

50th Invasive Species Identified in Lake Champlain



Spiny water flea accumulate on fishing line

On August 28th, an interstate group of scientists, conservationists and natural resource professionals working on the Lake Champlain Basin Program initiative announced that the invasive species Spiny Water Flea has been confirmed in several locations within Lake Champlain. Another blow for an already troubled water body, the spiny water flea is the first aquatic invasive zooplankton to be confirmed in Lake Champlain, and the 50th exotic invasive species to be identified in the Lake.

Native to Eurasia, the spiny water flea first arrived in the US in the Great Lakes during the 1980's. Carried in the ballast water of large ocean-going vessels, spiny water flea was discharged into Lake Ontario in 1982 and had spread to Lake Superior by 1987. These small predatorial zooplankton range from 1/4 to 5/8 inch long as adults, and are named for their long, spiny tail.

Spiny water fleas disrupt aquatic food webs primarily because they eat other zooplankton, including Daphnia, which are an important food source for native fishes. In some lakes, the presence of spiny water flea has been linked to the decline or elimination of some species of native zooplankton. Sadly, there are no known control technologies to eliminate spiny water flea once they have become established in a water body.

The news is not all bad, however. According to Shawn Good, a fisheries biologist with the Vermont Fish & Wildlife Dept., the presence of spiny water flea is unlikely to have a dramatic effect on native fish species, plants and other animals. Since the crustacean can be consumed by fish such as smelt, cisco and alewife, their populations will likely not cause major havoc. The water fleas also pose no threats to people, and despite their prickly name are not sharp and will not cut feet or other exposed skin like zebra mussels.

Although the spiny water flea tends to congregate near the top of the water column, they usually do so in areas where the water is deep. Because of this, many swimmers, anglers and boaters who stick close to the shoreline may not encounter problems with the small crustacean. Those who may be impacted are the deep water anglers. "Anglers who fish using downriggers have been the primary ones affected, but they've found ways to minimize the impacts by spooling their reels with heavier weight main line and attaching smaller diameter leaders," Good explained. "The heavier main lines tend to prevent the spiny water flea from accumulating."

While this particular species may not represent a serious threat on its own, it is important to keep in mind that it is the cumulative effect of the many invasive species in our water bodies that create very real and concerning impacts. While we have identified 50 non-native invasive species in Lake Champlain to-date, the Great Lakes have more than 180 identified exotics. Since the water bodies are connected, it is essential that we remain vigilant and take every precaution to prevent spread. In addition, overland introduction of invasives occurs when boats and fishing gear are moved from one body of water to another. This is especially true of the spiny water flea, since its eggs can survive up to 5 days out of water.

Preventing the Spread of Spiny Water Flea:

Clean - Inspect and remove plants, animals and mud from boat, trailer, anchor lines, and angling equipment.

Drain - Drain water from all compartments including the bilge, live wells, bait buckets, storage compartments, etc.

Dry - Allow your boat and equipment to sun dry for a minimum of five days before moving from Lake Champlain to another body of water.

Heat or Spray - You can also spray equipment with pressurized or hot water (at least 140°F) to kill spiny water flea and their eggs

If you would like to help control the spread of aquatic invasives in Vermont, consider becoming a Vermont Invasive Patroller (VIP). VIPs monitor local water bodies for new introductions of invasive species while also learning about native aquatic plants and animals. [Click here](#) for more information about becoming a VIP.

For more information on the spiny water flea and other Lake Champlain invasive species, visit the Lake Champlain Basin Program's Aquatic Invasive Species [web list](#).