Crayfish – *Procambrus clarkii* (red swamp crayfish)

Crayfish Classification

Kingdom:	Animalia
Phylum:	Arthropoda (jointed exoskeleton)
Subphylum:	Crustacea (aquatic arthropods with 2 pairs of antennae)
Class:	Malacostraca (crustaceans with modified appendages)
Order:	Decapoda (shrimp, crayfish, lobsters, & crabs)

Natural History

Crayfish, commonly known as **crawfish** or **crawdads**, are freshwater crustaceans that resemble small lobsters. Crayfish live in any freshwater body that is low in pollution, does not freeze to the bottom, and provides hiding places (mud, rocks, logs, etc.) from predators. They breathe through feather-like **gills**. Crayfish are considered an **indicator species** because very few of them can survive polluted waters. Crayfish have 8 jointed walking legs, a segmented body, 2 pairs of sensory antennae, and compound eyes. The 2 large pincers or claws are the **chelipeds**. If a crayfish loses a leg, the leg will regenerate.

Crayfish are **omnivores** that feed upon living and dead animals and plants. Larval crayfish are very tiny. They are often active during the day, feeding upon plankton. Adult crayfish are **nocturnal**, actively feeding upon snails, algae, shrimp, insect larvae, worms, tadpoles, and aquatic plants from dusk until daybreak. Body color varies depending on diet. Usually, crayfish move about at a slow walk but can, if startled, use rapid flips of their tail to swim backwards quickly. Most crayfish live short lives, usually less than two years. They rely upon rapid, high-volume reproductive strategies to continue the species.

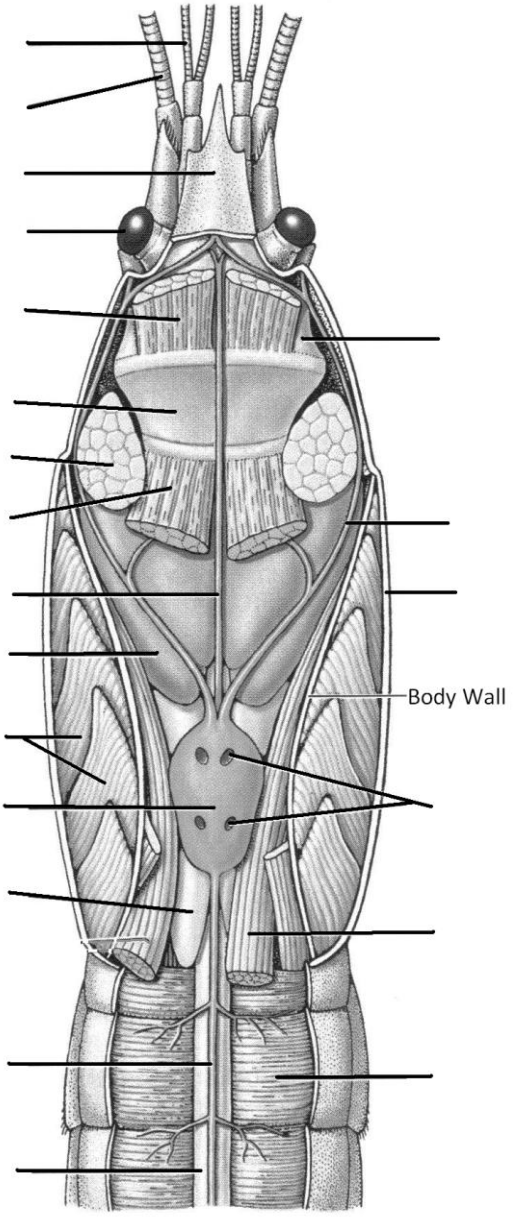
Many crayfish become sexually mature and mate in October or November after they're born, but fertilization and egg laying usually occur the following spring. The fertilized eggs are attached to the female's swimmerets on the underside of her jointed abdomen. There the 10 to 800 eggs change from dark to translucent as they develop. The egg-carrying female is said to be "**in berry**," because the egg mass looks something like a berry. The eggs hatch in 2 to 20 weeks, depending on water temperature. The newly-hatched crayfish stay attached to their mother until shortly after their second molt.

The exoskeleton could be considered a blessing and a curse. The hard exoskeleton is highly protective with joints that allow for movement. However, because their exoskeleton does not grow as their body grows, crayfish must molt (shed) their old exoskeletons as they grow through a process called **ecdysis**. When they first molt they are soft, and very vulnerable to attack by other crayfish or predator fish. It can take a couple days for the new shell to fully harden. Juveniles can molt every week or so. Adults may only molt a couple times a year, and only under the right conditions. Molting occurs 6 to 10 times during the first year of rapid growth, but less frequently during the second year. The empty shell will be consumed to recover the lost minerals.

The natural predators of the crayfish include alligators, burbots (a type of cod), chicken turtles (*Deirochelys reticularia*), painted turtles, desman (a type of otter), and grackles (a type of a bird).

Link to everything you wanted to know about crayfish and more!

Organ System	Structures to Identify
Circulatory	Antennal artery, Dorsal abdominal artery, Heart, Ophthalmic artery, & Ostia of heart
Digestive	Cardiac stomach, Digestive gland (hepatopancreas), Intestine, & Pyloric stomach
Integumentary	Antenna, Antennule, Carapace, Compound eye, & Rostrum
Muscular	Abdominal extensor muscle, Abdominal flexor muscle, Anterior gastric muscle, Mandibular muscle, & Posterior gastric muscle
Reproductive	Testis
Respiratory	Gills



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