



# bryozoans

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<b>Common Name</b>	bryozoan
<b>Genus &amp; Species</b>	<i>Lophopodella carteri</i>
<b>Family</b>	Lophopodidae
<b>Order</b>	Plumatellida
<b>Class</b>	Phylactolaemata (freshwater bryozoans)

**Diagnosis:** The Asian freshwater bryozoan *Lophopodella carteri* (*L. carteri*) was accidentally introduced to the Great Lakes with imported aquatic plants in the 1930s. Its body fluids are toxic to fish and salamanders. In some areas of the Great Lakes and St. Lawrence River, *L. carteri* competes with zebra mussels for substrate and prevents settlement of mussel larvae.

**Ecology:** *L. carteri* is known to reproduce sexually and asexually, the latter usually in freshwater. This asexual, freshwater form reproduces via the production of statoblasts, chitin-encapsulated buds, which can be transported across long distance and survive harsh conditions. When the conditions become favorable, statoblasts germinate and give rise to new colonies. *L. carteri* can also hybridize between colonies.

**Habitat & Distribution:** Native to SE Asia, Bombay and NE Africa, but is now established in the Great Lakes. It has also invaded Ohio, Pennsylvania, Illinois, New Jersey, and Michigan, Virginia, Massachusetts, Kentucky and Pennsylvania. *L. carteri* has also been found in ponds and reservoirs on Oahu, Hawaii. Mode of invasion was through the import of aquatic plants; a colony of *L. carteri* can move up to 12 cm per day

**Status:** *L. carteri* are currently established in Lake Michigan and Lake Erie of the Great Lakes and have been since the 1930's. In some areas of the Great Lakes and St. Lawrence River, *L. carteri* competes with zebra mussels (*Dreissena polymorpha*,) for substrate and prevents settlement of mussel larvae. Specific to zebra mussels *L. carteri* could prevent recruitment by the current produced by cilia (used for food selection, waste rejection) that may physically prevent *D. polymorpha* larvae from settling. Additionally, the cover produced by *L. carteri* colonies may cause *D. polymorpha* larvae to seek alternate substrates.

**USGS Fact Sheet:** <http://nas.er.usgs.gov/queries/FactSheet.aspx?SpeciesID=278>

