

## National Invasive Species Awareness Week: Spiny waterflea

Part 6 in a series to learn about invasive species and what to do to help protect Michigan and the Great Lakes.

Posted on **February 26, 2016** by [Mary Bohling](http://msue.anr.msu.edu/experts/mary_bohling) ([http://msue.anr.msu.edu/experts/mary\\_bohling](http://msue.anr.msu.edu/experts/mary_bohling)), Michigan State University Extension, Michigan Sea Grant, and Bindu Bhakta, MSU Extension



**Spiny water fleas collect on fishing lines and downrigger cables and can clog the first eyelet of rods, damage a reel's drag system, and prevent fish from being landed. Photo: Lake George Association**

*National Invasive Species Week 2016 is February 21-27. Invasive species are plants, animals, and other organisms that are not traditionally found in a given location (in this case the Great Lakes) AND are having a negative impact of some kind, whether ecological, economic, social, and/or a public health threat.*

To help bring attention to this week, [Michigan State University Extension](http://www.michiganseagrant.org) (MSUE) and [Michigan Sea Grant](http://www.michiganseagrant.org) (<http://www.michiganseagrant.org>) are featuring two different invasive species (one aquatic and one terrestrial species) that have invaded or have the potential to invade Michigan's environment. Today's featured aquatic invasive species is the spiny waterflea.

**Species Name:** Spiny Waterflea (*Bythotrephes longimanus*)

**Description:** According to the [United States Geological Survey](http://nas.er.usgs.gov/queries/FactSheet.aspx?speciesID=162) (<http://nas.er.usgs.gov/queries/FactSheet.aspx?speciesID=162>) this invasive crustacean is a tiny freshwater species of zooplankton – small animals that rely on water flow and wind to move long distances. The spiny waterflea is distinguished by a single dark compound eye and a long straight tail spine that is twice as long as the rest of its body. The tail is straight or slightly angled with 1-3 barbs along its length. They sometimes have orange, blue or green coloration with a red stripe that runs half the length of the tail.

**Similar species:** The spiny waterflea is similar to the fishhook waterflea (another non-native species).

**Origin:** The spiny waterflea is native to Northern Europe and Asia.

**How it came to the Great Lakes:** Spiny waterfleas likely came to the Great Lakes accidentally in the ballast water of ocean going freighters.

**How long it has been here:** Spiny waterfleas were first detected in December 1984 in Lake Huron.

**Extent of range:** Since the first detection in 1984, spiny waterfleas have now been reported in all five Great Lakes and over 100 inland lakes.

**Why it is a problem:** Spiny waterfleas disrupt the native zooplankton community reducing food supplies for small fish and the young of sport fish such as bass, walleye and yellow perch. Small fish that prey on zooplankton may find the barbs of the spiny waterflea difficult to swallow and often spit it out, causing them to expend important energy resources without gaining nutritional value.

**How it is spread:** Spiny waterfleas are easily spread between waterbodies on angling equipment and bait buckets and in live wells and bilge waters. They can also spread naturally on water currents between hydrologically connected waterbodies.

**A cool/unusual fact:** Male and female spiny waterfleas can reproduce both sexually and asexually, often switching between methods depending on the availability of mates.

**Management actions/options:** As with many aquatic invasive species, once a reproducing population becomes established, management becomes difficult, lengthy, and expensive. Prevention through education, early detection and rapid response to newly forming populations is most effective.

**What you can do to help prevent the spread:** You can prevent the spread of spiny waterfleas by 1) helping to educate others about identifying and preventing the spread of spiny waterfleas and 2) practicing the Clean, Drain and Dry method for watercraft prior to moving them between lakes.

Watch this [video](https://www.youtube.com/watch?v=IWobcoWchsl) (<https://www.youtube.com/watch?v=IWobcoWchsl>).

[Michigan Sea Grant](http://www.michiganseagrant.org/) (<http://www.michiganseagrant.org/>) helps to foster economic growth and protect Michigan's coastal, Great Lakes resources through education, research and outreach. A

collaborative effort of the University of Michigan and Michigan State University and its [MSU Extension](#) (/), Michigan Sea Grant is part of the [NOAA-National Sea Grant](#) (<http://seagrant.noaa.gov/>)  network of 33 university-based programs.

### Read the aquatic series:

[Part 1: Introduction](#) (/news/invasive\_species\_week\_non\_native\_plants\_animals\_a\_serious\_threat\_bohling16)

[Part 2: Water hyacinth](#) (/news/national\_invasive\_species\_awareness\_week\_water\_hyacinth\_bohling16)

[Part 3: Water chestnut](#) (/news/national\_invasive\_species\_awareness\_week\_water\_chestnut\_bohling16)

[Part 4: Yellow floating heart](#) (/news/national\_invasive\_species\_awareness\_week\_yellow\_floating\_heart\_bohling16)

[Part 5: Round goby](#) (/news/national\_invasive\_species\_awareness\_week\_round\_goby\_bohling16)

[Part 6: Spiny waterflea](#) (/news/national\_invasive\_species\_awareness\_week\_spiny\_waterflea\_bohling16)

[Part 7: Quagga mussel](#) (/news/national\_invasive\_species\_awareness\_week\_quagga\_mussel\_bohling16)

### Read the terrestrial series:

[Part 1: Introduction](#) (/news/invasive\_species\_week\_non\_native\_plants\_animals\_a\_serious\_threat\_bohling16)

[Part 2: Chinese Yam](#) (/news/national\_invasive\_species\_awareness\_week\_michigan\_species\_and\_what\_day\_two)

[Part 3: Kudzu](#) (/news/national\_invasive\_species\_awareness\_week\_michigan\_species\_and\_what\_you\_shou)

[Part 4: Japanese stilt grass](#) (/news/national\_invasive\_species\_awareness\_week\_michigan\_species\_and\_what\_you\_4)

[Part 5: Mile-a-minute weed](#)

(/news/national\_invasive\_species\_awareness\_week\_michigan\_species\_and\_what\_you\_5)

[Part 6: Himalayan balsam](#) (/news/national\_invasive\_species\_awareness\_week\_michigan\_species\_and\_what\_6)

[Part 7: Asiatic sand sedge](#)

(/news/national\_invasive\_species\_awareness\_week\_michigan\_species\_and\_what\_you\_7)

### Invasive Species Resources:

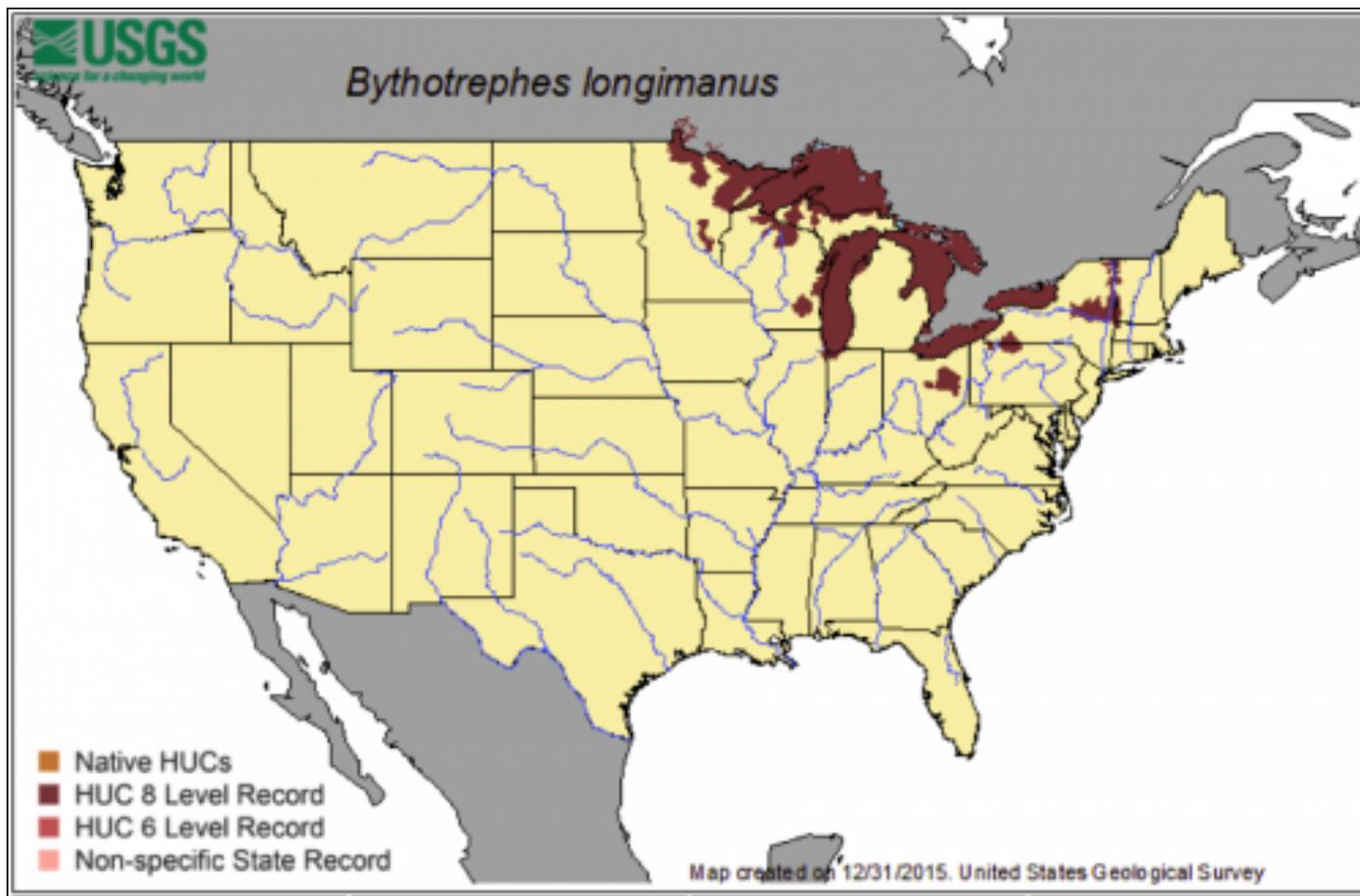
USGS Spiny Waterflea [fact sheet](#) (<http://nas.er.usgs.gov/queries/FactSheet.aspx?speciesID=162>) 

Ontario's Invading Species Awareness Program Spiny Waterflea [fact sheet](#)

(<http://www.invadingspecies.com/invaders/invertebrates/spiny-and-fishhook-waterflea/>) 

<http://www.misin.msu.edu/tools/apps/> (<http://www.misin.msu.edu/tools/apps/>) 

<http://mnfi.anr.msu.edu/invasive-species/invasives.cfm#publications> (<http://mnfi.anr.msu.edu/invasive-species/invasives.cfm#publications>) 



<http://mnfi.anr.msu.edu/invasive-species/fieldguide.cfm> (<http://mnfi.anr.msu.edu/invasive-species/fieldguide.cfm>)

<http://www.glerl.noaa.gov/res/Programs/glansis/> (<http://www.glerl.noaa.gov/res/Programs/glansis/>)

[http://www.michigan.gov/dnr/0,4570,7-153-10370\\_59996---,00.html](http://www.michigan.gov/dnr/0,4570,7-153-10370_59996---,00.html) ([http://www.michigan.gov/dnr/0,4570,7-153-10370\\_59996---,00.html](http://www.michigan.gov/dnr/0,4570,7-153-10370_59996---,00.html))

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## Related Events



## **2017 Lake Huron Regional Fisheries Workshops**

**([http://msue.anr.msu.edu/events/2017\\_lake\\_huron\\_regional\\_fisheries\\_workshops](http://msue.anr.msu.edu/events/2017_lake_huron_regional_fisheries_workshops))**

*Apr 4, 2017* | Charles A. Hammond American Legion Hall, 1026 6th Street, Port Huron, MI 48060

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## **Dessert with Discussion ([http://msue.anr.msu.edu/events/dessert\\_with\\_discussion](http://msue.anr.msu.edu/events/dessert_with_discussion))**

*Apr 11, 2017* | Kellogg Biological Station, 3700 E. Gull Lake Drive, Hickory Corners, MI 49060

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## **2017 Lake Huron Regional Fisheries Workshops**

**([http://msue.anr.msu.edu/events/2017\\_lake\\_huron\\_regional\\_fisheries\\_workshops\\_1](http://msue.anr.msu.edu/events/2017_lake_huron_regional_fisheries_workshops_1))**

*Apr 12, 2017* | Bangor Township Hall, 3921 Wheeler Rd, Bay City, MI 48706

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## **2017 Lake St. Clair Fisheries Workshop**

**([http://msue.anr.msu.edu/events/2017\\_lake\\_st\\_clair\\_fisheries\\_workshop](http://msue.anr.msu.edu/events/2017_lake_st_clair_fisheries_workshop))**

*Apr 13, 2017* | Sportsmen's Direct, 38989 Jefferson Avenue, Harrison Townshp, MI 48045

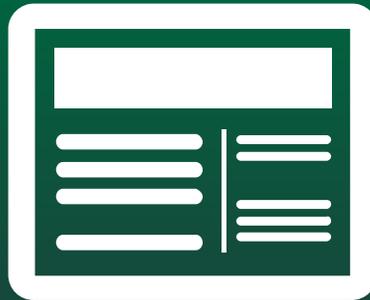
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## **Michigan Lake and Stream Associations 56th Annual Conference**

**([http://msue.anr.msu.edu/events/michigan\\_lake\\_and\\_stream\\_associations\\_56th\\_annual\\_conference](http://msue.anr.msu.edu/events/michigan_lake_and_stream_associations_56th_annual_conference))**

*Apr 21, 2017 – Apr 22, 2017* | Crystal Mountain Resort, 12500 Crystal Mountain Dr., Thompsonville, Michigan 49683

### **Related Articles**



### **Conference to discuss threats to Michigan inland lakes and streams**

**([http://msue.anr.msu.edu/news/conference\\_to\\_discuss\\_threats\\_to\\_michigan\\_inland\\_lakes\\_and\\_stream](http://msue.anr.msu.edu/news/conference_to_discuss_threats_to_michigan_inland_lakes_and_stream))**

*March 28, 2017* | **Bindu Bhakta** | Michigan Lake and Stream Associations 2017 conference is to be held on Earth Day to focus on the significant threats and management of invasive species of Michigan's inland lakes and streams.

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### **Fishing for answers: Here's how you can help Great Lakes fisheries**

**([http://msue.anr.msu.edu/news/fishing\\_for\\_answers\\_how\\_you\\_can\\_help\\_great\\_lakes\\_fisheries\\_msg17](http://msue.anr.msu.edu/news/fishing_for_answers_how_you_can_help_great_lakes_fisheries_msg17))**

*March 22, 2017* | **Dan O'Keefe** | Michigan Sea Grant is offering anglers a variety of ways to contribute information to scientists in 2017.

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## **Fishery experts to discuss recent findings, management at South Haven Fishery Workshop**

**([http://msue.anr.msu.edu/news/fishery experts to discuss recent findings at south haven msg17 of March 20, 2017](http://msue.anr.msu.edu/news/fishery_experts_to_discuss_recent_findings_at_south_haven_msg17_of_march_20_2017) | Dan O'Keefe** | 2017 Southern Lake Michigan meeting on April 20 is free, open to public.

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## **Michigan Sea Grant project looks at cisco restoration in Lake Michigan**

**([http://msue.anr.msu.edu/news/cisco restoration in lake michigan msg17 kinnunen17](http://msue.anr.msu.edu/news/cisco_restoration_in_lake_michigan_msg17_kinnunen17))**

*March 6, 2017* | **Ronald Kinnunen** | How can cisco restoration efforts be tailored to fit the needs of Lake Michigan stakeholder groups?

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## **Workshop offers options for protecting shorelines**

**([http://msue.anr.msu.edu/news/workshop offers options for protecting shorelines](http://msue.anr.msu.edu/news/workshop_offers_options_for_protecting_shorelines))**

*March 1, 2017* | **Bindu Bhakta** | Workshop will educate inland lake property owners about natural solutions that can be used/adopted/developed for shoreline and water quality protection.