

An Ice-Breaking Experience

BY KATHLEEN COUCHON

“Would you like to go to the North Pole?” With an emphatic and affirmative “Yes!,” this middle-school science teacher found herself off on the adventure of a lifetime. In the summer of 2004, I spent six weeks as part of the Arctic Coring Expedition (ACEX) in the Arctic Ocean on IODP Expedition 302. I quickly found myself immersed in a scientific experience that will forever shape the way I look at teaching.

My middle-school students had a preconceived notion of what scientists look like formed from books, movies, TV shows, even comic strips. Many had a very narrow view of what scientists actually do. Did I ever return with something to share with them!

Joined by a fellow teacher-researcher from Sweden and my ARMADA host researchers from URI, Dr. Kate Moran, Dr. John Farrell, and Dr. David C. Smith, it was my great fortune to be accepted as an integral part of the scientific team on board the Swedish icebreaker *Oden*. I was afforded the opportunity to work alongside micropaleontologists, geologists, geochemists, microbiologists, and ice scientists, among others. I learned early into the cruise that when asked if I wanted work to do, the answer should always be “Yes!” In this manner, I found myself participating in a variety of scientific experiences I never could have imagined.

At one time, I was flying high above the massive ice floes in my first helicopter ride as the ice team mapped ice conditions. In another instance, the helicopter actually landed on the sea ice, depositing a team of scientists to deploy satellite radar reflectors to track ice movement. On the drilling ship *Vidar*

Viking I assisted in cutting a core containing sediments dating back tens of millions of years. In the *Oden* labs, I shared the excitement of scientists finding evidence of freshwater organisms that once dwelled in the salty Arctic—a true “Eureka!” moment.

Returning to school at the end of the expedition, I tried to recreate some of these experiences with my students. The students couldn’t drill down into deep ocean sediments, but they could take cores of the local salt marsh. In a bit of synchronicity, the kids photographed and analyzed their cores in the school “lab” on the same date that the ACEX cores were examined in Bremen, Germany. When they asked me if this is what I did in the Arctic, I could answer, “not quite but almost.”

KATHLEEN COUCHON (Kcouchon@narragansett.k12.ri.us) sailed as a teacher-researcher aboard the Swedish icebreaker *Oden* on IODP Expedition 302 (ACEX), in the summer of 2004. Her experience was possible through the NSF-funded ARMADA project, administered by the Office of Marine Programs at the University of Rhode Island, Graduate School of Oceanography.



Author Kathleen Couchon during the IODP Expedition 302 (Arctic Coring Expedition) in summer 2004.