

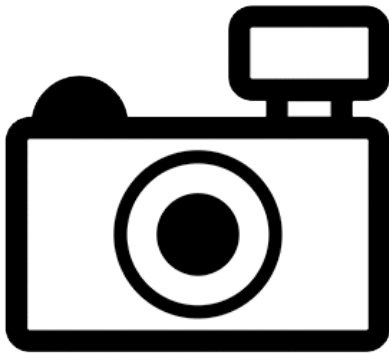
***Cherax longipes* (a crayfish, no common name)**

Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, September 2011

Revised, December 2017

Web Version, 5/20/2018



No Photo Available

1 Native Range and Status in the United States

Native Range

From Holthuis (1982):

“All 8 species of the subgenus *Cherax* inhabit the Central Mountain Range in the Wissel Lakes region of Irian [Irian Jaya, a.k.a. West Papua province, Indonesia] [...] 2 of the species (*C. longipes* and *C. solus*) are known only from Tigi Lake [...]”

Status in the United States

This species has not been reported as introduced or established in the United States.

The Florida Fish and Wildlife Conservation Commission has listed the crayfish *Cherax longipes* as a prohibited species. Prohibited nonnative species “are considered to be dangerous to the ecology and/or the health and welfare of the people of Florida. These species are not allowed to be personally possessed or used for commercial activities” (FFWCC 2017).

From Washington Department of Fish & Wildlife (2017):

“(1) Prohibited aquatic animal species. RCW 77.12.020

These species are considered by the commission to have a high risk of becoming an invasive species and may not be possessed, imported, purchased, sold, propagated, transported, or released into state waters except as provided in RCW 77.15.253. [...] The following species are classified as prohibited animal species: [...] Family Parastacidae: Crayfish: All genera except *Engaeus*, and except the species *Cherax quadricarinatus* [sic], *Cherax papuanus*, and *Cherax tenuimanus*.”

Means of Introduction into the United States

This species has not been reported as introduced or established in the United States.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing

From GBIF Secretariat (2017):

“Kingdom	Animalia
Phylum	Arthropoda
Class	Malacostraca
Order	Decapoda
Family	Parastacidae
Genus	<i>Cherax</i> Erichson, 1846
Species	<i>Cherax longipes</i> Holthuis, 1949”

“SPECIES | ACCEPTED”

Size, Weight, and Age Range

No information available.

Environment

From Holthuis (1982):

“All species [of subgenus *Cherax*] are inhabitants of purely fresh water [...]”

Climate/Range

From Holthuis (1982):

“[...] between altitudes of 1650 and 1750 m.”

Distribution Outside the United States

Native

From Holthuis (1982):

“All 8 species of the subgenus *Cherax* inhabit the Central Mountain Range in the Wissel Lakes region of Irian [Irian Jaya, a.k.a. West Papua province, Indonesia] [...] 2 of the species (*C. longipes* and *C. solus*) are known only from Tigi Lake [...]

Introduced

No introductions of this species have been reported.

Means of Introduction Outside the United States

No introductions of this species have been reported.

Short Description

From Lukhaup and Herbert (2008):

“Rostral teeth [...] 3-5”

“Chelae [...] 4 x longer than broad”

“Carapace [with] numerous tubercles”

“Small eyes; legs extremely long and slender”

Biology

From Holthuis (1982):

“All species [of subgenus *Cherax*] are found in lakes and larger or smaller streams.”

Human Uses

No information available.

Diseases

From Tavakol et al. (2016):

“*Diceratocephala boschmai* Baer, 1953 (Temnocephalida: Diceratocephalidae) [...]

Type hosts: [...] *Cherax longipes* [...]

Threat to Humans

No information available.

3 Impacts of Introductions

No information available. No introductions of this species have been reported.

The Florida Fish and Wildlife Conservation Commission (FFWCC 2017) and the Washington Department of Fish and Wildlife (2017) have listed this species as a prohibited species.

4 Global Distribution

No georeferenced occurrences of *C. longipes* were found.



Figure 1. The island of New Guinea, with a purple star indicating the approximate location of Tigi Lake, the only place where *C. longipes* is known to be established (Holthuis 1982). Public domain map.

5 Distribution within the United States

This species has not been reported as introduced or established in the United States.

6 Climate Matching

Summary of Climate Matching Analysis

The climate match (Sanders et al. 2014; 16 climate variables; Euclidean Distance) for *Cherax longipes* is low across the contiguous United States. The consistently low match was reflected in a low Climate6 score. Scores of 0.005 or less indicate a low climate match for the target match region of the contiguous U.S.; Climate6 score for *Cherax longipes* was 0.000.

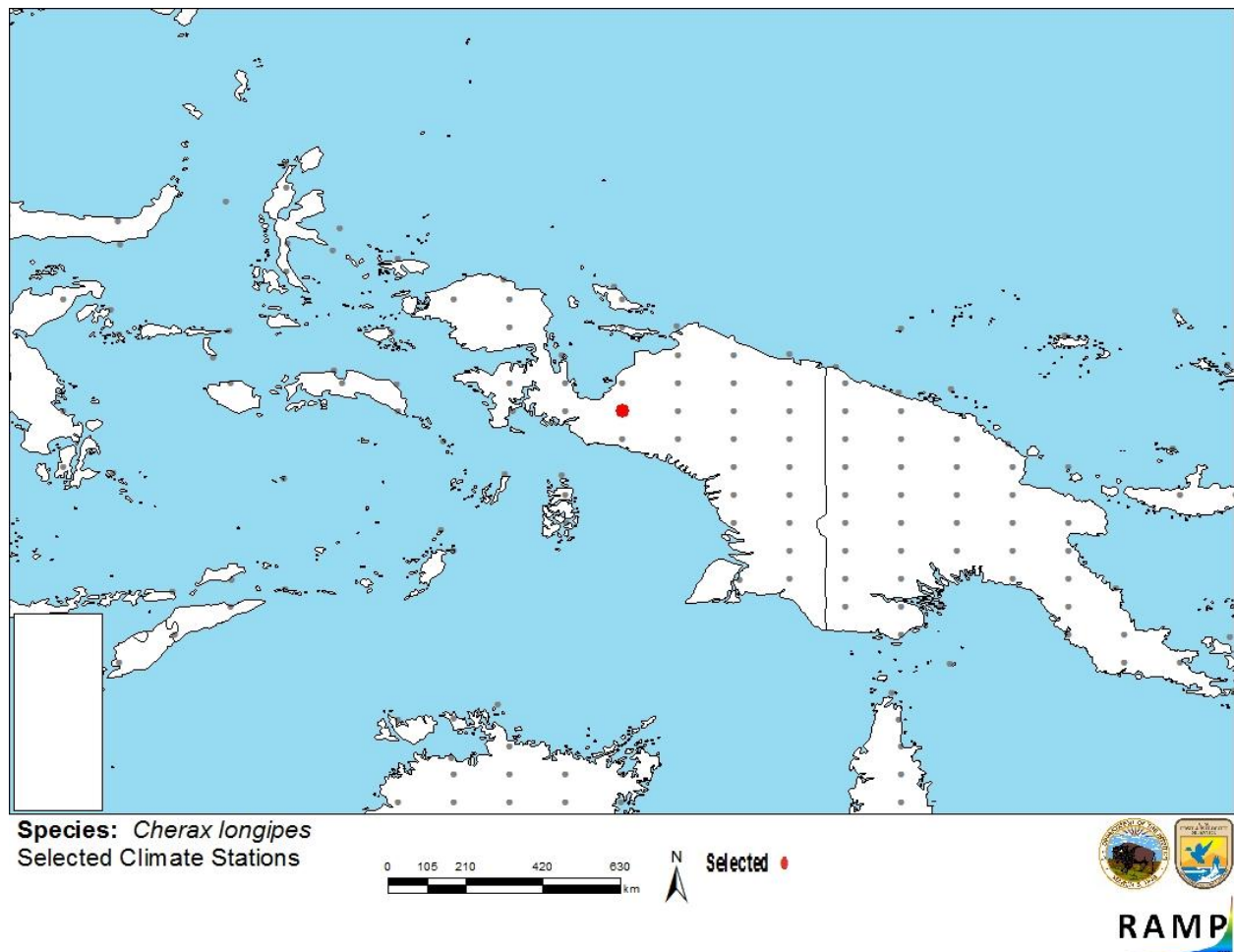


Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations selected as source locations (red) and non-source locations (gray) for *Cherax longipes* climate matching. Source location approximates the known distribution of the species as described by Holthuis (1982).

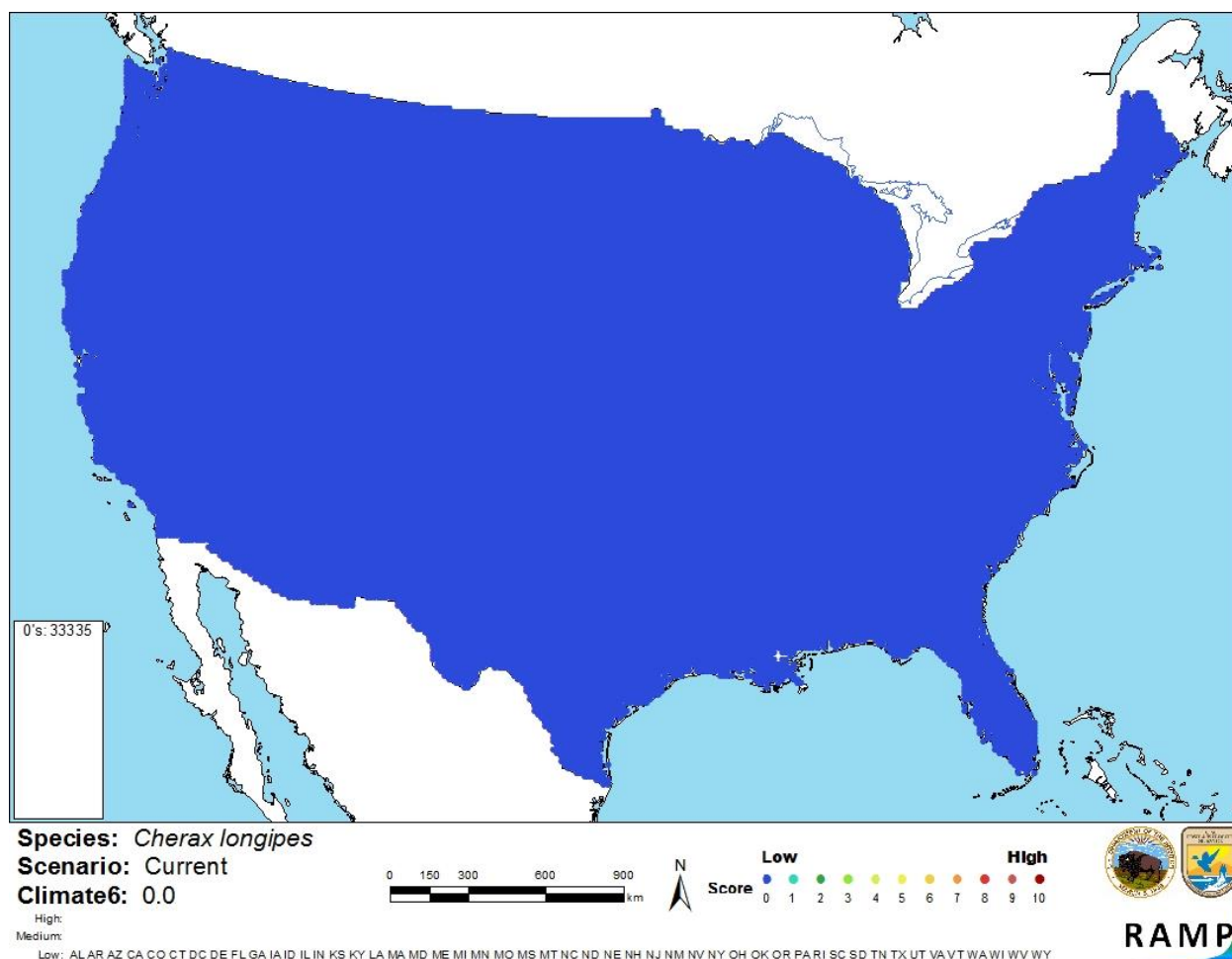


Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Cherax longipes* in the contiguous United States based on source location reported by Holthuis (1982). 0=Lowest match, 10=Highest match.

The “High”, “Medium”, and “Low” climate match categories are based on the following table:

Climate 6: Proportion of (Sum of Climate Scores 6-10) / (Sum of total Climate Scores)	Climate Match Category
$0.000 < X \leq 0.005$	Low
$0.005 < X < 0.103$	Medium
≥ 0.103	High

7 Certainty of Assessment

Very little information was available on the biology, ecology, and distribution of *Cherax longipes*. No information was available on the impacts of introduction because no introductions have been reported. Certainty of this assessment is low because of this paucity of data on which to base the assessment.

8 Risk Assessment

Summary of Risk to the Contiguous United States

Cherax longipes is a crayfish species known from a single lake in western New Guinea. No introduction history was reported for the species, nor any evidence of trade. *C. longipes* has an overall low climate match to the contiguous U.S. Florida and Washington prohibit possession or sale of *C. longipes*. The overall risk assessment is uncertain, because of the unknown impacts of introduction, were it to occur, and the low climate match.

Assessment Elements

- **History of Invasiveness: Uncertain**
- **Climate Match: Low**
- **Certainty of Assessment: Low**
- **Overall Risk Assessment Category: Uncertain**

9 References

- FFWCC (Florida Fish and Wildlife Conservation Commission). 2017. Prohibited species list. Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida. Available: <http://myfwc.com/wildlifehabitats/nonnatives/regulations/prohibited/> 1/. (December 2017).
- GBIF Secretariat. 2017. GBIF backbone taxonomy: *Cherax longipes* Holthuis, 1949. Global Biodiversity Information Facility, Copenhagen. Available: <https://www.gbif.org/species/8816505>. (December 2017).
- Holthuis, L. B. 1982. Freshwater Crustacea Decapoda of New Guinea. In J. L. Gressitt, editor. Biogeography and ecology of New Guinea. Monographiae Biologicae, volume 42. Springer, Dordrecht, The Netherlands.
- Lukhaup, C., and B. Herbert. 2008. A new species of crayfish (Crustacea: Decapoda: Parastacidae) from the Fly River drainage, Western Province, Papua New Guinea. *Memoirs of the Queensland Museum* 52:213-219.
- Sanders, S., C. Castiglione, and M. Hoff. 2014. Risk Assessment Mapping Program: RAMP. U.S. Fish and Wildlife Service.
- Tavakol, S., W. J. Luus-Powell, W. J. Smit, C. Baker, A. Hoffman, and A. Halajian. 2016. First introduction of two Australian temnocephalan species into Africa with an alien host: double trouble. *Journal of Parasitology* 102(6):653-658.
- Washington Department of Fish & Wildlife. 2017. WAC 220-12-090 classification – nonnative aquatic animal species. Washington Department of Fish & Wildlife, Olympia, Washington. Available: <http://wdfw.wa.gov/ais/wac.html>. (December 2017).