

“INVERTEBRATE” CLASSIFICATION

"**EUKARYOTES**" (also includes green plants, red algae, fungi, etc.)

"**PROTISTS**" (single celled eukaryotes without plastids)

"**AMOEBOZOANS**" (some amoebae, slime molds, etc.)

Phylum Lobosea (lobose and testate amoebae) **150**

Phylum Archamoebae (parasitic amoebae)

"**RHIZARIA**" (foraminiferans, polycystines, acantharians, haplosporidans, etc.)

Phylum Foraminifera (foraminiferans) **50,000**

Phylum Radiolaria **4,240**

Class Polycystina (radiolarians)

Class Acantharia (“heliozoans”)

“**ALVEOLATES**” (ciliates, apicomplexans, dinoflagellates)

Phylum Ciliophora (ciliates) **~12,000?**

“**EXCAVATA**” (parabasalids, euglenozoans, trypanosomes, trichomonads, etc.)

Phylum Parabasalida (hypermastigotes and trichomonads) **300**

Class Hypermastigota (hypermastigotes)

CHOANOFLLAGELLATES (collared flagellates)

Phylum Choanoflagellata **~50?**

METAZOANS (=ANIMALS: multicellular eukaryotes)

PARAZOANS

"Phylum Porifera" (sponges) **~5,500**

Class Calcarea (calcareous sponges)

Class Demospongiae (demosponges)

Class Hexactinellida (glass sponges)

"**MESOZOANS**"

Phylum Placozoa **1–2**

Phylum Monoblastozoa (**1 species**)

Phylum Rhombozoa (**70 species**)

Phylum Orthonectida (**20 species**)

"**RADIATANS**"

Phylum Cnidaria (jellyfish, sea anemones, hydras, corals, etc.) **8,500–10,000**

Class Hydrozoa (hydras, *Obelia*, etc.)

Class Scyphozoa (jellyfish)

Class Cubozoa (box jellyfish)

Class Anthozoa (sea anemones, corals, sea pens)

Subclass Hexacorallia (sea anemones, stony corals, corallimorphs)

Subclass Octocorallia (sea fans, sea whips, sea pens, soft corals)

Phylum Ctenophora (comb jellies) **80**

BILATERIANS

PROTOSTOMES

"**ACOELOMATES**"

Phylum Platyhelminthes (flatworms) **25,000 (?)**

"Class Turbellaria"

Order Polycladida

Order Tricladida

Order Rhabdozoa

Subphylum Neodermata

Class Monogenea

Class Trematoda

Subclass Aspidogastrea

Subclass Digenea

Class Cestoda

Phylum Nemertea (ribbon worms) **900–1,200 (S)**

Phylum Gastrotricha (gastrotrichs) **450 (?)**

Phylum Gnathostomulida (jawed worms) **80 (?)**

Phylum Micrognathozoa (micrognathozoans) **1 (S)**

- "BLASTOCOELOMATES" (=pseudocoelomates)
- Phylum Nematoda (round worms) **28,000 (E)**
 - Class Rhabditea
 - Class Enoplea
 - Phylum Nematomorpha (horsehair worms) **325 (E)**
 - Phylum Rotifera (rotifers) **1,800 (S?)**
 - Class Digonata
 - Class Monogononta
 - Phylum Acanthocephala (thorny-headed worms) **1,200 (S?)**
 - Phylum Entoprocta (entoprocts) **150 (S)**
 - Phylum Cycliophora (cycliophorans) **2 (?)**
 - Phylum Priapula (penis worms) **16 (E)**
 - Phylum Loricifera (loriciferans) **22 (E)**
 - Phylum Kinorhyncha (mud dragons) **150 (E)**
- "EUCOELOMATES" (=coelomates)
- Phylum Mollusca (clams, snails, squids, etc.) **93,195 (S)**
 - Class "Aplacophora" (solenogasters & caudofoveatans) **370**
 - Class Polyplacophora (chitons) **900-1,000**
 - Class Monoplacophora (trybilids) **30**
 - Class Scaphopoda (tusk shells) **900**
 - Class Bivalvia (mussels, clams, oysters) **20,000**
 - Subclass Protobranchia
 - Subclass Lamellibranchia
 - Subclass Anomalodesmata
 - Class Gastropoda (snails, slugs, limpets, nudibranchs) **70,000**
 - Subclass Prosobranchia
 - Subclass Opisthobranchia
 - Subclass Pulmonata
 - Class Cephalopoda (octopods, squids, nautilus) **900**
 - Subclass Nautiloidea **5**
 - Subclass Coleoidea **895**
 - Phylum Annelida (including Pogonophora) (segmented worms) **17,000–22,000 (S)**
 - Class Polychaeta **10,000–13,000**
 - Subclass Clitellata **6,500–8,700**
 - Subclass Oligochaeta **6,000**
 - Subclass Hirudinoidea (Hirudinea) **500**
 - Phylum "Echiura" (spoon worms) **140 (S)**
 - Phylum Sipuncula (peanut worms) **320 (S)**
 - Phylum Arthropoda (arthropods) **1,097,631 (E)**
 - Subphylum Hexapoda (EEB 4286, etc.)
 - Subphylum Trilobitomorpha† **4,000**
 - Subphylum "Crustacea" **68,000**
 - Class Maxillopoda (barnacles, pentastomes, copepods, ostracods, branchiura) **26,000**
 - Subclass Copepoda (copepods) **12,000**
 - Subclass Branchiura (fish lice) **130**
 - Subclass Pentastomida (pentastomes) **130**
 - Subclass Thecostraca **1,285**
 - Infraclass Cirripedia (barnacles)
 - Subclass Ostracoda **13,000**
 - Class Malacostraca (crabs, crayfish, isopods, amphipods, euphausiids) **40,200**
 - Order Stomatopoda (mantis shrimp) **350**
 - Order Decapoda (crabs, shrimps, lobsters, etc.) **18,000**
 - Order Amphipoda (amphipods) **8,000**
 - Order Isopoda (isopods) **10,000**
 - Class Branchiopoda (fairly shrimp, etc.) **900**
 - Order Anostraca (fairy shrimp) **270**
 - Order Notostraca (tadpole shrimp) **12**
 - Order Diplostraca (conchostracans water fleas)

- Subphylum Myriapoda **11,500–13,000**
 - Class Diplopoda (millipedes) **8,000–10,000**
 - Class Chilopoda (centipedes) **3,000**
 - Class Symphyla **160**
 - Class Pauropoda **500**
- Subphylum Cheliceriformes **70,000**
 - Class Chelicerata
 - SubClass Merostomata
 - Order Xiphosura (horseshoe crabs) **6**
 - Order Eurypterida† (water scorpions)
 - SubClass Arachnida
 - Order Scorpiones **1,260**
 - Order Uropygi (whip scorpions) **100**
 - Order Pseudoscorpionida (pseudoscorpions) **3,300**
 - Order Aranae (spiders) **35,000**
 - Order Opiliones (harvestmen) **5,000**
 - Order Acari (mites and ticks) **30,000**
 - Class Pycnogonida **1,000**
- "LOPHOPHORATES"
 - Phylum Bryozoa (ectoprocts) **4,500 (S?)**
 - Phylum Brachiopoda (lamp shells) **335 (S?)**
 - Class Inarticulata
 - Class Articulata
 - Phylum Phoronida (horseshoe worms) **20 (S?)**
- DEUTEROSTOMES
 - Phylum Echinodermata (sea stars, sea urchins, sea cucumbers, etc.) **7,000**
 - Class Crinoidea (feather stars)
 - Class Asteroidea (sea stars)
 - Class Ophiuroidea (brittle stars)
 - Class Echinoidea (sea urchins)
 - Class Holothuroidea (sea cucumbers)
 - ? Phylum Chaetognatha (arrow worms) **120 (?)**
 - Phylum Hemichordata (acorn worms & pterobranchs) **85**
 - Class Enteropneusta
 - Class Pterobranchia
 - Class Planctosphaeroidea
 - Phylum Chordata
 - Subphylum Urochordata (ascidians, sea squirts, salps, larvaceans) **3,000**
 - Class Ascidiacea (sea squirts)
 - Class Thaliacea (thaliacians)
 - Class Appendicularia (larvaceans)
 - Class Sorberacea
 - Subphylum Cephalochordata (lancets) **45**
 - Subphylum Vertebrata (vertebrates) **(46,670 species)**

Taxa in grey not covered.