

Bony Fish (Superclass Osteichthyes)

All of the bony fish have skeletons made from real bone. This is the most diverse group of vertebrates. There are over 29,000 species present. There are several groups of bony fish. Most are ray-finned fish. These are the typical fish you're most familiar with. The other main type of fish is the lobe-finned fish, which have fleshy fins with muscles. A final group is the lungfishes.

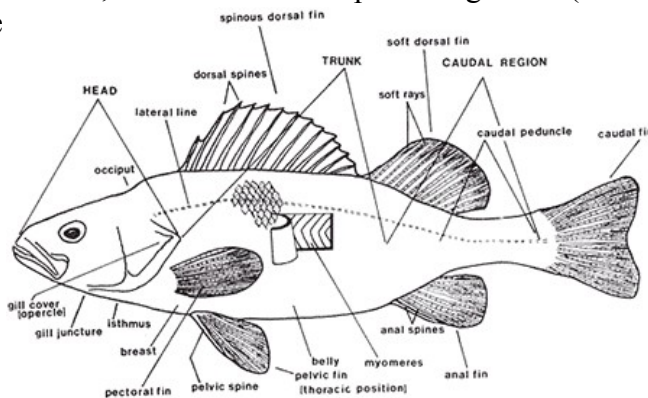


* Ray-finned fish

These are the most common type of fish – these have rays in their fins for support. These are the dominant class of vertebrates. Ray-finned fish include a huge variety of fish types.

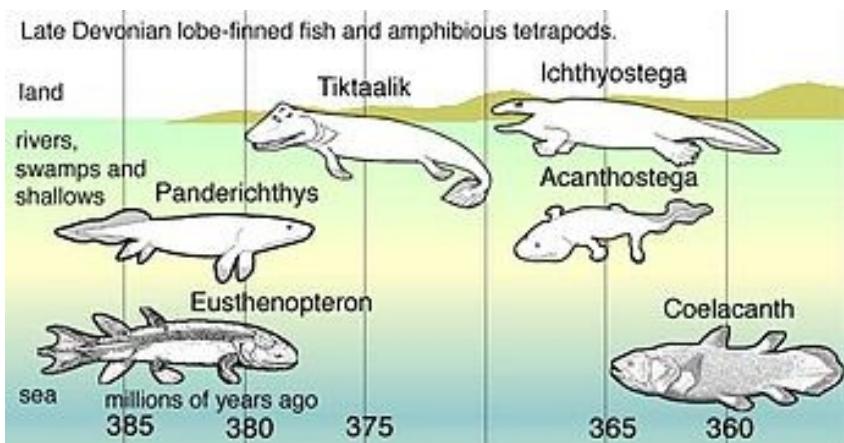
Most have a single sex, but some are hermaphroditic, and others exhibit parthenogenesis (birth without a father). A few, such as sea horses, involve a male giving “birth” through a pouch. Sizes range from the ocean sunfish (22 feet and over 5000 pounds) to the dwarf pygmy goby (15mm, or less than an inch).

Fish examples include sturgeons, bowfins, mooneye, tarpons, gulper eels, herrings, goldfish, piranhas, trout, ribbon fish, cave fishes, angler fish, flying fish, wrasse, sea horses and pipe fish, scorpion fish, puffer fish, tuna, and many others.



* Lobe-finned fish

Lobe-finned fish have fins that are enlarged and muscular, and some of these fish seem to walk on the lobes. It is thought that the lobe-finned fish may be ancestral to land vertebrates. These rare fish include the coelacanth, and the tetrapod fish which are largely extinct. These all have stubby fins that are more leg-like than fin-like. It is thought that these developed when the early oceans of earth were drying up.



* Lungfishes

Strange examples of the ray-finned fish include the lungfish. For these, the air bladder inside the body which normally helps with swimming is modified. Oxygen from the air can seep into the blood through the skin and the air bladder. Some can be out of the water for hours. Others can move from shallow puddle to puddle. Most of these live in the southern hemisphere. These developed about the time that sharks ruled the waters.

