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Colony Movement in the Freshwater Bryozoan *Lophopodella carteri*

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**COLONY MOVEMENT IN THE FRESHWATER BRYOZOAN
LOPHOPODELLA CARTERI**

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Lophopodella carteri is a member of the Phylum Bryozoa that forms clumped massive colonies in freshwater habitats throughout the world. Every member of the colony is linked by a common body cavity called a coelom. Previous researchers have documented locomotion in colonies of *L. carteri* and other members of the bryozoan Class Phylactolaemata. I am testing hypotheses relating to the stimulus of locomotion and the mechanism of colony movement. The rate of motion is variable but ranges from 0-0.5 cm/day. Since *L. carteri* is generally found in shaded habitats, I am testing for a phototaxic behavior in the colonies. Video microscopy of moving colonies has revealed that body wall contraction is coincident with colony locomotion. I am testing the hypothesis that locomotion in *L. carteri* involves alternate contraction of circular and longitudinal muscles in the body wall that act upon the common coelom and periodic attachment of adhesive glands to the substratum. To evaluate this hypothesis, length and width measurements of moving colonies are recorded to determine the extent and frequency of body wall contractions. Further microscopy procedures are utilized to record the presence of body wall muscles and to locate adhesive glands.