AQUATIC ANIMALS

My answer to the question:

What are the different types of aquatic animals?

Short question, potentially long answer, which perhaps explains why there are no answers so far: life began in the sea, and the majority of different animal Phyla (see NOTA 1) are still there, although *insects* (a sub-phylum of the phylum **Arthropoda**), with perhaps 2 000 000 to 30 000 000 species, *are practically not represented in the sea* (*saltwater*), *to which I will confine my answer*.

We all know a few *mammals* (*Cetacea* [whales, sperm whales, dolphins, narwhals], *Pinnipedia* [seals, sea otters, walruses], *Manatees* i.e.dugong; etc.. There is even a fish eating bat, *Myotis vivesi*, if you please). Then we all know that there are the *fish* (phylum **vertebrata**), albeit many people do not suspect how many species of fish exist: there are about 30000 *living and described* species of fish (<u>Vertebrate - Wikipedia</u>). As the freshwater fish, according to Wikipedia, account for 41.24 &% of all known species of fish, we should consider that more than 12000 species are excluded from my list.

(Just as a reference, I note that all *mammal* species, aquatic and not, are about 5500. There are 66000 *described* species of vertebrates, 50% terrestrial).

However, so far I just mentioned only a minimal part of the population of the oceans.

I will now give a short summary of the mostly aquatic phyla present in the seas with **more** than about 10000 species (main reference: <u>List of animal phyla - Simple English Wikipedia,</u> the free encyclopedia)

1. Phylum Crustacea (the aquatic relatives of the insects): 50 000 *described* species, including Classes *Branchiopoda* : brine shrimps (freshwater mostly, and not to be counted here); *Cephalocarida* : horseshoe shrimps; *Maxillopoda*: barnacles , fish lice; *Ostracoda* : seed shrimps; *Malacostraca*: lobsters , crabs, shrimps .

2. Phylum Mollusca : about 50000 to 150000 living species (such as clams , oysters , scallops , mussels , squid (calamari) and land snails (escargot, not to be counted here). Some mollusca, of course, make pearls.

3. Phylum Annelida : a larger phylum of wormlike animals. 10 000 species are marine animals (sandworm, etc.)

4. Phylum Echinodermata, possibly 17000 species (including sea urchins, sea lilies, starfish, sea cucumbers, etc.)

5. Phylum Radiata: about 10000 living species (including sea anemones, corals, jellyfish, etc.)

All these possibly 200 000 species do not include, besides many parasites, the **Porifera** (sponges), with just 5000 species, too few for this summary. Still, how can I forget the Phylum **Placozoa**? There is only one species known, *Trichoplax adhaerens* (https://simple.wikipedia.org/wik...), discovered in 1883. Small, about 2mm, aquatic , eats bacteria and single-celled algae & protozoa . Sounds like a minor phylum.

One can understand that it is easy to be scared by the sheer number of aquatic animals, all with their specificities, and then, perhaps, to be fascinated by their study.

NOTA:

(1) a Phylum is a major subdivision of animals, which are significantly different from the animals belonging to other Phyla; about 32 (to 39) animal phyla are known. 21 of them are exclusively aquatic animals.