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OBERVING TARDIGRADES OF THE MILNESIUM SPECIES
FROM ILLINOIS AND FLORIDA

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Tardigrades, or water bears as they are commonly known, are small (~1--5 mm in length) animals that inhabit interstitial spaces in terrestrial moss and lichens and aquatic sediments. Tardigrades are bilateral micrometazoans, and a sister group to the phylum Arthropoda in Ecdysozoa. Since their discovery in 1773 by J. A. E. Goeze, relatively little has been learned about the physiology, reproductive habits, feeding habits, and distribution of the Tardigrada (Nelson, 2001, 527). The objectives of this project were to study and observe the behavior of species of Milnesium as well as compare Milnesium sp. from different habitats. A variety of observations on the anatomy, distribution, feeding, molting, egg laying, and development in specimens of Milnesium were recorded. Apart from these general observations, specimens of Milnesium from Florida and Illinois were compared. Based on differences in buccal length, stylets, and claw patterns in the tardigrades from the two locations, it is highly probable that these two Milnesium are different species. Only one species of Milnesium (Milnesium tardigradum) is identified in the literature, however, a Karen Lindahl provides information on morphological differences in specimens of this genus from different locations in Illinois (Lindahl 1999).