The wet world of macroinvertebrates

Under the water of many lakes and streams is the amazing world of the macroinvertebrate (MAC-row-in-VERT-ih-brate).

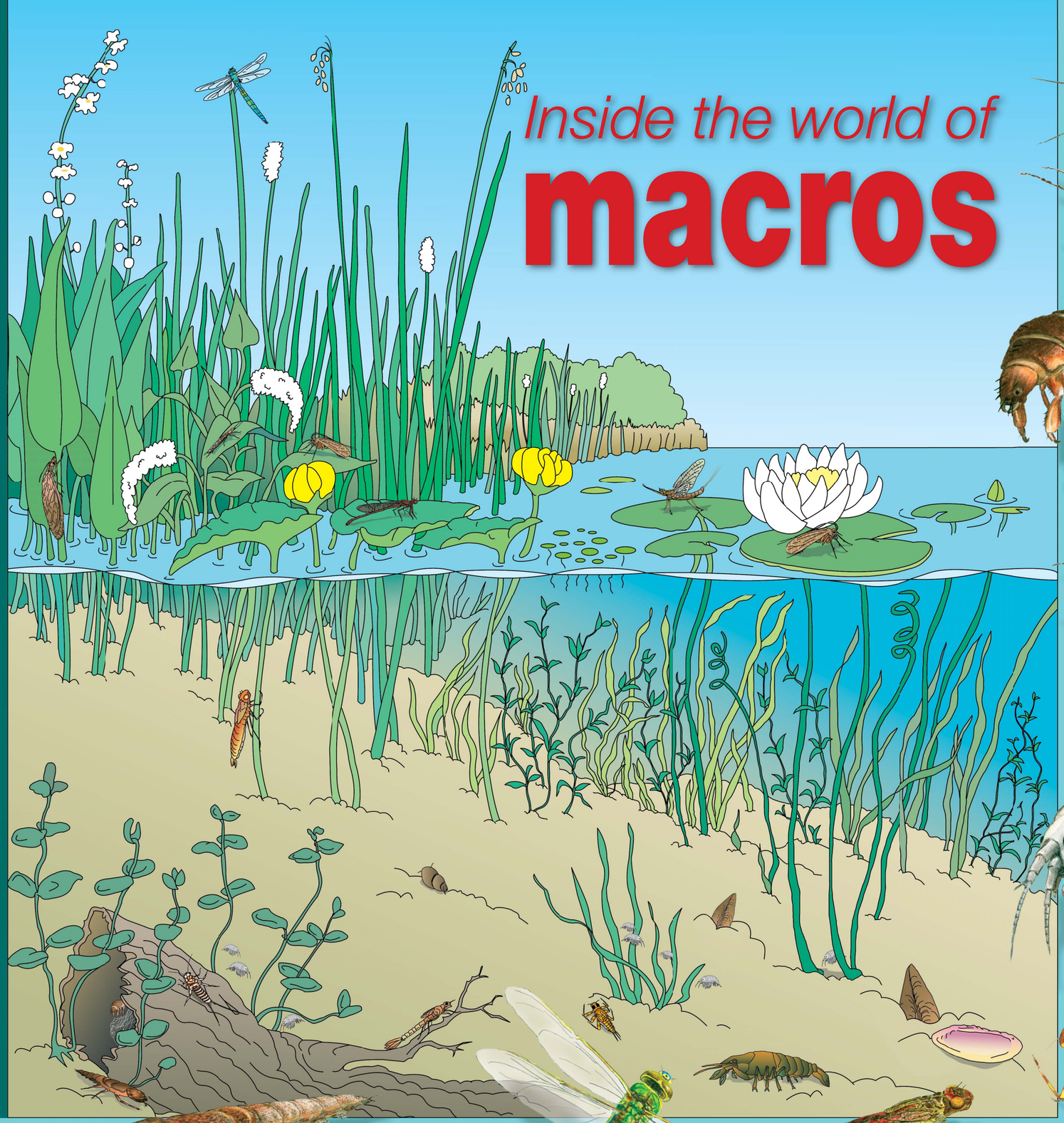
Macroinvertebrates are often called macros. They are invertebrates (animals without a backbone) that you can see without using a microscope or magnifying glass. Slimy snails are macros, and so are crawly crayfish.

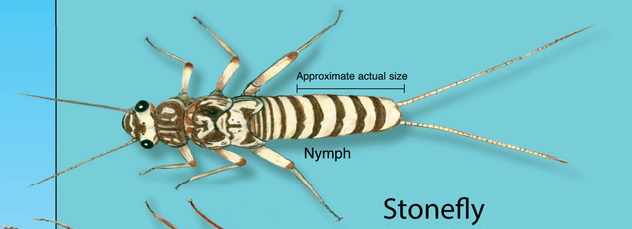
There are many different types of macros. Macros that live on or in the ground beneath the water are called benthic macros. Snails, mussels, crayfish, worms and leeches are all benthic macros. Some larval, or young, insects are also benthic macros, though they live above the water when they're older.

Scientists survey benthic macros to measure a water body's water quality. Scientists know that certain types of macros can tolerate polluted water, while other types cannot. So as pollution increases in a water body, non-tolerant macros die. If scientists look along the bottom of a lake and only find tolerant benthic macroinvertebrates, they know a lake is polluted.

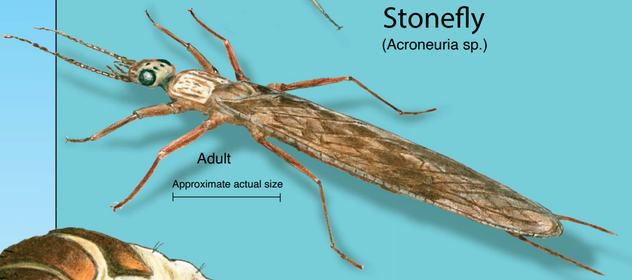
Because pollution tends to reduce the variety of organisms surviving in one place, healthy waters usually have many different types of macros. A variety of macros in one place is called diversity, and is a sign of good water quality.

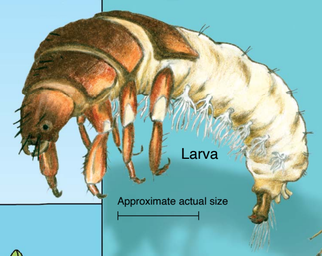
Inside the world of **macros**



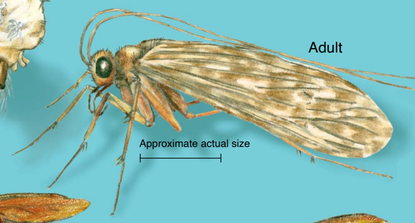


Stonefly
(Acroneuria sp.)



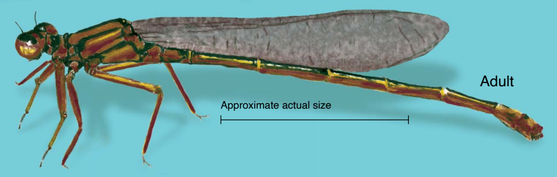


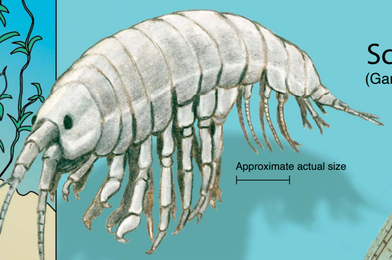
Caddisfly
(Hydropsyche sp.)





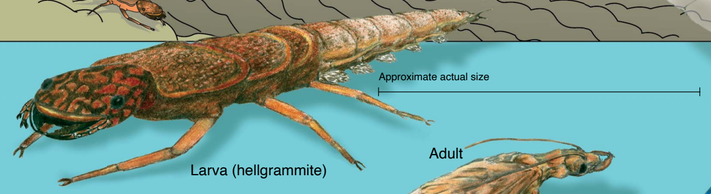
Damselfly
(Calopteryx maculata)



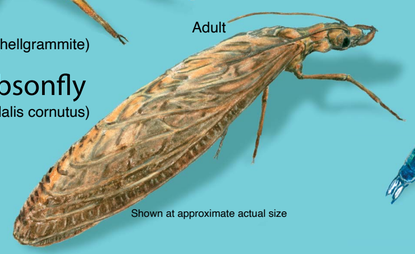


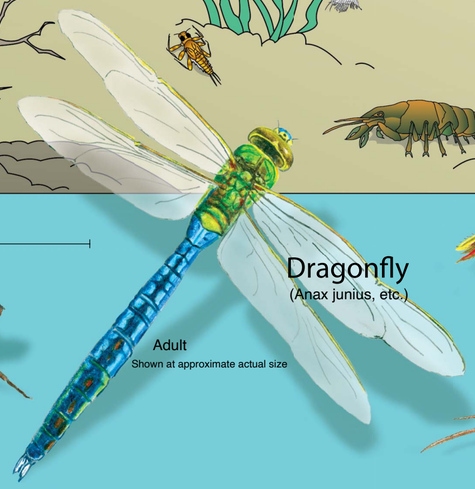
Scud
(Gammarus)

Mayfly
(Stenacron interpunctatum)

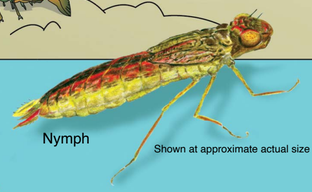


Dobsonfly
(Corydalis cornutus)

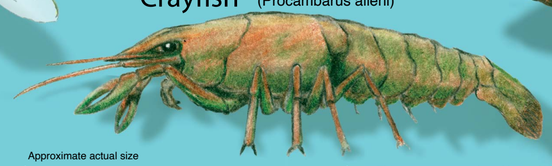




Dragonfly
(Anax junius, etc.)



Crayfish (Procambarus alleni)



Freshwater mussel
(Elliptio buckleyi)



Gil-breathing snail
(Viviparus georgianus)



Southwest Florida Water Management District
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