



Spring 5-5-2006

## Illinois Wesleyan Biologists Return to Antarctica

Ann Aubry  
*Illinois Wesleyan University*

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

---

### Recommended Citation

Aubry, Ann, "Illinois Wesleyan Biologists Return to Antarctica" (2006). *News and Events*. 3340.

<https://digitalcommons.iwu.edu/news/3340>

This Article 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](mailto:digitalcommons@iwu.edu).

©Copyright is owned by the author of this document.

Illinois Wesleyan Biologists  
Return to Antarctica  
May 5, 2006

BLOOMINGTON, Ill. – Two Illinois Wesleyan University faculty members are continuing their research on invertebrate animals found in the ocean and on the sea floor between Antarctica and South America, this time visiting the polar region during its light-limited early winter.



Scientists collect bottom-dwelling invertebrates during the 2004 expedition to Antarctica.

Associate Professors of Biology Elizabeth (Susie) Balser and Will Jaeckle will spend May 11-June 13 onboard the *R/V Laurence M. Gould*, conducting research in an ongoing project sponsored by the National Science Foundation, in conjunction with colleagues from Auburn University and Woods Hole Oceanographic Institute.

Balser still has animals called pterobranchs in her lab refrigerator from the previous (November 2004) trip to Antarctica, also onboard the *LM Gould*. She hopes to collect additional specimens for study and to transport back to IWU.

As with the previous trip, they will use satellite communication to e-mail journal entries from the expedition that will be posted on the Illinois Wesleyan University Web site at <http://europa.iwu.edu/news/antarctica/>

The research examines how the same species of marine animals found in Antarctica are also present in the water near South America, even though the continents have been separated for millions of years. One theory is that the animals have a "dispersive agent," a developmental stage called a larva that could be figuratively compared to a milkweed seed, which somehow crosses through the circumpolar current surrounding Antarctica and allows genetic exchange to continue between geographically isolated populations.

The hunt for these "dispersive agents" involves the use of plankton nets to collect larvae as the *LM Gould* travels from the Falkland Islands off the tip of South America, through the rough waters of Drakes Passage to the Antarctic peninsula. The animals include worms, molluscs, echinoderms, crustaceans and others; the different appearances of the species in their free-floating larval and bottom-dwelling adult forms makes identifying the organisms one of the challenges of the research.

"We're both interested in the basic biology of these planktonic, floating developmental forms," Jaeckle said. "We've been lucky enough to work tropically, in temperate areas, and now in polar regions.

"The world moves at a different rate down there. The water can be minus-1 degrees Celsius and metabolism of these animals is slow. In the tropics, if we were to look at a similar animal, they would go from egg to juvenile in probably 30 days. Although we don't really know (the animals' life cycles in the Antarctic), a year might be a reasonable estimate of time for a larva to complete its developmental process and assume an existence back on the sea floor as a juvenile. It's just really neat. They face different challenges."

Contact: Ann Aubry, (309) 556-3181