



## The Collapse of an Antarctic Ice Shelf

Presented by Dr. Eugene Domack

In 2002 a portion of the Larsen Ice Shelf, roughly the size of Rhode Island, collapsed allowing scientists a unique opportunity to study life below the extreme environment of floating Antarctic ice shelves. This situation has allowed scientists to probe portions of the ocean floor that have been undisturbed for nearly 10,000 years. In the words of Dr. Domack “this is definitely the biggest thing I’ve ever been involved with in the Antarctic...Seeing these organisms on the ocean bottom – it’s like lifting the carpet off the floor and finding a layer that you never knew was there.”

Underwater video studies of the area have indicated that a vast ecosystem exists beneath Antarctica’s floating ice shelves. This ecosystem, known as a “cold-seep” (or cold-vent) community, is fed by chemical energy from within the earth. Although similar communities exist, such as in the Gulf of Mexico and in the Sea of Japan, this is the first time that researchers have had the opportunity to explore this type of ecosystem within the inhospitable sub-ice setting of the Antarctic.

Dr. Domack will be presenting to us his research to date regarding the ice shelf collapse and the subsequent discovery of the cold-seep ecosystem.

A member of the Hamilton College faculty since 1985, Dr. Domack earned his Ph.D. in geology at Rice University. Specializing in the sediments, paleoenvironments, and glacial

geology of the Southern Hemisphere, Dr. Domack has been the chief scientist aboard many research vessels to Antarctica. Over the last 15 years he has led more than 100 undergraduates to Antarctica as part of his NSF sponsored research program. He has published many articles for journals such as *Nature*, *Antarctic Science*, *Marine Geology*, and *Geological Society of America Bulletin*, and has also edited the book, *The Earth's Glacial Record*. Dr. Domack has been awarded many grants for Antarctic study by the National Science Foundation, who also presented him with the Antarctic Service Award in 1981.

**Meeting logistics:** The meeting will take place on Thursday, November 17th at the Lemoyne Manor in Liverpool, New York (see attached map). A social hour will be held from 5:30 p.m. to 6:30 p.m. and will be followed by a buffet dinner starting at 6:30 p.m. The main presentation by Dr. Domack will begin at 7:30 p.m.

The cost of dinner is \$20 for members, \$22 for non-members and \$15 for student members. People may also attend the presentation only for a nominal fee of \$3. Groundwater & Environmental Services (GES) has graciously offered to sponsor the first six students to sign up for the meeting. Please RSVP by Monday, November 14th to Bonnie at Parratt-Wolff via e-mail at [bolney@pwinc.com](mailto:bolney@pwinc.com) or 437-1429.

