

spiny water flea

Bythotrephes longimanus

Kingdom:	Animalia
Division/Phylum:	Arthropoda
Class:	Branchiopoda
Order:	Cladocera
Family:	Cercopagididae

ILLINOIS STATUS

common, nonnative



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adult

ILLINOIS RANGE



Permanent

FEATURES

The spiny water flea is less than one-half inch long. This tiny crustacean has a long, sharp, barbed tail spine that often makes up more than 70 percent of the animal's length. Its head consists mainly of a large, single, black eye and a pair of jaws, or mandibles. Four pairs of legs are present, the first pair longer than the others. A pair of swimming antennae are located behind the head.

BEHAVIORS

The spiny water flea lives in Lake Michigan and possibly some inland lakes. It uses swimming antennae to move in the water. As it grows, it sheds the outer shell over its body, but not over its spine. The barbed tail spine makes it difficult for predators to swallow this organism, and, after attempting to eat it, they often spit it back out. The life span of the spiny water flea lasts several days to about two weeks. Adults are present in water bodies from late spring until fall. This crustacean may produce up to 10 offspring every two weeks. Most of the spring, summer and fall populations are comprised of females. These adult females produce unfertilized eggs that develop into female offspring which are identical to the mother. This cycle continues as long as the water temperature is not too hot or too cold and food is plentiful. When the water temperature begins to cool in the fall, both males and females are produced, allowing sexual reproduction to occur. Eggs are then deposited over the bottom, where they will remain until conditions become favorable for them to hatch. Adults die after reproducing. The spiny water flea eats zooplankton. It may eat up to 20 prey items each day, using its jaws to pierce and shred the prey. The spiny water flea is native to northern Europe.

BEHAVIORS (continued)

It first appeared in the United States (Lake Huron) in 1984 and spread to all of the Great Lakes by 1987. It is believed to have been brought from Europe to the United States in the ballast water of ships. The spiny water flea may be competing with small fishes for food. It can be transported in bilge and bait bucket water or by being attached to fishing equipment or other items.

Aquatic Habitats

lakes, ponds and reservoirs; Lake Michigan

Woodland Habitats

none

Prairie and Edge Habitats

none