



**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

**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

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### 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 <sup>a</sup>	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	Diflubenzuron	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)

<sup>a</sup>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.

### Acknowledgments

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- 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.
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- 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.
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- 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.
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**NOTE: Page numbers given in this PDF match the page numbers in the published paper copy of the reports. They do not match the pagination in the PDF versions posted on our website. Information on individual terms can be retrieved by opening the reports listed for that term, and using the search function in your Adobe Acrobat reader.**

### 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.  
1080: **30** 1-47.  
38023: **27** 4.  
Aatrex: **18** 3.  
Aatrex 4L: **18** 3.  
Aatrex 4LC: **18** 3.  
Aatrex 80W: **18** 3.  
Aatrex nine-o: **18** 3.  
AC 38023: **27** 4.  
Aceanthrylene: **11** 5.  
Acenaphthalene: **11** 47.  
Acenaphthanthracene: **11** 55.  
Acetamide: **30** 13.  
Acetone cyanohydrin: **23** 40, 46.  
Acetonitrile: **31** 12.  
Acetylaminofluorene: **11** 48.  
N-Acetylcysteine: **22** 5; **28** 7; **30** 12.  
N-Acetyl-D-glucosamine: **25** 20.  
N-Acetylglucosamine: **25** 4, 9.  
Acid copper chromate: **6** 42.  
Acraaldehyde: **28** 5.  
Acraldehyde: **28** 5.  
Acrolein: **28** 1-29.  
Acryldehyde: **28** 5.  
Acrylaldehyde: **28** 5.  
Acrylamide: **28** 13.  
Acrylic acid: **28** 3, 4, 6, 7, 24.  
Acrylic aldehyde: **28** 5.  
Acrylonitrile: **23** 6, 40, 46; **28** 13, 24.  
Actinium-227: **29** 7, 9, 16, 89, 96.  
Actinium-228: **29** 7, 9.  
Adiponitrile: **23** 11.  
AG-500: **9** 3.  
Agent orange: **8** 3, 5, 29.  
Agmatrin: **24** 4.  
Alachlor: **17** 3.  
Aldehyde dehydrogenase: **28** 13, 15, 22.  
Aldrin: **21** 42.  
Alfa-tox: **9** 3.  
Alkyl isocyanates: **23** 6.  
Alkylmercury: **10** 41.  
Alkyl phenols: **22** 2.  
Allethrin: **24** 2, 11.  
Alltox: **4** 3.  
Allyl alcohol: **28** 3, 6.  
Allyl aldehyde: **28** 5.  
Allylamine: **28** 24, 25.  
Allyl formate: **28** 3.  
Aluminum: **15** 70; **19** 1; **28** 3; **33** 8, 39, 71; **34** 59.  
Aluminum oxide: **20** 4.  
Amdro: **1** 34.  
American Cyanamid 38023: **27** 4.  
Americium-241: **29** 7, 14, 15, 20, 21, 24-26, 28, 34, 35, 38-40, 43, 46, 72, 78, 88, 89, 91, 97, 98, 101, 102, 105.  
Americium-243: **29** 7, 101.  
*p*-Aminobenzenearsonic acid: **12** 49, 52.  
*Alpha*-amino-butyronitrile: **23** 19.  
2-Amino-4-chloro-6-ethylamino-1,3,5-triazine: **18** 41.  
2-Amino-4-chloro-6-isopropylamino-1,3,5-triazine: **18** 41.  
*p*-Aminopropiophenone: **23** 10, 11; **30** 41.  
2-Aminothiazoline-4-carboxylic acid: **23** 8.  
Amitrol: **22** 3.  
Ammonia: **23** 19, 28, 46.  
Ammonium chromate: **6** 41.  
Ammonium diuranate: **29** 13.  
Ammonium hexacyanoferrate: **29** 55, 62, 90.  
Ammonium hydroxide: **34** 5.  
Ammonium molybdate: **19** 38; **33** 75, 78.  
Ammonium paramolybdate: **19** 38.  
Ammonium thiocyanate: **23** 11.

Amygdalin: **23** 3, 13, 46.  
Amylnitrite: **23** 50.  
Angeleside: **14** 5.  
Aniline: **23** 10.  
Anisoles: **17** 5, 19, 52; **31** 39.  
Anthanthrene: **11** 5, 47.  
Anthracene: **11** 5, 7, 10, 16, 17, 19, 20, 25, 40, 41, 45, 48, 52; **31** 39.  
Antimony: **5** 30; **32** 5.  
Antimony-124: **29** 5.  
Antimony-125: **29** 6, 21, 24, 27, 43-46, 58.  
Antimony-127: **29** 6.  
Apirolio: **7** 5.  
Aqualin: **28** 5.  
Aquilin: **28** 5.  
Argentite: **32** 2.  
Argentum: **32** 5.  
Argentum crede CI 77820: **32** 5.  
Argon-39: **29** 5, 13.  
Aroclor 1016: **7** 5, 26, 27, 32, 37, 38, 48, 51, 54; **31** 14, 15, 20, 35, 54.  
Aroclor 1221: **7** 5, 6, 26, 27, 38, 40-42, 49, 54, 55; **31** 14, 35.  
Aroclor 1232: **7** 6, 38, 40-42, 50; **31** 35.  
Aroclor 1242: **7** 5-8, 10, 12, 14, 30, 37, 38, 40-42, 47-51, 54; **31** 14, 15, 20, 35, 61.  
Aroclor 1246: **31** 54.  
Aroclor 1248: **7** 6, 7, 13, 14, 30, 37, 38, 40-42, 50, 51, 54, 55, 60; **31** 15, 24, 35, 52, 55, 61.  
Aroclor 1254: **7** 5-8, 12-14, 26, 27, 30, 31, 35-55, 57; **31** 14, 15, 20, 24, 35, 52, 54-57, 59-61.  
Aroclor 1260: **7** 6-9, 13, 14, 30, 31, 34, 37, 38, 40-42, 48, 51, 53; **31** 14, 15, 24, 35, 52, 60.  
Aroclor 1262: **7** 6, 38, 40-42.  
Aroclor 1268: **7** 6, 38, 41-43, 55.  
Arsanilic acid: **12** 59, 63, 68, 69, 76, 81.  
Arsenates: **12** 1-81.  
Arsenic: **2** 31; **5** 27, 30, 38; **12** 1-92; **14** 54; **15** 16, 49; **26** 12; **28** 4; **32** 5; **33** 36, 69, 73; **34** 8, 64.  
Arsenic acid: **12** 4, 5, 63, 68.  
Arsenic pentoxide: **12** 62.  
Arsenic sulfides: **12** 7, 8, 15.  
Arsenic trioxide: **12** 3, 5, 7, 8, 62, 63, 65-67, 69, 72.  
Arsenites: **12** 1-81.  
Arsenobetaine: **12** 14, 27, 30, 35, 36, 81.  
Arsenous acid: **12** 10.

Arsines: **12** 7, 9, 10, 79.  
Arsonous acid: **12** 10.  
Arsphenamine: **12** 4.  
Asana: **24** 2.  
Asarco: **26** 6.  
Ascorbic acid: **2** 24; **11** 57; **14** 15; **23** 11; **28** 7; **33** 7, 10.  
Aspon: **21** 4.  
Astatine-215: **29** 7, 9.  
Astatine-218: **29** 7, 9.  
Astatine-219: **29** 7, 9.  
Atranex: **18** 3.  
Atratol: **18** 3.  
Atratol 80W: **18** 3.  
Atratol 8P: **18** 3.  
Atrazine: **3** 21; **17** 3; **18** 1-53.  
Atrazine 4L: **18** 3.  
Atrazine 80W: **18** 3.  
Atred: **18** 3.  
BAL: **34** 65.  
Barium: **34** 9.  
Barium-140: **29** 6, 13, 22, 32, 33, 46, 53, 83.  
Barium sulphonate: **6** 35.  
Basudin: **9** 3.  
Bay 70142: **3** 3.  
Belmark **24**: 4.  
Belt: **21** 4.  
Bentonite: **29** 62.  
Benz(a)anthracene: **11** 6, 7, 16-20, 25, 27-34, 37, 40, 47, 52, 53, 55, 63.  
Benzaldehyde: **23** 13.  
Benzene: **1** 2; **8** 6; **17** 7; **27** 4.  
Benzo(a)fluorene: **11** 5.  
Benzo(a)perylene: **11** 16.  
Benzo(a)pyrene: **11** 1-63; **20** 5; **28** 24; **34** 12, 13.  
Benzo(b)fluoranthene: **11** 6, 17-19, 28, 32, 52, 53, 61.  
Benzo(b)fluorene: **11** 5.  
Benzo(c)fluorene: **11** 5.  
Benzo(c)phenanthrene: **11** 6.  
Benzo(e)pyrene: **11** 5, 16, 20, 32, 47, 56.  
Benzo(g,h,i)fluoranthene: **11** 5.  
Benzo(g,h,i)perylene: **11** 5, 7, 16, 18, 19, 23, 25, 26, 47, 52, 61.  
Benzo(j)fluoranthene: **11** 6, 61.  
Benzo(k)fluoranthene: **11** 5, 16, 17, 19, 52, 61.



Benzo(k)fluorene: **11** 23.  
Benzyl isothiocyanate: **11** 35.  
Beryllium-7: **29** 3, 5, 12.  
Beryllium-10: **29** 3, 5.  
Beta-ecdysone: **25** 20.  
2-(Beta-D-glucopyranosyloxy)-isobutyronitrile: **23** 34.  
Beta-dimethylcysteamine: **28** 7.  
Beta-hydropropionaldehyde: **28** 5.  
Beta-hydroxypropionaldehyde: **28** 5.  
Beta-propionaldehyde: **28** 7.  
Bicep: **18** 3.  
Bicep 4.5L: **18** 3.  
Bincennite: **23** 12.  
Biphenylenes: **8** 29.  
4,4'-Bipyridyl: **22** 7.  
O,N-Bisdesmethylfampur: **27** 3, 5, 17, 19, 20.  
Bismuth: **19** 3.  
Bismuth-207: **29** 44, 45, 96.  
Bismuth-210: **29** 6, 8, 9, 85.  
Bismuth-211: **29** 6, 9.  
Bismuth-212: **29** 6, 9.  
Bismuth-214: **29** 6, 8, 9, 95.  
Bismuth-215: **29** 6, 9.  
Bismuth subnitrate: **23** 10.  
Blue copperas: **33** 4.  
Blue powder: **26** 6.  
Blue vitriol: **33** 4.  
Bo-Ana: **27** 4.  
Boracite: **20** 2.  
Boranes: **20** 2.  
Borates: **20** 1-29.  
Borax: **20** 1-29.  
Borax pentahydrate: **20** 3.  
Bordeaux mixture: **33** 4.  
Boric acid: **20** 1-29.  
Boric oxide: **20** 3, 26.  
Boron: **20** 1-32.  
Boron-10: **20** 3, 5.  
Boronatocalcite: **20** 2.  
Boron oxide: **20** 24, 25, 28.  
Boron tribromide: **20** 5, 28.  
Boron trichloride: **20** 3, 5.  
Boron trifluoride: **20** 3, 5, 17, 25, 26.  
Brodan: **13** 4.

Brodifacoum: **30** 6, 41.  
Bromphemothrin: **24** 11.  
Butyltins: **15** 5, 22, 23, 25, 31, 35, 54.  
Bypyridine: **22** 2.  
N-Butyronitrile: **23** 40.  
Cacodylic acid: **12** 4, 6, 38, 40, 41, 53, 57, 59, 62, 63, 65, 67, 68, 70, 71, 73.  
Cadmium: **2** 1-46; **5** 27, 36, 38; **6** 18, 25, 32; **10** 60; **12** 12; **14** 9, 15, 54, 56, 57; **15** 49, 63; **26** 10-12, 14, 39, 40, 43, 47, 49, 65, 66, 70; **29** 77; **31** 54; **32** 19, 26; **33** 6, 8, 36, 39, 41, 69, 70; **34** 4, 8, 9, 12, 34, 35, 43, 64, 65.  
Cadmium-109: **2** 27, 30; **29** 5, 84.  
Cadmium-113m: **29** 5, 21.  
Cadmium-115: **29** 3, 5.  
Cadmium-115m: **2** 30 **29** 5.  
Cadmium chloride: **2** 24, 31.  
Cadmium cyanide: **23** 5, 6.  
Cadmium fluoride: **2** 19.  
Cadmium fluroborate: **2** 19.  
Cadmium selenide: **5** 4.  
Cadmium sulfate: **23** 24.  
Calciferol: **30** 41.  
Calcineurin: **34** 9.  
Calcium-45: **29** 5, 13, 14.  
Calcium arsenate: **12** 5, 6, 38, 39, 64, 66, 71.  
Calcium borate: **20** 23, 24, 28.  
Calcium carbonate: **20** 16, 17.  
Calcium cyanamide: **23** 11.  
Calcium cyanide: **23** 4, 11, 35.  
Calcium glutonate: **30** 7, 12, 31, 40.  
Calcium molybdate: **19** 33, 38.  
Calcium sodium EDTA: **33** 10.  
Calcium trisodium diethylnitramine penta acetic acid: **33** 10.  
Californium-252: **29** 7, 98, 102, 105.  
Calmodulin: **34** 9, 58.  
Camphechlor: **4** 3.  
Captafol **3**: 21, 22.  
Captan: **9** 29.  
Carbaryl: **9** 29.  
Carbofuran: **3** 1-36.  
Carbofuran-7-phenol: **3** 4, 6, 25, 27.  
Carbon-14: **29** 3-5, 10, 12-14, 19, 20, 25-28, 30, 101.  
Carbon tetrachloride: **1** 2; **11** 35; **17** 7; **21** 42; **23**

11; **26** 12.  
 Carbonyl nickel powder: **34** 5.  
 Carbopol: **30** 14.  
 Carboxymethylcellulose: **22** 2.  
 4-Carboxy-l-methylpyridium ion: **22** 7.  
 CAS 52-85-7: **27** 4.  
 CAS 87-86-5: **17** 6.  
 CAS 107-02-8: **28** 5  
 CAS 131-52-2: **17** 7.  
 CAS 333-41-5: **9** 3.  
 CAS 1563-66-2: **3** 3.  
 CAS 1910-42-5: **22** 4.  
 CAS 1912-24-9: **18** 3.  
 CAS 2385-85-5: **1** 2.  
 CAS 2921-88-2: **13** 4.  
 CAS 4685-14-17: **22** 4.  
 CAS 5103-71-9: **21** 4.  
 CAS 5103-74-2: **21** 4.  
 CAS 7440-02-0: **34** 5.  
 CAS 7440-22-4: **32** 5.  
 CAS 7440-50-8: **33** 4.  
 CAS 7440-66-6: **26** 6.  
 CAS 7646-85-7: **26** 6.  
 CAS 7733-02-0: **26** 6.  
 CAS 7758-98-7: **33** 4.  
 CAS 7761-88-8: **32** 5.  
 CAS 35367-38-5: **25** 3.  
 CAS 51630-58-1: **24** 4.  
 Cassiterite: **15** 12.  
 Catechols: **17** 5, 52.  
 CD-68: **21** 4.  
 Cekuquat: **22** 4.  
 Celatom MP-78: **23** 12.  
 Cerium: **29** 77.  
 Cerium-141: **29** 6, 10, 18, 26, 30, 33, 46, 53, 54, 61.  
 Cerium-143: **29** 6, 13.  
 Cerium-144: **29** 6, 10-13, 18, 21, 22, 24, 26, 30, 33, 44-46, 53, 54, 58, 60, 61, 75, 97.  
 Cerium chloride: **22** 5.  
 Ceruloplasmin: **33** 5, 7, 10.  
 Cerusite: **14** 5.  
 Cesium: **29** 77.  
 Cesium-134: **29** 6, 13, 26, 31-35, 37, 39, 46, 48-55, 57-61, 63, 64, 83, 88, 96, 99, 100.  
 Cesium-135: **29** 6, 101.  
 Cesium-137: **29** 3, 4, 6, 10, 12-14, 18-46, 48-64, 67, 68, 76-78, 81-84, 88, 90, 96-102, 104, 105.  
 CH<sub>2</sub>COOK: **30** 2.  
 CH<sub>2</sub>FCOOH: **30** 2.  
 CH<sub>2</sub>FCOONa: **30** 1-47.  
 Chalcocite: **33** 2.  
 Chalcopyrite: **14** 5; **33** 2.  
 Chem-penta: **17** 6.  
 Chemtrol: **17** 6.  
 Chitin: **25** 2-4, 9, 20, 24.  
 Chitinase: **25** 4.  
 Chitin synthetase: **25** 2, 4, 10.  
*Alpha*-chloralase: **30** 41.  
 Chlordan: **21** 4.  
 Chlor-dan: **21** 4.  
*Alpha*-chlordane: **21** 3.  
 Chlordane: **3** 1; **21** 1-49.  
*Cis*-chlordane: **21** 1-44.  
*Gamma*-chlordane: **21** 3.  
*Trans*-chlordane: **21** 1-44.  
 Chlordene: **21** 2-5, 13, 27, 29, 41, 42.  
 3-Chlordene: **21** 42.  
 Chlordene epoxide: **21** 41, 42.  
 Chloretol: **7** 5.  
 Chlorfluzaron: **25** 10.  
 Chlorinated camphene: **4** 2, 3.  
 Chlorinated diphenyl ethers: **17** 5, 40, 52.  
 Chlorindan: **21** 4.  
 Chlor-kil: **21** 4.  
 2-Chloro-4-amino-6-isopropylamin-s-triazine: **18** 26.  
 4-Chloroaniline: **25** 1, 3, 4, 18, 19, 24, 27, 31.  
 Chloroanisoles: **17** 40.  
 Chlorobenzenes: **8** 6; **31** 19.  
 2-Chlorobiphenyl: **31** 21.  
 4-Chlorobiphenyl: **31** 54.  
 4'-Chloro-3,4-biphenyldiol: **31** 59.  
 4'-Chloro-4-biphenylol: **31** 59.  
 2-Chlorochlordene: **21** 41, 42.  
 3-Chlorochlordene: **21** 41.  
 Chlorodane: **21** 4.  
 2-Chloro-4,6-diamino-1,3,5-triazine: **18** 41.  
 2-Chloro-4-ethylamino-6-isopropylamino-1,3,5-triazine: **18** 1-46.  
 4-Chloro-*alpha*-(1-methylethyl\_benzeneacetic acid cyano (3-phenoxyphenyl)methyl ester: **24** 4.

Chloroform: **8** 6; **18** 5, 26.  
4'-Chloroformanilide: **25** 10.  
Chlorohydrin: **21** 5, 29.  
4-Chloro-4'-hydroxybiphenyl: **31** 54.  
4'Chloro-3-methoxy-4-biphenylol: **31** 59.  
Chlorophen: **17** 6.  
Chlorophenols: **17** 3, 5, 11, 18, 52.  
N-[[4-Chlorophenyl]amino]carbonyl]-2,6-difluorobenzamide: **25** 3.  
N-[[4-Chlorophenyl]amino]carbonyl]-2,6-difluoro-3-hydroxybenzamide]: **25** 31.  
1-(4-Chlorophenyl)-3-(2,6-difluorobenzoyl)urea: **25** 1-3.  
4-Chlorophenyl isocyanate: **25** 3.  
2-(4-Chlorophenyl)-3-methylbutyric acid: **24** 28.  
3-(4-Chlorophenyl) isovaleric acid: **24** 12.  
Chlorophenylols: **31** 59.  
4-Chlorophenylurea: **25** 1-4, 10, 18, 24, 27, 31.  
Chlorpyrifos: **1** 33; **13** 1-34.  
Chlorpyrifos oxon: **13** 10.  
Chlorpyrifos-ethyl: **13** 4.  
Chlortox: **21** 4.  
Cholanthrene: **11** 6, 55.  
Cholecalciferol: **30** 41.  
Cholesterol (2R)-2-(4-chlorophenol) isovalerate: **24** 13.  
Cholestyramine: **17** 41.  
Chromate ion: **6** 3, 19, 39.  
Chromate zinc phosphate: **6** 42.  
Chromated copper arsenate: **6** 42; **33** 18, 35, 39, 40, 73.  
Chrome lignosulphonate: **6** 35, 41.  
Chromic oxide: **6** 3.  
Chromite: **6** 2.  
Chromium: **5** 38; **6** 1-60; **19** 6, 29; **23** 28; **26** 12; **29** 77; **31** 20; **34** 8, 9, 12, 43, 64.  
Chromium-51: **6** 37, 40, 42 **29** 5, 32, 33, 83.  
Chrysene: **11** 6, 18-20, 28, 32, 37, 40, 43, 45, 47, 50, 52.  
Cl 77949: **26** 6.  
C. I. No. 77775: **34** 5.  
Cl pigment metal: **26** 6.  
Cinchocaine chloride: **20** 21.  
Cismethrin: **24** 2, 11.  
CL 38023: **27** 4.  
Clofibrate: **22** 5.

Clophen: **7** 5, 36.  
Clophen A-50: **7** 48.  
Clophen A 60: **7** 5.  
Clor chem T-590: **4** 3.  
Cobalt: **19** 3; **26** 10, 67; **29** 77; **33** 40; **34** 8, 9, 12.  
Cobalt-57: **29** 5, 14, 16, 26, 27, 44.  
Cobalt-58: **29** 5, 13, 14, 16, 24, 83.  
Cobalt-60: **29** 5, 13, 14, 16, 20, 22, 24-27, 29-32, 37, 43-46, 58, 83, 84, 87, 96, 98, 102, 105.  
Cobalt chloride: **23** 10; **25** 27, 29.  
Cobalt cyanide: **23** 6, 18.  
Cobalt edetate: **23** 10.  
Cobalt histidine: **23** 10.  
Colemanite: **20** 2.  
Colestipol hydroxide: **17** 39.  
Collargo: **32** 31.  
Compound 1080: **30** 1-41.  
Co-op: **18** 3.  
Co-op atra-pril: **18** 3.  
Copper: **2** 1, 16, 24, 26, 31; **5** 6, 7, 26, 27, 36; **10** 4; **12** 5; **14** 15, 57; **15** 1, 16, 49, 63; **19** 1, 3-6, 19-21, 30-37, 39, 41, 42, 44, 46, 49; **22** 6; **26** 4, 8, 9, 11-13, 43, 44, 47, 48, 66, 75, 79, 82, 87; **31** 20; **32** 2, 5, 9, 11, 12, 19, 29, 26, 30, 31, 35, 37; **33** 1-98; **34** 4, 8, 9, 19, 36, 59, 64.  
Copper-63: **33** 4.  
Copper-64: **29** 5; **33** 6, 10.  
Copper-65: **33** 4.  
Copper acetoarsenite: **12** 57-60, 71.  
Copper acetyl acetonate: **33** 3.  
Copper aquo ion: **33** 5.  
Copper arsenate: **12** 5.  
Copper carbonate: **33** 3, 5, 6.  
Copper carbanato species: **33** 5, 80.  
Copper chloride: **33** 3, 5, 66, 74.  
Copper cyanide: **23** 6, 18, 27.  
Copper dimethyl dithiocarbamate: **33** 3.  
Copper glutamate: **33** 66.  
Copper hydroxide: **33** 5.  
Copper 8-hydroxyquinoline: **33** 10.  
Copper nitrate: **33** 5.  
Copper oxide: **33** 3.  
Copper pentachlorate: **33** 3.  
Copper ricinoleate: **33** 3.  
Copper rosinate: **33** 3.  
Copper sulfate: **19** 1, 5, 31, 39; **33** 1-98.

Copper (II) sulfate: **33** 4.  
 Copper-tartaric acid: **33** 3.  
 Copper-zinc superoxide dismutase: **33** 5.  
 Corodane: **21** 4.  
 Coronene: **11** 3, 5, 16.  
 Cortilan-neu: **21** 4.  
 Coumatetralyl: **30** 6.  
 CPIA-carboxyesterase: **24** 13.  
 CPIA-cholesterol ester: **24** 13, 14.  
 Cresylic acid: **33** 73.  
 Crioazine: **18** 3.  
 Crisquat: **22** 4.  
 Cristatrina: **18** 3.  
 Cristoxo: **4** 3.  
 Cupric acetate: **33** 9.  
 Cupric hydroxide: **33** 5.  
 Cupric oxide: **33** 5.  
 Cupric selenide: **5** 4.  
 Cupric sulfate: **33** 4.  
 Cupric sulfide: **33** 5.  
 Cupric sulphate: **33** 4.  
 Cuprous arsenite: **12** 5.  
 Cuprous oxide: **15** 70.  
 Curaterr: **3** 3.  
 Curium-241: **29** 7.  
 Curium-242: **29** 7, 14, 25, 39, 46.  
 Curium-243: **29** 7, 39, 46.  
 Curium-244: **29** 7, 15, 39, 40, 46, 78.  
 Curium-247: **29** 7, 15.  
 Curium-248: **29** 7, 15.  
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 Cyanic acid: **23** 6.  
 Cyanide: **23** 1-55; **32** 2; **33** 5.  
 Cyanides, weak-acid dissociable: **23** 32.  
 Beta-Cyanoalanine: **23** 19  
 Cyanocobalamin: **23** 8, 10.  
 Cyanogen: **23** 6, 11.  
 Cyanogen bromide: **23** 11, 38.  
 Cyanogen chloride: **23** 11, 18, 38.  
 Cyanogenic glycosides: **23** 1-50.  
 Cyanohydric acid: **23** 5.  
 Cyanohydrins: **23** 6.  
 Cyanophenoxybenzyl pyrethroids: **24** 1-39.  
*Alpha*-Cyano-3-phenoxybenzyl *alpha*-(4-chlorophenyl) isovalerate: **24** 4.  
*Alpha*-Cyano-3-phenoxybenzyl 2-(4-chlorophenyl)-3-methylbutyrate: **24** 4.  
*Alpha*-Cyano-3-phenoxybenzyl alcohol: **24** 2, 3, 11.  
 (RS) *alpha*-Cyano-3 phenoxybenzyl (RS) 2-4-chlorophenyl-3-methylbutyrate: **24** 1-39.  
 Cyano (3-phenoxyphenyl) methyl 4-chloro-*alpha*-(1-methylethyl)benzeneacetate: **24** 4.  
 Cycasin: **23** 3.  
 Cyclam: **34** 9.  
 Cyclethrin: **24** 2.  
 Cyclohexanediamine tetraacetic acid: **34** 9.  
 Cyclophosphamide: **28** 3, 6, 24.  
 Cyflee: **27** 4.  
 Cypermethrin: **24** 2, 11.  
 Cyclopentadiene: **21** 2.  
 Cysteine: **22** 5; **28** 7.  
 Cysteamine: **30** 12.  
 D-1221: **3** 3.  
 2,4-D: **8** 8, 29; **22** 3.  
 Dalapon: **22** 3.  
 Dazzel: **9** 3.  
 DDD: **4** 7.  
 DDE: **4** 3, 7; **7** 32, 48, 52; **10** 50; **21** 42; **31** 39.  
 DDT: **1** 18, 24, 31; **3** 1; **4** 3, 17, 19; **7** 52; **10** 63; **21** 5, 8; **26** 40, 66; **31** 19, 60.  
 Decaborane: **20** 2, 3, 5, 22, 23, 26, 28.  
 Decachlorobiphenyl: **31** 8, 17, 26.  
 Decarboxy fenvalerate: **24** 10, 12.  
 Dechlorane: **1** 1, 2, 26, 27.  
 Dechlorane 510: **1** 2.  
 Dechlorane 4070: **1** 2.  
 Deethylated atrazine: **18** 2, 12, 17, 26, 36.  
 Deethylhydroxyatrazine: **18** 12, 34.  
 Deflubenzon: **25** 3.  
 Dehydroascorbic acid: **23** 11.  
 Dehydrodiazinon: **9** 24.  
 Deisopropylated atrazine: **18** 2, 26, 36.  
 Deisopropylhydroxyatrazine: **18** 12.  
 Delor: **7** 5.  
 Deltamethrin: **24** 2, 11.  
 N-Desmethylfamphur: **27** 3, 7, 17.  
 O-Desmethylfamphur: **27** 3, 5, 17, 19, 20.  
 Dextrone: **22** 4.  
 Dextrone X: **22** 4.  
 Dexuron: **22** 4.  
 DFP: **30** 41.

Dhurrin: **23** 14.  
 Diagan: **9** 3.  
 Dialkyllead: **14** 11.  
 Dialkylorganotins: **15** 8.  
 Dialkyltins: **15** 35, 49, 50, 67.  
 Diaminoatrazine: **18** 26.  
 Dianon: **9** 3.  
 DiaterrFos: **9** 3.  
 Diazajet: **9** 3.  
 Diazatol: **9** 3.  
 Diazepam: **24** 13.  
 Diazide: **9** 3.  
 Diazinon: **1** 33; **9** 1-37.  
 Diazinon AG 500: **9** 16.  
 Diazinon 4E: **9** 13, 16.  
 Diazinon 4S: **9** 16.  
 Diazinon 14G: **9** 9, 16, 29.  
 Diazinon 50 W: **9** 16.  
 Diazol: **9** 3.  
 Diazoxon: **9** 6, 17, 23-25, 28.  
 Dibenz(a,c)anthracene: **11** 6, 52, 56.  
 Dibenz(a,h)anthracene: **11** 6, 19, 37, 52, 56, 63.  
 Dibenz(a,j)anthracene: **11** 6, 52.  
 Dibenzo(a,c)fluorene: **11** 6.  
 2,3,7,8-Dibenzofuran: **8** 6, 7.  
 Dibenzofurans: **8** 29; **17** 2, 3, 5, 8, 9, 13, 18, 21, 40, 42, 52; **31** 39.  
 Dibenzo(a,e)pyrene: **11** 6, 53.  
 Dibenzo(a,g)fluorene: **11** 6.  
 Dibenzo(a,h)fluorene: **11** 6.  
 Dibenzo(a,h)pyrene: **11** 6, 53.  
 Dibenzo(a,i)pyrene: **11** 6, 53.  
 Dibenzo(a,l)pyrene: **11** 6.  
 Diborane: **20** 2, 3, 28.  
 Dibutylmethyltins: **15** 5.  
 Dibutylorganotins: **15** 8, 52.  
 Dibutyltin dichloride: **15** 36, 52, 67.  
 Dibutyltin disulfide: **15** 67.  
 Dibutyltins: **15** 11, 22, 24, 26, 30, 31, 54, 63, 68.  
 Dichlorobenzene: **8** 6.  
 2,2'-Dichlorobiphenyl: **31** 21.  
 2,4'-Dichlorobiphenyl: **7** 7.  
 2,6'-Dichlorobiphenyl: **31** 21.  
 4,4'-Dichlorobiphenyl: **7** 8.  
 Dichlorobiphenyls: **31** 4, 21, 25, 32.  
 Dichlorobornane: **4** 2.  
 Dichlorochlordene: **21** 4, 5, 29.  
 4,4'-Dichloro-3-biphenylol: **31** 59.  
 1,2-Dichlorochlordene: **21** 4, 5.  
 Dichlorodene: **21** 4.  
 2,8-Dichlorodibenzodioxin: **8** 25.  
 Dichloromaleic acid: **17** 11.  
 2,4-Dichlorophenol: **17** 8.  
 Dichlorophenols: **17** 11.  
 Dichromate ion: **6** 3.  
 Dicobalt ethylenediamine tetraacetic acid: **23** 10.  
 Dicrotophos: **27** 12.  
 Dicyclohexyltin dichloride: **15** 36.  
 Dieldrin: **1** 24, 31; **4** 3, 7; **7** 52; **21** 27.  
 Diethyldithiocarbamate: **22** 18.  
 Diethylenetriamine pentaacetic acid: **34** 9.  
 Diethyl 2-isopropyl-6-methylpyrimidin-4-yl phosphate: **9** 6.  
 Diethyllead: **14** 67.  
 Diethylnitrosamine: **28** 24; **34** 11.  
 Diethylorganotins: **15** 8.  
 Diethyl phosphoric acid: **9** 24.  
 Diethyl phosphorothioic acid: **9** 24.  
 Diethyltin dichloride: **15** 36.  
 Diethyltin diiodide: **15** 1.  
 Diethyltins: **15** 15, 54.  
 N-N-Diethyl-*m*-toluamide: **24** 36.  
 0,0-Diethyl-0-(3,5,6-trichloro-2-pyridyl) phosphate: **13** 10.  
 0,0-Diethyl-0-(3,5,6-trichloro-2-pyridyl) phosphorothioate: **9** 29.  
 Diflubenuron: **25** 3.  
 Diflubenzuron: **25** 1-36.  
 3-OH-Diflubenzuron: **25** 27.  
 Difluoroacetone: **30** 12.  
 2,6-Difluorobenzamide: **25** 1, 3, 4, 10, 24, 31.  
 2,6-Difluorobenzoic acid: **25** 1-4, 10, 24, 27, 31.  
 1-(2,6-Difluorobenzoyl)-3-(4-chlorophenyl)urea: **25** 3.  
 2,6-Difluorohippuric acid: **25** 31.  
 2,6-Difluoro-3-hydroxydiflubenzuron: **25** 31.  
 1,3-Difluoro-2-propanol: **30** 12, 41.  
 2,3-Dihydro-2,2-dimethyl-7-benzofuranyl methyl carbamate: **3** 3.  
 2,8-Dihydromirex: **1** 28.  
 3,8-Dihydromirex: **1** 28.

Dihydrotoxinin: **24** 12.  
 Dihydroxybiphenyls: **17** 5, 52; **31** 59.  
 4,4'-Dihydroxy 3,5,3',5'-tetrachlorobiphenyl: **31** 59.  
 4,4'-Dihydroxy 2',3',5',6'-tetrachlorobiphenyl: **31** 59.  
 Dihydroxydihydrochlorodene: **21** 29.  
 Dihydroxyheptachlor: **21** 29.  
 2,3-Dimercapto-1-propane sulfonic acid: **26** 12.  
 2,3-Dimercaptopropanol: **10** 11; **34** 65.  
 N-(2,3-Dimercaptopropyl) phthalamidic acid: **12** 12.  
 2,3-Dimercaptosuccinic acid: **26** 12.  
 Dimethoate: **1** 33.  
 Dimethoxytetrachlorobenzenes: **17** 19.  
 4-Dimethylaminophenol: **23** 1, 10.  
 O-[4-1(Dimethylamino)sulfonyl] phenyl phosphorothioic acid O,O-dimethyl ester: **27** 4.  
 Dimethylarsenic acid: **12** 55.  
 Dimethylarsinate: **12** 10, 35, 64.  
 Dimethylarsine: **12** 9.  
 Dimethylarsinic acid: **12** 8, 10, 12, 20, 49, 52, 73.  
 Dimethylarsinous acid: **12** 10.  
 Dimethylbenz(a)anthracene: **11** 6, 56; **26** 14.  
 7,12-Dimethylbenz(a)anthracene: **11** 34, 35, 37, 47, 48, 50-53, 55, 56, 63.  
 1,1'-Dimethyl-4,4'-bipyridinium: **22** 1-28.  
 1,1'-Dimethyl-4,4'-bipyridinium chloride: **22** 1-28.  
 O,O-Dimethyl O, *p*-(N,N-dimethylsulfamoyl) phenyl phosphorothioate: **27** 4.  
 Dimethyl diselenide: **5** 4.  
 Dimethyl *p*-(dimethylsulfamoyl)phenyl phosphorothioate: **27** 4.  
 O,O-Dimethyl O-[*p*-(dimethylsulfamoyl)-phenyl] phosphorothioate: **27** 4.  
 O,O-Dimethyl-O,*p*-(dimethylsulfamoyl)phenylphosphorothioate: **27** 4.  
 O,O-Dimethyl hydrogen phosphorothioate, O-ester with *p*-hydroxy-N,N-dimethylbenzenesulfonamide: **27** 4.  
 Dimethyllead: **14** 67.  
 Dimethyl maleate: **22** 18.  
 Dimethylmercury: **10** 9, 10.  
 Dimethylnaphthalenes: **11** 40, 44.  
 Dimethylnitrosamine: **21** 42.  
 O, O-Dimethyl O-(*p*-nitrophenyl) phosphorothioate: **27** 8.  
 Dimethylorganotins: **15** 8.  
 N-N-Dimethylquinoneimine: **23** 10.  
 Dimethyl selenide: **5** 4; **12** 11.  
*p*-N,N-Dimethylsulfamoyl phenol: **27** 3, 5.  
 O, *p*-(Dimethylsulfamoyl)phenyl O,O-dimethyl phosphorothioate: **27** 4.  
*p*-(Dimethylsulfamoyl)phenyl dimethyl phosphorothioate: **27** 4.  
*p*-(N,N-Dimethylsulfamoyl)phenyl glucuronide: **27** 3, 5, 17, 19.  
 Dimethyl sulfoxide: **18** 5.  
 Dimethyltin dichloride: **15** 36, 52.  
 Dimethyltins: **15** 4, 5, 10, 21, 23, 25, 28, 30, 32, 38, 54.  
 Dimethyl(2,2,2-trichloro-1-hydroxyethyl) phosphonate: **9** 29.  
 Dimilin: **25** 1-32.  
 Dinoseb: **22** 11.  
 Dioctylorganotins: **15** 8, 52, 55.  
 Diorganotins: **15** 8, 13, 15, 18, 35, 37, 52.  
 Dioxins: **7** 55; **8** 1-37; **17** 2, 3, 5, 8, 9, 13, 18, 21, 42, 52; **31** 39.  
 Dipentylorganotins: **15** 8.  
 Diphacinone: **30** 4.  
 Diphenyl ethers: **17** 8, 40; **31** 39.  
 5,5-Diphenyl hydantoin: **23** 12.  
 Diphenyltin dichloride: **15** 36.  
 Diphenyltins: **15** 7.  
 Dipropylorganotins: **15** 8.  
 Dipropyltin dichloride: **15** 36.  
 Disodium calcium cyclohexanediamine tetraacetate: **26** 12.  
 Disodium ethylenediamine tetraacetic acid: **26** 12.  
 Disodium methanearsonate: **12** 6.  
 Disodium methylarsenate: **12** 45, 46, 49, 52, 58.  
 Disodium methylarsonate: **12** 40.  
 Dithiocarb: **34** 65.  
 Dithiocarbamates: **33** 10.  
 Dithiomolybdates: **19** 6.  
 Dizinon: **9** 3.  
 Dodecachlorooctahydro-1,3,4-metheno-2H-cyclobuta(c,d)pentalene: **1** 2.  
 Dodecyclamine *p*-chlorophenylarsonate: **12** 58.  
 Dopamine beta-hydroxylase: **33** 5.  
 Dovip: **27** 4.  
 Dowchlor: **21** 4.  
 Dowco 179: **13** 1.  
 Dovicide 7: **17** 6.  
 Dovicide EC-7: **17** 6.

Dowicide G: **17** 6.  
Dow pentachlorophenol: **17** 6.  
DP-2: **17** 6.  
D-penicillamine: **22** 5.  
DU 112307: **25** 3.  
Duphar BV: **25** 3.  
Durotox: **17** 6.  
Dursban: **9** 29; **13** 1, 3, 4.  
Dyknol: **7** 5.  
Dylox: **9** 29.  
Dyzol: **9** 3.  
D.z.n.: **9** 3.  
Ectrin: **24** 4.  
Emanay zinc dust: **26** 6.  
Endrin: **21** 36, 42.  
ENT 9932: **21** 4.  
ENT 19507: **9** 3.  
ENT 25644: **27** 4.  
ENT 25719: **1** 2.  
ENT 27164: **3** 3.  
ENT 27311: **13** 4.  
ENT 28244: **18** 3.  
ENT 29054: **25** 3.  
EPTC: **3** 22.  
Eradex: **13** 4.  
Erbon: **8** 3.  
Esfenvalerate: **24** 2.  
Ethanol: **17** 7; **30** 7, 12, 13, 40.  
Ethanolamine: **33** 3.  
2-Ethoxynaphthalene: **11** 54.  
Ethoxyquin: **33** 73.  
Ethyl acetate: **18** 5.  
N-Ethyl-N-hydroxyethyl nitrosamine: **34** 12.  
N-Ethyl-N-nitrosourea: **26** 13.  
Ethylene oxide: **22** 2.  
Ethylmercury: **10** 51, 52.  
Ethyltins: **15** 53.  
Europium-152: **29** 6, 97.  
Europium-155: **29** 6, 27.  
Famaphos: **27** 4.  
Famfos: **27** 4.  
Famophos: **27** 4.  
Famoxon: **27** 1, 3-5, 7, 11, 13, 14, 17, 18, 20, 21.  
Famphos: **27** 4.  
Famphur: **27** 1-23.

Fanfos: **27** 4.  
Farmco atrazine: **18** 3.  
Fenclor: **7** 5.  
Fendeet: **24** 36.  
Fenkill: **24** 4.  
Fenoprop: **8** 3.  
Fenprothion: **24** 2.  
Fenvalerate: **24** 1-43.  
Ferriamicide: **1** 33, 34.  
Ferric chloride: **31** 3.  
Ferric sulfate: **34** 9.  
Ferrihemoglobin cyanide: **23** 10.  
Ferrimolybdate: **19** 3.  
Ferrochrome lignosulfonate: **6** 35.  
Ferrous chloride: **1** 33.  
Ferrous sulfate: **34** 9.  
Fezadin: **9** 3.  
Fluoranthene: **11** 5, 10, 16-20, 26-29, 37, 40, 43, 47, 52, 56, 61.  
Fluorene: **11** 5, 10, 23, 32, 36, 37, 43, 45, 48; **31** 39.  
Fluorides: **19** 6; **33** 40.  
Fluoroacetic acid: **30** 2.  
FMC 10242: **3** 3.  
Formaldehyde: **28** 24.  
Formaldoxime: **23** 7.  
Formamide: **23** 12, 19.  
Formic acid: **23** 7.  
N-Formylglycine: **22** 7.  
FP Tracerite yellow: **23** 12.  
Francium-223: **29** 7, 9.  
Fratol: **30** 8.  
Free cyanide: **23** 1-50.  
Furadan: **3** 3, 27.  
G-24480: **9** 3.  
G-30027: **18** 3.  
Galena: **14** 5.  
Gallium arsenide: **12** 64.  
Gardentox: **9** 3.  
GC 1283: **1** 2.  
Geniphene: **4** 3.  
Germanium: **5** 30.  
Gesaprim: **18** 3.  
Gliflor: **30** 41.  
Glucuronic acid: **25** 4.

Glutaraldehyde: **28** 3.  
Glutathione: **28** 6, 7, 24.  
Glyceraldehyde: **28** 4, 6.  
Glycerol: **28** 3, 6.  
Glycerol monoacetate: **30** 7, 12, 13, 40.  
Glycidaldehyde: **28** 4, 6, 8, 24.  
Glycidol: **28** 6.  
Gold: **10** 4, 17; **12** 5, 16, 19; **23** 11, 35; **26** 8; **32** 2, 5, 11; **34** 4.  
Gold-198: **29** 6.  
Gramonol: **22** 4.  
Gramoxone: **22** 2, 4, 18.  
Gramuron: **22** 4.  
Griffex: **18** 3.  
Guaiacols: **17** 5.  
HCS 3266: **21** 4.  
Heptachlor: **3** 1; **21** 1-5, 13, 16, 22, 24, 29, 36, 43, 44.  
Heptachlor epoxide: **21** 2-5, 13, 14, 16, 18, 19, 21, 22, 28, 36, 43.  
Heptachlorinated dibenzodioxins: **17** 40.  
Heptachlorinated diphenyl ethers: **17** 40.  
Heptachlorobiphenyls: **31** 7, 17, 21, 25, 32-34, 43.  
1,2,3,4,6,7,8-Heptachlorodibenzodioxin: **8** 25.  
Heptachlorodibenzofurans: **17** 9, 13.  
Heptachlorophenoxyphenols: **17** 10.  
Herbaxon: **22** 4.  
Herboxone: **22** 4.  
Hexachlorobenzene: **1** 2; **17** 3, 5, 10, 13, 18, 21, 42, 52; **31** 39.  
2,2',4,4',5,5'-Hexachlorobiphenyl: **7** 7, 8, 43, 47.  
2,3,4,5,3',4'-Hexachlorobiphenyl: **8** 27.  
2,3,6,2',3',6'-Hexachlorobiphenyl: **7** 43.  
2,4,6,2',4',6'-Hexachlorobiphenyl: **7** 8.  
2,4,5,2',4',5'-Hexachlorobiphenyl: **7** 54.  
3,4,5,3',4',5'-Hexachlorobiphenyl: **7** 8, 43, 53; **8** 7.  
Hexachlorobiphenyls: **31** 6, 7, 17, 21, 25, 32-34, 36, 38, 43, 54, 60.  
Hexachlorocyclopentadiene: **1** 2; **21** 2.  
1,2,3,4,7,8-Hexachlorodibenzodioxin: **8** 5, 25.  
1,2,3,6,7,8-Hexachlorodibenzodioxin: **8** 5, 25, 27.  
1,2,3,7,8,9-Hexachlorodibenzodioxin: **8** 5, 23, 25, 27; **17** 2.  
Hexachlorodibenzodioxins: **17** 5, 9.  
Hexachlorodibenzofurans: **17** 9, 13.  
Hexachlorophene: **8** 3, 29.

Hexafluron: **25** 10.  
1,2,6-Hexane thiol: **28** 3.  
Hexavalent chromium: **6** 1-46; **19** 29.  
4-Hexylresorcinol: **28** 5.  
Hyaluronic acid: **25** 4, 24.  
Hydantoin: **23** 12.  
Hydantonic acid: **23** 12.  
Hydrochromate ion: **6** 3, 19.  
Hydrocyanic acid: **23** 3, 5.  
Hydrogen-3: **29** 3-5, 10, 12-14, 18-21, 25-28, 30, 74, 100, 102.  
Hydrogen cyanide: **23** 1-50.  
Hydrogen fluoride: **30** 14.  
Hydrogen peroxide: **22** 4, 6; **23** 32; **34** 6, 13.  
Hydrogen selenide: **5** 3.  
Hydroquinone: **28** 4.  
Hydroxocobalamin: **23** 8, 10, 11; **28** 27.  
3-Hydroxyanthronilic acid: **9** 23.  
Hydroxyatrazine: **18** 2, 4-6, 12, 26, 34, 36, 37.  
*p*-Hydroxybenzenesulfonic acid: **27** 3, 5.  
4-Hydroxybiphenyl: **31** 59.  
3-Hydroxycarbofuran: **3** 3-6, 15, 21, 22, 24, 25, 27.  
3-Hydroxycarbofuran-7-phenol: **3** 4, 22, 25, 27.  
3-Hydroxychlordane: **21** 5.  
1-Hydroxychlordene: **21** 41, 42.  
4-Hydroxy 2-chlorobiphenyl: **31** 59.  
4-Hydroxy 4'-chlorobiphenyl: **31** 59.  
Hydroxydiazinon: **9** 24.  
20-Hydroxyecdysone: **25** 10.  
1-Hydroxy, 2,3-epoxy chlordene: **21** 41, 42.  
Hydroxyethylenediamine triacetic acid: **34** 9.  
4-Hydroxyfenvalerate: **24** 28.  
N-Hydroxymethyl carbofuran: **3** 4, 22.  
Hydroxymonomethoxytetrachlorobenzenes: **17** 19.  
3-Hydroxy-N-hydroxymethyl carbofuran: **3** 24.  
3-Hydroxynitrosocarbofuran: **3** 25.  
3-(4' Hydroxyphenoxy) benzyl alcohol: **24** 29.  
Hydroxy-4-picolinic acid: **22** 7.  
3-Hydroxypropylmercapturic acid: **28** 25.  
3-Hydroxy-*trans*-chlordane: **21** 5.  
4-Hydroxy 3,5,4'-trichlorobiphenyl: **31** 59.  
Ilsemannite: **19** 3.  
Imidazole: **23** 12.  
2-Imidazolidimone: **23** 12.  
2-Iminothiazolidene-4-carboxylic acid: **23** 8.



Indeno(1,2,3-cd)pyrene: **11** 6, 16, 18, 19, 23, 26, 47, 52, 61.  
Indium: **2** 31.  
Indoleacetonitrile: **23** 14.  
Inerteem: **7** 5.  
Iodine: **23** 1, 9, 33, 34; **29** 77; **34** 8, 58.  
Iodine-125: **29** 6, 98, 102, 105.  
Iodine-129: **29** 6, 17-20, 23, 35, 42, 84, 98, 101, 102, 105.  
Iodine-130: **29** 6, 13.  
Iodine-131: **29** 6, 10, 12, 13, 18, 19, 32, 33, 43, 46-49, 51-54, 58-61, 64, 79, 81, 83, 88, 94, 96, 98, 102, 105.  
Iron: **2** 24; **6** 4, 35; **12** 12, 20; **14** 9, 15, 72; **19** 3, 6, 19, 32; **22** 6; **26** 4, 7, 12, 47, 49, 67, 75; **29** 77; **32** 5, 12, 18, 35; **33** 8, 9, 74, 78, 78; **34** 1, 8, 9, 19, 34, 37, 58.  
Iron-55: **29** 5, 13, 14, 16, 26, 28, 30, 41, 43, 44, 79, 96.  
Iron-59: **29** 5, 13, 16.  
Iron cyanide: **23** 6, 18, 27.  
Iron oxide: **14** 23; **20** 4.  
Isobornyl thiocyanate: **20** 14.  
*Alpha*-Isopropyl phenylacetate ester: **24** 2, 3.  
JASAD Merrillite: **26** 6.  
Jordisite: **19** 3.  
Kadethrin: **24** 11.  
Kanechlor: **7** 5.  
Kanechlor 200: **7** 6.  
Kanechlor 300: **7** 6.  
Kanechlor 400: **7** 3, 6, 55.  
Kanechlor 500: **7** 6.  
Kanechlor 600: **7** 6.  
Kaolinite: **22** 6; **33** 70.  
Kayazinon: **9** 3.  
Kayazol: **9** 3.  
Kepone: **1** 2.  
3-Ketocarbofuran: **3** 3-6, 21, 22, 24, 25, 27.  
3-Ketocarbofuran phenol: **3** 3, 6, 27.  
Killmaster: **13** 4.  
Knox out: **9** 3.  
Krypton-85: **29** 5, 13, 46, 101.  
L-Kynurenine: **9** 23.  
Kypclor: **21** 4.  
L 15: **26** 6.  
Lactic acid: **23** 34.

Laetrile: **23** 3, 13, 46.  
Lannate: **9** 29.  
Lanthanum-140: **29** 6, 22, 60, 97.  
Largon: **25** 3.  
Lasso: **18** 3.  
Laterite: **34** 3.  
Lauxtol A: **17** 6.  
Lead: **2** 1, 24, 26, 31; **5** 27, 38; **10** 4; **12** 5, 12; **14** 1-134; **15** 1, 16, 49; **19** 3, 6; **26** 12, 14, 39, 43, 44, 47, 49, 79; **29** 8, 9, 77; **31** 20; **32** 2, 5, 26, 30, 35; **33** 8, 9, 33, 36, 39, 41, 69; **34** 8, 9, 43, 64.  
Lead-210: **14** 9, 100 **29** 6, 8, 9, 15, 16, 18, 20, 21, 25-27, 29, 30, 34, 35, 85, 98, 105.  
Lead-211: **29** 6, 9.  
Lead-212: **29** 6, 9.  
Lead-214: **29** 6, 8, 9, 95.  
Lead acetate: **14** 9, 77, 78, 81, 83, 88, 91, 93, 94, 96, 97.  
Lead arsenate: **12** 4-6, 8, 15, 57, 60, 65, 66, 71; **14** 22, 49, 78, 91, 100.  
Lead carbonate: **14** 10, 56, 95.  
Lead chloride: **14** 9, 10.  
Lead hydroxide: **14** 10, 56.  
Lead nitrate: **14** 9, 69, 76, 78, 97.  
Lead oxide: **14** 9, 49.  
Lead phosphate: **14** 56.  
Lead subacetate: **14** 78.  
Lead sulfate: **14** 9, 10.  
Lead sulfide: **14** 9.  
Lindane: **17** 13.  
Lorsban: **13** 1, 3, 4.  
Lotaustralin: **23** 14.  
Lunar caustic fused silver nitrate: **32** 5.  
M 140: **21** 4.  
M 410: **21** 4.  
Magnacide H: **28** 5.  
Magnesium: **14** 15; **19** 3; **26** 12, 50, 66; **27** 19; **33** 9, 40, 44; **34** 8, 9, 59.  
Magnesium acetate: **34** 12.  
Magnesium oxide: **19** 1, 33.  
Magnesium sulfate: **30** 13.  
Malachite: **33** 2.  
Malathion: **18** 14; **30** 41.  
Malayaite: **15** 12.  
Malic acid: **22** 7.  
Malonitrile: **23** 40, 46.

Mandelonitrile: **23** 20.  
Manganese: **14** 9, 56; **19** 6, 19; **26** 7, 8; **29** 77; **32** 12, 19; **33** 8, 9, 40; **34** 8, 9, 12, 19, 34, 59.  
Manganese-54: **29** 5, 14, 16, 18, 22, 24-28, 30, 31, 43-45, 96.  
Manganese-56: **29** 5.  
Manganite: **23** 12.  
Maxolon: **30** 38.  
2-Mercaptoethanol: **28** 7.  
*Gamma*-mercaptopropionylglycine: **28** 7.  
Mercuric cyanide: **23** 5.  
Mercuric selenide: **5** 4.  
Mercuric sulfide: **10** 1, 14, 17, 40.  
Mercurous ion: **10** 7, 9.  
Mercury: **1** 26; **2** 24, 31; **5** 7, 26, 27, 36, 38; **7** 32, 52; **10** 1-90; **12** 10; **14** 15; **15** 1, 16; **19** 30; **26** 8, 13, 65; **32** 19, 30; **33** 8, 9; **34** 8, 64.  
Mercury-203: **29** 6.  
Mercury-206: **29** 6, 9.  
Methanearsonic acid: **12** 8, 20, 63.  
Methanol: **17** 7; **18** 5.  
Methidathion: **22** 12.  
Methionine: **28** 3.  
Methomyl: **30** 4.  
Methoxychlor: **21** 42.  
2-Methoxy-3,4-dihydro-2PH-pyran: **28** 25, 27.  
Methoxymethylmercury: **10** 41, 54.  
2-Methoxy naphthalene: **11** 54.  
Methylamine: **22** 7.  
Methylamine hydrochloride: **22** 7.  
9-Methylanthracene: **11** 41.  
Methylarsines: **12** 7.  
Methylarsinic acid: **12** 8.  
Methylarsonate: **12** 21.  
Methylarsonic acid: **12** 10.  
Methylarsonous acid: **12** 10.  
Methyl bromide: **1** 33.  
Methyl chloride: **22** 3.  
3-Methylcholanthrene: **11** 6, 34, 47-49, 51, 53, 56, 63; **15** 11; **25** 27; **31** 10.  
20-Methylcholanthrene: **34** 10, 12.  
Methyl fluoride: **30** 8.  
1-Methylnaphthalene: **11** 38, 40.  
2-Methylnaphthalene: **11** 38.  
Methylene blue: **23** 10.  
Methylene dioxyphenyls: **9** 6, 17.

Methylmercury: **5** 4, 27; **10** 1-75.  
Methyl methacrylate: **23** 11.  
Methyl parathion: **27** 8.  
S-Methyl-N-((methylcarbamoxy)oxy)-thioacetimidate: **9** 29.  
1-Methylphenanthrene: **11** 39.  
1-Methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP): **22** 9.  
Methyl prednisolone: **22** 5.  
4-Methylpyrazole: **30** 12, 40, 41.  
*p*-(N-Methylsulfamoyl)phenol: **27** 3, 5.  
*p*-(N-Methylsulfamoyl)phenyl glucuronide: **27** 5, 17, 19, 20.  
Methyltins: **15** 5, 20, 21, 23, 25, 27, 30, 32, 35, 53.  
Methyl viologen: **22** 4.  
Metoclopramide: **30** 38.  
Metribuzin: **22** 7.  
Micromite: **25** 3.  
Mirex: **1** 1-42; **8** 23; **31** 19, 39.  
Molded silver nitrate argenti: **32** 5.  
Molybdenite: **19** 3.  
Molybdenum: **19** 1-61; **20** 29; **29** 77; **33** 8, 9, 45, 74, 79; **34** 8.  
Molybdenum-99: **19** 4, 34 **29** 5, 46, 53.  
Molybdenum dioxide: **19** 38.  
Molybdenum trioxide: **19** 38.  
Molybdic acid: **19** 29.  
Monoacetin: **30** 40.  
Monoalkyltins: **15** 35.  
Monobutyltins: **15** 11, 28, 40.  
Monochlorobiphenyls: **31** 4, 21.  
2-Monochlorobiphenyl: **7** 4.  
4-Monochlorobiphenyl: **7** 8, 49, 55.  
Monochlorodihydrochlordene: **21** 5.  
Monocrotophos: **27** 12.  
Monofluoroacetic acid: **30** 2, 10, 14.  
8-Monohydro mirex: **1** 2, 28.  
9-Monohydro mirex: **1** 28.  
10-Monohydro mirex: **1** 3, 28.  
Monomethylarsonate: **12** 35.  
Monomethylarsonic acid: **12** 7, 12, 18, 19, 55.  
Monomethyltins: **15** 4, 5, 10, 28, 38.  
Monoorganotins: **15** 8, 13, 15, 18, 37.  
Monosodium fluoroacetate: **30** 8.  
Monosodium methanearsonate: **12** 6, 47, 48, 52, 58, 60, 72.

Montmorillonite: **22** 6.  
Morsodren: **3** 22.  
Moto: **4** 3.  
Naphthacene: **11** 5.  
Naphthalene: **11** 3, 5, 7, 16, 33, 36, 38, 40, 43, 47, 50, 52; **31** 39.  
Naphthene: **11** 50.  
l-Naphthyl N-methylcarbamate: **9** 29.  
Neocidol: **9** 3.  
Neodymium-147: **29** 6, 13.  
Neptunium-235: **29** 7, 78.  
Neptunium-237: **29** 7, 15, 78, 101.  
Neptunium-239: **29** 7, 14, 46.  
Neptunium-241: **29** 7.  
Ni(H<sub>2</sub>O)<sub>6</sub><sup>2+</sup>: **34** 5, 6.  
Niacin: **22** 5.  
Niagara NIA-10242: **3** 3.  
Nickel: **5** 7; **6** 31; **23** 28; **26** 12, 14, 41; **29** 77; **32** 2, 19, 20; **33** 8, 9, 41; **34** 1-76.  
Nickel-56: **34** 5.  
Nickel-57: **34** 6, 7.  
Nickel-58: **34** 5.  
Nickel-59: **34** 6.  
Nickel-60: **34** 5.  
Nickel-61: **34** 5.  
Nickel-62: **34** 5.  
Nickel-63: **29** 5, 26, 27; **34** 6, 8.  
Nickel-64: **34** 5.  
Nickel-65: **29** 5.  
Nickel-67: **34** 6.  
Nickel acetate: **34** 4, 12, 14, 48, 49, 51-55, 57, 59.  
Nickel ammonium sulfate: **34** 4, 12.  
Nickel antimonide: **34** 12.  
Nickel arsenide: **34** 12.  
Nickel bromide: **34** 5.  
Nickel carbonate: **34** 4, 6, 10, 12, 49, 53.  
Nickel carbonyl: **11** 35; **34** 2, 4, 6, 7, 10-13, 49-53, 55-57, 62-66.  
Nickel chloride: **34** 4, 5, 7, 10-14, 42, 45, 46, 50-57, 59, 62.  
Nickel chloride hexahydrate: **34** 6, 13, 44, 48, 52.  
Nickel chromate: **34** 12.  
Nickel cyanide: **23** 5, 6, 18.  
Nickel disodium EDTA: **34** 49.  
Nickel fluoborate: **34** 4, 55.  
Nickel fluoride: **34** 4, 12.

Nickel hexahydrate: **34** 58, 65.  
Nickel hydroxide: **34** 4-6, 12, 65.  
Nickel mesotetraphenylporphine: **34** 14.  
Nickel monosulfide: **34** 4, 12, 13.  
Nickel monoxide: **34** 62.  
Nickel nitrate: **34** 4, 6, 11, 13, 55.  
Nickelocene: **34** 4, 12, 52, 55.  
Nickeloplasmin: **34** 5.  
Nickel oxides: **34** 1-6, 8, 10-12, 19, 49-57, 59.  
Nickel perchlorate heptahydrate: **34** 52.  
Nickel selenide: **34** 12.  
Nickel subsulfide: **34** 1, 2, 4, 6-8, 10-13, 51, 54, 55, 57, 59, 62, 64.  
Nickel sulfamate: **34** 4.  
Nickel sulfate: **23** 24, 28; **26** 12; **34** 2, 4-8, 11-14, 19, 43, 46-57, 61, 62, 65.  
Nickel sulfate hexahydrate: **34** 6, 7, 43, 49, 50, 52, 53, 57, 59.  
Nickel sulfide: **26** 14; **34** 5, 6, 11, 55.  
Nickel telluride: **34** 12.  
Nicotinamide: **9** 7; **20** 19.  
Nicotinamide adenine dinucleotide phosphate (NADPH): **22** 4, 5; **28** 6.  
Nicotine: **30** 41.  
Nicotinic acid: **22** 5.  
Nigrosine: **30** 4.  
NiHPO<sub>4</sub>: **34** 5, 6.  
Niobium-95: **29** 5, 18, 21, 22, 26-28, 30, 33, 97.  
Nipsan: **9** 3.  
Niran: **21** 4.  
Nitras: **32** 5.  
Nitric acid silver (I) salt: **32** 5.  
Nitric acid silver (1+) salt: **32** 5.  
Nitrilotriacetic acid: **14** 15; **33** 9, 10.  
Nitrobenzene: **23** 10.  
N-[4-(5-Nitro-2-furyl)-2 thiazoyl] formamide: **28** 24.  
3-Nitro-4-hydroxyphenyl arsonic acid: **12** 6, 56, 58, 59, 70, 71, 81.  
4-Nitroquinoline-N-oxide: **26** 13.  
N-Nitrosoatrazine: **18** 36.  
Nitrosocarbofuran: **3** 25.  
N-Nitroso-N-methylurea: **19** 31.  
N-Nitrososarcosine ethyl ester: **19** 30.  
Noflamol: **7** 5.  
*Cis*-nonachlor: **21** 1-44.  
*Trans*-nonachlor: **21** 1-44.

Nonachlorinated diphenyl ethers: **17** 40.  
 Nonachlorobiphenyls: **31** 8, 17, 21, 25, 32.  
 Nonachlorophenoxyphenols: **17** 10, 21, 40.  
 Nonachlors: **21** 5, 11, 16, 26-28, 35.  
 Norepinephrine: **24** 12.  
 Nucidol: **9** 3.  
 Octachlor: **21** 4.  
 Octachlor epoxide: **21** 3.  
 Octachlorinated diphenyl ethers: **17** 40.  
 Octachlorobiphenyls: **31** 7, 17, 21, 32, 33, 43, 59.  
 Octachlorocamphene: **4** 3.  
 Octachlorocyclopentene: **21** 2.  
 Octachlorodibenzofurans: **17** 9, 13.  
 Octachlorodioxins: **17** 9, 11, 40.  
 Octachlorophenoxyphenols: **17** 10, 21, 40.  
 Octachlorostyrenes: **31** 19.  
 Octa-klor: **21** 4.  
 Octaterr: **21** 4.  
 Octyltins: **15** 5, 54.  
 OMS 1804: **25** 3.  
 Ontrack WE-I: **17** 6.  
 Organoarsenicals: **12** 1-81.  
 Organoleads: **14** 1-108.  
 Organotins: **15** 1-70.  
 Orthoarsenic acid: **12** 7.  
 Ortho-klor: **21** 4.  
 Ortho paraquat: **22** 4.  
 Orvar: **22** 4.  
 Oxalic acid: **22** 7; **30** 15.  
 Oxazolone: **21** 38, 42.  
 Oxychlorane: **21** 1-44.  
 PAHs: **11** 1-81.  
 Palladium-109: **29** 5.  
 2-PAM: **9** 23.  
 Papite: **28** 4.  
 PAPP: **30** 41.  
 Paracol: **22** 4.  
 Paraoxon: **21** 36.  
 Paraquat: **5** 27; **22** 1-28.  
 Paraquat CL: **22** 4.  
 Paraquat dichloride: **22** 1-28.  
 Paraquat dimethylsulfate: **22** 2.  
 Parathion: **10** 50; **21** 36; **27** 12.  
 Paris green: **12** 5; **33** 3.  
 PASCO: **26** 6.  
 Pathclear: **22** 4.  
 PCBs: **7** 1-72; **31** 1-75.  
 PCDDs: **8** 1-30; **31** 9, 14, 59.  
 PCDFs: **31** 9, 14, 59.  
 PCP: **17** 6.  
 PDD 6040-I: **25** 3.  
 Penchloral: **17** 6.  
 Penicillamide: **28** 7.  
 D-Penicillamine: **26** 12; **33** 10; **34** 65.  
 Penta: **17** 6.  
 Pentaborane: **20** 2, 3, 22, 23, 26, 28.  
 2,2',4,5,5'-Pentachlorobiphenyl: **7** 7, 8.  
 2,3,3',4,4'-Pentachlorobiphenyl: **31** 20.  
 3,3',4,4',5-Pentachlorobiphenyl: **8** 6.  
 Pentachlorobiphenyls: **31** 5, 6, 17, 21, 25, 32-34, 36, 38, 43, 59.  
 Pentachlorocyclopentadiene: **21** 2.  
 1,2,3,7,8-Pentachlorodibenzodioxin: **8** 5, 25.  
 1,2,4,7,8-Pentachlorodibenzodioxin: **8** 5, 25.  
 2,3,4,7,8-Pentachlorodibenzofuran: **7** 3.  
 Pentachlorodibenzofurans: **17** 9; **31** 9.  
 Pentachlorodioxins: **17** 9.  
 Pentachlorophenol: **8** 2, 3, 5; **17** 1-72.  
 Pentachlorophenol laurate: **17** 4.  
 Pentacon: **17** 6.  
 Pentafluorobenzyl bromide: **30** 7.  
 Penta general weed killer: **17** 6.  
 Penta-kil: **17** 6.  
 N-Pentane: **18** 5.  
 2,4-Pentanedione: **26** 14.  
 Pentanol: **17** 6.  
 Pentasol: **17** 6.  
 Pentlandite (FeNi)<sub>9</sub>S<sub>8</sub>): **34** 3.  
 Pentobarbital: **30** 12.  
 Penwar: **17** 6.  
 Permacide: **17** 6.  
 Permaguard: **17** 6.  
 Permasem: **17** 6.  
 Permatox: **17** 6.  
 Permethrin: **24** 11.  
 Perylene: **11** 5, 16, 20, 23, 24, 44, 47-49.  
 PH 60-40: **25** 3.  
 Phenacide: **4** 3.  
 Phenanthrene: **11** 5, 17-19, 23, 25, 27, 28, 30-33, 36, 39, 40, 44, 45, 47, 50, 52, 53, 55.

Phenatox: **4** 3.

Phenethyl isothiocyanate: **11** 35.

Phenobarbital: **22** 5; **33** 10.

Phenoclor: **7** 5, 36.

Phenoclor DP6: **7** 5.

Phenothrin: **24** 11.

3-Phenoxybenzaldehyde: **24** 6, 8.

3-Phenoxybenzoic acid: **24** 12, 28, 29.

3-Phenoxybenzoyl cyanide: **24** 10.

3-Phenoxybenzoyl glucine: **24** 36.

3-Phenoxybenzyl alcohol: **24** 29.

3-Phenoxybenzyl cyanide: **24** 10.

3-Phenoxybenzyl methylbutyric acid: **24** 6.

Phenoxyphenols: **17** 3, 5, 10, 52.

2-Phenoxyphenols: **17** 8, 40.

4-Phenoxyphenols: **17** 8.

Phenvalerate: **24** 4.

Phenylmercury: **10** 51, 52, 54, 59.

Phenyltins: **15** 5.

Phenytoin: **33** 10.

Phosphomolybdic acid: **20** 5.

Phosphorothioic acid: **13** 2.

Phosphorothioic acid 0,0-diethyl O-(6-methyl-2-(1-methylethyl)-4-pyrimidinyl ester: **9** 1-30.

Phosphorothioic acid 0,0-diethyl O-(3,5,6-trichloro-2-pyridinyl ester: **13** 1-24.

Phosphorothioic acid, O-[4-(dimethylamino)sulfonyl], phenyl O,O-dimethyl ester: **27** 1-21.

Phosphorothioic acid, O,O-dimethyl O-*p*-(dimethylsulfamoyl) phenyl ester: **27** 4.

Phosphorothioic acid, O,O-dimethyl-,O-ester with *p* hydroxy-N,N-dimethylbenzene sulfonamide: **27** 4.

Phosphorus: **19** 6; **20** 13; **27** 19; **34** 8.

Phosphorus-32: **29** 3, 5, 13, 14, 75, 98, 102, 105.

*Cis*-photochlordane: **21** 4, 29, 31-33.

Photomirex: **1** 28, 34.

4-Picolinic acid: **22** 7.

Pillarquat: **22** 4.

Pillarxone: **22** 4.

Pindone: **30** 41.

Piperonyl butoxide: **24** 13, 15.

Planar PCBs: **31** 1-75.

Platinum: **34** 9.

Plutonium-238: **29** 7, 11, 15, 17-20, 23-28, 33-35, 39, 40, 46, 58, 59, 73, 76, 88, 90, 91, 101.

Plutonium-239: **29** 7, 11, 13-15, 17-21, 23-28, 30, 33-35, 38-40, 43, 46, 58, 59, 78, 88, 90, 95, 98, 101, 102, 105.

Plutonium-240: **29** 7, 15, 18-21, 23-28, 33-35, 38-40, 43, 46, 58, 59, 78, 88, 90, 101.

Plutonium-241: **29** 7, 15, 39, 46, 97.

Plutonium-242: **29** 7, 15, 101.

Plutonium-244: **29** 7, 15.

PNAs: **11** 3.

Polonium-210: **29** 6, 8, 9, 15, 18, 20, 21, 25-27, 29, 30, 35, 42, 85, 96, 98, 102, 105.

Polonium-211: **29** 6, 9.

Polonium-212: **29** 6, 9.

Polonium-214: **29** 6, 8, 9, 95.

Polonium-215: **29** 6, 9.

Polonium-216: **29** 6, 9, 95.

Polonium-218: **29** 7-9.

Polychlorinated biphenyls: **1** 26; **4** 7, 19; **7** 1-72; **8** 2, 3, 27, 29; **21** 8, 42; **26** 42; **31** 1-75.

Polychlorinated dibenzofurans: **7** 3, 5, 55.

Polychlorinated dibenzo-*para*-dioxins: **8** 1-30.

Polychlorocamphene: **4** 3.

Polycyclic aromatic hydrocarbons: **11** 1-81; **34** 9, 10.

Polycyclic organic matter: **11** 3.

Polymethacrylates: **22** 2.

Polynuclear aromatic hydrocarbons: **11** 2.

POM: **11** 3.

Potassium-40: **29** 4, 5, 10, 17, 18, 20-22, 25-27, 29-31, 33-35, 38, 51, 52, 54, 58.

Potassium-42: **29** 5, 13.

Potassium arsenite: **12** 5.

Potassium cyanide: **23** 5, 20, 22, 30, 31, 34, 36-39, 41-46.

Potassium monofluoroacetate: **30** 2.

Potassium pentachlorophenate: **17** 5.

Potassium sorbate: **30** 6.

Potassium thiocyanate: **23** 45.

Powellite: **19** 3.

PP 148: **22** 4.

PP 910: **22** 4.

Pralidoxime: **9** 6.

Pralidoxime chloride: **27** 3, 19.

Praseodymium-143: **29** 6.

Praseodymium-144: **29** 6, 75.

Praseodymium-147: **29** 6, 27, 97.

Preglone: **22** 4.  
Priltox: **17** 6.  
Primatol A: **18** 3.  
Profenofos: **24** 13; **25** 9.  
Promethium-147: **29** 6.  
Propenal: **28** 5.  
2-Propenal: **28** 1-27.  
Propionitrile: **23** 6, 40.  
Propranolol: **24** 13.  
Propylene: **28** 3.  
Protactinium-231: **29** 7, 9, 16.  
Protactinium-234: **29** 7-9.  
Protactinium-234m: **29** 7.  
Prussic acid: **23** 5.  
Pydrin: **24** 4.  
Pyralene: **7** 5.  
Pyranol: **7** 5.  
Pyrene: **11** 4, 5, 10, 14, 16, 19, 20, 27-29, 32, 44, 47, 48, 53, 56.  
Pyridine: **22** 3.  
2-Pyridinealdoxime methochloride: **9** 23.  
Pyridoxal 5-phosphate: **23** 11.  
Pyridoxine hydrochloride: **2** 23.  
Pyrimidinol: **9** 28.  
Pyrinex: **13** 4.  
Pyrite: **12** 3; **14** 5.  
Quinolinic acid: **9** 23.  
Radium-223: **29** 7, 9.  
Radium-224: **29** 7, 9, 89, 95.  
Radium-226: **29** 7-9, 13, 16, 18, 20, 21, 23, 27, 29, 30, 32, 34, 35, 41, 42, 71, 85, 95, 97, 98, 100-103, 105.  
Radium-228: **29** 7, 9, 20, 95, 100, 101.  
Radon-218: **29** 7, 9.  
Radon-219: **29** 7, 9.  
Radon-220: **29** 7, 9.  
Radon-222: **29** 7-9, 13, 18, 98.  
Ramrod: **18** 3.  
Red squill: **30** 2.  
Resmethrin: **24** 2, 11.  
Rhodium-106: **29** 5.  
Roman vitriol: **33** 4.  
Ronnell: **8** 3.  
Rubidium-86: **29** 5.  
Rubidium-87: **29** 4, 5, 10, 18, 20, 25, 26, 29, 30.

Ruthenium: **29** 77.  
Ruthenium-103: **29** 5, 13, 18, 22, 26, 27, 30, 46, 49-54.  
Ruthenium-106: **29** 5, 10, 12, 13, 18, 21, 24, 26, 27, 30, 43-46, 49, 51, 53, 54, 58, 60, 61, 79.  
S-5602: **24** 4.  
Salzburg vitriol: **33** 4.  
Samarium-143: **29** 4, 6.  
Samarium-151: **29** 6, 97.  
Sanmarton: **24** 4.  
Santobrite: **17** 6.  
Santophen: **17** 6.  
Santotherm: **7** 5.  
Sarin: **27** 2.  
Sarolex: **9** 3.  
SD 43775: **24** 4.  
Selenium: **2** 24, 31; **5** 1-57; **7** 53; **10** 11, 43, 60, 64; **11** 57; **12** 11; **20** 19; **22** 5, 16; **23** 32, 33; **26** 13, 74-76; **32** 5, 9, 31, 37; **33** 8, 44, 65.  
Selenium-75: **23** 44; **29** 5, 33, 83.  
Selenium dioxide: **5** 3, 5.  
Selenomethionine: **5** 29, 30, 39.  
Selocide: **5** 25.  
Selenopurine: **5** 30.  
Shell atrazine herbicide: **18** 3.  
Shell silver: **32** 5.  
Silber: **32** 5.  
Silflake: **32** 5.  
Silicoborates: **20** 14.  
Silicon: **26** 7; **33** 39.  
Silpowder: **32** 5.  
Silver: **5** 6, 26, 38; **10** 17; **12** 5; **15** 49; **26** 8; **29** 77; **32** 1-44; **33** 8, 9, 41.  
Silver (1+) nitrate: **32** 5.  
Silver 108m: **29** 5, 31.  
Silver-110: **29** 5, 46.  
Silver-110m: **29** 5, 25, 26, 30, 31, 58-60, 63, 64, 76, 79; **32** 6, 8, 9, 21, 22, 24, 26, 28-30, 34.  
Silver-111: **29** 5.  
Silver-113: **29** 5.  
Silver acetate: **32** 5, 9.  
Silver acetylide: **32** 5.  
Silver albuminate: **32** 8, 35.  
Silver atom: **32** 5.  
Silver azide: **32** 5.  
Silver carbonate: **32** 6.

Silver chloride: **32** 6, 8, 18, 20, 30,  
 Silver colloidal: **32** 5.  
 Silver cyanide: **23** 5, 6, 27; **32** 35.  
 Silver fulminate: **32** 35.  
 Silver iodide: **32** 3, 10, 17.  
 Silver nitrate: **32** 2, 4, 5, 7, 30-32, 35.  
 Silver oxalate: **32** 5.  
 Silver selenide: **5** 4; **32** 9.  
 Silver sulfadiazine: **32** 4.  
 Silver sulfate: **32** 6.  
 Silver sulfide: **32** 6-8, 29, 30.  
 Silver thiosulfate: **32** 3, 6, 7, 30.  
 Silvex: **8** 3, 29.  
 Simazine: **18** 14.  
 Sinituho: **17** 6.  
 Sodium-22: **29** 3, 5.  
 Sodium-24: **29** 3, 5, 13, 14, 33, 41.  
 Sodium acetate: **30** 7, 12, 13, 40.  
 Sodium alpha ketoglutarate: **30** 12.  
 Sodium arsenilate: **12** 63, 81.  
 Sodium arsenate: **12** 4, 5, 64, 67, 70.  
 Sodium arsenite: **12** 4-6, 12, 38, 41, 55-57, 60, 63-68, 70; **28** 4.  
 Sodium bicarbonate: **30** 8.  
 Sodium bisulfite: **28** 25.  
 Sodium borate: **20** 17, 23-25, 28.  
 Sodium borohydride: **20** 26.  
 Sodium cacodylate: **12** 49, 52, 57, 58, 64, 67, 70.  
 Sodium chromate: **6** 41.  
 Sodium citrate: **14** 15.  
 Sodium cyanide: **23** 5, 8, 11, 20, 22, 24, 27-31, 35-46, 50; **30** 4.  
 Sodium diethyldithiocarbamate: **34** 12, 65.  
 Sodium dimethylarsenate: **12** 46, 47, 49, 52.  
 Sodium ferrocyanide: **23** 12.  
 Sodium fluoacetate: **30** 8.  
 Sodium fluoride: **23** 7; **30** 14.  
 Sodium fluoroacetate: **30** 8.  
 Sodium hexacyanoferrate: **23** 12.  
 Sodium molybdate: **19** 22, 23, 30, 40.  
 Sodium monofluoroacetate: **30** 1-47.  
 Sodium nitrite: **23** 1, 10, 33.  
 Sodium nitroprusside: **23** 12, 32.  
 Sodium pentachlorophenate: **6** 42; **17** 1-58.  
 Sodium pyruvate: **20** 19; **23** 10.  
 Sodium selenate: **5** 26.  
 Sodium selenite: **5** 26, 29.  
 Sodium succinate: **30** 7, 12, 31, 40.  
 Sodium sulfate: **30** 13; **33** 75, 78.  
 Sodium tetraborate: **20** 3, 24.  
 Sodium thiocyanate: **23** 11.  
 Sodium thiosulfate: **12** 12; **23** 1, 9-11, 33.  
 Soman: **27** 2.  
 Soval: **7** 5.  
 Spectracide: **9** 3.  
 Spermidine: **28** 3.  
 Spermine: **28** 3.  
 Sphalerite: **14** 5; **26** 4.  
 Stalinon: **15** 1.  
 Stannic compounds: **15** 3, 4.  
 Stannite: **15** 12.  
 Stannous compounds: **15** 3, 4.  
 Stannous fluoride: **15** 12.  
 Strobane-T: **4** 3.  
 Strontium: **19** 19; **29** 77.  
 Strontium-85: **29** 5, 13, 28, 79.  
 Strontium-89: **29** 5, 10, 13, 18, 19, 28, 43, 46.  
 Strontium-90: **29** 4, 5, 10, 12-14, 18, 19, 21-25, 27, 28, 31, 32, 36-38, 40-43, 46, 56, 63, 67, 73, 74, 76-79, 81, 88, 96-98, 100-102, 105.  
 Strychnine: **30** 2.  
 Strychnine sulfate: **5** 30.  
 Succinic acid: **22** 7.  
 Succinonitrile: **23** 6, 40, 46.  
 Sulfates: **19** 5, 21, 23, 30, 31, 37, 39, 42; **33** 79.  
 Sulfotep: **9** 3.  
 Sulfur: **5** 26, 27, 30, 40; **19** 3, 6, 33, 34, 36, 37, 41; **23** 1, 9, 33, 46; **33** 9.  
 Sulfur-35: **29** 3, 5, 14.  
 Sumicidin: **24** 4.  
 Sumifly: **24** 4.  
 Sumipower: **24** 4.  
 Sumitox: **24** 4.  
 Sweep: **22** 4.  
 Synklor: **21** 4.  
 Synthetic 3956: **4** 3.  
 Tabun: **27** 2.  
 Tartrazine: **30** 4.  
 Tat-chlor 4: **21** 4.  
 2,3,7,8-TCDD: **8** 1-30.

Technetium-99: **29** 5.  
 Technetium-99m: **29** 5.  
 Teflubenzuron: **25** 10.  
 Tellurium: **32** 5.  
 Tellurium-127m: **29** 6.  
 Tellurium-129: **29** 6.  
 Tellurium-129m: **29** 6.  
 Tellurium-132: **29** 6, 46.  
 Tenaklene: **22** 4.  
 Ten-eighty: **30** 8.  
 Term-I-trol: **17** 6.  
 Tetraalkyllead: **14** 6, 10, 11, 50, 69, 102.  
 Tetraalkyltins: **15** 35, 50.  
 1,4,8,11-Tetraazacyclotetradecane: **34** 9.  
 Tetrabutyltins: **15** 22, 46, 52, 62.  
 2,2',4,4'-Tetrachlorobiphenyl: **7** 4.  
 2,2',5,5'-Tetrachlorobiphenyl: **7** 7, 48, 55.  
 3,4,3',4'-Tetrachlorobiphenyl: **7** 8, 53; **8** 6; **31** 20.  
 Tetrachlorobiphenyls: **31** 4, 5, 17, 21, 25, 32-34, 36, 38, 43, 59.  
 2,3,6,7-Tetrachlorobiphenylene: **8** 6.  
 Tetrachlorobornane: **4** 2.  
 Tetrachlorocatechols: **17** 11.  
 1,2,3,7-Tetrachlorodibenzodioxin: **8** 9.  
 1,2,3,8-Tetrachlorodibenzodioxin: **8** 5, 9.  
 1,3,6,8-Tetrachlorodibenzodioxin: **8** 18.  
 1,3,7,8-Tetrachlorodibenzodioxin: **8** 9.  
 2,3,7,8-Tetrachlorodibenzo-para-dioxin (2,3,7,8-TCDD): **8** 1-30; **31** 9, 10, 12, 18, 20, 22, 37, 39, 48, 59, 60; **33** 10.  
 2,3,7,8-Tetrachlorodibenzofuran: **7** 3; **31** 19, 20.  
 Tetrachlorodihydroxyl benzenes: **17** 11.  
 Tetrachlorodiols: **17** 11.  
 Tetrachlorodioxins: **17** 9.  
 Tetrachlorohydroquinones: **17** 11, 19.  
 2,3,4,5-Tetrachlorophenol: **17** 9.  
 2,3,4,6-Tetrachlorophenol: **8** 5; **17** 8, 9.  
 Tetrachlorophenols: **17** 8, 11, 40.  
 Tetraethyl dithiopyrophosphate: **9** 3.  
 Tetraethyllead: **14** 5-7, 9, 11, 56, 65-67, 69, 76, 78, 87, 93, 96.  
 Tetraethyltins: **15** 39, 52, 61, 67.  
 Tetrahydro-5,5-dimethyl-2(1H)-pyrimidine: **1** 34.  
 Tetramethrin: **24** 2, 11.  
 Tetramethyllead: **14** 5, 9, 10, 50, 60, 65-67, 69, 87, 96.  
 Tetramethyltins: **15** 5, 21, 27, 38, 61, 64.  
 Tetraorganotins: **15** 11, 15, 37, 52, 64, 65.  
 Tetraphenyltins: **15** 52.  
 Tetrapropyltins: **15** 64.  
 Tetrathiomolybdates: **19** 6.  
 Tetrodotoxin: **24** 12.  
 TH 6040: **25** 3.  
 Thallium: **5** 27; **30** 2.  
 Thallium-206: **29** 6, 9.  
 Thallium-207: **29** 6, 9.  
 Thallium-208: **29** 6, 9.  
 Thallium-210: **29** 6, 9.  
 Thiomolybdates: **19** 6.  
 Thorium-227: **29** 7, 9, 89, 96.  
 Thorium-228: **29** 7, 9, 20, 27, 42, 98, 102, 105.  
 Thorium-230: **29** 7-9, 13, 20, 98, 101, 102, 105.  
 Thorium-231: **29** 7, 9.  
 Thorium-232: **29** 4, 7, 9, 10, 17, 18, 20, 29, 42, 98, 101, 102, 105.  
 Thorium-234: **29** 7-9.  
 Thymidine kinase: **25** 27.  
 Tin: **11** 35; **15** 1-83; **26** 13; **32** 12.  
 Tin-113: **15** 27.  
 Tin-123: **29** 5.  
 Tin-126: **29** 5, 101.  
 Titanium: **29** 77.  
 Toluene: **11** 48; **31** 39.  
 Topiclor 20: **21** 4.  
 Totacol: **22** 4.  
 Toxakil: **4** 3.  
 Toxaphene: **4** 1-26; **21** 2.  
 Toxer total: **22** 4.  
 Toxichlor: **21** 4.  
 Toxon 63: **4** 3.  
 Trialkyllead: **14** 11, 52, 69, 86, 102.  
 Trialkyltins: **15** 2, 3, 10, 35, 50, 52, 64.  
 Tributylmethyltins: **15** 5.  
 Tributyltin acetate: **15** 59.  
 Tributyltin fluoride: **15** 65.  
 Tributyltin oxide: **15** 36, 52.  
 Tributyltins: **15** 1, 2, 5-11, 13, 16, 20, 22, 24, 26-28, 30, 31, 34, 35, 37, 40, 46, 48, 49, 58, 63, 64, 67, 68, 70; **33** 41.  
 Trichlorobenzenes: **8** 29.  
 Trichlorobenzoquinones: **17** 11.



2,2',5-Trichlorobiphenyl: **7** 7.  
Trichlorobiphenyls: **31** 4, 17, 21, 25, 32-34, 36, 38.  
Trichlorobornane: **4** 2.  
2,3,7-Trichlorodibenzodioxin: **8** 25.  
Trichlorodiols: **17** 11.  
Trichlorohydroquinones: **17** 11.  
*Cis*-N-((trichloromethyl)thio)-4-cyclohexane-1,2-dicarboximide: **9** 29, 30.  
2,4,5-Trichlorophenol: **8** 1, 3; **17** 8.  
2,4,6-Trichlorophenol: **8** 5; **17** 8.  
Trichlorophenols: **17** 9, 11.  
2,4,5-Trichlorophenoxyacetic acid (2,4,5-T): **8** 2, 3, 5, 8, 16, 29.  
3,5,6-Trichloro-2-pyridinol: **13** 2.  
Trichloropyrophos: **13** 4.  
Tricyclohexyltin bromide: **15** 36.  
Tricyclohexyltin chloride: **15** 52.  
Tricyclohexyltins: **15** 10, 11, 16, 60, 68, 69.  
Triethanolamine cacodylate: **12** 68.  
Triethylenetetramine: **34** 9.  
Triethyllead: **14** 56, 65-67, 84, 96.  
Triethyltin acetate: **15** 1.  
Triethyltin chloride: **15** 52.  
Triethyltin hydroxide: **15** 36.  
Triethyltins: **15** 1, 10, 35, 37, 39, 49, 57, 63, 64, 66-68.  
Trihexyltins: **15** 60.  
Trimethylarsine: **12** 8, 56.  
Trimethyllead: **14** 65-67, 69, 84, 96, 103.  
Trimethylnaphthalenes: **11** 39.  
Trimethylselenonium chloride: **12** 11.  
Trimethyltin chloride: **15** 35, 49.  
Trimethyltin hydroxide: **15** 36.  
Trimethyltins: **15** 5, 7, 10, 20, 23, 25, 28, 30, 32, 37, 38, 49, 55, 63, 66.  
Trioctyltins: **15** 61.  
Triorganotins: **15** 8, 10, 11, 13, 15, 16, 18, 35, 37, 52, 64-67, 70.  
Tripropyltins: **15** 37, 46.  
Triphenyltin chloride: **15** 36.  
Triphenyltin hydroxide: **15** 36.  
Triphenyltins: **15** 6-10, 37, 46-48, 59, 64, 68.  
Tripropyltin chloride: **15** 52.  
Tripropyltin oxide: **15** 36.  
Tripropyltins: **15** 10, 37, 39, 58.  
Trithiomolybdates: **19** 6.

Trivalent chromium: **6** 1-46.  
Trivalent copper: **33** 5.  
Tungsten: **5** 30; **19** 3, 4, 6, 29.  
Tungsten-181: **29** 6, 79.  
Tungsten-185: **29** 6, 97.  
Tungsten-187: **29** 6.  
Tyrosinase: **33** 5.  
U<sub>3</sub>O<sub>8</sub>: **29** 12.  
Uracil: **28** 21.  
Uranium: **6** 42; **12** 5; **19** 1, 3, 4, 9, 19, 42; **32** 11; **33** 32.  
Uranium-232: **29** 73, 76.  
Uranium-233: **29** 7, 101.  
Uranium-234: **29** 7-9, 17-20, 27, 29, 30, 101.  
Uranium-235: **29** 4, 7, 9, 13, 14, 17-20, 27, 29, 30, 98, 101, 102, 105.  
Uranium-236: **29** 7, 101.  
Uranium-238: **29** 3, 4, 7-10, 14, 17-20, 27, 29, 30, 98, 101, 102, 105.  
Uranium dioxide: **29** 13.  
Uranium hexafluoride: **29** 13.  
Uridine diphospo N-acetyl glucosamine: **25** 4, 24.  
Vanadium: **6** 18; **19** 3, 6, 23; **26** 13.  
Vapotone: **4** 3.  
Vectal: **18** 3.  
Vectal SC: **18** 3.  
Velsicol 1068: **21** 4.  
Vinyl acetate: **28** 24.  
Warbex: **27** 1-21.  
Warfarin: **30** 6.  
Weed-beads: **17** 6.  
Weedol: **22** 4.  
Weedone: **17** 6.  
WL 43775: **24** 4.  
Wolframate: **19** 29.  
Wulfenite: **19** 3.  
Wurtzite: **26** 4.  
Xanthines: **31** 39.  
Xanthoncs: **31** 39.  
Xenon-131: **29** 6, 13.  
Xenon-133: **29** 6, 13, 43, 46.  
Xenon-135: **29** 6, 43.  
Xylene: **1** 2.  
Yttrium-90: **29** 4, 5, 73, 74, 76, 78.  
Yttrium-91: **29** 5, 13, 78.

Zinc: **2** 1, 16, 24, 26, 31; **5** 6, 26, 37, 38; **6** 25; **7** 53; **10** 60; **12** 5, 12; **14** 9, 15, 45, 49, 54, 57; **15** 49, 63; **19** 6, 19; **20** 11, 13; **23** 11, 28; **26** 1-106; **27** 8; **29** 77; **31** 20; **32** 2, 19, 26, 30, 35; **33** 6-9, 33, 36, 37, 39-41, 69, 74, 79; **34** 4, 8, 9, 37, 59, 64.

Zinc-65: **26** 47, 67, 70, 72; **29** 5, 14, 16, 22, 24-27, 30, 31, 33, 37, 74, 79, 83, 84, 96.

Zinc acetate: **26** 12, 14.

Zinc bicarbonate: **26** 6, 7.

Zinc carbonate: **26** 6, 7, 70.

Zinc chloride: **26** 6, 7, 13, 14, 87.

Zinc chromate: **6** 41.

Zinc humic acid: **26** 7.

Zinc hydroxide: **26** 7, 70.

Zinc oxide: **26** 5, 6, 14, 75-77, 79, 82, 87.

Zinc phosphate: **26** 68.

Zinc phosphide: **26** 76.

Zinc sulfate: **26** 5-7, 13, 14, 72, 78-81; **33** 79.

Zinc sulfide: **26** 6.

Zineb: **26** 13.

Ziram: **26** 13.

Zirconium: **19** 19; **29** 77.

Zirconium-95: **29** 4, 5, 10, 12, 13, 16, 18, 21, 22, 24, 26-28, 30, 33, 46, 53, 96.

[Zn(H<sub>2</sub>O)<sub>6</sub>]<sup>2+</sup>: **26** 1, 5-7.

## Section 2: Index to Species

Common and scientific names of plants and animals listed in the Contaminant Hazard Reviews (CHR) series. Individual species are indexed by scientific name, by **CHR report number** and by page numbers within each CHR report. References are provided from common names to scientific names.

### Abalone

Black, *Haliotis cracherodii*

Red, *Haliotis rufescens*

Various, *Haliotis tuberculata*

Abalones: **26** 19.

*Abelmoschus esculentus*: **3** 18; **19** 22, 45; **24** 6, 10.

*Abies* spp.: **25** 24, 25; **26** 51; **33** 47.

*Acacia georginae*: **30** 2, 14.

*Acacia* spp.: **30** 13.

*Acanthogobius flavimanus*: **21** 10.

*Acartia clausi*: **5** 33; **6** 22, 24; **10** 60; **12** 50; **23** 21; **33** 52.

*Acartia* spp.: **26** 69.

*Acartia tonsa*: **4** 10; **5** 33; **7** 47; **10** 48; **15** 43; **18** 26, 29; **25** 13, 14; **26** 57; **32** 24; **33** 39, 48, 52.

*Accipiter cooperii*: **2** 13, 15; **7** 15; **21** 18.

*Accipiter fasciatus*: **30** 24.

*Accipiter gentilis*: **10** 31; **31** 41.

*Accipiter nisus*: **10** 31, 41, 63; **31** 41.

*Accipiter* sp.: **10** 41.

*Accipiter striatus*: **21** 18; **31** 41.

*Acer macrophyllum*: **20** 12.

*Acer rubrum*: **3** 26; **26** 51, 82; **33** 13, 14, 34, 69; **34** 20.

*Acheta domesticus*: **26** 10, 12.

*Acheta pennsylvanicus*: **21** 29; **24** 14, 15.

*Acholla multispinosa*: **25** 10.

*Achyla* sp.: **34** 39.

*Acipenser nudiventris*: **15** 39, 66.

*Acipenser oxyrhynchus*: **29** 29.

*Acipenser stellatus*: **15** 39.

*Acmaea digitalis*: **14** 28.

*Acris crepitans*: **33** 25; **34** 26, 35.

*Acris* sp.: **10** 47.

*Acrobeloides* sp.: **25** 8.

*Acrocheilus alutaceus*: **29** 28.

Actinomycete, *Nocardiosis* sp.

*Actinomycetes* sp.: **23** 26.

*Actitis macularia*: **7** 15.

*Adamussium colbecki*: **33** 16.

*Adelotus brevis*: **22** 13.

*Adinia xenica*: **1** 14.

*Aechmophorus occidentalis*: **33** 25.

*Aedes aegypti*: **8** 19; **25** 11; **27** 8.

*Aedes albopictus*: **25** 11, 12, 20.

*Aedes melanimon*: **25** 6, 23.

*Aedes nigromaculis*: **24** 17; **25** 6, 12, 23.

*Aedes* sp.: **24** 17.

*Aegolius funereus*: **31** 41.

*Aeolanthus bioformifolius*: **33** 14, 39.

*Aeolanthus* sp.: **33** 39.

*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*, *Egredia*  
*laevigata*, *Fucus*, *Laminaria*, *Pelvetia canaliculata*  
    Red, *Champia parvula*, *Plumaria elegans*  
    Various, *Amphidinium* spp., *Amphora*  
*coffeaeformis*, *Anabaena*, *Anacystis*,  
*Ankistrodesmus*, *Asterionella formosa*,  
*Asteromonas gracilis*, *Bellerochea 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*,  
*Glennodinium halli*, *Gymnodinium splendens*, *Haslea*  
*ostrearia*, *Hymenomonas carterae*, *Isochrysis*  
*galbana*, *Microspora* sp., *Mougeotia* sp.,  
*Nannochloris oculata*, *Nitella* spp., *Nitzschia*, *Nostoc*  
*muscorum*, *Ochromonas danica*, *Oedogonium*,  
*Olisthodiscus lutens*, *Peridinium gatunense*,  
*Phormidium inundatum*, *Platymonas*  
*subcordiformis*, *Plectonema boryanum*, *Polygonum*  
sp., *Procentrum micans*, *Prorocentrum mariae-*  
*lehouriae*, *Rhizosolenia* sp., *Scenedesmus*,  
*Schroederella* spp., *Scripsiella faeroense*,  
*Selenastrum capricornutum*, *Skeletonema*  
*costatum*, *Spirogyra* sp., *Symiodinium* sp., *Synedra*  
sp., *Tabellaria* sp., *Tetraedron* sp., *Tetraselmis*  
*chui*, *Thalassiosira*, *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.  
*Amblyomma 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*, *Hyalella*,  
*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; **24I** 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  
*Anthocidaris 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.  
*Aquiptecten 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  
     Large-tooth, *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.  
*Astraliium 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 postermanum*, *Escherichia coli*,  
*Flavobacterium* 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.  
*Brachythecium rivulare*: **14** 24.  
*Brachythecium 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, bulls, *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 grandoculis*  
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 defoliaria*, *Operophtera brumata*, *Plutella xylostella*, *Spodoptera*, *Tortrix viridiana*

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.

*Ceratitis 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 jubata*: **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*,  
*Goeldochironomus holoprasinus*, *Labrundinia pilosella*,  
*Psectocladus* 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, *Ectropus 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 Quahaug, *Mercenaria mercenaria*  
 Pullet-shell, *Venerupis pallustris*  
 Razor, *Ensis minor*  
 Short-necked, *Tapes phillippinarum*  
 Softshell, *Mya arenaria*  
 Southern quahaug, *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 olivaceous*: **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** 29, 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** 37, 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., *Diaptomus*, *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 pugilator*  
    Green, *Carcinus maenas*  
    Hermit, *Clibanarius olivaceous*, *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** 21; **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** 22, 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 adspersus*  
*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.

Damselflies, 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** 35, 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.

*Dendraster 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.

*Deroceras 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 blainvelleri*  
     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, *Zenaidura 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 pectenarius*: **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.  
*Epitrimerus 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.  
*Eropodella 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.  
*Etioplus 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 catus*: **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*  
    Cyprinofirm, *Labeo rohita*  
    Goat, *Upeneus* spp.  
    Harlequin, *Rasbora heteromorpha*  
    Jelly, *Cyanea*  
    Lump, *Cyclopterus lumpus*  
    Margined flying, *Cypselurus cyanopterus*  
    Monk, *Squatina squatina*  
    Parrot, *Scarus* spp.  
    Rabbit, *Siiganus* spp.  
    Scorpion, *Scorpaena* spp.  
    Star, *Asterias rubens*  
    Surgeon, *Ctenochaetus* spp.  
    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 suspense*

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 lagopus*

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.

*Fratercula* 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*, *Trichoderma 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, *Lepisosteus 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 gaujava*  
 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*  
*Gutiérrezia* 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 pallasii*  
*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.  
*Hieraetus morphnoides*: **30** 24.  
*Hieraetus 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 bubalus*: **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.

*Isoodon auratus barrowensis*: **30** 29.

*Isoodon macrourus*: **30** 29.

*Isoodon 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, *Hemichromus 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.  
*Lasiornis 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.  
*Leptonyxotes 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.  
*Leous 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.  
*Leucospilus delineatus*: **2** 27.  
*Leuctra* sp.: **32** 25.  
*Leuresthes tenuis*: **13** 6, 8, 11; **24** 22.  
 Lichens, *Bryoria fuscescens*, *Cetraria nivalis*, *Cladonia* spp., *Cladonia*, *Compyllium 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 vulgate*  
 Slipper, *Crepidula fornicata*  
 Various, *Acmaea digitalis*, *Littorina littorea*,  
*Patella caerulea*  
 Limpkin, *Aramus guarauna*  
*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*

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 fulviflamma*: **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.  
*Lymantria 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.  
*Machrobrachium rude*: **33** 55.  
*Machrobrachium* sp.: **34** 33.  
*Macrocystis pyrifera*: **6** 33; **34** 40.  
*Macromia* sp.: **7** 37.  
*Macroneustes 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*  
*Magiccicada* 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.  
*Meliccytus 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 thermocyclopoides*: **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.  
*Micropogonias 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, *Platynothus peltifer*  
     Pear rust, *Epitrimerus pyri*  
     Two-spotted spider, *Tetranychus urticae*  
     Various, *Chorioptes 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*, *Tamenthyphnum* 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, *Ectomyeloisceratoniae*  
     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 humulis*  
 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*  
 Murrel, *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*  
 Muskrats, *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; **32**, 39, 40; **31** 1, 46, 48, 56-58, 61; **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.

*Najus 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.  
*Nitzchia angularis*: **24** 17.  
*Nitzchia closterium*: **29** 71.  
*Nitzchia* spp: **15** 48; **26** 53; **33** 48.  
*Nocardia* spp.: **30** 8.  
*Nocardiopsis* 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.  
*Notothernia 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.  
*Oncopeltis 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, 7-49, 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, *Cypericercus* so., *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, *Leipottherapon 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 tricornutum*: **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, *Seerasalmus* 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*  
*Placopecten 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.  
*Platycercus 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.  
*Pontoporia 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 mariae-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 subis*: **24** 8.  
Pronghorn, *Antilocapra americana*  
*Prosopium cylindraceum*: **10** 29; **15** 31.  
*Prosopium williamsoni*: **23** 12; **29** 28.  
*Prothemadera novae-seelandiae*: **30** 25.  
*Prototheca zopfi*: **23** 21.  
Protozoan, *Blepharisma undulans*, *Chilomonas paramecium*, *Colpoda*, *Costia* sp., *Cristigera* sp., *Entosiphon sulcatum*, *Fabrea salina*, *Ichthyophthirius* sp., *Oikomonas termo*, *Paramecium* 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*  
*Pseudopterogorgia* 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.  
*Pteronarcella 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 conchonioides*: **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.  
*Pyloodictis 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 sphenoccephala*: **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.  
 Raspberry  
     Blooming red, *Rubus strigosus*  
     Various, *Rubus*  
*Rasbora daniconus neilgeriensis*: **17** 32  
*Rasbora heteromorpha*: **15** 46; **28** 12.  
 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 (=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.  
*Saccobranhus 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 harrisii*: **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.

- Scardinus erythrophthalmus*: **6** 31.

- Scarus gyttatus*: **26** 25.

Scaup

- Greater, *Aythya marila*

- Lesser, *Aythya affinis*

- Sceloglaux 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 mansoni*: **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.

- Scophthalmus aquosus*: **7** 13, 31; **11** 30; **12** 32; **32** 16.

- Scophthalmus maeoticus maeoticus*: **29** 78.

- Scophthalmus 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*

*Scylliorhinus 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. septemspinosa*

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, *Amnicola* sp., *Ancylus fluviatilis*, *Aplexa hypnorum*, *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 proximos*

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.  
*Spizula 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.  
 Surgeon  
     Atlantic, *Acipenser oxyrhynchus*  
     Sevyuga, *Acipenser stellatus*  
     Sheep, *Acipenser nudiventris*  
     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, *Carpoides 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 philippinarum*: **17** 25; **21** 10.  
*Tapes* sp.: **31** 23.  
*Tapes japonica*: **32** 13.  
 Tapeworm: **12** 3.  
*Taricha granulosa*: **29** 79, 80.  
*Taricha torosa*: **21** 17, 27.  
 Tasmanian devil, *Sarcophilus harrisii*  
 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 tetrax*: **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 albacares*: **20** 9; **29** 31.  
*Thunnus alalunga*: **29** 30, 31.  
*Thunnus thynnus*: **28** 3; **33** 25.  
*Thylogale billardieri*: **30** 5, 35, 37.  
*Thymallus arcticus*: **26** 15, 64; **32** 28; **33** 62; **34** 45.  
*Thynnus* spp.: **5** 14; **10** 40.  
 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, *Oreochromis 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.  
*Trichodina* sp.: **33** 3.  
*Trichogaster pectoralis*: **3** 21.  
*Trichosurus vulpecula*: **30** 2, 5, 6, 8, 10, 15, 24, 36-38, 40.  
*Tridacna derasa*: **33** 52, 70.  
*Tridacna maxima*: **11** 28; **12** 35.  
*Trifolium* sp.: **4** 1; **19** 13; **22** 8, 24; **33** 43.  
 Triggerfish, *Balistoides* spp.  
*Trigloch* spp.: **23** 4.

*Trinectes maculatus*: 1 14.  
*Trinervitermes dispar*: 6 14.  
*Tringa solitaria*: 7 23.  
*Tringa totanus*: 33 27.  
*Tringa totanus robusta*: 12 33.  
*Triops longicaudatus*: 25 17.  
*Tripneustes esculentus*: 34 25.  
*Triticum aestivum*: 2 12; 5 22; 9 25; 10 1; 11 25, 26; 12 12, 43; 18 1, 4, 41; 19 13; 22 2, 8; 28 3; 29 60, 69; 34 22.  
*Triticum cristatus*: 11 49.  
*Triticum* spp.: 25 7; 29 49.  
*Triticum vulgare*: 15 28.  
*Triturus cristatus*: 26 64.  
*Troglodytes aedon*: 29 83.  
*Tropisternus lateralis*: 25 12.  
*Tropocyclops prasinus mexicanus*: 26 58.  
Trout  
    Brook, *Salvelinus fontinalis*  
    Brown, *Salmo trutta*  
    Cutthroat, *Oncorhynchus clarki* (formerly *Salmo clarki*)  
    Lake, *Salvelinus namaycush*  
    Rainbow, *Oncorhynchus mykiss* (formerly *Salmo gairdneri*)  
    Spotted sea, *Cynoscion nebulosus*  
Trumpeter, six-lined, *Siphamia cephalotes*  
*Tubifex costatus*: 12 51.  
*Tubifex* sp.: 6 30; 14 32; 29 78.  
*Tubifex tubifex*: 3 10; 15 27, 45; 17 26; 33 21; 34 42.  
Tui, *Prosthemadera novae-seelandiae*  
*Tullbergia granulata*: 22 9.  
Tuna  
    Bluefin, *Thunnus thynnus*  
    Japanese, Scombridae  
    Skipjack, *Euthynnus pelamis*  
    Various, *Thynnus* spp.  
    Yellowfin, *Thunnus albacares*  
Tunas: 10 30; 14 34; 29 31.  
Tunicates, *Ciona intestinalis*, *Cynthia claudicans*, *Halocynthia roretzi*, *Podoclavella moluccensis*, *Polycarpa pedunculata*, *Salpa fusiformes*  
Turbellarians, *Bothromestoma* sp., *Mesotoma* sp.  
Turbot, *Scophthalmus maximus*, *S. maeoticus maeoticus*

*Turdus merula*: 5 23; 26 30.  
*Turdus migratorius*: 2 12; 7 23; 12 56; 14 41; 19 16; 21 19; 34 28.  
*Turdus philomelos*: 29 55, 63.  
Turkey, *Meleagris gallopavo*  
*Turnagra capensis*: 30 25.  
Turnip, *Brassica rapa*  
*Tursiops gephyreus*: 33 29.  
*Tursiops truncatus*: 26 35; 33 29.  
Turtle  
    Atlantic green, *Chelonia mydas*  
    Common box, *Terrapene carolina*  
    Common mud, *Kinosternon sabrubrum*  
    Common musk, *Sternotherus odoratus*  
    Loggerhead, *Caretta caretta*  
    Loggerhead musk, *Sternotherus minor minor*  
    Missouri slider, *Pseudemys floridana hoyi*  
    Peninsula cooter, *Pseudemys floridana peninsularis*  
    Pond slider, *Pseudemys scripta*  
    Slider, *Chrysemys scripta*, *Trachemys scripta*  
    Snapping, *Chelydra serpentina*  
Turtle-dove, ringed, *Streptolia risoria*  
Turtles: 29 80.  
Tuskfish, scarbreast, *Choerodon azurio*  
*Tympanuchus cupido*: 10 52.  
*Tympanuchus cupido attwateri*: 7 23  
*Tympanuchus phasianellus*: 4 12.  
*Typha latifolia*: 20 8; 22 9, 10.  
*Typhlodromus* sp.: 22 9.  
*Tyto alba*: 7 53; 21 35; 27 9, 10; 30 24.  
*Uca minax*: 3 22.  
*Uca pugilator*: 2 23; 10 48, 61; 15 37, 43; 25 17, 20; 26 10, 68.  
*Uca* sp.: 13 19, 21; 18 30; 26 68; 33 73.  
*Uca tangeri*: 23 22.  
*Ulmus americana*: 15 28; 33 15.  
*Ulothrix* sp.: 26 66.  
*Ulva lactuca*: 29 25.  
*Ulva* sp.: 14 27; 26 53; 33 73.  
*Umbilicaria* sp.: 34 21.  
*Umbra limi*: 9 18.  
*Umbra pygmaea*: 6 13; 11 48.  
*Upeneus moluccensis*: 15 27.

*Upeneus tragula*: **26** 25.  
*Upupa epops*: **26** 30, 43.  
*Uria aalge*: **7** 23; **31** 44, 45; **33** 9, 42.  
*Uria lomvia*: **21** 23, 27.  
*Urocyon cinereoargenteus*: **29** 36; **30** 36.  
*Uromastix hardwickii*: **29** 81.  
*Uronema marinum*: **10** 47.  
*Uronema nigricans*: **10** 61.  
*Uronema* sp.: **14** 59.  
*Urophycus chuss*: **11** 30; **33** 25.  
*Ursus maritimus*: **7** 1, 25; **26** 35; **31** 34, 46, 48; **32** 17; **33** 8, 29, 38, 42.  
*Ursus* spp.: **23** 12; **30** 4; 36.  
*Uta stansburiana*: **29** 81.  
*Vaccinium angustifolium*: **12** 22; **33** 34; **34** 22.  
*Vaccinium myrtilloides*: **29** 56, 63.  
*Vaccinium pallidum*: **14** 27.  
*Vaccinium* sp.: **29** 50.  
*Vaccinium uliginosum*: **29** 56.  
*Vaccinium vitis-idaea*: **29** 56.  
*Vallisneria americana*: **18** 17, 19.  
*Vallisneria gigantea*: **28** 2, 10.  
*Vallisneria spiralis*: **28** 10.  
*Vallisneria* spp.: **28** 10.  
Vaquita (porpoise), *Phocoena sinus*  
*Varanus gouldi*: **30** 16, 17.  
*Varanus varius*: **30** 17.  
*Venerupis pallustris*: **19** 26.  
*Veromessor andrei*: **30** 24.  
*Vespula germanica*: **30** 15.  
*Vespula vulgaris*: **30** 15.  
*Vicia faba*: **29** 69; **33** 46; **34** 13.  
*Victorella* sp.: **32** 14, 24, 25.  
*Vigna* sp.: **12** 41; **23** 15.  
*Villorita cyprinoides*: **33** 52.  
*Villosa iris*: **33** 52.  
Vireo  
    Red-eyed, *Vireo olivaceus*  
    Warbling, *Vireo gilvus*  
*Vireo gilvus*: **25** 25.  
*Vireo olivaceus*: **25** 24.  
*Vitis* sp.: **5** 22; **24** 3.  
*Viviparus ater*: **14** 14.  
*Viviparus bengalensis*: **17** 28.  
Vole

Bank, *Clethrionomys glareolus*  
Brown-backed, *Clethrionomys rufocanus*  
Creeping, *Microtus oregoni*  
Field, *Microtus agrestis*  
Levant, *Microtus guentheri*  
Meadow, *Microtus pennsylvanicus*  
Pine, *Pitymys pinetorium* (now *Microtus pinetorum*)  
Prairie, *Micropterus ochrogaster*, *Microtus ochrogaster*  
Singing, *Microtus miurus*  
Various, *Arvicola terrestris*, *Clethrionomys rutilus*, *Lemmus* sp.  
*Vombatus ursinus*: **30** 36, 38.  
*Vorticella* sp.: **26** 53.  
*Vulpes fulva*: **29** 36.  
*Vulpes macrotis*: **30** 5.  
*Vulpes macrotis arsipus*: **30** 36.  
*Vulpes macrotis mutica*: **30** 40.  
*Vulpes* sp.: **12** 34; **14** 99; **15** 33; **23** 12; **30** 38; **31** 46.  
*Vulpes vulpes*: **10** 39, 43, 64; **29** 60; **30** 5, 36, 37; **31** 48; **33** 34.  
*Vultur gryphus*: **14** 2; **23** 32.  
Vulture  
    Black, *Coragyps atratus*  
    King, *Sarcorhampus papa*  
    Turkey, *Cathartes aura*  
Wallaby  
    Agile, *Macropus agilis*  
    Bennett's (also known as red-necked), *Macropus rufogriseus*  
    Banded hare-, *Lagostrophus fasciatus*  
    Rock, *Petrogale penicillata*  
    Tamar, *Macropus eugenii*  
    Western brush, *Macropus irma*  
Walleye, *Stizostedion vitreum vitreum*  
Walrus, *Odobenus rosmarus*  
Warbler  
    MaGillivray's, *Oporornis tolmiei*  
    Townsend's, *Dendroica townsendi*  
    Various, *Dendroica* spp.  
Warmouth, *Lepomis gibbosus*  
Wasp  
    Common, *Vespula vulgaris*  
    German, *Vespula germanica*

Watermilfoil, Eurasian, *Myriophyllum spicatum*  
*Watersipora cucullata*: **26** 57.

#### Weed

Duck, *Lemna*, *Spirodella oligorrhiza*  
Fire, *Epilobium angustifolium*  
Hydrilla aquatic, *Hydrilla verticillata*  
Lake, *Lagarosiphon major*  
Loco, *Astragalus*  
Pond, *Ceratophyllum*, *Najas guadalupensis*, *Navicula* sp., *Potamogeton*  
Rat, *Palicourea marcgravii*  
Sargassum, *Sargassum fluvitans*  
Sea, *Chondrus crispus*, *Fucus*, *Porphyra* sp., *Sargassum*, *Ulva*  
Submerged, *Elodea*, *Hydrodictyon*, *Najas* spp., *Spirogyra* sp., *Zannichellia* sp.  
Ribbon, *Vallisneria spiralis*  
Water, *Elodea*  
Various, *Chenopodium album*, *Cladophora*

#### Weevil

Cotton boll, *Anthonomus grandis*  
Granary, *Sitophilus granarius*  
Rice water, *Lissorhopterus oryzophilus*

#### Whale

Beluga, *Delphinapterus leucas*  
Cuvier's goosebeaked, *Ziphius cavirostris*  
Fin, *Balaenoptera physalis*  
Giant bottlenosed, *Berardius bairdii*  
Gray, *Eschrichtius robustus*  
Killer, *Orcinus orca*  
Long-finned pilot, *Globicephala medaena*  
Pilot, *Globicephala macrorhynchus*  
Pygmy sperm, *Kogia breviceps*  
Sperm, *Physeter catodon*, *Physeter macrocephalus*  
Various, *Ziphius* sp.  
White, *Delphinapterus leucas*

Wheat, *Triticum aestivum*, *Triticum* spp., *Triticum vulgare*

#### Whelk

Channeled, *Busycon canaliculatum*  
Common dog, *Nucella lapillus*, *Nucellus lapillus*  
Various, *Kelletia kelletia*, *Thais lapillus*

Waved, *Buccinum undatum*

Whelks: **26** 21.

Whimbrel, *Numenius phaeopus*

Whistling-duck, fulvous, *Dendrocygna bicolor*

#### Whitefish

Lake, *Coregonus clupeaformis*  
Mountain, *Prosopium williamsoni*  
Round, *Prosopium cylindraceum*  
Various, *Coregonus* spp.  
Whiting, *Merlangius merlangius*, *Sillago bassensis*  
Wigeon, American, *Anas americana*  
Wildcelery, *Vallisneria americana*  
Willow, *Salix* spp.  
Wolf, *Canis lupus*  
Wolffish, spotted, *Anarhichas minor*  
Wolverine, *Gulo gulo*  
Wombat

Common, *Vombatus ursinus*  
Southern hairy-nosed, *Lasiorhinus latifrons*

Woodchuck, *Marmota monax*

#### Woodcock

American, *Scolopax minor*  
Eurasian, *Scolopax rusticola*

Woodlice: **14** 32, 48.

#### Woodpeckers

Acorn, *Melanerpes formicivorus*  
Various, Picidae

#### Worm

Black cut, *Agrotis ipsilon*  
Cotton leaf, *Spodoptera littoralis*  
Earth, *Allolobophora*, *Eisenia*, *Lumbricus*, *Octochaetus*  
Horn, Sphingidae  
Lesser meal, *Alphitobius diaperinus*  
Lug, *Arenicola cristata*  
Manure, *Eisenia foetida*  
Marine, *Nereis*, *Nephtys*  
Oligochaete, *Lumbriculus variegatus*  
Rag, *Hediste diversicolor*  
Sand, *Nereis diversicolor*  
Silk, *Bombyx mori*  
Southern army, *Spodoptera eridanea*  
Tiger, *Eisenia foetida*  
Tobacco horn, *Manduca sexta*  
Various, *Limnodrilus*, *Nais* sp., *Neanthes arenaceodentata*, *Paranais* sp., *Spirorbis lamellora*, *Styiodrilus* sp., *Tubifex*

Worms: **6** 44; **7** 8, 28, 50; **14** 35; **15** 8, 15; **17** 15; **21** 8; **31** 19.

Wren

Bush, *Xenicus longipus*

House, *Troglodytes aedon*

Rock, *Xenicus gilviventris*

*Xenicus gilviventris*: **30** 24.

*Xenicus longipes*: **30** 6, 24.

*Xenopus laevis*: **5** 31, 35; **11** 49; **17** 36; **26** 9, 64, 65; **28** 12; **29** 79, 81; **30** 17; **34** 13, 14.

*Xiphias gladius*: **5** 14; **10** 30; **33** 25; **34** 30.

Yeast, *Cryptococcus terreus*, *Rhodotorula* sp.,  
*Saccharomyces*, *Torulopsis glabrata*

Yeasts: **3** 26; **12** 9, 41; **17** 19; **34** 13, 38, 65.

Yellowtail, *Seriola quinqueradiata* (also *Seriola lalandei*)

Yellowhead, *Mohoua ochrocephala*

*Zalophus californianus*: **2** 10; **5** 49, 25; **10** 39, 43; **14** 52; **32** 17, 19.

*Zannichellia* sp.: **18** 23, 24; **28** 8.

*Zapus princeos*: **6** 15.

*Zea mays*: **3** iii, 1, 4, 5, 15, 17, 21, 26-28; **4** 19; **5** 22; **6** 13; **8** 16; **9** 1; **12** 12, 43; **14** 48, 56; **15** 28; **18** iii, 1, 3, 6-8, 12, 15, 33, 41; **19** 22, 45; **20** 11, 13; **21** 6; **22** 2, 8; **23** 3, 12, 19, 33; **24** 2, 3, 15, 36; **25** 7; **26** 51; **28** 7; **32** 20; **33** 15, 39, 43; **34** 22.

Zebrafish, *Brachydanio rerio*

*Zenaida* (also *Zenaidura*) *macroura*: **7** 23, 50, 60; **10** 35; **14** 2, 85; **30** 23.

*Zingiber officinale*: **29** 24.

*Ziphius cavirostris*: **7** 26; **31** 31, 32.

*Ziphius* sp.: **31** 34.

*Zizania aquatica*: **14** 70.

*Zostera marina*: **18** 25; **26** 18, 40, 66.

*Zostera* spp.: **33** 15, 38.

*Zygaena filipendulae*: **23** 15.

*Zygaena trifolii*: **23** 20.

*Zygnema* sp.: **34** 32.

*Zylorhiza* spp.: **5** 6.

*Zyzomys argurus*: **30** 36.

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1. Mirex (1985)	PB85-203081, PC A04	809680131	
2. Cadmium (1985)	PB86-116779, PC A04	809680132	
3. Carbofuran (1985)	PB86-126885, PC A03	809680133	
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16. Index to Species (1989)	PB89-165161, PC A04	809680146	
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29. Radiation (1994)	PB95-192225, PC AO7	809520114	
30. Sodium Monofluoroacetate (1080) (1995)	PB95-189007, PC AO4	809520113	
31. Planar PCBs (1996)	PB97-150742, PC AO6	809780006	
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33. Copper (1998)	ADA 347472, PC AO7	809880055	
34. Nickel (1998)	pending	809880089	

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