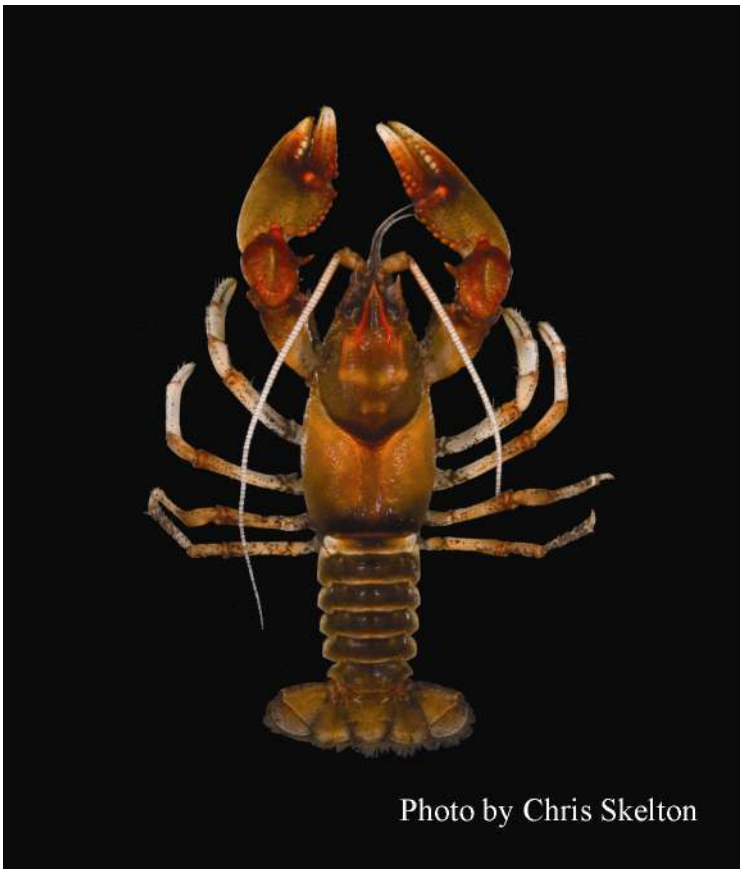


Common Name: TALLAPOOSA CRAYFISH

Scientific Name: *Cambarus* (*Depressicambarus*) *englishi* Hobbs and Hall

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Cambaridae

Rarity Ranks: G3/S2

State Legal Status: Rare

Federal Legal Status: none

Description: The overall body color of the Tallapoosa crayfish is brownish to olive and the abdomen is almost black. The rostrum tapers toward the tip and appears slightly pinched in the middle. There are well-developed cervical spines. The claws of this species may be robust and have two rows of tubercles along the mesial margin of the palm. The antennae are whitish in live individuals. This species reaches a maximum total body length of about 90 mm (3½ inches).

Similar Species: The Tallapoosa crayfish occurs with its close relative, the slackwater crayfish (*Cambarus halli*). In life, the two can be separated by the color of the antennae; whitish in the Tallapoosa crayfish and pinkish in the slackwater crayfish. Additionally, the rostrum of Tallapoosa crayfish appears to be more tapered and pinched in the middle, whereas the rostrum of the slackwater crayfish is more parallel-sided. The variable crayfish (*Cambarus latimanus)* can also be found with the Tallapoosa crayfish, but it is a drab species with an areola that is narrower and hence more hourglass shaped than that of the Tallapoosa crayfish.

Habitat: This species is found primarily in fast moving water under and among large rocks.

Diet: No diet studies of the Tallapoosa crayfish are known. Crayfishes are considered opportunistic omnivores and are likely to feed on live and decaying vegetation, aquatic insect larvae, small fishes, and dead animal matter.

Life History: Stream dwelling crayfishes typically hide during the day and come out at night to feed. Reproduction usually occurs during the spring and fall, but males in reproductive condition may be found at any time during the year. When female crayfish are ready to lay eggs, they usually find a secure hiding place and hence are rarely encountered. When the eggs are released, the female attaches them to her swimmerets and is said to be "in berry." Upon hatching, the juvenile crayfish are attached to the mother by a thread. After the juveniles molt for the second time, they are free of the mother, but stay close and will hold on to her for some time. Eventually they move off on their own. Crayfishes molt 6 or 7 times during their first year of life and most are probably able to reproduce by the end of that year. They molt once or twice a year for the remainder of their lives and live about 3 years. Male Tallapoosa crayfish in reproductive condition have been collected in March, September, and October. The smallest and largest breeding males known are about 64 mm (2.5 inches) and 75 mm (3.0 inches), respectively. No females with eggs have been collected. The largest female specimen collected is about 90 mm (3.5 inches) in length.

Survey Recommendations: Since this species is usually found in swift water, it is most easily collected by holding a net perpendicular to the current downstream of a large rock, then lifting the rock and disturbing the substrate beneath it. If a crayfish is hiding underneath the rock, it will likely move into the net. Shocking downstream into a seine net with a backpack electroshocker is also effective. Collections in spring or fall are more likely to produce males in reproductive condition, which can be helpful with identifications.

Range: The Tallapoosa crayfish is known only from the Tallapoosa and Little Tallapoosa river systems in Georgia and Alabama. In Georgia, these streams lie in the Piedmont physiographic province.

Threats: The small range of this species makes it vulnerable to extirpation. Urbanization in the upper Tallapoosa River system is an emerging threat to the Tallapoosa crayfish and other rare and endemic aquatic species. Heavy sedimentation resulting from poor development and land management practices may cover substrates and other daytime hiding places on which crayfishes rely to avoid predation. The introduction of non-native crayfishes is a threat to all crayfish species.

Georgia Conservation Status: No populations are known to be protected.

Conservation and Management Recommendations: Conserving populations of the Tallapoosa crayfish will require general watershed level conservation measures, including the protection of riparian zones, control of sediment and nutrient runoff from farms and construction sites, and limiting the amount of impervious cover (e.g., pavement) within occupied watersheds. Non-native crayfishes should never be used for bait. Instead, anglers should use crayfishes collected from the river system they will be fishing in and should never release unused bait crayfish back into Georgia waters.

Selected References:

Hobbs, H. H., Jr. 1981. The crayfishes of Georgia. Smithsonian Contributions to Zoology 318:1-549.

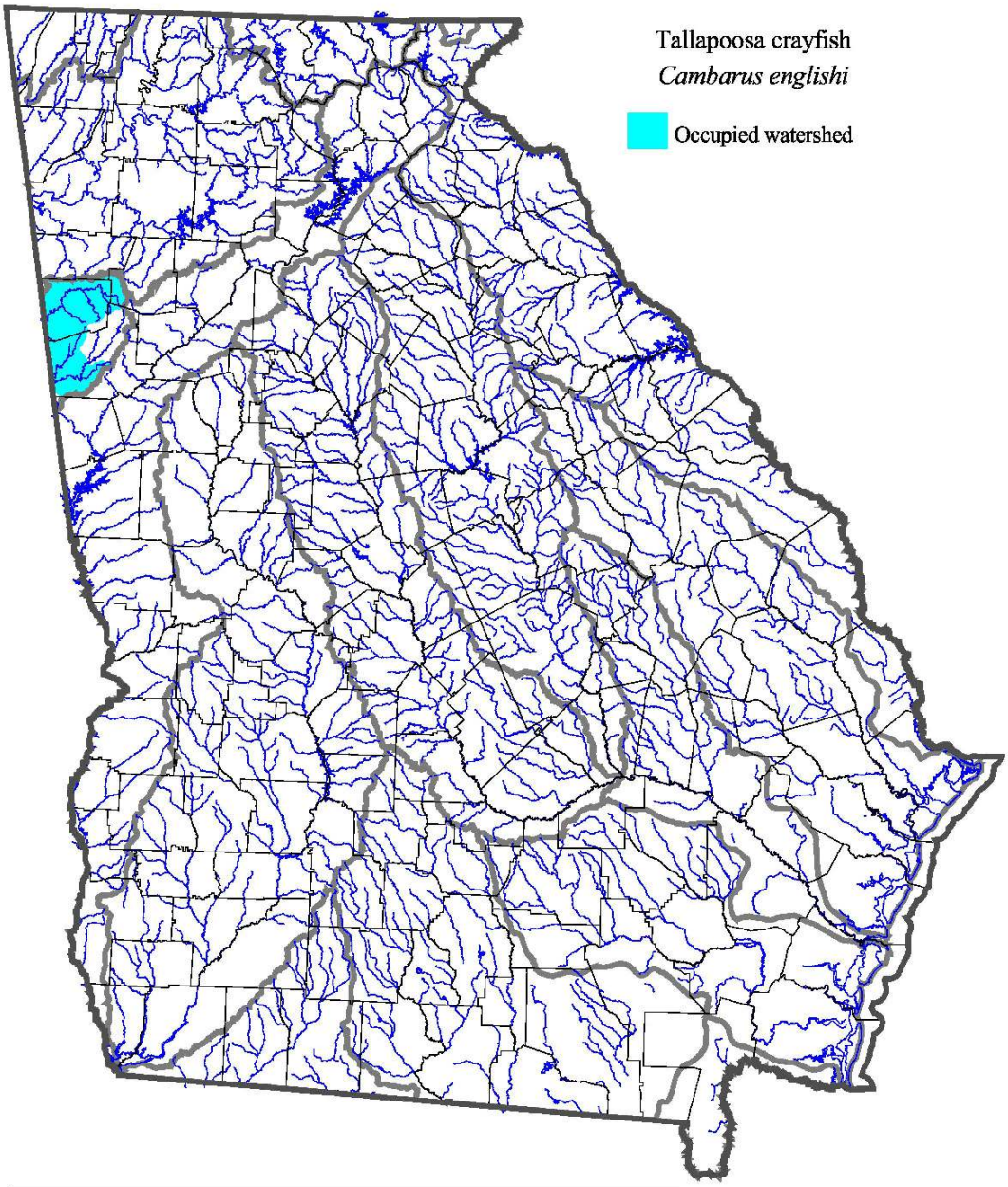
Hobbs, H. H., Jr. 1989. An illustrated checklist of the American crayfishes (Decapoda: Astacidae, Cambaridae, and Parastacidae). Smithsonian Contributions to Zoology 480:1-236

Hobbs, H.H., Jr. and E. T. Hall, Jr. 1972. A new crayfish from the Tallapoosa River in Georgia (Decapoda: Astacidae). Proceedings of the Biological Society of Washington 85(12): 151-161.

Taylor, C. A., G. A. Schuster, J. E. Cooper, R. J. DiStefano, A. G. Eversole, P. Hamr, H. H. Hobbs III, H. W. Robison, C. E. Skelton, and R. F. Thoma. 2007. A reassessment of the conservation status of crayfishes of the United States and Canada after 10+ years of increased awareness. Fisheries 32:8:372-389.

Author of Species Account: Christopher E. Skelton

Date Compiled or Updated: June 2008



Watersheds (Huc 10) with known occurrences. Streams, county lines, and major river basin boundaries are also shown. Map generated from GADNR (Nongame Conservation Section) data on December 18, 2008.