

Killer Shrimp (*Dikerogammarus villosus*)

What Ontario is Doing

To prevent this unwanted invader from coming into the province, Ontario has regulated Killer Shrimp as **prohibited** under the Invasive Species Act. For more information on the Invasive Species Act and Regulations visit www.ontario.ca/invasionON.

Background

As its common name suggests, Killer Shrimp is a particularly vicious and destructive aquatic invertebrate that can attack and kill native invertebrates larger than itself and even small fish. This species is also known to kill or injure prey without consuming it. Killer Shrimp is a highly adaptable species that can tolerate a wide range of temperatures from 0-30°C and a wide range of salinities from fresh to brackish waters. It prefers slow-moving waters of lakes, rivers, and canals, and is able to colonize any type of hard-bottomed surface. Killer Shrimp has spread rapidly throughout Europe, where it is considered one of the most damaging invasive species.

Range

The Killer Shrimp is native to the Ponto-Caspian region of Eastern Europe. However, with the construction of canals and connection of waterways for shipping, the species has since rapidly spread throughout western Europe. It has now successfully colonized most European inland water bodies. It has arrived in the United Kingdom despite the use of preventative biosecurity control measures and risk assessments. Spread of this species is likely aided by human activities such as boating, shipping and angling as Killer Shrimp can be carried in ballast water and attach to vessels and equipment. Killer Shrimp has not yet been documented in North America.

Impacts of Killer Shrimp in Ontario

Killer Shrimp can have many negative effects on the environment it invades. Through its aggressive predatory behaviour, it can displace native species, potentially leading to their extirpation, thereby reducing biodiversity. Killer Shrimp can also attack smaller fish preying upon certain life stages such as eggs, larvae and juveniles, which can cause changes throughout the food web and could impact populations of native fish species. Killer Shrimp can also carry several parasites, which are harmful to other native crustaceans, fish and birds.

How to Identify Killer Shrimp

- Killer Shrimp is a relatively large freshwater invertebrate, with total body length reaching up to 30 mm (or 3 cm).

- They are curled, semi-transparent and consist of a head, thorax and abdomen.
- Killer Shrimp have two pairs of antennae and may be striped or uniform in colour with relatively large jaws
- The thorax has seven sections each with a pair of walking legs
 - The first two pairs of legs assist with grasping of food
 - The first four pairs of legs go downwards and forwards and;
 - The last three pairs of legs go downwards and backwards
- The abdomen is subdivided into three segments each with a pair of swimming limbs
- At the end of the abdomen there is a fanned tail

What You Can Do

- Learn how to identify Killer Shrimp and how to prevent the introduction or spread of this unwanted species.
- Never buy or keep Killer Shrimp. It is against the law to possess or use Killer Shrimp for bait or other purposes.
- Inspect your boat, trailer and equipment after each use. Remove all plants, animals and mud before moving to a new water body.
- Drain water from the motor, live well, bilge and transom wells while on land.
- Rinse all recreational equipment with high pressure (>250 psi) or hot (> 50°C) water OR let it dry in the sun for at least five days.
- If you have any information about the illegal importing, distribution or sale of Killer Shrimp, report it immediately to the MNRF TIPS line at 1-877-TIPS-MNR (847-7667) toll-free anytime. You can also call Crime Stoppers anonymously at 1-800-222-TIPS (8477).
- If you've seen a Killer Shrimp or other invasive species in the wild, please contact the toll free Invading Species Hotline at 1-800-563-7711, or visit [EDDMapS Ontario website](#) to report a sighting.

Other Resources

[Ontario Ministry of Natural Resources and Forestry](#)

[Ontario Invading Species Awareness Program](#)

[Invasive Species Centre](#)

For More Information

Contact the Invading Species hotline at 1-800-563-7711.



Credit: The Environment Agency

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