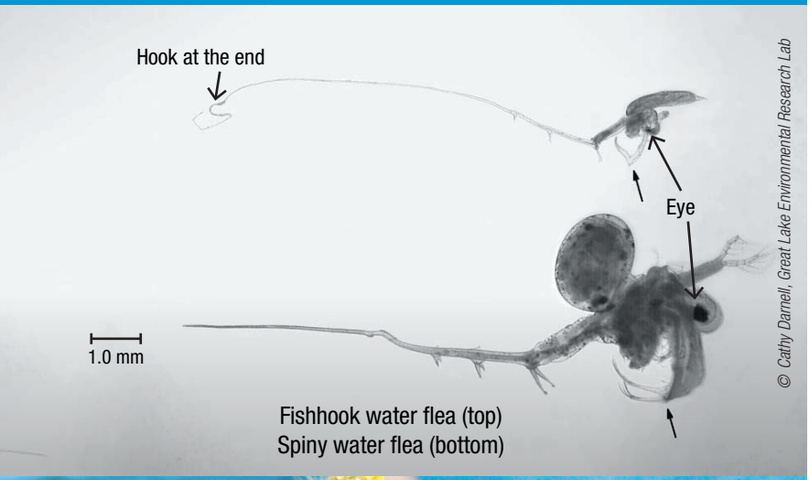
What are these water fleas?

The spiny water flea (*Bythotrephes longimanus*) and the fishhook water flea (*Cercopagis pengoi*) are small crustaceans, from 1 to 1.5 cm in length, belonging to the zooplankton group.

Its main characteristic: a long tail, making for more than half of its body, with three pairs of sharp barbs.



© Cathy Darnell, Great Lake Environmental Research Lab

© A. L. Jaeger Miehls, Michigan State University

© Emily DeBolt

What to do if you think you are observing invasive water fleas?

Be on the lookout for helping detect these invasive species while practicing your recreational or fishing activities!

1. Put the specimens in a container filled with water or take a photo (if possible).
2. Note the name of the waterbody and/or the place of observation as well as the date.
3. Contact the ministère des Forêts, de la Faune et des Parcs (MFFP) as soon as possible or bring the specimens to the closest MFFP's regional office.

By phone: 1 877 346-6763
By email: services.clientele@mffp.gouv.qc.ca

© Jeff Gunderson, Minnesota Sea Grant

Forêts, Faune et Parcs
Québec

W11-10A-20/06

Spiny and fishhook water fleas, highly damaging little invaders

© Jeff Gunderson, Minnesota Sea Grant

They take too much space where they don't belong

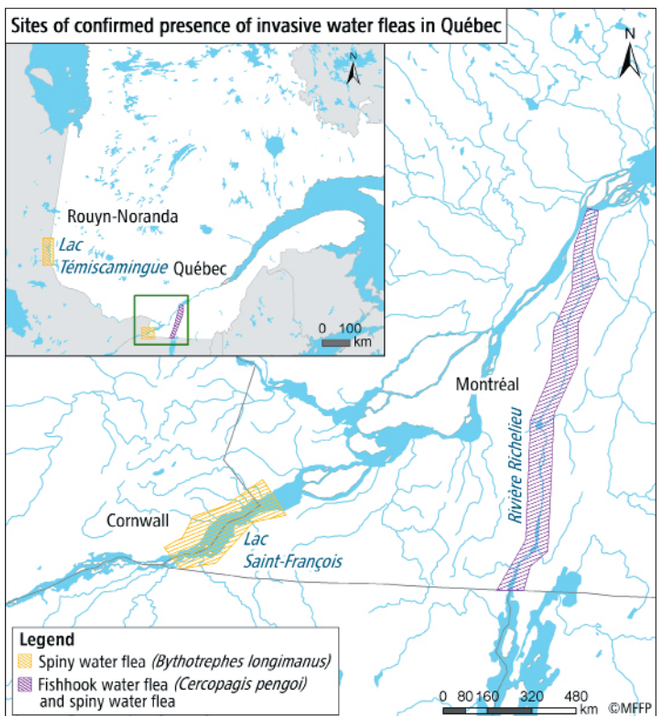
Votre gouvernement

Québec

Are they in Québec?

Spiny and fishhook water fleas are in Québec.

Probably introduced in North America in ballast water from transatlantic ships, they were dispersed in inland waters by recreational activities. They are now well established at the borders of Québec, namely in Ontario, including the lac Témiscamingue, as well as in the American Great Lakes and the lac Champlain.



Observations of invasive water fleas in Québec:

Spiny water flea	Fishhook water flea
2014 – Lac Saint-François	2019 – Rivière Richelieu
2015 – Rivière Richelieu	
2018 – Lac Témiscamingue	

Why is their presence so harmful?

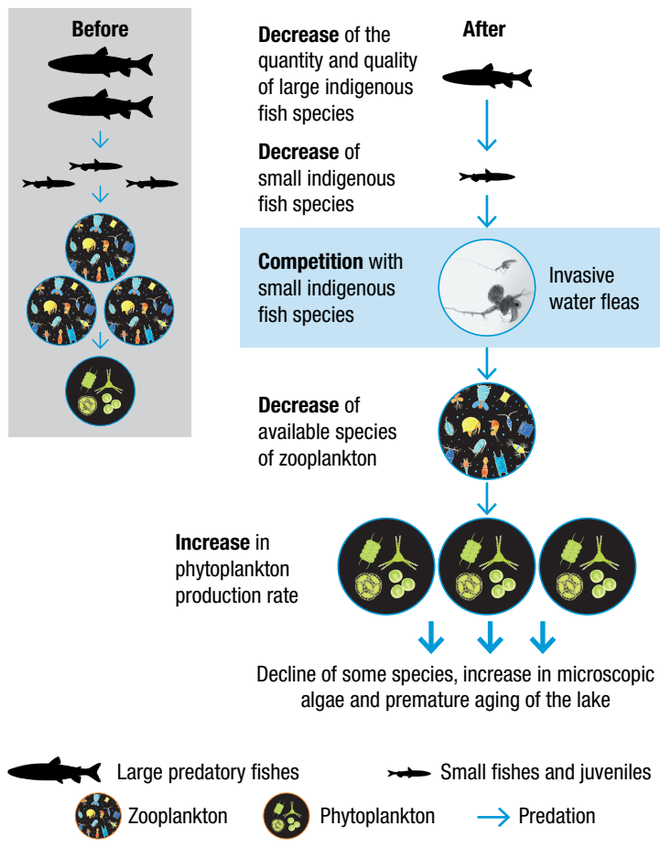
The presence of water fleas can cause significant and above all **irreversible** ecological repercussions.

This presence also leads to socio-economic repercussions, such as the decrease in the attractiveness and quality of the fishing offer, as well as loss of income for operators of a contaminated lake (outfitters, hoteliers, restaurateurs, real estate value).

ECOLOGICAL REPERCUSSIONS

- Decline of fish species and loss of biodiversity (e.g. decrease or disappearance of species)
- Modification of the food chain by a cascade of negative effects on native species and aquatic ecosystems of invaded waterbodies

Establishment of an invasive water flea population



What favors their dispersal?

- The use of contaminated recreational boating and fishing equipment from one waterbody to another
- Survival of eggs under extreme conditions, which can be transported from one waterbody to another by the use of bait fish
- Their great reproductive capacity, allowing them to quickly establish large populations

How to avoid the spread of these invasive water fleas?

CLEAN NOT TO SPREAD!

Once established, aquatic invasive species **cannot be eradicated**!

Cleaning boats, gear and fishing equipment is the best way to protect our lakes and streams.

Far from any waterbody, perform these four simple steps when you leave the water or before each visit to a new waterbody:

To know more about methods to prevent dispersal:
mffp.gouv.qc.ca/the-wildlife/preventing-introduction-invasive-species/?lang=en