

WHITE RIVER CRAYFISH

Procambarus acutus acutus

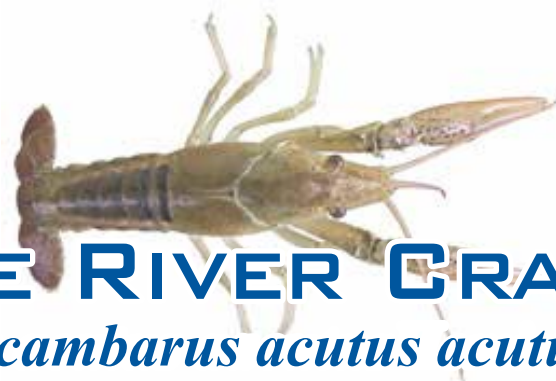


Photo courtesy of Tony Palacios, iNaturalist.org, EOL.

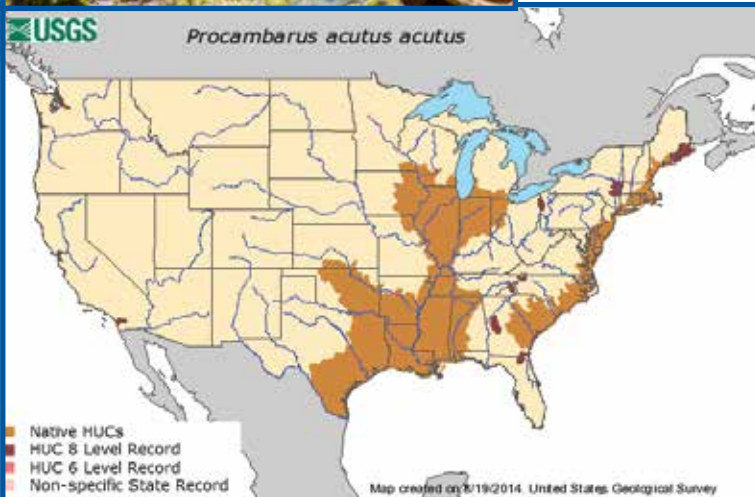


The white river crayfish, also called the white river crawfish and the eastern white river crayfish, is often confused with its southern counterpart, the southern white river crayfish (Procambarus zonangulus). The eastern white river crayfish occurs naturally in the United States and is cultured eastwards from Louisiana to the Atlantic coast northward to Maine, but has established select non-native populations in locations throughout the East Coast and in California.

SPECIES DESCRIPTION

Adult white river crayfish are usually a dark burgundy red but can range in color from pinkish tan to brownish olive with a black “V-shaped” stripe on the abdomen. The carapace is rough and granular and is separated in the middle by a narrow space called the areola. Juveniles are gray with dark spots scattered over the carapace. The claws are long and narrow, delicate in appearance, and have small dark tubercles. This species reaches about 6-13 cm (2.5-5 in) in length.

The white river crayfish is nearly impossible to distinguish from the southern white river crayfish without looking at the reproductive structures of a breeding male. It is also confused with the red swamp crayfish (*P. clarkii*), which have an areola that is straight, or often invisible, and a black “V-shaped” stripe on the abdomen. The juveniles are also typically plain or striped on the carapace instead of spotted. White river crayfish can also be found in streams and ditches with a stronger flow than what is preferred by the red swamp crayfish.



NATIVE & INTRODUCED RANGES

The native range for this species extends from the Southern Atlantic Coast drainage from Georgia to Maine, from the Florida panhandle to Mexico, and from the Central Mississippi Valley to the Upper Great Lakes drainages. It was introduced intentionally into California and New England for aquaculture and bait, and has been found in Pennsylvania in Adams, Bedford, Chester, Crawford, Erie, Luzerne, Monroe, and Philadelphia counties.

BIOLOGY & SPREAD

Because this species is used in bait and aquaculture, it is most likely spread intentionally and unintentionally. White river crayfish may be released by anglers using them as bait, aquarists who keep them as pets, landowners stocking them in ponds, and by consumers purchasing them from live food markets.



Photo courtesy of Linda Gail Price, iNaturalist.org, EOL.

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Photo courtesy of Liz Bergey, Oklahoma Biological Survey and Department of Biology, University of Oklahoma.



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HABITAT

The white river crayfish is typically found in open waters of sloughs, swampy areas, sluggish lowland streams and ditches, or in floodplains. It will frequently burrow into sediments to escape drying or freezing.

IMPACTS

Threat to Biodiversity

While the impacts of this species are relatively unknown, the white river crayfish has been classified as a high-risk species by individual invasiveness assessments. Because it is an opportunistic feeder, it is expected to outcompete native crayfish for resources like shelter and food. It could also act as a vector for parasites and disease.



Photo courtesy of Phil Myers, Animal Diversity Web, EOL.

PREVENTION & CONTROL

Many chemicals kill crayfish; however, none are currently registered for crayfish control and none selectively kill invasive crayfish without killing other crayfish species. The best way to prevent further ecological problems caused by the white river crayfish is to prevent their introduction or slow their spread into new waters. Learn how to identify the white river crayfish. Never release live bait into any water body, and never transport any crayfish from one water body to another. It is illegal in Pennsylvania to possess, sell, barter, or transport any crayfish in Pennsylvania unless the head is removed and the crayfish is dead.



Photo courtesy of United States Geological Survey.

References:

Lieb, D.A., Bouchard, R.W., Carline, R.F., Nuttall, T.R., Wallace, J.R. and Burkholder, C.L. 2011. *Conservation and management of crayfishes: lessons learned from Pennsylvania*. Fisheries 36 (10):489-507

Missouri Department of Conservation. White river crayfish species profile page. <<http://mdc.mo.gov/discovernature/field-guide/white-river-crayfish>>.

Invasive Species Compendium. *Procambarus acutus acutus*. <<http://www.cabi.org/isc/datasheet/67841>>.