



Photo by Chris Lukhaup

Common Name: CHATTOOGA RIVER CRAYFISH

Scientific Name: *Cambarus (Puncticambarus) scotti* Hobbs

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Cambaridae

Rarity Ranks: G3/S2

State Legal Status: Threatened

Federal Legal Status: none

Description: The overall color of the Chattooga River crayfish is tannish to brown, although the margins of the rostrum and various tubercles are bright reddish. The claws are a dull greenish and are robust in adult males. The areola is wide and nearly parallel sided and well-developed cervical spines are present. The rostrum is fairly long and tapers gradually to a point. This species reaches a maximum total body length of about 90 mm (3½ inches).

Similar Species: This species has been collected with the variable crayfish (*Cambarus latimanus*) and the ambiguous crayfish (*Cambarus striatus*). Both of these species have a much narrower areola than the Chattooga River crayfish and neither have cervical spines.

Habitat: The Chattooga River crayfish is usually collected from beneath rocks or debris in flowing areas with moderate to swift current. It is known from the Chattooga River and smaller tributary streams.

Diet: No studies of the Chattooga River 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 Chattooga River crayfish in reproductive condition have been collected in March-May and September-October and females carrying eggs were found in April. The number of eggs for 4 individuals ranged from 110-310, with egg diameters ranging from 2.1-2.3 mm (about 1/8 inch).

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 Chattooga River crayfish is known from about 20 locations in the Chattooga River system in northwestern Georgia and northeastern Alabama. In Georgia it has been collected at 14 sites in Walker and Chattooga counties within the Ridge and Valley physiographic province.

Threats: The small range of this species and poor land use practices within that range are potential threats to the Chattooga River crayfish. 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 native crayfishes.

Georgia Conservation Status: There are no known protected populations of this species.

Conservation and Management Recommendations: Conserving populations of the Chattooga River crayfish will require general watershed level protection 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:

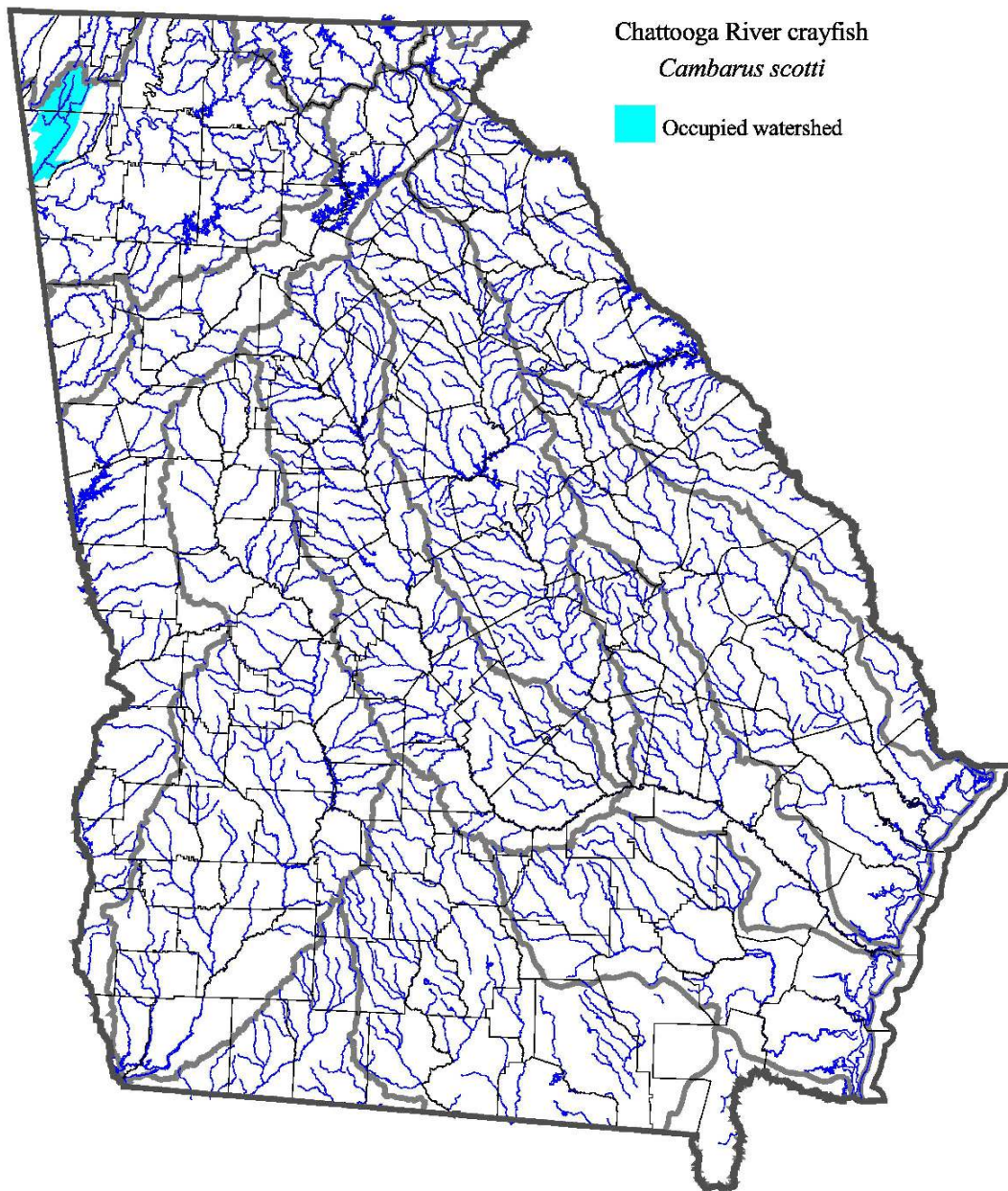
Hobbs, H. H., Jr. 1981. The crayfishes of Georgia. Smithsonian Contributions to Zoology 318:1-549.

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

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)72-389.

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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.