# HUBBARD COUNTY AQUATIC INVASIVE SPECIES WATCH

# Spiny waterflea (*Bythotrephes longimanus*) and Fishhook waterflea (*Cercopagis pengoi*)


Emily DeBolt


## SEARCH LOCATIONS

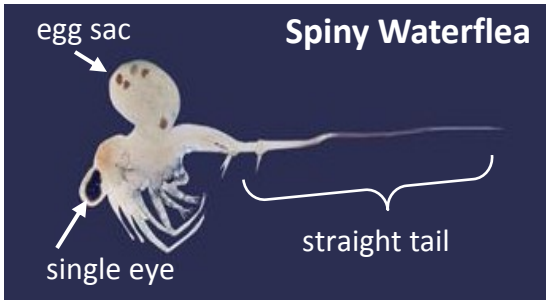
- Daytime: in **deep or dark water**
- Nighttime: **near surface**

## SEARCH TIME

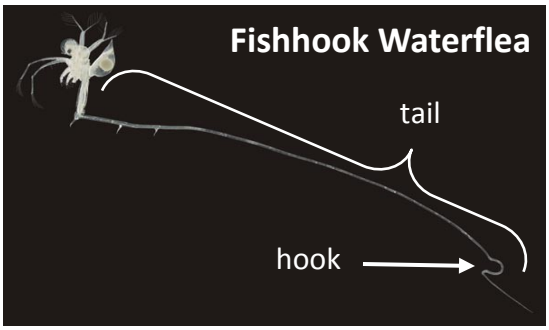
- **May through October**

## SEARCH IMAGE

- **Gelatinous mass** on fishing line, downrigger cable or anchor rope
- (Dark spots are single eyes of water fleas and/or eggs in sac)



Bill O'Neil



www.iisgcp.or

## IDENTIFICATION CHECKLIST

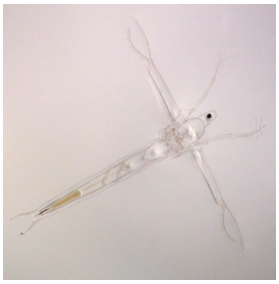
✓ 1) **5-15 mm** in length (difficult to determine without magnification)

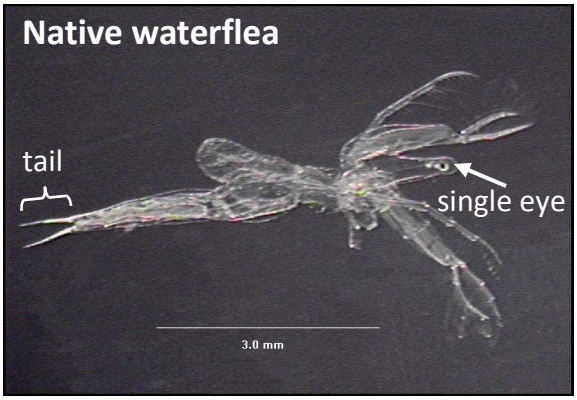
✓ 2) **Slender** tail is **longer than the body**

✓ 3) The barbed tail is **straight** (Spiny waterflea) or with a **distinct kink** or hook (Fishhook waterflea)

## MN NATIVE LOOK-ALIKES occurring as a **gelatinous mass** on fishing line etc.

- **Up to 6 mm** in length
- Tail is **less than one body length**
- Tail is **forked**


UNH Center for Freshwater Biology



Zooplankton Project. http://www.cnas.missouristate.edu/zooplankton/default.htm

**INFORMATION ON HUBBARD COUNTY AQUATIC INVASIVE SPECIES WATCH:**

# Spiny waterflea (*Bythotrephes longimanus*) and Fishhook waterflea (*Cercopagis pengoi*)

## MINNESOTA STATUS: *Prohibited invasive species*

It is unlawful (a misdemeanor) to possess, import, purchase, transport, or introduce spiny waterflea or fishhook waterflea except under a permit for disposal, control, research, or education.

## IF YOU FIND A NEW OCCURANCE THAT FITS THE SPINY OR FISHHOOK WATERFLEA DESCRIPTION

1) Record its location (GPS coordinates, labeled dot on map or landmark)
2) Record the date
3) Document the plant (electronic images that include items on the "checklist")
4) Provide this information to the local MN DNR Aquatic Invasive Species Specialist. Name and contact information can be found at: **http://www.dnr.state.mn.us/invasives/ais/contacts.html**

## METHOD(S) OF REPRODUCTION

- Waterfleas can reproduce asexually as well as sexually.
- Unfertilized eggs are carried in a brood pouch, and fertilized eggs are cast in the fall, hatching the following spring (Evans 1988).

## PATHWAYS OF SPREAD

- Waterfleas can spread by attaching to fishing lines, downriggers, anchor ropes, and fishing nets.
- While female waterfleas die out of water, under certain conditions they produce eggs that resist drying and freezing, and can establish a new infestation.
- They also can be unintentionally transported in bilge water, bait buckets, or livewells.

## RESOURCES

Center for Invasive Species and Ecosystem Health: http://www.invasive.org

MN Dept. of Natural Resources: http://www.dnr.state.mn.us/invasives/index_aquatic.html *and* http://files.dnr.state.mn.us/aboutdnr/reports/legislative/2012_invasive_species_annual_report_final.pdf

2/2016

Since it is difficult to distinguish the native Leptodora from the non-native, invasive waterfleas, ***please report every occurrence of a gelatinous mass found on fishing lines, anchor ropes, and/or downrigger cables.***