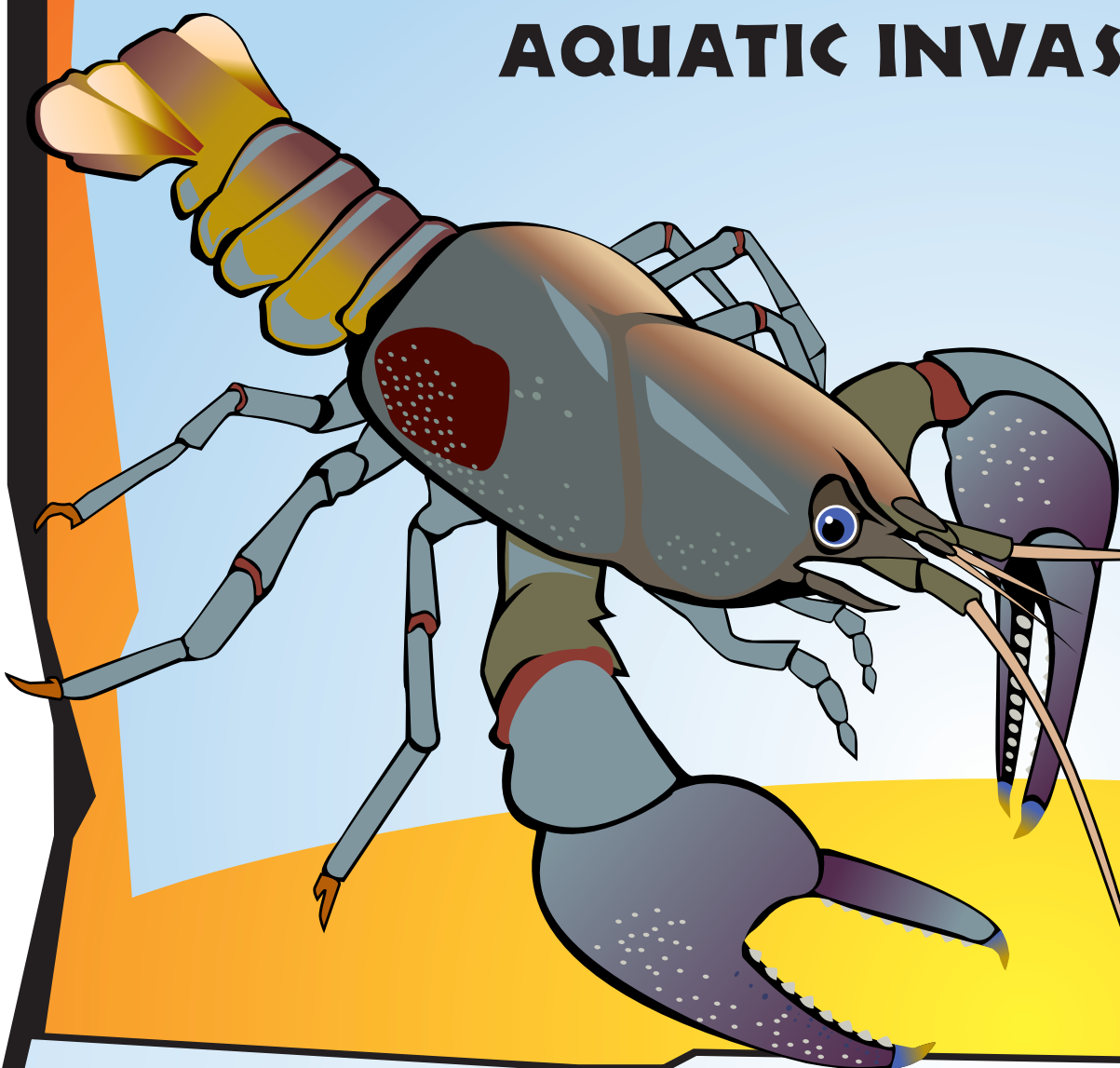


# GREAT LAKES MOST UNWANTED

## AQUATIC INVASIVE SPECIES



### RUSTY CRAYFISH

*Orconectes rusticus*

**Description:** The rusty crayfish is an invasive crayfish species with a thick exoskeleton (shell over its body) and oversized claws. They can thrive in a diversity of aquatic habitats like rivers, lakes and ponds with sand, silt or rocky bottoms, but prefer small, fast-flowing streams. They are dark reddish-brown, grow 3 to 6 inches long, and are most easily identified by a dark, rusty colored spot found on each side of the carapace (main body segment).



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#### DISTINGUISHING FEATURES AND BEHAVIOR

- **Underwater Lawn Mowers:** Rusty crayfish destroy aquatic plant beds. They change habitat by grazing on and eliminating aquatic plants, which takes shelter and food sources away from other species.
- **Invasive Bullies:** The rusty crayfish are aggressive and will force native crayfish from their hiding areas. When threatened, they assume a "claws-up" position to back down potential predators and to prevent getting eaten.
- **Big Appetites:** The rusty crayfish eats a diversity of food, and research suggests they eat more food (up to twice as much) than other crayfish, reducing food available for other animals.
- **Harms Fish:** The invasive crayfish affect fish populations by eating fish eggs, reducing invertebrate prey available for fish, and destroying habitat (loss of aquatic plants) that fish use during their life cycles.

#### THIS FUGITIVE'S STORY

Expert opinions vary, but rusty crayfish likely arrived in Michigan waters in the early 1900s. They are native to the Ohio River Valley region (not far from Michigan), but are considered non-native invaders to the Great Lakes basin. They were most likely introduced to Great Lakes waters by way of the bait bucket — it is suspected that anglers using the rusty crayfish as bait may have

unintentionally introduced them to the basin. The invasive crayfish began to reproduce, hybridize with local species (reproduce with other, related species), and have now spread to local waters throughout the state and the region.

#### THE PROBLEM

The invasive rusty crayfish outcompetes native crayfish and fish populations for habitat needs like food, shelter and space. They can harm native fish populations by eating eggs and destroying fish nursery habitat. They have a voracious appetite and grow quickly. They are better able to avoid getting eaten by fish because of their larger claws, which they hold up in a defensive position when predators are near. Their thick exoskeletons also offer more protection.

They aggressively oust native crayfish from the best shelter or hiding spots. The rusty crayfish also alter habitat by grazing on and removing native aquatic plants. They even cut down some invasive plants like Eurasian milfoil, which can be bad because milfoil can spread even more rapidly when cut or fragmented in this way.

#### WHAT'S BEING DONE

Education and awareness are important because communities may not understand differences in crayfish species and the problems caused by rusty crayfish. Opportunities exist to educate the public about problems caused by this invasive. No chemicals are approved for crayfish control —

those that would kill crayfish are not specific and would also kill other animals as well.

Some research suggests biological controls such as using smallmouth bass as natural predators, because they like to eat crayfish, could be effective. Some agencies and fishing clubs are advocating the catch and release of smallmouth bass to help bring their numbers under control, but nothing has yet been proven to permanently slow the spread of rusty crayfish.

#### WHAT YOU CAN DO

- Learn to identify rusty crayfish.
- Inspect and remove aquatic plants and animals from your boat, motor and trailer.
- Drain lake or river water from live well, bilge and bait buckets before leaving the water access point.
- Dispose of unwanted live bait in the trash (NOT in or near water).
- Never transport or dump live fish or crayfish from one body of water to another.
- Report new sightings — call a U.S. Fish and Wildlife Service office or your state natural resources agency.

#### REMINDER: KNOW THE RULES!

Specimens are needed to confirm sightings; but some jurisdictions prohibit possession of rusty crayfish and other invasive aquatic animals and plants. Others may restrict possession for specific uses only. Contact your local natural resources agency for guidance.