

Taxonomic Structures and Glossary of Terms Referenced in Georgia's Protected Crayfish Accounts

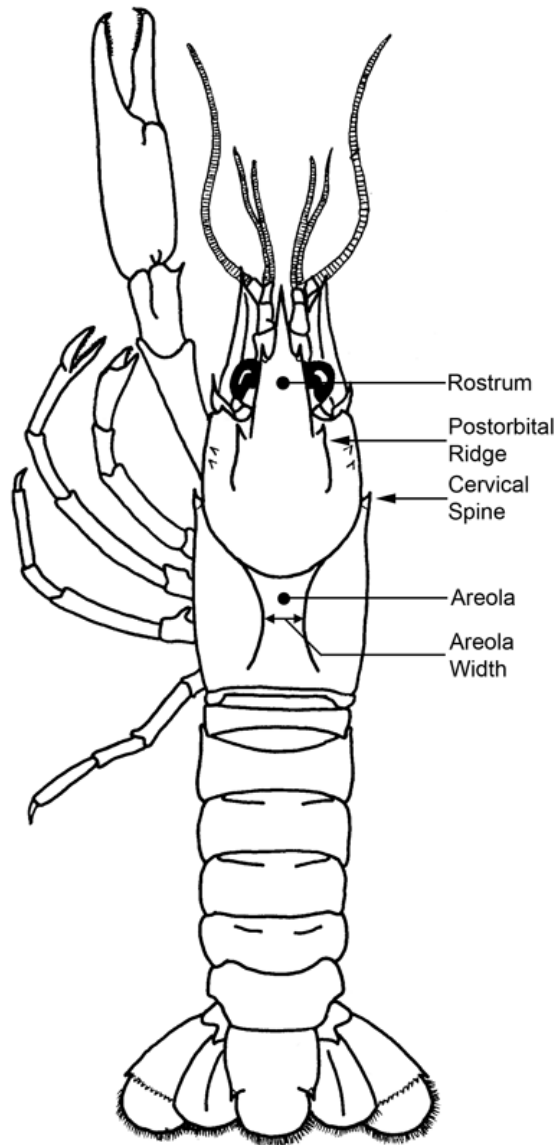


Figure 1. Dorsal view of a crayfish with important taxonomic characteristics labeled. Modified from Hobbs (1976) and Eversole and Jones (2004).

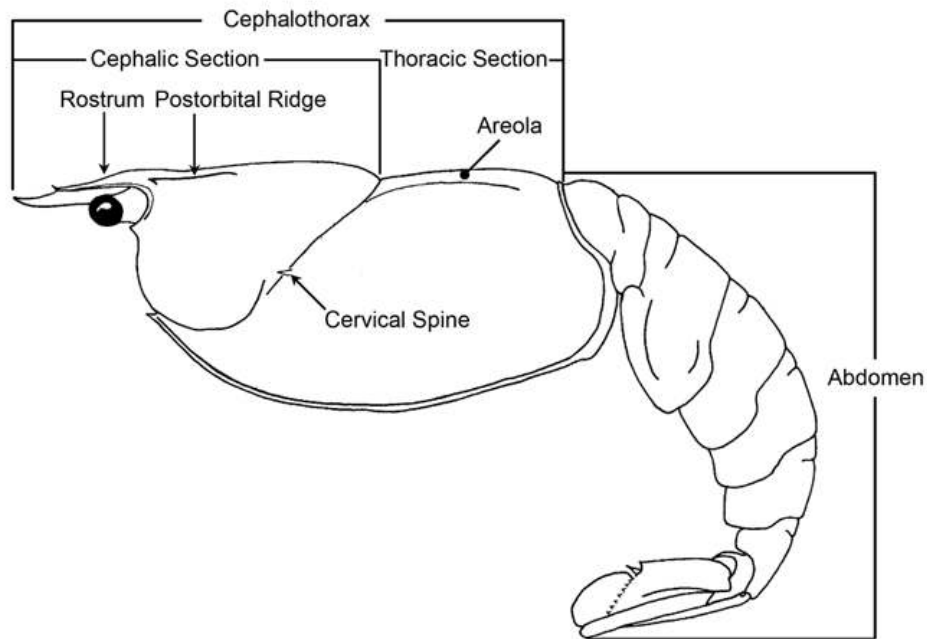


Figure 2. Lateral view of a crayfish with important taxonomic characteristics labeled. Modified from Hobbs (1976) and Eversole and Jones (2004).

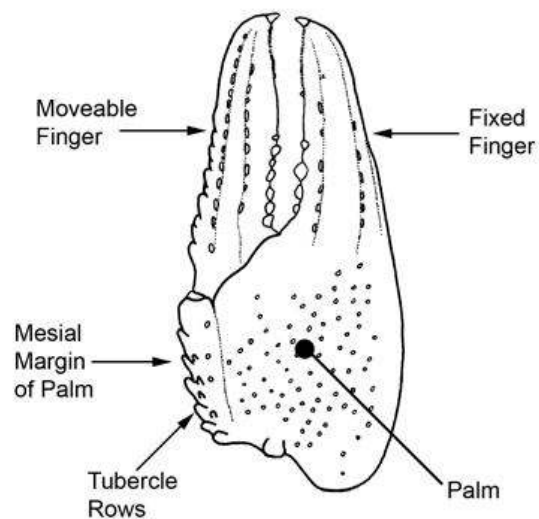


Figure 3. Crayfish claw with important taxonomic characteristics labeled. Modified from Prins and Hobbs (1972) and Eversole and Jones (2004).

CRAYFISH GLOSSARY

Abdomen - the rear half of the crayfish, posterior to (to the rear of) the cephalothorax.

Anterior - directional term indicating front end of an organism; toward the front.

Aquifer - underground layer of water contained in permeable rock or in gravel, silt, sand, or clay.

Areola - the space found on the dorsal (back or top) surface of the carapace between two curved grooves.

Carapace - the exoskeleton of a crayfish that covers the cephalothorax (front) portion of the body.

Carina - small ridge; usually referring to raised area down the center of the rostrum.

Cephalothorax - the anterior or front portion of the body made up of the fused cephalic and thoracic regions; anterior to (in front of) the abdomen.

Cervical spine - sharp point on either side of the cephalothorax.

Dorsal - directional term indicating the "back" or "top" of an animal or object.

Endemic - native to a particular place.

Exoskeleton - the hard outer covering (skeleton) of crayfish and other arthropods; this covering is shed during molting.

Fingers - the two long appendages of a claw used for grasping or defending.

Fixed finger - non-movable finger on the claw.

"in berry" - term used to describe a female crayfish carrying eggs under her abdomen.

Impervious - surfaces around water bodies that do not allow percolation of rain into the soil (e.g. parking lots, roads, roof tops) that cause streams to receive explosive runoff during rain events.

Karst - limestone area where erosion has created sinkholes, caves, and underground streams.

Lateral- directional term indicating "to the side."

Lentic - areas with non-moving water such as ponds or swamps.

Macrophytes - plants large enough to be observed with the naked eye.

Medial - pertaining to the middle.

Mesial - directional term indicating "toward the middle or midline of the animal."

Molting - the process of shedding the exoskeleton.

Obliterated - no space between the grooves that delineate the areola.

Omnivore - animals that eat both plant and animal matter.

Palm - the portion of the claw that is not composed of fingers.

pH - measure of acidity or alkalinity of a solution. Low pH is acid; high pH is alkaline.

Posterior - directional term indicating rear end of an organism; toward the rear.

Postorbital ridge - the ridge (raised area) directly behind the eyes.

Riffle - areas of fast flow in a stream where surface of water is agitated.

Riparian - area along the margin of a stream.

Rostrum - the "nose" of the crayfish; the portion of the carapace that is anterior to (in front of) the eyes

Setae - hair-like structures.

Swimmerets - paired "feathery" appendages on the ventral side of the abdomen.

Telson - center segment of the tail.

Troglobitic - living in underground habitats.

Tubercle - rounded projection or bump.

Ventral - directional term indicating the "belly" or "bottom/underside" of an animal.

Definitions and figures adapted from the following sources:

Eversole, A and D.R. Jones. 2004. Key to the crayfish of South Carolina. Clemson University, Clemson, SC. 43 p.

Hobbs, H.H., Jr. 1976. Crayfishes (Astacidae) of North and Middle America. US EPA. Cincinnati, OH. 173 p.

Hobbs, H.H., Jr. 1981. Crayfishes of Georgia. Smithsonian Contributions to Zoology. Number 318. 549 p.

North Carolina Wildlife Resources Commission. The Crayfishes of North Carolina.
Available online at
http://www.ncwildlife.org/Wildlife_Species_Con/nccrayfishes/nc_crayfishes.html

Prins, R. and H.H. Hobbs, Jr. 1972. A new crayfish of the subgenus *Puncticambarus* from the Savannah River drainage, with notes on *Cambarus* (P.) *reburus* Prins (Decapoda, Astacidae). *Proceedings of the Biological Society of Washington*, 84:411-420.

This document compiled by Dr. Chris Skelton, November 2008.