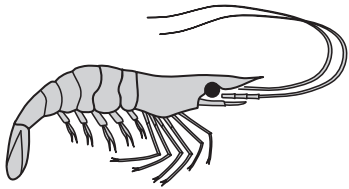
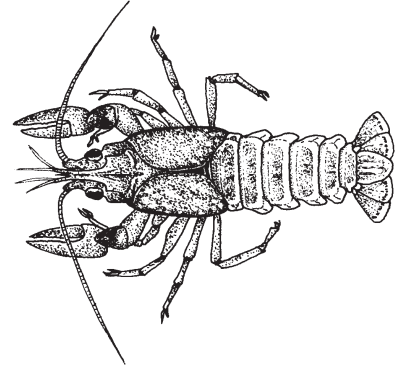


Freshwater Invertebrate Identifier

Even if you happen to be a dry fly purist today, chances are you got your start in fishing with a small aberdeen hook on the end of the line in one hand, and a dipnet in the other. Collecting your own bait is a great way to start down the angler's path, but there are plenty of other interesting aquatic creatures swimming our ponds and canals, too. This article is for anyone who has ever held a dipnet, wondered what in the world that little thing with all the legs was, and discovered that catching bait can be just as much fun as catching fish.

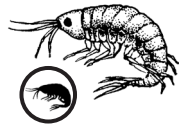
Crustaceans

Crayfish: (To 5") Color ranges from red to brown to green. This common crustacean is well-known as a good bait for largemouth bass. The pincers can draw blood, however, so handle with care when using "crawdads" for bait. The egg-bearing female can be told instantly because she anchors the small, black eggs beneath her tail. Crayfish have nineteen pairs of appendages including antennae, legs, claws, and swimmerets! **Note:** There are no seasons, gear, bag or size limits for freshwater crayfish and neither a recreational nor commercial license is needed. It is illegal to take Florida's imperiled crayfish (Panama City, Sims Sink and Black Creek crayfishes) and all cave-inhabiting crayfish.



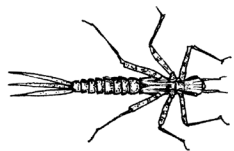
Grass shrimp: (To 1 ½") This greenish, semi-transparent crustacean is very common. It is usually found closely associated with vegetation of some kind, often shoreline grasses. Like the crayfish, a female anchors her eggs beneath her tail. This is a prime panfish bait that, despite its small size, may also draw the interest of passing largemouths.

Amphipod: (Less than ¼") This gray, near-microscopic crustacean is common in bottom sediments and some vegetation (especially the submerged roots of water lettuce and water hyacinth). When removed from the water, it jumps around erratically.



Insects

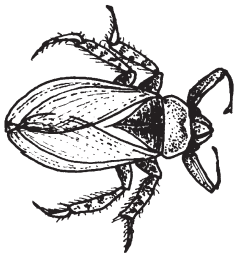
Many insects have a life cycle that involves water. A common pattern is to have a larval stage that lives in water, and an "emergent" adult stage that lives on land (although often still near water). For some insects the larval stage is the long-lived stage while the adult may live for only days or even hours. Other insects, such as predaceous diving beetles, may live out their entire lives under water, as both larval and adult stages.



Damselfly nymph: (To 1") Usually green or brown. Look for the three feathery "tails", which are actually breathing structures similar to gills. This is the larval form of the adult damselfly.

Dragonfly nymph: (To 1 ½") This insect is usually green or brown in color. The larval form (like the adult dragonfly) is predaceous and will bite if given the opportunity. The body is thicker and rounder than the damselfly's (above) and lacks the three "tails". Dragonfly nymphs can actually use a form of jet propulsion by expelling water quickly from the back of the body to "jet" forward if alarmed.





Water bug: (To 2 ½") This diverse group of insects comes in a wide variety of shapes and sizes. They are usually green, brown, or black. Most are highly predatory. The small, bright green water bugs in particular (called “alligator fleas” locally) have a strong, stinging bite—if one gets you, you’ll definitely take notice! Males of some species may be found carrying eggs cemented to their backs (for protection) by the female.

Water strider: (To ¾") This small, delicate bug is found *on* the water rather than in it. It usually occurs in groups that stay closely together as they skate erratically across the water’s surface. Usually black or brown in color.



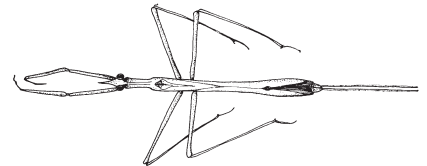
Water boatman: (To ½") This insect’s name comes from the oar-shaped back legs. A small dark gray bug that spends all its time underwater near pond or lake bottom. Unusual among other aquatic bugs in being non-predatory, feeding instead on plants or algae.

Whirligig beetle: (To 1") This shiny black beetle skims rapidly on top of the water’s surface in tight circles, lending it its name. It is often found in groups, and the overall effect on the observer can be dizzying!

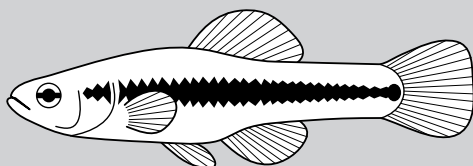


Predaceous diving beetle: (To 1") The larvae are called “water tigers,” for their aggressiveness and voracious appetite. Most adults are black or brown, and may have hairs on the back of their legs that increase surface area for swimming, giving them “diving fins” for better propulsion and maneuverability. Adults must breathe air directly, and can carry a bubble under their shells as a natural scuba tank!

Water scorpion: (To 2") Don’t worry—this brown insect is not related to scorpions, despite the name! It is predatory, however, and hangs from vegetation near the surface while it waits for prey to come within reach. Looks very similar to a small walking stick.



Crawling water beetle: (To ¼") These tiny beetles are variously colored but usually have dark spots on the back. Poor swimmers that prefer to crawl, they are omnivorous and feed on a variety of plant and animal matter.



(Bluefin killifish)

A Minnows and Baitfish Identifier is also available.

This handout is a publication of the South Region Fisheries Management Section of the Florida Fish and Wildlife Conservation Commission (FWC), and is paid for in part by Sport Fish Restoration funds. For more information can visit us at MyFWC.com.



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