



## Four new crayfishes (Decapoda: Cambaridae) of the genus *Orconectes* from Texas

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### Abstract

Four new crayfishes of the genus *Orconectes* from Texas are described, including *Orconectes (Hespericambarus) cyanodigitus*, *Orconectes (Gremicambarus) castaneus*, *Orconectes (Buannulifictus) occidentalis* and *Orconectes (B.) texanus*. *O. cyanodigitus*, of the Red River system, is most closely aligned with *O. deanae* and *O. difficilis*. It is distinguished from the former by its gonopod's much shorter, less recurved central projection; and from the latter by its much longer mesial process. *O. castaneus*, of a small section of the Colorado River system, is most similar to *O. nais* and *O. palmeri longimanus*. Its obliterated areola, longer gonopod processes, annulus ventralis structure and color distinguish it from the former; while its shorter gonopod processes, annulus ventralis structure, and color pattern distinguish it from the latter. *O. p. longimanus*, heretofore considered widely ranging in Texas, is split into three closely allied taxa, with its Texas range reduced to the Red River system and a small tributary of Trinity River; *O. texanus* occupying most of the remainder of east Texas, including the Sabine, Neches, Trinity, San Jacinto and Navasota basins; and *O. occidentalis* occupying the Colorado, Guadalupe, Medina, Frio and Nueces systems of central Texas. *O. texanus* is distinguished from *O. p. longimanus* by its gonopod's more recurved processes and more strongly tapered central projection, annulus ventralis structure and color pattern; and from *O. occidentalis* by its annulus ventralis configuration and color pattern. *O. occidentalis* is distinguished from *O. p. longimanus* primarily by its annulus ventralis structure and color pattern. Evidence of the extirpation of *O. p. longimanus* from its type locality is presented.

**Key words:** crawfish, crawdad, species descriptions