

## Colorado Crustacean of Interest

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# Longtailed Tadpole Shrimp

**Scientific Name:** *Triops longicaudatus*  
(LeConte)

**Subphylum:** Crustacea  
**Class:** Branchiopoda  
**Order:** Notostraca  
**Family:** Triopsidae



**Figure 1.** Longtailed tadpole shrimp. Photograph courtesy of Dave Leatherman.

**Identification and Descriptive Features:** The longtailed tadpole shrimp had a broad, shield-like carapace covering the front of the body and an elongated abdomen tipped with two long tails. When full-grown they may be about 40 mm and are a golden brown color.

The feathery gills are on the legs. Three eyes are present on the front of the head.

**Distribution in Colorado:** Potentially widespread. It is known to occur in the western states of the US as well as the provinces of Alberta and Saskatchewan. The longtailed tadpole shrimp is also present in parts of Asia and South America.



**Figure 2.** Longtailed tadpole shrimp swimming in pool.

**Life History and Habits:** The longtailed tadpole shrimp is a resident of small, very temporary (vernal) pools that form after heavy rainfall or flash floods. Flooding that covers the dormant eggs cause them to hatch and the tadpole shrimp begin to feed and grow. They are omnivores that will consume algae, organic particles that they stir up from the bottom and guide into their mouth. They may also prey upon small arthropods (including mosquito larvae), worms and anything they can capture and subdue; they may also be cannibalistic.

Tadpole shrimps develop rapidly, reaching maturity in as little as 8 days. Populations likely consist primarily, if not entirely, of hermaphrodites that are capable of self-fertilization. (Some males may also be



**Figure 3.** Longtailed tadpole shrimp in a small pool on the side of a road in the Pawnee National Grassland, Weld County, Colorado.

present.) Eggs are laid in batches, about one per day during its brief adult life. They are short-lived, typically surviving for only about 2-4 weeks.

The eggs must completely dry out before they can hatch. Known as cysts, they are extraordinarily resistant to desiccation and temperature extremes and may remain dormant for two decades.

**Special Note:** The longtailed tadpole shrimp is an ancient species that appears to have gone essentially unchanged for 70 million years. They are sold as the item of aquarium kits under the trade names “Aquasaurs” or “Triassic Triops”.