

# AQUATIC INVASIVE SPECIES PREVENTION

## ZEBRA MUSSEL VELIGER & SPINY WATERFLEA MONITORING



In 2016, the Chisago Lakes Lake Improvement District adopted a Zebra Mussel Prevention, Early Detection and Rapid Response Plan.

In 2017, zebra mussels were found in four locations in Comfort Lake. No lake-wide zebra mussel treatments were possible at this time.

Populations of zebra mussels have also been found in Forest Lake, White Bear Lake, Mille Lacs Lake and the St. Croix River. Zebra mussels can change water quality and lake biota. Once zebra mussels have been established in a lake there has never

been a successful attempt to eradicate them from a lake. Managing an established population of zebra mussels is often unsuccessful.

In 2020, Chisago County partnered with the National Park Service and St. Croix River Association to monitor for zebra mussel veligers and spiny waterfleas in 13 County lakes and rivers. This was part of a larger St. Croix basin, regional Minnesota/Wisconsin program where 35 lakes and rivers were sampled. Veligers are microscopic, free living larvae that begin to form shells. After two to three weeks, the microscopic veligers settle and attach to any firm surface using tiny fibers called “byssal threads”.

Spiny waterfleas are predatory zooplankton. They eat zooplankton that small, native fish eat. They are tiny with spikes or “barbs” that form along the base of the spine or tail. They are translucent and form clumps on fishing lines, ropes and nets. They are a poor food source for native fish and can clog fishing lines. There are no known effective control methods for spiny waterfleas.

In the 2020 monitoring, veligers were found in Comfort Lake. No veligers were found at any of the other sites. No spiny waterfleas (sample photo right) were found at any of the monitoring sites sampled this year.



Jeff Gunder son, Minnesota Sea Grant

### Partners:

- Chisago County
- Chisago Lakes Lake Improvement District
- National Park Service
- St. Croix River Association

### Chisago County Lakes & Rivers Monitored:

- Comfort
- Fish
- Horseshoe
- Kroon
- Little
- Little Green
- North Center
- North Goose
- Rush
- South Lindstrom
- Spider
- St. Croix River at Interstate Park
- Sunrise River at Kost Dam

