



**Common Name:** DOUGHERTY PLAIN CAVE CRAYFISH

**Scientific Name:** *Cambarus (Jugicambarus) cryptodytes* Hobbs

**Other Commonly Used Names:** none

**Previously Used Scientific Names:** none

**Family:** Cambaridae

**Rarity Ranks:** G2G3/S1

**State Legal Status:** Threatened

**Federal Legal Status:** none

**Description:** This is the only albino crayfish known to occur in Georgia. Eyes are present but not pigmented, and the claws and legs are slender and appear fragile. The antennae are approximately twice as long as the body. This species reaches a maximum total body length of about 65 mm (3 inches).

**Similar Species:** This is the only known albino crayfish occurring in Georgia.

**Habitat:** This species is known only from subterranean habitats. It has been seen and collected in underwater caves and has also been collected from wells.

**Diet:** Nothing is known about the diet of the Dougherty Plain cave crayfish. Like other crayfishes, it is likely an opportunistic omnivore and may even prey on the troglobitic salamander *Haideotriton wallacei*.

**Life History:** Because this crayfish is a troglobite (an animal that lives entirely in the dark parts of caves), very little is known of its life history. Males in reproductive condition have been collected in July, September, and October; no females with eggs have been found. Some researchers hypothesize that cave crayfishes live for several decades.

**Survey Recommendations:** Researchers have been able to catch several individuals of this species in study wells with a modified funnel trap. SCUBA diving in springs along the Flint River has also yielded specimens of this species.

**Range:** All records of the Dougherty Plain cave crayfish are from the Dougherty Plain physiographic province, a karst topography where springs, seeps, and caves have formed within the limestone geology. The species is currently known from Dougherty and Decatur counties in southwestern Georgia and Jackson and Washington counties, in the Panhandle of Florida. It almost certainly occurs in Mitchell and Baker counties, Georgia, as these counties lie between Dougherty and Decatur Counties, in southwest Georgia.

**Threats:** Small range size makes this species vulnerable to extirpation. Excessive water withdrawals from the Floridian Aquifer reduce the amount of habitat for the Dougherty Plain cave crayfish. Runoff of pesticides and nutrients from agricultural areas is also a threat.

**Georgia Conservation Status:** Because this species inhabits subterranean waters it is virtually impossible to protect specific populations.

**Conservation and Management Recommendations:** Restrict access to sensitive cave habitats. Use vegetated buffers around groundwater recharge areas and streams to protect water quality within caves. Identify levels of groundwater withdrawal that are compatible with aquatic habitat needs for crayfishes and other troglobites.

### **Selected References:**

Hobbs, Jr., H. H. 1941. Three new Florida crayfishes of the subgenus *Cambarus* (Decapoda: Astacidae). American Midland Naturalist, 26(1): 110-121.

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

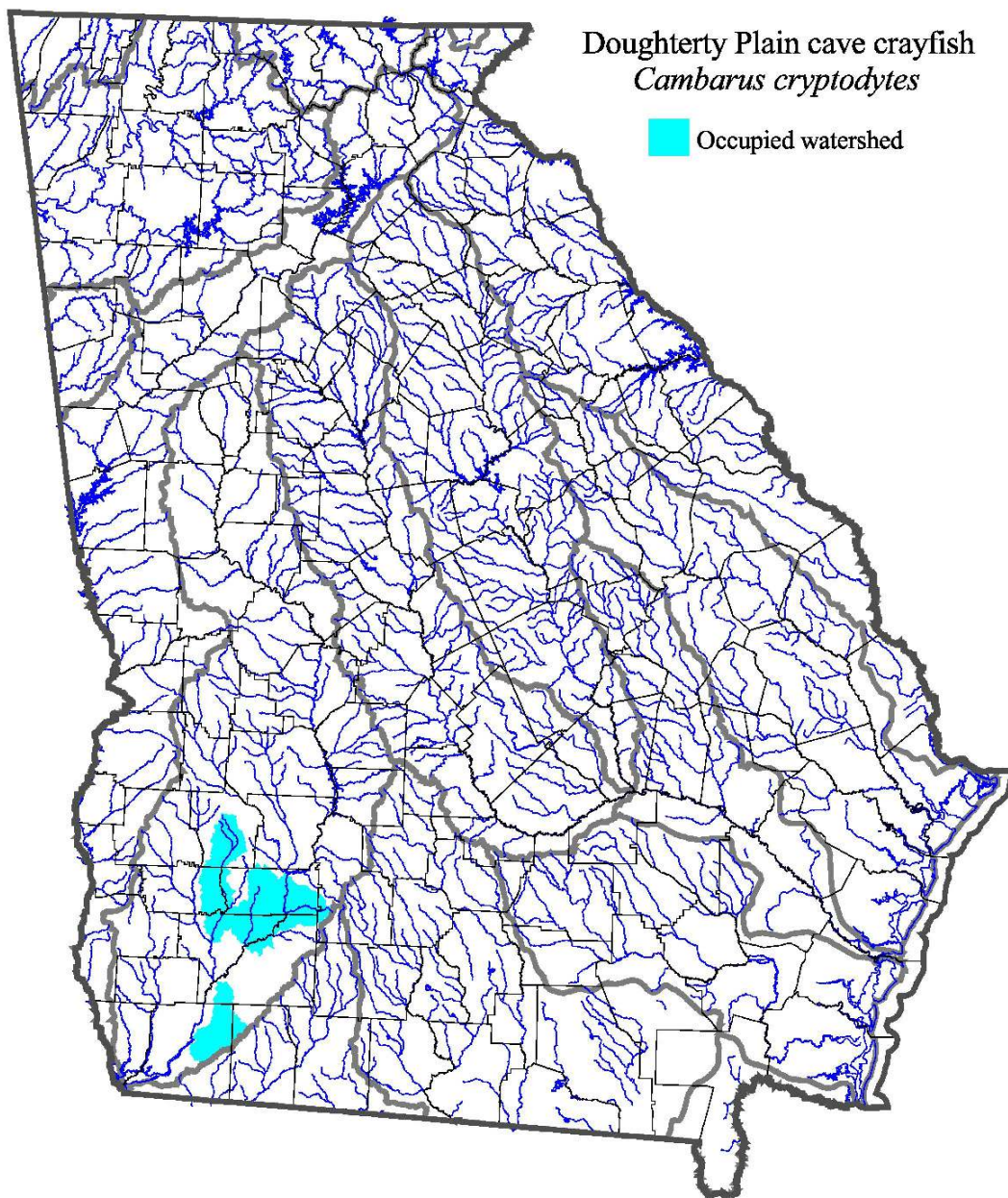
Purvis, K.M. and S. Opsahl. 2005. A novel technique for invertebrate trapping in groundwater wells identifies new populations of the troglobitic crayfish, *Cambarus cryptodytes*, in southwest Georgia, USA. Journal of Freshwater Ecology 20: 361-365.

Sutton, B. and K. Relyea. 1971. Notes on the Georgia blind cave salamander, *Haideotriton wallacei* (Amphibia: Plethodontidae). (Abstract) ASB Bulletin 18(2): 58.

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.