

# The Rusty Crayfish

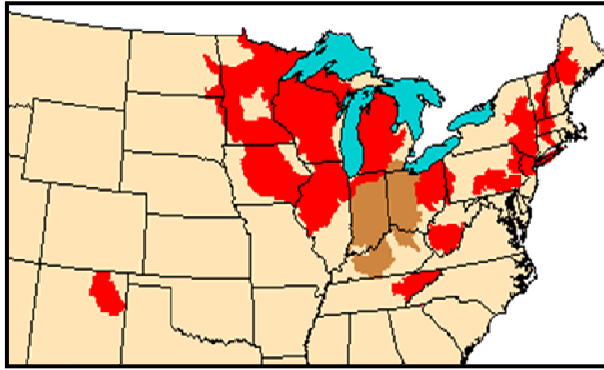
The rusty crayfish is considered a non-native, invasive species in the park and throughout Pennsylvania. Originally from the Ohio River Basin, this crayfish has been introduced into 19 states where it never occurred before over the last 30-40 years (Figure 2). It has been transported from one place to another primarily by bait fishermen, but also through biological supply houses, aquaculture, and the pond and aquarium trade.

Rusty crayfish were first documented in Pennsylvania in the 1970's and now occur in the Delaware, Potomac, Schuylkill, and Susquehanna River watersheds. From large rivers they are able to invade the countless small streams that feed into the rivers, such as Valley Creek.

### *What does invasive mean?*

An invasive, non-native species is one that, once introduced, is able to out-compete native species for needed resources such as food, space, water, and shelter. In extreme cases, native species may be totally eliminated from the ecosystem.

The rusty crayfish is bigger, more aggressive, and eats up to twice as much as native crayfish in Valley Creek. They are able to eliminate **ALL** other crayfish species through direct competition for food and shelter and increasing the susceptibility of native crayfish to predators as they are chased from under protective rocks and move more to find food. Rusty crayfish also may reduce the amount of aquatic vegetation, reduce aquatic insect populations, and ultimately negatively effect large predators such as trout.



■ Introduced Populations ■ Native Range

Figure 2. Distribution of rusty crayfish in the United States, including their native range and areas where they have been introduced and are considered non-native. (From <http://nas.er.usgs.gov/queries/FactSheet.aspx?speciesID=214>).

## For additional information on rusty crayfish please visit\*:

<http://www.invadingspecies.com/Invaders.cfm?A=Page&PID=4>

[http://www.seagrant.umn.edu/ais/rustycrayfish\\_invader](http://www.seagrant.umn.edu/ais/rustycrayfish_invader)

<http://nas.er.usgs.gov/queries/FactSheet.aspx?speciesID=214>

\* Information contained within this brochure was obtained from the sources above.

### *Did You Know?*

It is illegal to use rusty crayfish as fishing bait in Pennsylvania and no live bait of any kind can be used in Valley Creek within the park. These regulations exist to prevent the introduction of additional non-native species into Valley Creek and to control the spread of rusty crayfish across the state.

National Park Service  
U.S. Department of Interior



Valley Forge National Historical Park  
King of Prussia, Pa

## Stewards of Native Diversity at Valley Forge



2010

[www.nps.gov/vafo](http://www.nps.gov/vafo)

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## What is the Crayfish Corps

In 2008, the rusty crayfish (*Orconectes rusticus*) invaded Valley Creek in Valley Forge National Historical Park. Valley Creek is considered an “Exceptional Value” waterway, Class A Wild Trout Fishery, and one of the park’s most important natural resources. The rusty crayfish is a highly aggressive, non-native species that poses a significant threat to the continued health of the stream ecosystem.

Members of the Crayfish Corps will join NPS staff in the battle to suppress rusty crayfish populations by physically removing them from the stream ecosystem. Our goal is to maintain a ratio of 1 rusty crayfish or less for every 4 native crayfish present in Valley Creek.

### What is a Non-Native Species?

Non-native species are those that occur in an area as the result of deliberate or accidental human activities.

## Rusty Crayfish Identification

Rusty crayfish are most easily identified by the presence of rust-colored spots located on both sides of the carapace behind the claws (a) (Figure 1).

These patches may be less pronounced on crayfish from different areas.



NPS Photo

(a) Rust-colored spot on carapace

Rusty crayfish claws are grayish– green to reddish-brown with dark black bands on the tips (b). The claws, when closed, have an oval gap in the middle. The moveable claw is smooth and S-shaped (c).



NPS Photo

(b) Black bands on tip of claw

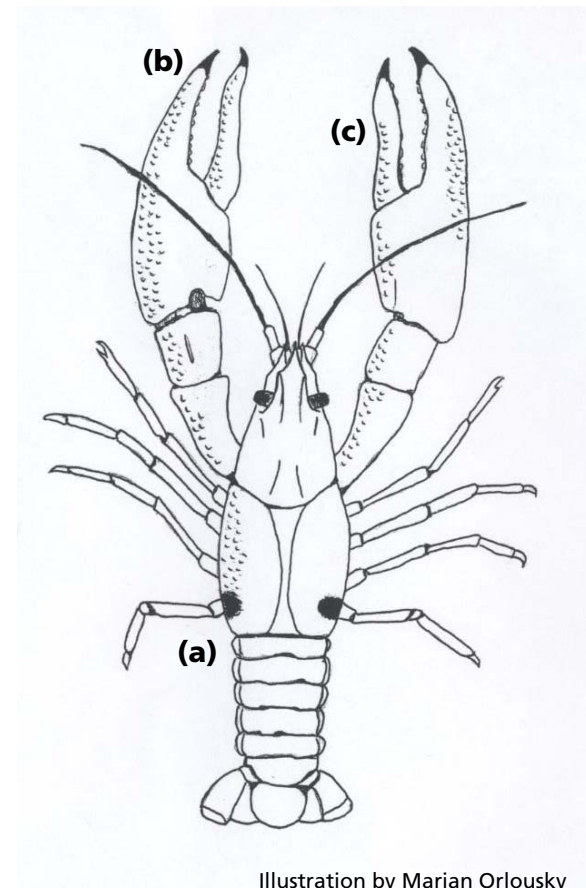


Illustration by Marian Orlousky

Figure 1. Rusty crayfish illustration showing key identifying characteristics: (a) rust-colored spots, (b) black bands on tip of claws, and (c) S-shaped moveable claw.

## Join the Crayfish Corps

Crayfish Corps is active between May and August in order to catch the most rusty crayfish and allow the stream time to rest. Crayfish removal is accomplished using hand nets and participants should be prepared to get in the stream and get wet!

All ages are welcome and park staff will provide necessary training and equipment including nets and a limited number of hip boots. Participants should wear their own close-toed water shoes if possible.

Receive a Crayfish Corps button the first time you participate and earn a Crayfish Corps t-shirt after participating only three times.



To become a member of the Crayfish Corps, visit our volunteer website :

<http://www.nps.gov/vafo/supportyourpark/volunteeropportunities.htm>



NPS Photo

Crayfish Corps volunteers Ajena and Kaylen Rogers