

## Bloody red shrimp

### *Hemimysis anomala*

#### Description

Most likely introduced to the Great Lakes in ballast water; first identified in Lake Michigan in 2006 and since spread to other Great Lakes.

#### Identification

Under 1/2 inch; bright red to orange-red in color; black eyes on stalks.

#### Habitat

Native to eastern Europe. Prefers slow-moving waters; rocky, wave-exposed shorelines; shaded areas of piers or docks or rocky bottoms; avoids direct sunlight; free-swimming when not resting. Spreads by ballast water or range expansion.

#### Reproduction

The bloody red shrimp has a lifespan of about 9 months. Sexual maturity is reached when they reach a size of 5.6 mm and the temperature is above 8 degrees celsius. Breeding occurs from April to September/October with 20-30 embryos, depending on the size of the female. They have a





longer breeding season than native Mysid species and can produce 2-4 generations per year.

### **Impact**

Considered a "high risk" species for invasion of inland lakes. Based on its history in Europe, bloody red shrimp may significantly impact native fisheries; they have a huge appetite for the zooplankton that small fish eat. Can pose a high risk of harm to fish populations through food web impacts.

### **Similar**

Great Lakes opossum shrimp (*Mysis relicta*), which also has stalked eyes and less than 1/2 inch in length. The bloody red shrimp tends to be smaller and more red in color, while the Great Lakes opossum shrimp is more clear in color. The Great Lakes opossum shrimp also has a deeply forked tail, whereas the bloody red shrimp has a flat end to its tail with two prominent terminal spines.

### **Monitoring and Rapid Response**

Do not transport live specimens; place specimens in a glass/plastic container filled with ethanol (grain alcohol) or rubbing alcohol and report sightings to your state's natural resource agency.

### **Credits**

The information provided in this factsheet was gathered from the European Network on Invasive Alien Species, NOAA's Great Lakes Environmental Research Lab, and the "Invaders of the Great Lakes" book produced by Wildlife Forever, the Great Lakes Network Sea Grant and the Wisconsin Sea Grant Institute. Individual species images that appear with a number in a black box are courtesy of the Bugwood.org network (<http://www.invasive.org>). Individual photo author credits may not be included due to the small display size of the images and subsequent difficulty of reading the provided text. All other images appear courtesy of Google (<http://images.google.com>).