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Excystment of Over-Wintering Statoblasts of the Freshwater Bryozoan *Pectinatella Magnifica*

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Poster Presentation P16

**EXCYSTMENT OF OVER-WINTERING STATOBLASTS OF THE FRESHWATER
BRYOZOAN *PECTINATELLA MAGNIFICA***

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Colonies of *Pectinatella magnifica* were collected in October of 2007 from Crab Orchard Lake in Southern Illinois. Colonies consisting of hundreds of individuals (zooids) were maintained in the laboratory at IWU in large culture dishes in freshwater from Crab Orchard Lake. Like other phylactolaemate bryozoans, zooids of *P. magnifica* produce environmentally resistant statoblast. These over-wintering structures house totipotent tissue that under favorable conditions regenerates a single zooid that by budding recreates the large gelatinous colony typical of this species. The primary objective of this project was to induce excystment of statoblasts produced by laboratory maintained colonies. Because these statoblasts generally require a period of dormancy that includes reduced ambient temperature, statoblasts were collected on filter paper in Petri dishes and stored in the refrigerator at 320C. After a period of at least two weeks, statoblast were transferred to freshwater in culture dishes and subjected to variations in light, temperature, and available food. After several weeks, at 260C, constant light, and high food content in the water, several statoblasts excysted and produced zooids. However, only a low percentage of statoblasts excysted, and attempts to induce further excystment have not been successful.