Spiny Water Flea
(*Bythotrephes longimanus*)

The spiny water flea, or *Bythotrephes longimanus*, is a tiny predatory crustacean native to Eurasia and was introduced into the United States and Canada via ballast water. First discovered in Lake Huron in 1984, the spiny water flea had established itself in all of the Great Lakes by 1987, and has since spread into many lakes including Lake George.

Identification

The spiny water flea is a tiny crustacean that can grow up to ½ inch in size. It has an elongated, barbed tail to protect against predation by small juvenile fish. Masses of the spiny water flea can be found in gelatinous clumps on fishing lines.

Photo Credit: Mass.gov – Office of Energy and Environmental Affairs

Impacts

While the spiny water flea is considered zooplankton, it feeds on the same native zooplankton (e.g. Daphnia) that native fish rely on for food. As the spiny water flea becomes more abundant, less food remains for juvenile fish. Unlike native species of water flea, the spiny water flea is not a viable food source for native juvenile fish because it has a long, barbed tail, making it difficult to eat.

The barbed tail of the spiny water flea allows it to catch on fishing gear, especially lines and downrigger cables. As stated above, masses of the water flea can accumulate on fishing gear, forming a gelatinous clump.

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Spread Prevention

As of now, the only effective strategy to control spiny water flea populations is to prevent its introduction into new bodies of water. The best way to prevent its spread is through clean boating practices. This includes three main concepts – Clean, Drain, Dry.

- Clean: inspect the boat, trailer, fishing gear, and any equipment that came into contact with the water. Remove all visible plant fragments, mud, debris, etc. above water line
- Drain: drain all water holding compartments including live wells, bait wells, and bilge areas
- Dry: make sure to dry boats, trailers, and all equipment before entering another waterbody (this can take 5-7 days in dry, warm weather).

Photo Credit: Mass.gov – Office of Energy and Environmental Affairs

While the female water fleas die out of water, their eggs can resist drying, freezing, and can establish new populations. Their eggs can also be transported in bilge water, bait buckets, and livewells. Proper cleaning of boats, trailers, fishing lines, and equipment is extremely important to stop the spread of the spiny water flea.

Clearwater LOWER HUDSON PRISM

References:

- www.Invasivespeciesinfo.gov
- www.mass.gov/eea/agencies/dcr
- "Spiny Water Flea (*Bythotrephes longimanus*)." Great Lakes Research and Education Center, Great Lakes Restoration Initiative

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