis virens: 5 36; 6 22; 7 47; 11 45; 21 29, 31; 31 51.
Neritina sp.: 15 45.
Nerodia cyclopion: 7 15.
Nerodia rhombifera: 7 17.
Nerodia sipedon: 14 35; 21 17.
Nerodia taxispilota: 29 31.
Newt
California, *Taricha torosa*
Eastern, *Notophthalmus viridescens*
Rough-skinned, *Taricha granulosa*
Various, *Triturus cristatus*
Nicotiana tabacum: 2 12; 3 4, 23; 5 22; 6 13, 42; 10 22; 12 6; 20 11; 22 8; 23 13; 24 3; 29 68, 69; 34 29, 37.
Nicrophorus tomentosus: 14 31.
Nitella spp.: 19 24.
Nitroca spinipes: 15 44, 47; 24 20; 34 42.
Nitzschia angularis: 24 17.
Nitzschia closterium: 29 71.
Nitzschia spp: 15 48; 26 53; 33 48.
Nocardia spp.: 30 8.
Nocardioopsis sp.: 21 4.
Noemacheilus barbatulus: 26 15, 61.
Nomia melanderi: 24 16.
Nostoc muscorum: 3 18; 18 14; 19 24.
Notemigonus crysoleucas: 24 9; 26 25; 29 30; 31 51.
Notiomystis cincta: 30 25.
Notomys alexis: 30 32.
Notomys mitchelli: 30 32.
Notopterus notopterus: 10 46, 59.
Notophthalmus viridescens: 29 65, 80.
Notornis mantelli: 30 24.
Notothenia gibberifrons: 32 15; 33 24; 34 26.
Notropis cornutus: 17 36.
Notropis hudsonius: 8 11; 12 48.
Notropis venustus: 4 7.
Nucella lapillus: 15 49.
Nucellus lapillus: 15 30, 40.
Numenius americanus: 21 21, 28.
Numenius arquata: 29 34.
Numenius phaeopus: 33 27.
Nuphar luteum: 2 10.
Nuphar sp.: 20 8; 34 22.
Nuthatch, white-breasted, *Sitta carolensis*
Nutria, *Myocastor coypus*
Nycticorax nycticorax: 1 32; 7 19, 32, 52; 8 1; 26 29, 43; 31 43, 45, 60; 34 28.
Nycticorax violaceus: 4 7; 21 21.
Oak
Red, *Quercus rubra*
Various, *Quercus* spp.
Oat, *Avena sativa*
Oceanodroma furcata: 1 32.
Ocenebra erinacea: 26 20, 41.
Ochotona princeps: 19 20.
Ochotona sp.: 23 12.
Ochrogaster lunifer: 30 15.
Ochromonas danica: 33 48.
Octochaetus pattoni: 10 57, 68.
Octopus, *Eledone cirrhosa*, *Octopus vulgaris*,
Paroctopus sp., *Polypus bimaculatus*
Octopus vulgaris: 33 19.
Odobenus rosmarus: 2 10; 21 25.
Odocoileus hemionus: 4 12; 10 54, 56, 64; 12 68, 72; 14 53, 104; 19 iii, 17, 42, 46; 26 34; 29 36, 42, 67.
Odocoileus hemionus hemionus: 29 42; 30 32.
Odocoileus hemionus columbianus: 29 36, 42.
Odocoileus sp.: 23 33; 33 32.
Odocoileus virginianus: 2 14; 5 23; 12 34, 68; 14 45, 53; 15 32; 19 42; 26 34, 43; 29 36, 37, 42; 30 7, 14; 33 32, 37, 42; 34 31.
Odonata: 9 19.
Odontotermes obesus: 21 28.
Odontotermes spp.: 33 47.
Odontotermes transvaalensis: 34 23.
Oedemagena tarandi: 27 6, 18.
Oedogonium cardiacum: 3 22; 5 31; 8 19; 11 42; 17 20; 25 17.
Oedogonium sp.: 6 30; 18 25; 33 3.
Oikomonas termo: 24 14.
Okra, *Abelmoschus esculentus*
Olea spp.: 20 13.
Oligochaetes: 7 29; 15 27, 48.

- Olisthodiscus lutens*: 6 32.
 Olive, *Olea* spp.
Ommastrephes bartrami: 2 5; 33 19.
Onchiurus apuanicus: 18 13.
Oncopeltus fasciatus: 27 7.
Oncorhynchus clarki: 7 38; 9 10; 13 8; 21 15, 33; 23 23; 25 18; 26 61; 29 28; 32 18; 33 58.
Oncorhynchus gorboscha: 11 38; 12 52.
Oncorhynchus keta: 12 49; 21 15; 32 26.
Oncorhynchus kisutch: 1 7, 8, 27, 29; 2 18; 3 9; 4 9; 5 18, 32; 6 31; 7 14, 30, 31, 49; 8 11, 12, 18, 21; 11 38; 12 26; 14 69; 17 15, 34; 19 28; 20 15, 17; 21 33; 23 23; 25 18; 26 61; 29 29, 74; 31 33; 32 27; 33 58; 34 44.
Oncorhynchus mykiss: 1 8; 2 11, 18, 27, 28; 3 9; 4 3, 9; 5 26, 33, 35, 36, 40, 41; 6 20, 24-26, 31, 32; 7 31, 37, 47-49, 57, 60; 8 8, 11, 18, 20, 28; 9 8, 10; 10 46, 49, 59-61; 11 15, 37, 41, 43, 44, 48; 12 26, 48, 53, 55; 13 8; 14 13, 55, 57, 60-62, 69; 15 37, 43, 47; 17 15, 28, 29, 52; 18 29; 19 iii, 15, 16, 19, 27-29, 44; 20 10, 15, 18; 21 27, 33; 22 12, 13; 23 4, 23, 24, 26, 29; 24 12, 23; 25 18, 19; 26 9, 45, 46, 61, 62, 72, 84; 27 8; 28 12, 13, 25; 29 28, 74, 75, 78; 30 15; 31 26, 49, 50; 32 7, 27, 30; 33 6, 59, 71, 72, 76; 34 14, 26, 40, 44, 46, 47, 60, 64.
Oncorhynchus nerka: 17 30, 31, 52; 19 19; 20 9, 15, 18; 26 62; 29 28.
Oncorhynchus spp.: 6 21, 23, 25.
Oncorhynchus tshawytscha: 1 27; 2 17; 5 18; 6 31; 7 30, 61; 15 34; 17 35; 21 33; 23 24; 26 62, 72; 28 12; 29 65, 75; 31 1, 26, 36, 37, 48; 32 27; 33 47, 60.
Ondatra zibethicus: 10 37, 43; 14 45; 15 32; 29 37, 42; 33 32, 43.
 Onion, *Allium* sp.
Oniscus asellus: 14 57; 26 19.
Oonopsis spp.: 5 6.
Operophtera brumata: 31 39.
Ophiocephalus punctatus: 33 61.
Ophioderma brevispina: 15 42.
Ophiolobus sp.: 22 8.
Ophryotrocha diadema: 17 24.
Oplegnathus fasciatus: 9 8, 11.
Oporornis tolmiei: 25 25.
 Opossum, *Didelphis virginiana*
Opsanus beta: 13 9, 10, 11.
Opsanus tau: 24 24.
 Orange
 Mandarin, *Citrus tachibana*
 Southern mock, *Philadelphus* spp.
 Sweet, *Citrus sinensis*
Orchestia gammarellus: 26 21; 33 21, 41.
Orchestia mediterranea: 26 21.
Orchestia traskiana: 15 45.
Orcinus orca: 31 29.
Orconectes immunis: 13 7.
Orconectes limosus: 10 46.
Orconectes nais: 7 37, 45; 14 71; 21 31; 33 36.
Orconectes rusticus: 24 20; 33 71.
Orconectes sp.: 18 32.
Orconectes virilis: 10 23; 26 22, 58, 69.
Oreochromis mossambicus: 33 8.
Oreochromis niloticus: 33 61, 72; 34 45.
 Orfe, golden, *Leuciscus idus melanotus*
Ornithonussus sylvilarum: 27 6, 10.
Ortalis cinereiceps: 26 76.
Orthemis sp.: 25 13.
Oryctolagus cuniculus: 13 14; 15 10, 11, 52, 64; 17 47, 48, 53; 18 40; 19 37, 42; 20 4, 23-26; 23 34; 25 2; 30 2, 5, 6, 32, 33, 37.
Oryctolagus sp.: 21 39, 42; 22 19, 23; 23 10, 11, 35, 40-42, 45; 24 12, 33; 25 27, 29, 30; 26 77, 80; 27 7, 8, 12, 17; 28 7, 15, 18, 23; 29 42, 52, 53, 59, 63, 94, 95; 30 10-12, 25, 36, 39; 32 9, 31, 33; 33 8, 9, 32, 66; 34 2, 7-9, 12, 30, 31, 49, 52, 58, 59.
Orygia pseudotsuga: 25 24, 25.
Oryza sativa: 3 iii, 1, 8, 19, 27; 5 22; 8 29; 9 1; 10 22; 12 39, 40; 14 26; 17 1, 19; 20 12; 24 2; 26 8; 34 21, 37.
Oryzaephilus surinamensis: 13 1.
Oryzias latipes: 2 22; 22 13; 29 75, 77.
Oryzomys palustris: 29 90.
Oscillatoria sp.: 34 37.
Osmerus mordax: 1 29; 8 11; 15 31; 17 15.
 Osprey, *Pandion haliaetus*
 Ostracods, *Cypricercus* sp., *Cypicerus* sp.,
 Cypridopsis sp., *Cyprinotus* sp., *Cyrinofus* sp.
Ostrea edulis: 15 2, 30, 42; 26 20.
Ostrea equestris: 32 14.
Ostrea sinuata: 32 14.
Ostrea sp.: 31 23.
 Otter
 River, *Lutra canadensis*
 Sea, *Enhydra lutris*
 Various, *Lutra* spp.
Otus asio: 7 52, 60; 21 19; 23 31.
 Ovenbird, *Seiurus aurocapillus*
Ovibus moschatus: 33 33.
Ovis aries: 3 13; 9 14, 27; 10 37; 12 68, 69; 14 iii, 3, 12, 45, 55, 87, 92-94, 99; 15 33; 17 48; 18 12, 37; 19 1, 5, 6, 17-19, 21, 22, 30, 31; 21 39; 22 16, 20; 23 4, 10, 12, 33, 35, 42; 24 34; 25 2, 3, 30; 26 80, 81, 88; 27 12, 17-20; 28 18; 29 38, 42, 52, 59, 60, 63, 64, 90, 91, 94; 30 1-6, 33, 37; 32 9; 33 1, 66, 77; 34 31, 38.
Ovis canadensis: 6 15.
Ovis sp.: 1 33; 3 24; 4 8, 18, 19; 5 1, 26, 28, 29, 41; 9 1, 24; 10 43; 12 3; 15 15, 60, 64, 68; 18 36; 19 36, 37, 41, 47, 49; 25 27; 26 3, 8-10, 12, 34, 39, 46, 49, 77,

- 90, 91; 29 63, 67, 100; 30 38, 39; 33 4, 8-11, 33, 43, 44, 45, 65, 74, 78, 79, 81; 34 1, 37, 59.
- Owl
 Burrowing, *Athene cunicularia*
 Common barn, *Tyto alba*
 Eagle, *Bubo bubo*
 Great horned, *Bubo virginianus*
 Laughing, *Sceloglaux albifacies*
 Long-eared, *Asio otus*
 Screech, *Otus asio*
 Short-eared, *Asio flammeus*
 Tawny, *Strix aluco*
 Tengmalm's, *Aegolius funereus*
- Oxya velox*: 33 11.
- Oxylobium* spp.: 30 16.
- Oyster
 American, *Crassostrea virginica*
 European flat, *Ostrea edulis*
 Pacific, *Crassostrea gigas*
 Rock, *Saccostrea cucullata*
 Sydney rock, *Crassostrea commercialis*
 Various, *Crassostrea*, *Ostrea*, *Saccostrea* sp.
- Oystercatcher, Eurasian, *Haematopus ostralegus*
- Oysters: 5 27; 6 17, 34, 44; 7 48, 49; 11 40; 15 11, 20, 27, 34, 43, 70; 17 iv; 20 9, 27; 21 2, 10; 26 11, 20, 65, 82, 90; 34 29.
- Pachymetopan grande*: 6 37.
- Pacifastacus* sp.: 10 23; 19 26; 33 21.
- Paddlefish, *Polyodon spathula*
- Pademelon, *Thylogale billardieri*
- Pagophilus groenlandica*: 10 54, 56, 65, 74.
- Pagurus longicarpus*: 2 16; 26 58; 34 42.
- Pagurus* sp.: 22 10.
- Paintbrush, Indian, *Castilleja* spp.
- Palaemon elegans*: 26 58, 68, 69.
- Palaemon macrodactylus*: 4 10; 21 31.
- Palaemon serratus*: 26 11, 41.
- Palaemon* spp.: 26 69.
- Palaemonetes kadiakensis*: 4 9; 7 37, 45.
- Palaemonetes pugio*: 2 7; 4 10; 6 35; 7 38; 11 37-39; 13 7; 14 31; 15 45, 48; 17 27; 18 30; 21 31; 24 20, 26; 25 16; 26 22; 31 37, 51; 32 25, 29.
- Palaemonetes varians*: 26 69.
- Palaemonetes vulgaris*: 1 12, 15, 21, 22; 2 16; 27 8.
- Palicourea marcgravii*: 30 2, 13.
- Palm, Iraqi date, *Phoenix* sp.
- Panagrellus redivivus*: 9 25, 28.
- Pandalus borealis*: 12 29, 35.
- Pandalus jordani*: 33 21.
- Pandalus montagui*: 2 7; 14 31; 26 11, 23, 58, 69; 34 24.
- Pandalus* spp.: 12 29.
- Pandion haliaetus*: 4 7; 6 14; 10 34; 12 21, 32; 21 21, 22, 27; 26 29, 43; 31 43; 34 28.
- Panicum millaceum*: 18 41; 23 3, 12.
- Panolis flammea*: 33 16, 39.
- Panonychus ulmi*: 15 65.
- Pantala hymeneae*: 2 28.
- Pantala* sp.: 25 13.
- Panthers: 14 99.
- Panulirus argus*: 34 24.
- Panulirus cygnus*: 12 35.
- Panulirus interruptus*: 2 7.
- Panulirus japonicus*: 24 12.
- Papaver orientale*: 33 14.
- Paphia undulata*: 33 19.
- Papio anubis*: 14 95, 99; 21 39; 23 10; 28 18; 30 5.
- Paracentrotus lividus*: 14 31; 17 25; 33 56.
- Parafilaria bovicola*: 12 12.
- Paragnetina media*: 25 21.
- Paragrapsus quadridentatus*: 33 55.
- Paralabrax clathratus*: 33 24; 34 26.
- Paralabrax nebulifer*: 31 36.
- Paralichthys dentatus*: 5 34; 32 27; 33 48, 61.
- Paralichthys lethostigma*: 26 36; 33 24; 34 26.
- Paralichthys* sp.: 33 6, 61.
- Paralithodes camtschatica*: 12 29; 26 41.
- Paramecium* spp.: 11 48; 26 53; 34 12.
- Paranais* sp.: 8 19.
- Paratya australiensis*: 33 10, 55.
- Pardosa* sp.: 25 23.
- Parhalella natalensis*: 33 55.
- Parimelia baltimorensis*: 14 23, 24; 33 14.
- Paroctopus* sp.: 12 35.
- Parophrys vetulus*, see *Pleuronectes vetulus*
- Paropsis atomaria*: 23 20.
- Parrot
 Port Lincoln, *Barnardius zonarius*
 Red-rumped, *Psephotus haematonotus*
- Partridge, gray, *Perdix perdix*
- Parus atricapillus*: 25 24.
- Parus biocolor*: 25 24.
- Parus gambeli*: 25 25.
- Parus major*: 25 24; 31 39.
- Paspalum notatum*: 1 21, 23.
- Passer domesticus*: 3 12, 15; 5 23; 9 9; 10 52; 13 13; 14 39; 30 21; 32 8.
- Passer montanus*: 25 24.
- Passerina amoena*: 25 25.
- Passerina cyanea*: 25 24.
- Passiflora* spp.: 22 24.
- Passion fruit, *Passiflora* spp.
- Patella caerulea*: 15 27, 30.
- Patella vulgata*: 32 14; 33 52; 34 24.
- Pea, *Pisum sativum*
- Peach, *Prunus persica*
- Peanut, *Arachis hypogea*
- Pear, *Pyrus communis*
- Pear scylla, *Psylla pyricola*

- Pearsonia metallifera*: 34 21.
 Pecan, *Carya illinoensis*
Pecten alba: 12 35.
Pecten jacobaeus: 33 20.
Pecten maximus: 2 6; 15 30, 34.
Pecten novae-zelandiae: 19 15.
Pecten spp.: 26 20.
 Peewee, eastern wood-, *Contopus virens*
Pelecanus occidentalis: 2 10; 4 7; 5 14; 6 14; 10 34; 12 21, 32; 14 39; 21 22; 26 29; 33 27; 34 28.
Pelecanus sp.: 4 14; 7 34, 53.
 Pelican
 Brown, *Pelecanus occidentalis*
 Various, *Pelecanus* sp.
Pelvetia canaliculata: 33 15.
Penaeopsis joyneri: 9 20.
Penaeus aztecus: 5 34; 7 38; 9 11; 11 38, 40; 12 29; 13 6; 18 30; 21 31; 22 11; 26 35; 28 11; 33 21; 34 24.
Penaeus brasiliensis: 26 23.
Penaeus duorarum: 4 10; 7 38; 11 40, 43; 18 30; 19 26; 21 31; 24 20, 26.
Penaeus indicus: 10 48; 33 72.
Penaeus latisulcatus: 12 35.
Penaeus setiferus: 10 61; 12 29; 13 21; 26 23.
Penaeus spp.: 2 7.
Penaeus vannamei: 17 20.
 Penguin
 Adelie, *Pygoscelis adeliae*
 Chinstrap, *Pygoscelis antarctica*
 Gentoo, *Pygoscelis papua*
 Penguins: 26 30; 33 26.
Penicillium spp.: 30 8, 9.
Peophila guttata: 30 21.
 Pepper, *Piper* spp.
Perameles gunni: 30 33.
Perameles nasuta: 30 33.
Perca flavescens: 3 9; 4 9; 5 32; 7 38, 48; 8 11, 16; 10 29; 12 26; 15 31; 17 15; 23 24; 25 19; 26 25, 26; 29 29, 50; 31 33, 37; 33 24; 34 33.
Perca fluviatilis: 33 35.
 Perch
 Climbing, *Anabas testudineus*
 Spangled, *Leipotherapon unicolor*
 Various, *Perca fluviatilis*
 White, *Morone americana*
 Yellow, *Perca flavescens*
Perga dorsalis: 30 15.
Perdix perdix: 4 12; 7 20; 10 2, 52, 62; 12 60.
Peridinium gatunense: 29 64.
Periplaneta americana: 20 14; 24 14, 16; 25 9; 27 7.
 Periwinkle, *Littorina littorea*
Perna canaliculus: 32 14.
Perna indica: 33 52.
Perna viridis: 26 21, 56; 33 20, 52.
Pernis apivorus: 14 2, 3.
Perognathus inornatus: 30 33.
Perognathus longimembris: 30 38.
Perognathus parvus: 29 91.
Peromyscus leucopus: 2 25; 3 15; 7 41, 56; 9 iv, 2, 23, 24, 26; 14 45, 47, 53; 15 61; 24 8; 26 38; 29 91, 96; 30 39; 34 31.
Peromyscus maniculatus: 11 54; 14 45, 46, 53; 15 33; 24 8, 9; 29 91; 33 37.
Peromyscus polionotus: 1 7, 17; 3 13-15; 8 8; 29 91.
Peromyscus spp.: 30 33, 38.
 Petrel
 Grey-faced, *Pterodroma macroptera*
 Southern giant, *Macronectes giganteus*
 Storm, *Oceanodroma furcata*
 Petrels: 26 30; 33 26.
Petrogale penicillata: 30 8, 25.
Petromyzon marinus: 17 37; 21 15, 33; 29 75.
 Petromyzontidae: 11 33.
Phaeodactylum tricoratum: 2 22; 14 65, 70; 22 10; 26 53; 34 40.
Phalacrocorax atriceps: 32 16; 33 26; 34 27.
Phalacrocorax auritus: 7 20, 32; 8 8, 13; 31 39, 43.
Phalacrocorax carbo: 7 21, 36; 31 44.
Phalacrocorax sp.: 1 32; 31 44, 45.
Phalaris arundinacea: 29 23, 41.
Phaseolus lunatus: 23 3, 12, 14, 15, 20; 25 7.
Phaseolus sp.: 3 23; 4 1; 17 19; 22 24; 23 15; 24 3, 10; 28 8; 32 20.
Phaseolus vulgaris: 7 29; 14 56; 20 13; 23 19.
Phasianus colchicus: 1 6, 7; 2 12; 3 12, 14; 4 8, 12, 17; 5 23; 7 21, 33, 40; 9 iv, 1, 14, 23, 30; 10 2, 34, 50, 52, 54, 63, 71; 12 60; 13 13, 15; 14 12; 17 21, 39; 18 34; 21 34, 35; 22 16; 26 76; 27 10; 30 21; 31 53.
Phasianus sp.: 3 8, 16; 5 6; 7 52, 53; 14 86.
 Pheasant, ring-necked, *Phasianus colchicus*
Philadelphus spp.: 23 12.
Philarctus quaeris: 17 28.
Philesturnus carunculatus: 30 25.
Philodena acuticornis: 6 20; 26 54; 34 40.
Philohela minor, see *Scolopax minor*
Phleum pratense: 7 11; 18 12; 34 34.
Phoca groenlandica: 6 12; 10 43.
Phoca hispida: 5 15; 7 25; 10 61, 64; 26 34, 44; 31 34; 34 32.
Phoca hispida saimensis: 21 25.
Phoca largha: 29 35.
Phoca spp.: 5 15, 25.
Phoca vitulina: 5 15; 7 34; 10 37; 12 34; 14 53; 15 33; 20 9; 21 25; 31 29, 30; 33 28; 34 32.
Phocoena phocoena: 26 34; 31 22, 30, 31; 33 28.
Phocoena sinus: 34 31.
Phocoenoides dalli: 21 25; 26 34; 31 31.

- Phoenicopterus ruber*: 26 29, 30, 43.
Phoenicopterus ruber roseus: 33 27.
Phoenix dactylifera: 20 8.
Phoenix sp.: 13 23.
Phomopsis leptostromiformes: 26 12.
Phormidium inundatum: 32 21.
Photobacterium phosphoreum: 33 9.
Phoxinus lagowski: 25 23.
Phoxinus phoxinus: 7 48; 12 48; 26 62; 29 54.
Phragmites sp.: 22 9; 33 36.
Physa heterostropha: 6 20; 23 22; 26 56; 29 72.
Physa sp.: 5 31; 8 19; 11 42, 46; 17 20, 24; 18 32; 25 13, 17, 23; 28 11; 33 47, 52.
Physeter catodon: 29 35.
Physeter macrocephalus: 7 25; 23 8; 34 32.
Pica nuttalli: 30 25.
Pica pica: 10 54; 23 12; 27 1, 2, 9, 11, 20; 30 22, 25, 39.
Pica sp.: 23 4.
Picea abies: 14 26, 48; 33 15.
Picea alba: 12 22.
Picidae: 17 4.
Pickerel
 Chain, *Esox niger*
 Various, *Esox*
Pieris brassicae: 9 6, 13; 25 9; 30 14.
Pig
 Domestic, *Sus* spp.
 Feral, *Sus scrofa*
 Guinea, *Cavia* spp.
Pigeon
 Domestic, *Columba livia*
 Nicobar, *Caloenas nicobarica*
Pika, *Ochotona princeps*, *Ochotona* sp.
Pike
 Northern, *Esox lucius*
 Various, *Hoplias* sp.
Pimephales promelas: 1 8, 12, 13, 18; 2 31; 3 9; 4 9, 11, 14-16; 5 32; 6 24-26; 7 51; 8 18, 22; 9 10, 18, 22; 10 58; 11 38, 41; 12 48, 55; 13 6, 7, 20; 14 64; 15 46; 17 32, 33; 18 29; 19 27; 21 33; 23 24, 27, 28; 24 24; 25 19; 26 62, 63, 71; 28 12; 29 75, 76; 31 26, 50; 32 27, 30; 33 9, 10, 61, 72; 34 45, 46.
Pine
 Digger, *Pinus sabiniana*
 Lodgepole, *Pinus contorta*
 Longleaf, *Pinus palustris*
 Maritime, *Pinus pinaster*
 Mugho, *Pinus* sp.
 Shortleaf, *Pinus echinata*
 Slash, *Pinus elliotii*
 Stone, *Pinus pinea*
 Sugar, *Pinus lambertiana*
 Southern, *Pinus* sp.
 White, *Pinus strobus*
Pineapple, *Ananas comosus*
Pinfish, *Lagodon rhomboides*
Pinna nobilis: 6 33; 34 24.
Pinnipeds: 14 99; 26 33.
Pintail, northern, *Anas acuta*
Pinus contorta: 33 69.
Pinus echinata: 14 26.
Pinus elliotii: 29 69.
Pinus lambertiana: 29 69.
Pinus palustris: 29 69.
Pinus pinaster: 33 46.
Pinus pinea: 33 46.
Pinus sabiniana: 20 13.
Pinus silvestris: 12 22, 41; 29 48, 56.
Pinus sp.: 3 4, 15, 23; 12 41; 20 11; 29 69; 33 45, 69, 78.
Piper spp.: 20 8; 22 2; 24 3; 34 29.
Pinus strobus: 33 69.
Pipilo erythrophthalmus: 25 24.
Pipilo spp.: 30 23.
Pipistrellus pipistrellus: 17 48; 31 47.
Piranga olivacea: 25 24.
Piranha, *Seerassalmus* sp.
Pisaster brevispinus: 33 21.
Pistia sp.: 28 8.
Pisum sativum: 4 19; 12 39, 41; 18 13; 19 13; 22 5; 24 3; 26 8; 29 69; 34 13, 21.
Pitar morrhuana, see *Pitar morrhuanus*
Pitar morrhuanus: 6 10; 26 21; 32 14.
Pituophis catenifer: 30 17.
Pitymys pinetorium, see *Microtus pinetorum*
Placocecten magellanicus: 2 6; 11 28; 12 28; 32 14.
Plaice, *Platichthys flesus*, *Pleuronectes platessa*
Planchonella oxyedra: 34 21.
Planorbis corneus: 29 76.
Plant
 Copper-tolerant, *Becium homblei*
 Floating, *Eichornia*, *Jussiaea* sp., *Pistia* sp.
 Heliotrope, *Echium* sp., *Heliotropium* sp., *Senecio*
 Lupinosis, *Lupinus* spp.
 Marine flowering, *Posidonia oceanica*
 Nickel hyperaccumulator, *Allysum* spp., *Geissosis prainosa*, *Homalium* spp., *Hybanthus* spp., *Pearsonia metallifera*, *Planchonella oxyedra*, *Psychotria douarrei*, *Sebertia acuminata*
 Perennial, *Rubus* spp.
 Poisonous (fluoroacetate-containing), *Acacia*, *Dichapetalum*, *Gastrolobium*, *Oxylobium* spp.
 Vascular, *Cassiope* sp.
Platalea leucorodia: 31 44.
Platichthys flesus: 2 8; 7 31, 48, 60; 11 40; 14 33; 31 26, 27, 38; 33 61.

- Platycentropus radiatus*: 25 24.
Platyercus elegans: 30 25.
Platymonas subcordiformis: 14 70.
Platynothrus peltifer: 33 43, 47, 78.
Plecotus phyllotis: 25 9.
Plectonema boryanum: 25 11, 20, 21.
Plegadis chihi: 5 14.
Plethodon cinereus: 33 37.
Pleurobrachia pileus: 33 49.
Pleuronectes americanus: 2 23; 5 34; 8 18; 11 29; 15 31; 31 27, 36, 37; 32 16, 19, 27, 28; 33 24, 62; 34 26.
Pleuronectes ferruginea: 2 8; 12 52; 15 38; 20 17; 31 25, 38; 33 23; 34 25.
Pleuronectes flesus: 10 61; 29 55.
Pleuronectes platessa: 14 67; 17 34; 26 9, 42, 71; 29 21, 30; 29 78; 32 30; 33 72.
Pleuronectes vetulus: 11 45, 46, 48; 12 32; 31 33.
Pleurozium schreberi: 34 21.
 Plum, *Prunus* spp.
Plumaria elegans: 12 50.
Plutella xylostella: 24 6, 15.
Poa annua: 12 6, 39.
Poa pratensis: 22 8.
Poa spp.: 26 38; 33 37.
 Pochard, *Aythya ferina*
Podiceps cristata: 10 35.
Podiceps nigricollis: 5 20.
Podiceps spp.: 7 22.
 Podicipediformes: 10 12.
Podilymbus podiceps: 4 6.
Podoclavella moluccensis: 6 11.
Podophthalmus vigil: 6 34.
Poecilia mexicana: 22 12.
Poecilia reticulata: 3 21; 4 9; 5 6, 37; 8 18, 21, 28; 10 61; 14 71; 15 46; 17 36, 37; 22 13; 26 62, 71; 27 8; 31 50, 51; 32 27; 33 61; 34 9, 45.
Poeciliopsis spp.: 11 36, 48.
Pogona barbatus: 30 17.
Pogonomyrmex spp.: 30 15.
 Polecat, *Mustela putorius furo*
Polioptila caerulea: 25 24.
 Pollack, walleye, *Theragra chalcogramma*
Polycarpa pedunculata: 26 37.
 Polychaetes, *Capitella capitata*, *Glycera dibranchiata*, *Lycastis ouanaryensis*, *Marphysa sanguinea*, *Neanthes arenaceodentata*, *Nereis*, *Ophryotrocha diadema*, *Sabella pavonina*
Polygonum sp.: 22 10.
Polyodon spathula: 21 12; 31 27, 37.
Polypus bimaculatus: 20 9.
Pomacea paludosa: 33 36, 52, 73.
Pomacea spp.: 17 20, 39.
Pomatomus saltatrix: 2 8; 10 40; 34 35.
Pomoxis annularis: 2 11; 17 34; 25 19; 31 34.
Pomoxis nigromaculatus: 23 25; 25 21, 23; 26 25; 31 34.
 Pompano, Florida, *Trachinotus carolinus*
Pontoporeia affinis: 2 23, 29.
Pontoporeia hoyi: 11 45; 21 10; 31 49.
Pontoporeia blainvillei: 33 29.
 Poplar, tulip, *Liriodendron tulipifera*
 Poppy, *Papaver orientale*
Populus grandidentata: 29 23.
Populus sp.: 29 48.
Populus tremula: 29 56; 34 35.
Populus tremuloides: 7 11; 29 23.
Porcellio scaber: 14 48, 57; 26 19, 40, 50-52; 33 76, 78.
Porcellio sp.: 5 22.
 Porcupine
 Indian crested, *Hystrix indica*
 North American, *Erethizon dorsatum*
 Porgy, *Pachymetopan grande*
 Porgy
 Black, *Sparus macrocephalus*
 Jolthead, *Calamus bajonado*
 Various, *Pachymetopan grande*
Porichthys notatus: 23 25.
Porites spp.: 21 9.
Porphyra sp.: 29 25; 34 22.
Porphyra martinica: 4 7.
 Porpoise
 Dall's, *Phocoenoides dalli*
 Finless, *Neophocaena phocaenoides*
 Harbor, *Phocoena phocaena*
 Various, *Phocoena sinus*
Porthetria dispar: 14 31; 20 3, 13; 26 38; 34 22, 34.
Portunus pelagicus: 26 68.
Porzana carolina: 14 40.
Posidonia oceanica: 10 22.
 Possum, brush-tailed, *Trichosurus vulpecula*
Potamocorbula amurensis: 32 14, 24.
Potamogeton carinatus: 28 10.
Potamogeton crispus: 2 3; 15 4; 28 10.
Potamogeton foliosus: 14 71.
Potamogeton pectinatus: 18 24, 25; 33 36.
Potamogeton perfoliatus: 18 16, 17, 20, 21.
Potamogeton pusillus: 22 10.
Potamogeton richardsoni: 2 10.
Potamogeton spp.: 12 23; 14 27; 18 23; 20 8; 23 21; 28 4, 8, 13; 33 3, 15; 34 32.
Potamogeton tricarinatus: 28 2, 10.
 Potato
 Common, *Solanum tuberosum*
 Sweet, *Ipomoea batatas*
Praunus flexuosus: 26 58.
 Prawn
 Deep sea, *Pandalus borealis*
 Freshwater, *Macrobrachium* spp.

- Various, *Pandalus*, *Penaeus*
 White, *Penaeus indicus*
Prionace glauca: 12 35; 26 26; 34 35.
Pristina sp.: 2 21.
Procambarus acutus acutus: 3 9; 26 69.
Procambarus blandingi: 1 4, 12, 21.
Procambarus clarki: 1 14, 18; 9 19; 13 7; 21 10; 22 11;
 24 12, 20, 26; 33 55, 71.
Procambarus spp.: 4 7.
Procentrum micans: 26 53.
Prorocentrum maria-lehouriae: 32 21.
Procladius sp.: 25 22.
Procyon lotor: 1 21; 5 24; 7 41, 56; 10 38, 43; 14 46, 99,
 104; 21 26; 30 33, 37, 39; 33 33; 34 31.
Progne subis: 24 8.
 Pronghorn, *Antilocapra americana*
Prosopium cylindraceum: 10 29; 15 31.
Prosopium williamsoni: 23 12; 29 28.
Prosthemadera novae-seelandiae: 30 25.
Prototheca zopfi: 23 21.
 Protozoan, *Blepharisma undulans*, *Chilomonas*
paramecium, *Colpoda*, *Costia* sp., *Cristigera* sp.,
Entosiphon sulcatum, *Faurea salina*,
Ichthyophthirius sp., *Oikomonas termo*, *Parame-*
cium spp., *Spirostomum ambiguum*, *Tetrahymena*
pyriformis, *Trichodina* sp., *Uronema*, *Vorticella* sp.
 Protozoans: 26 19; 29 72; 34 23, 38.
 Prune, *Prunus domestica*
Prunella modularis: 27 9.
Prunus amygdalus: 22 24; 23 11, 12, 15, 19.
Prunus armenaica: 23 3, 4, 12, 13.
Prunus avium: 10 22.
Prunus domestica: 20 8.
Prunus dulcis: 23 3.
Prunus laurocerasus: 23 3.
Prunus persica: 23 3, 4, 12; 26 5.
Prunus serotina: 14 27, 48.
Prunus spp.: 23 3, 4, 12, 19; 26 5.
Psectocladus sp.: 22 11.
Psephotus haematonotus: 30 22.
Psettichthys melanostictus: 11 40, 42.
Pseudacris triseriata: 22 13.
Pseudagrion spp.: 13 7.
Pseudemys floridana hoyi: 29 32.
Pseudemys floridana penisularis: 29 32.
Pseudemys scripta: 29 32.
Pseudis paradoxa: 17 20.
Pseudocrenilabrus philander: 33 24.
Pseudodiaptomus coronatus: 33 56.
Pseudomonas spp.: 3 6; 5 4; 9 3; 15 4; 23 13; 26 53; 30
 8, 9.
Pseudomys australis: 30 33.
Pseudomys hermannsburgensis: 30 33.
Pseudomys higginsii: 30 33.
Pseudomys nanus: 30 33.
Pseudopleuronectes americanus: see *Pleuronectes*
americanus
Pseudopteroorgia spp.: 21 9.
Pseudorasbora parva: 9 20.
Pseudotsuga menziesii: 25 24, 25; 33 69.
Psidium guajava: 18 41.
Psithyrus bohemicus: 33 16
Psorophora columbiae: 24 20; 25 23.
Psychotria douarrei: 34 21.
Psylla pyricola: 24 14.
 Ptarmigan
 Common, *Lagopus mutus*
 Willow, *Lagopus lagopus*
Pterodroma macroptera: 30 6.
Pteronarca badia: 7 37; 13 6, 7.
Pteronarcys californica: 9 10; 12 46; 13 7; 21 31; 22 11;
 32 25; 33 70.
Pteronarcys dorsata: 12 46; 24 20.
Pteronarcys sp.: 4 9.
Ptychocheilus oregonensis: 10 40.
Puccinia graminis: 28 3.
 Puffer, northern, *Sphoeroides maculatus*
 Puffins, *Fratercula* spp.
Puffinus pacificus: 5 14.
 Pumpkinseed, *Lepomis gibbosus*
Puntius conchionus: 14 64.
Puntius gonionotus: 22 12.
 Pupfish, desert, *Cyprinodon macularis*
Pusa hispida: 31 29, 31.
Pusa vitulina: 31 60.
Pygoscelis adeliae: 2 9; 21 22; 32 16; 33 26; 34 27.
Pygoscelis antarctica: 32 16; 33 26; 34 27.
Pygoscelis papua: 32 16; 33 26; 34 27.
Pylodictis olivaris: 21 12; 31 25.
 Pyrethrum flower, *Chrysanthemum cinariaefolium*
Pyrus communis: 4 1; 5 22; 15 65, 69; 20 8, 13; 23 3.
Pyrus spp.: 23 15; 24 3.
 Pytiscidae: 2 28.
 Quahog or quahaug
 Northern, *Mercenaria mercenaria*
 False, *Pitar morrhuanus*
 Ocean, *Arctica islandica*
 Southern, *Mercenaria campechiensis*
 Quail
 California, *Callipepla californica*
 Common, *Coturnix coturnix*
 Coturnix, *Coturnix risoria*
 Gambel's, *Callipepla gambeli*
 Japanese, *Coturnix japonica*
 Quelea, *Quelea quelea*
Quelea quelea: 3 12, 15.
Quercus rubra: 34 21.

- Quercus* spp.: 12 41; 25 24, 25; 26 17, 51, 82; 29 48; 31 39; 33 13.
- Quiscalus mexicanus*: 4 6.
- Quiscalus quiscula*: 3 12, 17; 7 36, 52; 10 54; 13 13; 21 19, 34, 36; 27 12.
- Quokka, *Setonix brachyurus*
- Quoll
 Eastern native, *Dasyurus viverrinus*
 Tiger, *Dasyurus maculatus*
 Various, *Dasyurus*
- Rabbit
 European, *Oryctolagus cuniculus*
 Various, *Lepus*, *Oryctolagus* sp., *Sylvilagus*
- Raccoon, *Procyon lotor*
- Racerunner, six-lined, *Cnemidophorus sexlineatus*
- Radish, *Raphanus sativus*, *Raphanus* spp.
- Ragwort, tansy, *Senecio jacobaea*
- Rail
 Clapper, *Rallus longirostris*
 Sora, *Porzana carolina*
- Raja clavata*: 32 30.
- Raja erinacea*: 8 18.
- Raja* sp.: 12 32, 35.
- Rallus longirostris*: 1 32; 4 7.
- Ramalina fraxinea*: 29 51.
- Rana catesbeiana*: 8 20; 9 10; 10 30; 13 6; 14 34, 50, 72; 18 32; 30 17.
- Rana clamitans*: 14 50; 33 25, 37; 34 26.
- Rana dalmatina*: 26 64.
- Rana esculenta*: 24 12.
- Rana japonica*: 28 7.
- Rana pipiens*: 6 12; 10 30, 47, 59; 11 49; 14 72; 20 18; 22 13; 29 79, 81; 30 17; 32 28; 33 63.
- Rana pipiens pipiens*: 24 24.
- Rana sphenocephala*: 4 9.
- Rana* spp.: 12 32; 14 34; 21 17; 26 72; 29 80; 32 7.
- Rana temporaria*: 15 46; 22 9; 33 25.
- Rana temporaria*: 10 31.
- Rana utricularia*: 14 72; 24 9.
- Rangia cuneata*: 3 10, 22; 6 34; 11 36, 41, 43, 44; 29 27.
- Rangifer tarandus*: 10 64; 14 100; 27 1, 6, 18-20; 29 41, 49, 50, 55, 57, 61, 62, 67, 88, 104; 32 34; 33 33; 34 31, 32, 36.
- Rangifer tarandus granti*: 29 49, 62.
- Rape, *Brassica napus*
- Raphanus sativus*: 14 56.
- Raphanus* spp.: 25 7; 28 8; 34 34, 39.
- Rasbora daniconus neilgeriensis*: 17 32
- Rasbora heteromorpha*: 15 46; 28 12.
- Raspberry
 Blooming red, *Rubus strigosus*
 Various, *Rubus*
- Rat
 African giant, *Cricetomys gambianus*
 Alexandrine, *Rattus alexandricus*
 Black, *Rattus rattus*
 Bush, *Rattus fuscipes*
 Canefield, *Rattus sordidus*
 Cotton, *Sigmodon hispidus*
 Desert wood, *Neotoma lepida*
 Grassland melomys, *Melomys burtoni*
 Heermann's kangaroo, *Dipodomys heermanni*
 Kangaroo, *Dipodomys* spp.
 Laboratory white, *Rattus* spp.
 Marsh rice, *Oryzomys palustris*
 Morro Bay kangaroo, *Dipodomys heermanni morroensis*
 Norway, *Rattus norvegicus*
 Roof (see black), *Rattus rattus*
 Swamp, *Rattus lutreolus*
 Thick-tailed, *Zygomys argurus*
 Tunney's, *Rattus tunneyi*
 Water-, *Hydromys chrysogaster*
 White-throated wood, *Neotoma albigula*
 Wood, *Neotoma intermedia*
- Ratsbane, *Dichapetalum toxicarium*
- Rattus alexandricus*: 30 33.
- Rattus fuscipes*: 30 33.
- Rattus lutreolus*: 30 33.
- Rattus norvegicus*: 5 24; 7 41; 13 14; 14 46, 47; 17 48-50; 29 91; 30 6, 34, 39.
- Rattus rattus*: 29 43-45; 30 34, 39.
- Rattus sordidus*: 30 34.
- Rattus* spp.: 1 3-7, 10, 16; 2 iii, 19, 31; 3 11, 13, 15, 16, 23-25; 4 4, 8, 18; 5 iv, 26-29, 39, 41, 43, 44; 6 18, 27, 38-40; 7 41-43, 49, 54, 55, 58, 60; 8 24-29; 9 iv, 8, 13, 14, 24, 26, 30; 10 12, 65, 66; 11 1, 49, 51-53, 55, 63; 12 11, 69, 70, 73; 14 iii, 12-15, 55, 87, 95-97, 99, 108; 15 3, 4, 8, 10, 11, 52-64, 68; 17 2, 40-42, 53, 54; 18 12, 36-38, 42; 19 18, 29-31, 38-42, 44, 47; 20 24-26, 28; 21 4, 5, 36, 39-43; 22 2, 4, 16, 20-24; 23 9-11, 14, 35, 42-45, 48; 24 10, 11, 13, 28, 29, 34-36; 25 2, 3, 27, 30-32; 26 3, 9-15, 35, 44, 46, 49, 50, 77, 81, 82, 88-91; 27 1, 3, 6, 12, 18-20; 28 1, 6, 7, 15, 19-25; 29 42, 67, 84, 91, 92, 96, 97; 30 10-13, 34, 39, 41; 31 1, 11, 12, 54, 57-61; 32 8, 9, 31, 33, 34; 33 7-11, 33, 44, 45, 65, 67, 75, 76, 79-81; 34 1, 7-14, 30, 31, 35, 37, 38, 49, 52-59, 61, 62, 64, 65.
- Rattus tunneyi*: 30 34.
- Raven
 Australian, *Corvus coronoides*
 Common, *Corvus corax*
 Little, *Corvus mellori*
- Ray
 Electric, *Torpedo* sp.
 Thornback, *Raja clavata*
 Various, *Raja* sp.
- Razorbill, *Alca torda*

- Recurvirostra americana*: 5 20.
 Redhead, *Aythya americana*
 Redhorse, black, *Moxostoma duquesnei*
 Redshank
 Common, *Tringa totanus*
 Icelandic, *Tringa totanus robusta*
Regulus satrapa: 25 25.
 Reindeer, *Rangifer tarandus*
Reithrodontomys humulis: 29 92.
Reithrodontomys megalotis: 30 38.
Reithrodontomys raviventris: 30 40.
Reticulitermes flavipes: 19 22.
Rhacomitrium sp.: 34 32.
Rhepoxynius abronius: 19 28.
Rheumobates spp.: 34 24.
Rhinichthys osculus: 32 28.
Rhinobatis lentiginosus: 33 24.
Rhinogobius flumineus: 21 15.
Rhinolophus ferrumequinum: 31 47.
Rhinomugil corsula: 17 35, 36.
Rhizoctonia solani: 18 13; 23 19.
Rhizophora mangle: 34 32.
Rhizophora spp.: 1 12; 10 20.
Rhizopus sp.: 22 8.
Rhizosolenia sp.: 26 53, 85.
Rhodotorula sp.: 34 40.
Rhyncostegium riparioides: 23 21; 33 48.
 Rice
 Domestic, *Oryza sativa*
 Wild, *Zizania aquatica*
Richmondia cardinalis: 24 8.
Ricinus communis: 23 19; 28 7.
Rissa tridactyla: 7 21.
Rithropanopeus harrisi: 4 10; 15 36, 45; 22 10; 25 16;
 26 12, 58, 85.
 Rivulus, mangrove (fish), *Rivulus marmoratus*
Rivulus marmoratus: 33 62.
 Roach (fish), *Rutilus rutilus*
 Robin
 American, *Turdus migratorius*
 European, *Erithacus rubecula*
 Rosella, crimson, *Platycercus elegans*
Rostrhamus sociabilis: 17 39, 40; 33 73.
 Rotifer, *Asplanchna*, *Brachionus*
Rubus frondosus: 26 38.
Rubus sp.: 33 37.
Rubus strigosus: 24 15.
 Rudd, *Scardinius erythrophthalmus*
Ruppia maritima: 20 8, 19.
Ruppia spp.: 18 23; 23 21.
Rutilus rutilus: 29 50.
 Rye, *Secale cereale*
 Rye, perennial, *Lolium perenne*
Rynchops niger: 7 21, 32; 21 22.
Sabella pavonina: 32 25.
Saccharomyces cervisiae: 21 42; 25 27; 28 8.
Saccharomyces spp.: 17 19, 41.
Saccharum officinarum: 3 1; 8 29; 18 1, 3, 41; 22 7, 24;
 24 3, 10; 28 7.
Saccobranthus fossilis: 3 9; 21 33; 33 62, 72.
Saccostrea cucullata: 26 9, 21; 33 20.
Saccostrea sp.: 32 14.
 Saddleback, *Philesturnus carunculatus*
 Safflower, *Carthamus tinctorius*
 Sagebrush, big, *Artemisia tridentata*
Sagitta elegans: 20 9.
Saguinus fuscicollis: 9 1.
Saimiri sciurea: 28 22, 23.
Saimiri spp.: 6 18; 29 92.
 Salamander
 Eastern red-backed, *Plethodon cinereus*
 Jefferson, *Ambystoma jeffersonianum*
 Marbled, *Ambystoma opacum*
 Spotted, *Ambystoma maculatum*
 Tiger, *Ambystoma tigrinum*
 Two-lined, *Eurycea bislineata*
 Various, *Necturus*
Salix spp.: 29 54, 56.
Salmo clarki, see *Oncorhynchus clarki*
Salmo gairdneri, see *Oncorhynchus mykiss*
Salmo salar: 1 12, 13; 2 22; 5 26; 7 31, 48; 11 41, 43; 12
 26; 15 32, 34; 17 33; 21 15; 23 12, 25, 26, 28, 29; 24
 25; 25 19; 26 5, 26, 42, 63, 71, 84; 29 76; 31 27; 33
 41, 62.
Salmo spp.: 10 29.
Salmo trutta: 3 9; 4 9; 5 36; 7 47, 49; 8 11; 11 33; 17 15;
 21 33; 22 13; 23 12, 25; 26 63, 70, 84; 28 12; 29 28,
 54, 61, 76, 79; 31 27; 32 28; 33 8, 62.
 Salmon
 Atlantic, *Salmo salar*
 Chinook, *Oncorhynchus tshawytscha*
 Chum, *Oncorhynchus keta*
 Coho, *Oncorhynchus kisutch*
 Kokanee, see Sockeye
 Pink, *Oncorhynchus gorbuscha*
 Sockeye, *Oncorhynchus nerka*
 Various, Salmonidae
Salmonella sp.: 2 31; 3 25; 4 18; 26 14; 28 24; 32 31.
Salmonella typhimurium: 3 25; 6 30; 7 55; 8 17; 11 34,
 49; 12 35; 17 41; 20 5; 21 42; 25 27; 28 8.
 Salmonidae: 5 iii, 18; 7 10, 47, 54; 10 40; 15 34, 70; 17
 18, 21.
 Saltbush, *Atriplex* spp.
Salpa fusiformes: 20 9.
Salvelinus alpinus: 31 38.
Salvelinus fontinalis: 1 13, 18, 27; 2 18, 20, 22; 4 14, 15,
 16; 5 33; 6 26; 7 12, 31, 48, 49, 51; 9 10, 18, 20, 22;
 10 29, 46, 49, 59-61, 70, 74; 12 49; 14 62, 63; 17 36;

- 18 28; 19 29; 21 33; 23 25, 26; 25 19; 26 26, 64; 29 28; 33 62; 34 45.
- Salvelinus namaycush*: 1 27; 3 9; 4 5; 5 27, 35; 6 12, 26; 7 27, 31, 47, 60, 61; 8 8, 11; 9 10; 10 29; 12 26; 13 9; 14 62; 15 32; 17 15; 20 8; 21 16; 29 28; 31 27, 28, 36; 33 62; 34 26, 45.
- Sambucus* spp.: 23 4.
- Sand dollar, *Dendraster excentricus*
- Sanddab, speckled, *Citharichthys stigmaeus*
- Sanderling, *Calidris alba*
- Sandpiper
- Solitary, *Tringa solitaria*
 - Spotted, *Actitis macularia*
 - Various, *Calidris*, *Erolia* spp.
- Saprolegnia* sp.: 34 39.
- Sarcophilus harrisi*: 30 11, 34, 37.
- Sarcorhampus papa*: 14 3.
- Sargassum fluvitans*: 12 27.
- Sargassum* sp.: 12 27; 34 22, 33.
- Sauger, *Stizostedion canadense*
- Scallop
- Antarctic, *Adamussium colbecki*
 - Bay, *Argopecten irradians*
 - Pacific, *Chlamys ferrei nipponensis*
 - Rock, *Hinnites multirugosus*
 - Sea, *Placopecten magellanicus*
 - Various, *Chlamys*, *Mizuhopecten yessoensis*, *Pecten*
- Scaphirhynchus platyrhynchus*: 21 12, 13, 16, 26.
- Scardinius erythrophthalmus*: 6 31.
- Scarus gyttatus*: 26 25.
- Scaup
- Greater, *Aythya marila*
 - Lesser, *Aythya affinis*
- Scelogaux albifascies*: 30 24.
- Scenedesmus acutiformes*: 33 49; 34 40.
- Scenedesmus costatum*: 17 22.
- Scenedesmus obliquus*: 12 44, 45; 29 71.
- Scenedesmus quadricauda*: 7 48; 15 38; 18 26; 21 29, 30; 23 21; 26 53.
- Scenedesmus* spp.: 31 51; 32 21.
- Scenedesmus subspicatus*: 33 49.
- Schistosoma mansonii*: 28 11.
- Schroederella* spp.: 26 53, 66, 85.
- Sciaenops ocellatus*: 33 3, 24, 62; 34 26.
- Sciurus carolinensis*: 2 14; 10 38; 21 26; 33 33; 34 31.
- Sciurus hudsonicus*, see *Tamiasciurus hudsonicus*
- Sciurus* spp.: 30 1.
- Sclerotium rolfsii*: 18 13.
- Scolopax minor*: 1 31; 3 18; 7 21; 29 63.
- Scolopax rusticola*: 29 59.
- Scomber scombrus*: 26 26.
- Scomberomorus cavalla*: 26 26.
- Scomberomorus maculatus*: 33 24
- Scombridae: 5 13.
- Scopthalmus aquosus*: 7 13, 31; 11 30; 12 32; 32 16.
- Scopthalmus maeoticus maeoticus*: 29 78.
- Scopthalmus maximus*: 26 72.
- Scorpaena porcus*: 29 78.
- Scorpaenichthys marmoratus*: 26 64, 65.
- Scoter, surf, *Melanitta perspicillata*
- Screech-owl, eastern, *Otus asio*
- Scripsiella faeroense*: 10 59; 33 49.
- Scrobicularia plana*: 2 6; 32 7, 14, 24; 34 24, 32.
- Scud, *Gammarus*, *Hyalella*
- Sculpin
- Fourhorn, *Myoxocephalus quadricornis*
 - Mottled, *Cottus bairdi*
 - Shorthorn, *Myoxocephalus scorpius*
- Scup, *Stenotomus chrysops*
- Scyliorhinus caniculus*: 26 26, 64.
- Sea cucumber, *Stichopus*
- Sea-eagle, white-tailed, *Haliaeetus albicilla*
- Sea lion
- California, *Zalophus californianus*
 - Northern, *Eumetopias jubata*
- Sea star (Asteroidea), *Pisaster brevispinus*
- Sea urchins, *Anthocidaris crassispina*, *Arbacia*, *Echinometra*, *Hemicentrotus* sp., *Lytechinus*, *Paracentrotus lividus*, *Strongylocentrotus*, *Tripneustes esculentus*
- Seal
- Australian fur, *Arctocephalus pusillus*
 - Bearded, *Erignathus barbatus*
 - Crabeater, *Lobodon carcinophagus*
 - Gray, *Halichoerus grypus*
 - Harbor, *Phoca groenlandica*, *Phoca vitulina*, *Pusa vitulina*
 - Harp, *Pagophilus groenlandica*
 - Hooded, *Cystophora cristata*
 - Leopard, *Hydrurga leptonyx*
 - Northern fur, *Callorhinus ursinus*
 - Ringed, *Phoca hispida*, *Pusa hispida*
 - Saimaa ringed, *Phoca hispida saimensis*
 - Spotted, *Phoca largha*
 - Weddell, *Leptonychotes weddell*
- Seaskaters (oceanic insects), *Halobates* spp., *Rheumobates* spp.
- Seatrout, spotted, *Cynoscion nebulosus*
- Sebertia acuminata*: 34 21.
- Secale cereale*: 5 2; 6 13; 11 26; 12 12; 24 36.
- Sedges, *Carex* spp.
- Seerasalmus* sp.: 29 39.
- Seiurus aurocapillus*: 25 24.
- Selenastrum capricornutum*: 12 45; 14 58, 71; 17 5, 22; 25 11; 26 53; 29 78; 31 51.
- Semibalanus balanoides*: 33 56.
- Semotilus margarita*: 33 62.
- Senecio jacobaea*: 19 41.

- Senecio* sp.: 33 10.
Sepia officinalis: 32 13; 33 20, 52.
Sepiotheuthis australis: 12 35.
Sergestes lucens: 12 30.
Serinus canarius: 17 39, 57; 23 31.
Seriola quinqueradiata: 9 9.
Serranus cabrilla: 33 24.
Sesarma cinereum: 4 10; 18 33.
Sesarma heamatocheir: 6 24.
Sesarma reticulatum: 25 17.
Setaria faberii: 26 38.
Setaria sp.: 33 37.
Setonix brachyurus: 30 34.
 Shad
 Gizzard, *Dorosoma cepedianum*
 Threadfin, *Dorosoma petenense*
 Various, *Dorosoma* spp., *Konosirus punctatis*
 Shag, imperial, *Phalacrocorax atriceps*
 Shark
 Blue, *Prionace glauca*
 Shortfin mako, *Isurus oxyrinchus*
 Tope, *Galeorhinus galeus*
 Various, *Carcharhinus* spp., *Mustelus*, *Sphyrna* spp.
 White, *Carcharodon carcharius*
 Whitetip, *Carcharhinus longimanus*
 Sharks: 10 40, 74; 34 26, 35.
 Shearwater, wedge-tailed, *Puffinus pacificus*
 Shearwaters: 26 30; 33 26.
 Sheep
 Bighorn, *Ovis canadensis*
 Domestic, *Ovis aries*, *Ovis* sp.
 Shelduck, *Tadorna tadorna*
 Shell
 Ivory, *Buccinum striatissimum*
 Pen, *Pinna nobilis*
 Spindle, *Hemifusus* spp.
 Shiner
 Blacktail, *Notropis venustus*
 Common, *Notropis cornutus*
 Golden, *Notemigonus crysoleucas*
 Spottail, *Notropis hudsonius*
 Shoveler, northern, *Anas clypeata*
 Shrew
 Common, *Sorex araneus*
 Least, *Cryptotis parva*
 Long-tailed, *Sorex minutus*
 Masked, *Sorex cinereus*
 Short-tailed, *Blarina brevicauda*
 Various, *Sorex* sp.
 Shrike, loggerhead, *Lanius ludovicianus*
 Shrimp
 Aesop, *Pandalus montagui*
 Brine, *Artemia salina*, *Artemia* sp.
 Brown, *Penaeus aztecus*
 Clam, *Eulimnadia* spp.
 Freshwater, *Paratya australiensis*
 Glass, *Palaemonetes kadiakensis*
 Grass, *Palaemonetes pugio*, *P. vulgaris*
 Korean, *Palaemon macrodactylus*
 Mysid, *Holmesimysis*, *Metamysidopsis*, *Mysidopsis*,
 Mysis
 Pink, *Penaeus duorarum*
 Sand, *Crangon allmanni*, *C. crangon*, *C. septempinosa*
 Tadpole, *Triops longicaudatus*
 Various, *Crangon*, *Lysmata*, *Metapenaeus ensis*,
 Palaemon, *Paratya australiensis*, *Penaeopsis*
 joyneri, *Penaeus*, *Sergestes lucens*
 White, *Penaeus setiferus*
 Shrimps: 5 17, 37; 6 35; 7 38, 47, 48; 9 iii, 8; 10 24; 12
 29, 30, 81; 13 19; 15 37; 18 30; 26 21; 32 15; 34 29,
 33.
Sialia sialis: 21 19; 29 83.
 Sicklepod, *Cassia* spp.
Siderastrea spp.: 21 9.
Siganus cramin: 26 25.
Sigara sp.: 22 11.
Sigmodon hispidus: 6 5, 15, 42; 24 8; 29 36, 42, 92, 93;
 30 35.
 Silkworm, *Bombyx mori*
Sillago bassensis: 12 56.
 Silverside
 Atlantic, *Menidia menidia*
 Inland, *Menidia beryllina*
 Tidewater, *Menidia peninsula*
Simocephalus serrulatus: 2 17; 9 10; 12 47; 21 31; 22
 11.
Simocephalus sp.: 4 9; 17 26.
Simulium sp.: 14 31.
Simulium vittatum: 25 13, 21.
Siphamia cephalotes: 26 37.
Siphonurus lacustris: 29 54.
 Siphonoptera: 9 3; 13 1.
 Sirenians: 26 33.
Sitophilus granarius: 23 20.
Sitta carolinensis: 30 24.
 Skate, little, *Raja erinacea*
Skeletonema costatum: 2 22; 12 50; 14 65; 15 38-40,
 43, 45, 47; 17 22; 20 16; 24 17; 25 11; 26 53, 85;
 32 20, 21, 72.
 Skimmer, black, *Rynchops niger*
 Skink, *Lerista pectorittata*, *Morethia boulengeri*,
 Tiliqua
 Skipper, mud, *Boleophthalmus dussumieri*
 Skua, great, *Catharacta skua*
 Skuas: 26 30
 Skunk, striped, *Mephitis mephitis*
 Skunks: 23 12; 30 38.
Skwala sp.: 25 13.

- Slippersnail, common Atlantic, *Crepidula fornicata*
- Slug
 Grey field, *Deroceras reticulatum*
 Various, *Agriolimax reticulatus*, *Arion* spp.,
Deroceras
- Smelt
 Rainbow, *Osmerus mordax*
 Top, *Atherinops affinis*
- Sminthopsis crassicaudata*: 30 35.
Sminthopsis macroura: 30 35.
- Snail
 Apple, *Pomacea paludosa*
 Land, *Helix aspersa*, *Arianta arbustorum*
 Mud, *Ilyanassa obsoleta*, *Nassarius obsoletus*,
Nassarius sp.
 Pond, *Cipangopoludina malleata*
 Ram's horn, *Helisoma trivolvis*
 Red, *Indoplanorbis exustus*
 Various, *Ammicola* sp., *Ancylus fluviatilis*, *Aplexa*
hypnorium, *Arcularia gibbosula*, *Arion* spp.,
Australorbis, *Biomphalaria* spp., *Bulinus* spp.,
Campeloma decisum, *Gillia altilis*, *Helisoma*, *Helix*,
Juga plicifera, *Lanistes carinatus*, *Lymnaea*,
Melanoides sp., *Mudalia potosensis*, *Murex*
brandaris, *Neritina* sp., *Physa*, *Planorbis corneus*,
Pomacea, *Thiara tuberculata*, *Viviparus*
- Snake
 Garter, *Thamnophis* sp.
 Gopher, *Pituophis catenifer*
 Northern water, *Nerodia sipedon*
 Various, *Elaphe obsoleta*
 Water, *Natrix* sp., *Nerodia*
 Western ribbon, *Thamnophis proximus*
- Snakehead, green, *Ophiocephalus punctatus*
- Snapper
 Mangrove, *Lutjanus griseus*, *Lutianus griseus*
 Various, *Lutianus fulviflamma*
- Solanum melongena*: 24 3.
Solanum sp.: 24 3.
Solanum tuberosum: 5 22; 12 6, 12; 14 27; 17 19; 21 5;
 22 2, 24; 28 3.
- Sole
 Dover, *Microstomus pacificus*
 English, *Pleuronectes vetulus* (formerly *Parophrys*
vetulus)
 Flathead, *Hippoglossoides elassodon*
 Sand, *Psettichthys melanostictus*
 Various, *Limanda* sp., *Solea solea*, *Trinectes*
maculatus
Solea solea: 7 8; 15 44.
Solenopsis invicta: 1 iii, 1, 11, 20, 21, 23, 24, 33; 13 1;
 21 28; 24 14, 16.
Solenopsis sp.: 19 23.
Solidago graminifolia: 7 11.
- Somateria mollissima*: 1 32; 2 9; 6 14; 31 53; 32 16, 19;
 33 27; 34 28.
Sorbus aucuparia: 29 56.
Sorex araneus: 14 47; 26 36, 37; 29 39, 57; 33 68; 34
 31, 35.
Sorex cinereus: 34 31.
Sorex minutus: 34 31.
Sorex sp.: 22 23; 33 33.
 Sorghum, *Sorghum halepense*, *Sorghum* spp., *Sorghum*
vulgare
Sorghum halepense: 3 22; 12 68; 21 6, 8; 22 2; 23 4, 12.
Sorghum spp.: 23 14, 15, 19; 24 36; 28 7; 33 69.
Sorghum sudanense: 23 4, 12, 19, 33; 33 69.
Sorghum vulgare: 18 iii, 1, 3, 12, 41.
 Soybean, *Glycine max*
- Sparrow
 Chipping, *Spizella passerina*
 House, *Passer domesticus*
 Song, *Melospiza melodia*
 Tree, *Passer montanus*
- Sparrowhawk, European, *Accipiter nisus*
- Spartina alterniflora*: 10 20; 12 53; 18 22, 26, 33; 34 22.
Spartina spp.: 6 9; 34 33, 35.
Sparus macrocephalus: 10 14.
Spermophilus beecheyi: 30 23, 35, 38.
Spermophilus spp.: 30 1, 3, 4, 38, 41.
Spermophilus variegatus: 5 24; 33 34.
Sphaerium sp.: 33 20.
Sphagnum spp.: 10 22; 29 58.
Sphoeroides maculatus: 27 8.
 Sphyngidae: 12 6.
Sphyrna spp.: 10 29.
- Spiders, *Araneus umbricatus*, *Argiope aurantia*,
Chiracanthium mildei, *Dysdera crocata*, *Lycosa* sp.,
Pardosa sp.
- Spiderwort, *Aribidopsis thaliana*
- Spilosoma* spp.: 30 15.
- Spinach, *Spinacia oleracea*
Spinacia oleracea: 11 35; 24 6, 10; 32 20; 34 21.
Spirodella oligorrhiza: 22 10; 30 15.
Spirogyra sp.: 22 3; 28 8; 33 3.
Spirorbis lamellora: 26 59.
Spirostomum ambiguum: 32 22.
Spisula solidissima: 26 57; 32 24, 29.
Spiza americana: 24 6, 8.
Spizella passerina: 2 27; 25 24.
Spodoptera eridania: 23 20.
Spodoptera littoralis: 25 9, 10.
Spodoptera litura: 24 6.
- Sponge
 Freshwater, *Ephydatia fluviatilis*, *Spongilla* sp.
 Various, *Halichondria* sp.
Spongilla sp.: 26 5.
 Spoonbill, white, *Platalea leucorodias*

- Spot, *Leiostomus xanthurus*
 Springtails, *Folsomia candida*, *Tullbergia granulata*
 Spruce, *Picea* spp.
Squalus acanthias: 12 32; 15 32; 33 25; 34 9, 45.
 Squash, *Cucurbita* spp.
Squatina squatina: 26 26.
 Squawfish, northern, *Ptychocheilus oregonensis*
 Squid, *Gonatopsis borealis*, *Illex illecebrosus*
argentinus, *Ommastrephes bartrami*, *Sepioteuthis*
australis, *Symplectoteuthis oualaniensis*
 Squids: 6 10; 34 33.
 Squirrel
 California ground, *Spermophilus beecheyi*
 Gray, *Sciurus carolinensis*
 Ground, *Citellus* spp., *Spermophilus* spp.
 Red, *Tamiasciurus hudsonicus*
 Rock, *Spermophilus variegatus*
 Various, *Sciurus*
 Sriebea, *Astyanax bimaculatus*
 Stanleya spp.: 5 6.
 Starfish, *Asterias*, *Luidia clathrata*
 Starling, European, *Sturnus vulgaris*
 Steelhead, *Oncorhynchus mykiss*
Stelgidopteryx serripennis: 14 40.
Stenella coeruleoalba: 10 38, 43; 26 35; 31 22, 31; 33
 29.
Stenonema sp.: 32 25.
Stenotomus chrysops: 31 50, 51; 34 26.
Sterna caspia: 31 40, 44.
Sterna forsteri: 4 6; 8 8, 13; 21 22; 31 44, 45, 60.
Sterna fuscata: 5 14.
Sterna hirundo: 2 10; 10 63; 14 82; 31 44, 53; 34 28, 35.
Sterna maxima: 5 14.
Sterna nilotica: 21 20.
Sterna paridisaea: 7 22; 31 39, 44.
Sternotherus minor minor: 29 32.
Sternotherus odoratus: 29 32.
Stichopus japonicus: 12 35.
Stichopus tremulus: 26 70.
 Stickleback
 Fourspine, *Apeltes quadracus*
 Threespine, *Gasterosteus aculeatus*
 Stilt, black-necked, *Himantopus mexicanus*
 Stitchbird, *Notiomystis cincta*
Stizostedion canadense: 2 11; 21 12.
Stizostedion vitreum vitreum: 2 11, 20; 6 26; 7 14; 10 29;
 28 13; 31 37; 33 62.
Stolothrissa sp.: 33 23.
Stomoxys calcitrans: 24 6; 25 10.
 Stork, white, *Ciconia ciconia*
 Strawberry, *Fragaria vesca*
Strepera graculina: 30 22, 24.
Streptococcus faecalis: 32 21.
Streptococcus zooepidemicus: 28 23.
Streptopelia capicola: 1 9.
Streptopelia risoria: 2 24; 7 36, 50, 53, 60; 8 23; 13 14;
 14 82, 83; 31 53.
Streptopelia senegalensis: 30 22.
Strigops habroptilus: 30 24.
Strix aluco: 31 44.
Strongylocentrotus franciscanus: 26 59.
Strongylocentrotus nudus: 33 56.
Strongylocentrotus purpuratus: 26 45, 59, 85; 29 27; 34
 43.
Strophites rugosus: 18 32.
 Sturgeon
 Atlantic, *Acipenser oxyrhynchus*
 Sevyuga, *Acipenser stellatus*
 Sheep, *Acipenser nudiiventris*
 Shovelnose, *Scaphirhynchus platyrhynchus*
Sturnella magna: 24 8.
Sturnella magna argutula: 8 8.
Sturnella neglecta: 9 29; 30 24.
Sturnus vulgaris: 1 6; 2 13; 3 12; 7 22, 32, 36, 40; 9 14;
 10 54, 62; 12 33; 13 13; 14 40, 41, 52, 84, 107; 21 19,
 23, 27, 34-36; 23 14, 32; 27 9-12; 29 83; 30 16, 22.
Stylodrilus sp.: 11 45.
 Sucker
 Bridgelip, *Catostomus columbianus*
 Largescale, *Catostomus macrocheilus*
 River carp, *Carpionodes carpio*
 White, *Catostomus commersoni*
 Sudex, *Sorghum bicolor* X *Sorghum sudanense*
 Sugarcane, *Saccharum officinarum*
Sula bassanus: 21 23, 27.
Sula leucogaster: 7 23.
Sula sp.: 26 42.
Sula sula: 5 14.
 Sunfish
 Green, *Lepomis cyanellus*
 Longear, *Lepomis megalotis*
 Orangespot, *Lepomis humilis*
 Redbreast, *Lepomis auritis*
 Redear, *Lepomis microlophus*
 Spotted, *Lepomis punctatus*
 Sunflower, *Helianthus* spp.
Sus scrofa: 29 38; 30 2, 5-7, 35, 37-39; 33 34.
Sus spp.: 5 26, 28-30, 39, 44; 8 1, 5; 9 iv, 8, 13, 14, 16,
 24, 27; 10 12, 54, 55; 12 6, 11, 70, 77, 81; 13 12; 14
 86, 98, 99; 17 2, 16, 50; 18 36; 19 21, 31, 40, 42; 20
 5; 21 5, 42; 23 4, 33, 34, 45; 25 2, 27, 31; 26 9, 10,
 12, 35, 46, 50, 77, 81, 89; 29 42, 49, 63, 67, 93, 94,
 96; 30 16, 24, 25, 35, 38, 41; 32 9; 33 2, 4, 9, 34, 39,
 44, 45, 65, 68, 74, 75, 77, 80, 81; 34 1, 30, 31, 37, 38,
 62.
 Swallow
 Barn, *Hirundo rustica*
 Northern rough-winged, *Stelgidopteryx serripennis*

- Tree, *Tachycineta bicolor*
 Welcome, *Hirundo neoxena*
- Swan
 Mute, *Cygnus olor*
 Trumpeter, *Cygnus buccinator*
 Tundra, *Cygnus columbianus*
- Swine, *Sus* spp.
 Swordfish, *Xiphias gladius*
Sylvilagus audubonii: 30 38.
Sylvilagus floridanus: 2 14; 7 41; 29 36; 33 37.
Sylvilagus sp.: 12 71; 30 2.
Symiodinium sp.: 29 65.
Symplectoteuthis oualaniensis: 33 20.
Synedra sp.: 26 66; 31 51.
Tabellaria sp.: 26 66.
Tachycineta bicolor: 21 23; 29 83; 31 44; 33 27, 42; 34 28, 35.
Tadorna tadorna: 29 41.
 Tadpoles: 12 11.
 Takake, *Notornis mantelli*
Talitrus saltator: 26 21.
Talorchestia deshayesii: 26 21.
Talpa europea: 5 24; 34 31.
 Tamarin, *Saguinus fuscicollis*
Tamenthypnum sp.: 34 32.
Tamias spp.: 30 3.
Tamias striatus: 17 51; 19 20; 29 93, 94.
Tamiasciurus hudsonicus: 2 14; 34 31.
 Tanager, scarlet, *Piranga olivacea*
Tanypus grodhausi: 25 10.
Tanytarsus dissimilis: 2 17; 5 31; 7 51; 14 60; 26 58, 84; 28 11; 32 25; 33 56.
Tanytarsus sp.: 25 22.
Tapes decussatus: 10 61.
Tapes japonica: 32 13.
Tapes philippinarum: 17 25; 21 10.
Tapes sp.: 31 23.
 Tapeworm: 12 3.
Taricha granulosa: 29 79, 80.
Taricha torosa: 21 17, 27.
 Tasmanian devil, *Sarcophilus harrisi*
 Tautog, *Tautoga onitis*
Tautoga onitis: 34 35.
Tautogolabrus adspersus: 32 20, 28.
Taxidea taxus: 19 20; 23 4, 12; 30 4, 35, 39.
 Tea, Labrador, *Ledum* sp.
- Teal
 Blue-winged, *Anas discors*
 Green-winged, *Anas carolinensis*
- Tellina tenuis*: 33 72.
Temora spp.: 26 69.
 Tench, *Tinca tinca*
Tenebrio molitor: 25 10.
- Termite
 Australian, *Mastotermes darwinensis*
 Rhodesian, *Trinervitermes dispar*
 Various, *Coptotermes*, *Heterotermes*, *Odontotermes*, *Reticulitermes flavipes*, *Microtermes*
- Tern
 Arctic, *Sterna paradisaea*
 Caspian, *Sterna caspia*
 Common, *Sterna hirundo*
 Forster's, *Sterna forsteri*
 Gull-billed, *Gelochelidon nilotica*, *Sterna nilotica*
 Royal, *Sterna maxima*
 Sooty, *Sterna fuscata*
- Terrapene carolina*: 1 21; 14 35; 29 32.
Tetraedron sp.: 13 18.
Tetrahymena pyriformis: 5 35; 7 45; 33 49.
Tetranychus mcdanieli: 15 65.
Tetranychus urticae: 15 65; 22 9; 24 14; 25 10.
Tetrao tetrix: 29 59.
Tetraselmis chui: 12 54.
Thais lapillus: 2 6.
Thais sp.: 33 73.
Thalassia testudinum: 34 32.
Thalassiosira aestivalis: 12 50.
Thalassiosira nordenskioldi: 25 11.
Thalassiosira pseudonana: 15 37, 39; 17 23; 24 17; 26 53, 67; 33 49.
Thalassiosira rotula: 34 40, 47.
Thalassiosira sp.: 32 20.
Thalassiosira weissflogii: 25 11; 26 10.
Thamnophis proximos: 24 6, 8.
Thamnophis sp.: 11 49; 21 17, 27.
Themisto spp.: 26 21; 33 21.
Theragra chalcogramma: 21 17.
Thermonectes basillaris: 25 12.
Thiara tuberculata: 33 52.
Thielaviopsis basicola: 23 13.
Thomomys sp.: 9 1.
- Thorn, box, *Lycium andersonii*
- Thrush
 Grey shrike, *Colluricincla harmonica*
 New Zealand, *Turnagra capensis*
 Song, *Turdus philomelos*
 Wood, *Hylocichla mustelina*
- Thunnus* spp.: 5 14; 10 40.
Thunnus albacares: 20 9; 29 31.
Thunnus alalunga: 29 30, 31.
Thunnus thynnus: 28 3; 33 25.
Thylogale billardierii: 30 5, 35, 37.
Thymallus arcticus: 26 15, 64; 32 28; 33 62; 34 45.
- Tick
 American dog, *Dermacentor variabilis*
 Cattle, *Haemaphysalis longicornis*
 Fever, *Boophilus* spp.

- Gulf Coast, *Amblyomma maculatum*
 Lone star, *Amblyomma americanum*
 Rocky mountain wood, *Dermacentor andersoni*
 Tropical horse, *Anocentor nitens*
Tigriopus californicus: 25 17.
Tigriopus japonicus: 33 56.
 Tilapia
 Mozambique, *Tilapia* (also *Oreochromis*)
mossambica
 Nile, *Oreochromus niloticus*
 Various, *Tilapia*
Tilapia mossambica: 14 49; 15 46; 24 25; 33 41.
Tilapia nilotica: 34 45, 47.
Tilapia sp.: 17 35.
Tilapia sparrmanii: 26 64.
Tilapia zilli: 26 64.
Tiliqua nigrolutea: 30 17.
Tiliqua rugosa: 30 11, 16, 17.
 Timothy, *Phleum pratense*
Tinca tinca: 33 6.
Tipula abdominalis: 25 24.
Tipula sp.: 4 9; 5 22.
Tisbe furcata: 33 56.
Tisbe holothuriae: 6 22; 26 12, 58, 84.
 Tit, great, *Parus major*
 Titmouse, tufted, *Parus bicolor*
 Toad
 American, *Bufo americanus*
 Egyptian, *Bufo regularis*
 European, *Bufo bufo*
 Fowler's, *Bufo fowleri*, *Bufo woodhousei fowleri*
 Giant, *Bufo marinus*
 Gulf coast, *Bufo valliceps*
 Narrow-mouthed, *Gastrophryne carolinensis*
 Various, *Bombina variegata*, *Bufo*
 Toadfish, Gulf, *Opsanus beta*, *Opsanus tau*
 Toadflax, bastard, *Comandra* spp.
 Tobacco, *Nicotiana tabacum*
Tolypothrix sp.: 18 25.
Tolypothrix tenuis: 18 14.
 Tomato, *Lycopersicon esculentum*
 Tomcod, *Microgadus tomcod*
Torpedo sp.: 24 12.
 Tortoise, gopher, *Gopherus polyphemus*
Tortrix viridana: 31 39.
Torulopsis glabrata: 34 40.
 Towhee
 Rufous-sided, *Pipilo erythrophthalmus*
 Various, *Pipilo* spp.
Trachemys scripta: 29 31, 80, 81.
Trachinotus carolinus: 33 62.
 Tree, tropical rainforest, *Dacryodes excelsa*
 Trematodes, *Schistosoma*
Trematomus bernacchii: 21 17.
Triaenodus tardus: 3 21.
Trichechus manatus: 7 25, 34; 33 29, 38, 42, 79.
Trichoderma viride: 18 13.
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clarki)
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gairdneri)
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 Trumpeter, six-lined, *Siphamia cephalotes*
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 Common box, *Terrapene carolina*
 Common mud, *Kinosternon sabrubrum*
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 Loggerhead musk, *Sternotherus minor minor*
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