

SPINY WATERFLEA

Bythotrephes longimanus

What are spiny waterfleas?

Spiny waterfleas are aquatic zooplankton (small animals) from Europe and Asia that have invaded the Great Lakes ecosystem, as well as some inland water bodies. Adults range from $\frac{1}{4}$ to $\frac{5}{8}$ inch long and they have a single long tail with 1-3 sets of small spines along its length. Infestations of spiny waterfleas negatively impact native fish populations, aquatic habitats and sports fishing. There is no successful method of control.



Individual spiny waterfleas.
(Photo: Emily DeBolt, Lake George Association)

Where are spiny waterfleas located?

Spiny waterfleas live in fresh water habitats and prefer cold temperatures, but can tolerate both brackish and warm water. They have spread throughout the Great Lakes and have been found in more than ten counties in New York State. Lake Erie, Lake Ontario, Lake George, Great Sacandaga Lake, Stewarts Bridge Reservoir, Lake Champlain and a number of smaller water bodies are infested.

Why are spiny waterfleas a problem?

Spiny waterfleas eat smaller, native zooplankton that are important food for both small crustaceans and native fish such as perch. In some lakes, they have eliminated native zooplankton from the food chain, causing serious declines in native fish populations. In the Great Lakes, spiny waterfleas have been associated with the decline of alewife.

Spiny waterfleas also interfere with fishing, as their spines catch on fishing line, resulting in clogged fishing rod eyelets and damaged reel systems, preventing fish from being reeled in.



Spiny water fleas on Lake George 9/16/12

photo courtesy Emily DeBolt

On fishing lines, spiny waterfleas look like masses of bristled jelly with dark spots scattered throughout.

How do spiny waterfleas spread?

Spiny waterfleas originally arrived in the Great Lakes through the ballast water of cruise ships, tankers and cargo carriers. Ballast water is water taken on or discharged by ships for stability, often resulting in organisms getting caught up in the ballasts and inadvertently moved from one region to another. Spiny waterfleas spread by attaching to fishing lines, downriggers, anchor ropes, and fishing nets and hitching rides to other waterbodies. They can also be transported in bilge water, bait buckets, live wells, and the bottoms of canoes and kayaks.

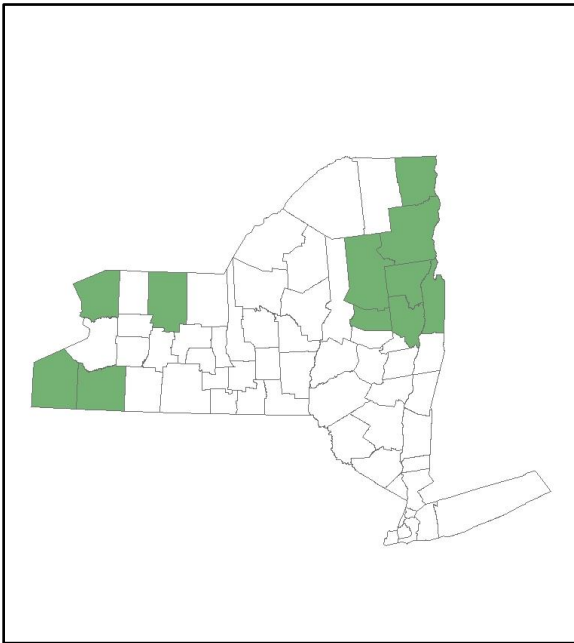
What can I do?

There is no known control method for the spiny waterflea once it is introduced, so preventing the spread of this invasive is critical.

- Clean, drain, and dry your watercraft, trailer, and equipment before and after each use.
- When possible, use the following methods to fully decontaminate your equipment.
 - Clean the outside of the watercraft and trailer with high pressure (2500 psi) hot water (140°F) for 10 seconds.
 - Flush the inside of the motor and all compartments (bilge, live well, bait buckets, ballast, etc.) with hot water (140°F) for two minutes.
 - Soak fishing gear and equipment in hot water (140°F) for two minutes.
- Dump bait bucket water where it came from or on land.
- Learn how to identify spiny waterfleas: visit <http://www.seagrant.umn.edu/ais/waterflea> for more information.
- Report infestations to DEC at isinfo@dec.ny.gov or to iMapInvasives at www.NYiMapInvasives.org.



Steward removes aquatic invasive species from boat. (J. Clayton, NYSDEC)



Current locations of spiny waterflea in New York State

CONTACT INFORMATION

Invasive Species Coordination Unit

Division of Lands and Forests,

Bureau of Invasive Species and Ecosystem Health

New York State Department of Environmental Conservation

625 Broadway, 5th Floor, Albany, NY 12233-4253

P: (518) 402-9405 | isinfo@dec.ny.gov

www.dec.ny.gov