



Lake Superior Research Institute Documents Non-native Zooplankton in Western Lake Superior

(October 9, 2018) The University of Wisconsin Superior's Lake Superior Research Institute (LSRI) has confirmed the presence and range expansion of non-native zooplankton in western Lake Superior.

LSRI's taxonomists Heidi Schaefer and Lana Fanberg made the discovery this summer in zooplankton samples collected during exploratory monitoring that was motivated by recent, local occurrences of non-native zooplankton. Samples were collected weekly May through September of 2018 from the Superior Entry to the Duluth-Superior Harbor (46°42'26.6"N, 92°0'45.4"W), Superior, WI.



Nitokra hibernica female (left), *Thermocyclops crassus* female with eggs (right)

LSRI taxonomists documented the first occurrence of the non-native copepod *Thermocyclops crassus* in Lake Superior, which was previously discovered by researchers at Cornell University in samples collected from western Lake Erie in 2014-2016. Schaefer and Fanberg also confirmed the continued presence of the non-native mysid *Hemimysis anomala*, which was initially discovered nearby in Lake Superior's Allouez Bay in 2017 by U.S. Fish and Wildlife Service.

LSRI's team also documented the presence of three non-native harpacticoid copepods that have extended their range in the Great Lakes to western Lake Superior. The species include *Nitokra hibernica* (native to Eurasia), *Heteropsyllus nunni* (native to South Atlantic and Gulf Coast), and *Schizopera borutzkyi* (native to the Black Sea basin). While these harpacticoids are established in some of the other Great Lakes, this discovery marks the first documentation of these benthic copepods in western Lake Superior. The history of their establishment and range within Lake Superior remains unknown; LSRI is currently pursuing funding for analysis of historical samples from the Duluth-Superior Harbor area that could give insight to an earlier arrival of these benthic copepods.

The Lake Superior Research Institute is located on the University of Wisconsin-Superior's campus. For more information about LSRI visit the [LSRI webpage](#). LSRI's lead zooplankton taxonomist, Heidi Schaefer, can be reached at hschaefer@uwsuper.edu.

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