



Illinois Wesleyan University
Digital Commons @ IWU

John Wesley Powell Student Research
Conference

2006, 17th Annual JWP Conference

Apr 8th, 2:35 PM - 3:35 PM

Observing Tardigrades of the Milnesium Species from Illinois and Florida

Craig Brauer
Illinois Wesleyan University

Elizabeth Balser, Faculty Advisor
Illinois Wesleyan University

Follow this and additional works at: <https://digitalcommons.iwu.edu/jwprc>

Brauer, Craig and Balser, Faculty Advisor, Elizabeth, "Observing Tardigrades of the Milnesium Species from Illinois and Florida" (2006). *John Wesley Powell Student Research Conference*. 34.

<https://digitalcommons.iwu.edu/jwprc/2006/posters2/34>

This Event is protected by copyright and/or related rights. It has been brought to you by Digital Commons @ IWU with permission from the rights-holder(s). You are free to use this material in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/ or on the work itself. This material has been accepted for inclusion by faculty at Illinois Wesleyan University. For more information, please contact digitalcommons@iwu.edu.

©Copyright is owned by the author of this document.

Poster Presentation P12

**OBSERVING TARDIGRADES OF THE MILNESIUM SPECIES
FROM ILLINOIS AND FLORIDA**

Craig Brauer and Elizabeth Balser*
Biology Department, Illinois Wesleyan University

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).