RUSTY CRAYFISH Invades Ontario Waters



You can stop invading species www.invadingspecies.com

What is Rusty Crayfish?

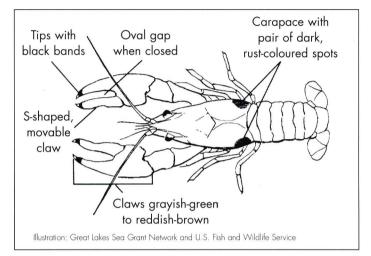
Rusty crayfish (*Orconectes rusticus*) is a member of a large group of organisms called crustaceans. It is one of approximately 350 crayfish species found in North American waters. Rusty crayfish is native to the Ohio River system of Ohio, Kentucky and Indiana, but has been introduced to many northern lakes and streams where it is a cause for concern. Rusty crayfish may have been introduced through bait bucket dumping or released from an aquarium, though there is no way of knowing for certain.

This species has a brown body and claws with dark black bands near the tips (see diagram). There are prominent rusty patches (which may not always be present) on either side of the carapace as though it was picked up by a person with rusty paint on their forefinger and thumb. Rusty crayfish grows to an average length of 10 cm (3.9 inches), not including the claws. Its claws are more robust and larger than other native species in Ontario.

Rusty crayfish can live three to four years. The number of eggs a female lays ranges from 50 to 575 eggs, which hatch in three to six weeks depending on water temperature. Fertilized eggs and newly hatched young are carried on the underside of a female's abdomen for protection. As a result, it is possible for a single crayfish to start a new population once introduced to a water body.

Where is it found?

The first Ontario reports of this species were from the Kawartha Lakes in the early 1960s. Rusty crayfish has since become established in several areas of southern and northwestern Ontario. It is found in Lake of the Woods, Quetico Provincial Park, Lake Superior, and tributaries near Thunder Bay. It is also found in the Ottawa River drainage basin, the upper Mississippi drainage system, in Lanark and Frontenac counties, the Trent-Severn waterway, as far north as Balsam Lake,



areas in Haliburton, and Berford Lake on the Bruce Peninsula. In 2002 and 2004, rusty crayfish was found in streams in the Toronto area as well as in the upper Grand River watershed near Grand Valley and upper Speed River watershed near Guelph. Its distribution in the U.S. has also expanded to include many other states.

Rusty crayfish inhabits lakes, rivers, ponds, and streams which have water in them all year-round. The species prefers rock, log and debris cover, as well as bottoms of clay, silt and gravel. It is most active from spring to fall when temperatures are above 8°C.

What does it eat?

The species is omnivorous, eating aquatic plants, benthic invertebrates (e.g. worms, snails, leeches, and aquatic insects found at the bottom of a water body), decaying plants and animals, fish eggs, and small fish. Young crayfish especially feed heavily on benthic invertebrates like mayflies, stoneflies, midges, and sideswimmers.

What are the impacts?

Rusty crayfish can eat twice as much as native crayfish. By consuming larger quantities of benthic invertebrates, rusty crayfish competes with young game fish





and forage fish for food. This could impact the recreational and commercial fishery. Also, rusty crayfish consumption of vegetation reduces the abundance and species diversity of aquatic plants. Many invertebrates and fish rely on these plants for habitat. Fish populations might be further impacted by rusty crayfish feeding on the eggs and young of native fish.

Rusty crayfish can displace native crayfish and contribute to their local extinction. The native species are forced by rusty crayfish out of their daytime hiding sites, so they are more vulnerable to predation by birds and fish. Mating between native *Orconectes propinquus* and rusty crayfish has resulted in hybrid crayfish. This hybridization may hasten the local loss of *O. propinquus* species.

You can help!

The Ontario Federation of Anglers and Hunters (O.F.A.H.) and the Ontario Ministry of Natural Resources (OMNR) have set up a toll-free **Invading Species Hotline 1-800-563-7711** and website **www.invadingspecies.com** for you to obtain information on and report sightings of rusty crayfish and other invading species.

- Report sightings. If you find rusty crayfish in a new area, freeze it or preserve it in rubbing alcohol, then call the Invading Species Hotline or contact your local OMNR Office to report your finding and confirm your specimen as rusty crayfish.
- **Get involved.** Participate in one of our many community based monitoring programs to detect and prevent the spread of invading species.
- Find out more.
 Contact the Invading Species Hotline
 1-800-563-7711 or visit
 www.invadingspecies.com



Boaters and Anglers – You can help!

It is extremely important to prevent the further spread of rusty crayfish. To protect your lake and prevent the spread of rusty crayfish and other invading species, please take the following precautions before leaving a water body and entering another:

- Never use rusty crayfish as bait!
- Do not release live bait! Empty your bait bucket on dry land, or freeze or salt the bait for later use. It is illegal to release live baitfish from one water body into another.
- Inspect your boat, trailer and equipment remove all plants, animals and mud, and dispose of them on dry land or in the garbage.
- Drain water from motor, live well, bilge and transom wells while on land.
- Remove organisms you can't see on your boat, trailer and equipment by:
 - Rinsing them with hot water (>40°C), or
 - Spraying with high pressure water (250 p.s.i.), or
 - Drying them in the sun for at least 5 days.

