Forty Years of Women Researchers in Antarctica

Colin Bull began fighting in 1959 to get the U.S. Navy to allow women scientists to go to Antarctica, and kept it up until he won, a decade later. He couldn't understand the Navy's reluctance. "Have you ever seen a female scientist with a parka on?" he said. "She is virtually indistinguishable from a male scientist with a parka on."

Eventually the Navy relented, and allowed women scientists onto the continent in 1969. Bull, then director of Ohio State University's Institute of Polar Studies, assembled an all-women scientific research team that arrived in Antarctica in October 1969, for a four-month research expedition. The following month, they also became the first women to step onto the South Pole.

"What the U.S. Navy was worried about was incomprehensible to me," Bull said recently, not long after the 40th anniversary of the mission. "It was utterly stupid."

Today about a third of the Antarctic scientists are women. Hundreds of women have worked in the program, some of them leading research stations and heading major expeditions. More than 50 are

working at the South Pole during the 2009-2010 summer season.

The Navy, which had established McMurdo Station, the main American base in Antarctica, as a military outpost in 1956, had been adamant at the time. They would not transport women onto the continent. The National Science Foundation, which funded the program, did not challenge Navy policy.

"The Navy thought it was like a ship, and they didn't let women on ships," said Terry Tickhill Terrell, one of the surviving members of the Ohio State University team. "I don't know what they were afraid of—we went there to do science."

Terrell, now 60, was a 19-year-old undergraduate at Ohio State when she heard about the planned trip. She was a chemistry major who was bored with her work in the lab.

"I couldn't understand why all this awful lab work was important," she said. "So I walked into the Polar Studies office and said: 'I want a job in Antarctica.' The room fell dead silent. The secretary took pity on me and said, 'there's a group of women going this year. Dr. Lois Jones is in her office right now, and I'll call her.'"

Geochemist Lois Jones, who passed away in 2000, was the leader of the four-woman Ohio State team, which also included geologist Eileen McSaveney and the late Kay Lindsay, a biologist.

"Dr. Jones said, 'we have everyone we need, but tell me about yourself,'" Terrell recalled. "I said, 'I'm a chemistry major. I grew up on a farm. I am a hard worker.' She asked if I'd done any camping. I said, 'I'm an outdoor person, and took outdoor cookery at 4H.' The next day she called me up and said: 'one of the ladies is unable to go. I need a cook and field assistant.'"

The women spent most of their time in Wright and Taylor Valleys, part of the McMurdo Dry Valleys, one of the few areas of Antarctica not covered by thousands of meters of ice.

"We spent our days breaking rocks and hauling heavy backpacks full of rocks to send back for chemical analysis," Terrell said. "The wind blew all the time, and there was sand in our boots, sand in our clothes and sand in our food. There was sand in everything. We had oatmeal for breakfast every morning—not because we liked it, but because it was the only thing that was edible with sand in it."

Despite its initial reluctance to dispatch women to the continent, the Navy later celebrated its new feminist attitude with a media event at the South Pole station, where women had never been before. A ski-equipped LC-130 flew six women researchers there on Nov. 12, 1969. They included the four members of Jones' team; Pam Young, a biologist doing research with the New Zealand Antarctic program; and Jean Pearson, a science writer for the Detroit Free Press.

All six linked arms and stepped off the airplane's cargo ramp onto the ice together—so they all would be first.

"It was a one-day event that was largely symbolic," Terrell said. "I remember they dropped the cargo door, and we all walked out with our arms joined and stepped off at exactly the same time. We got a tour of the Pole base, and we were asked if we wanted to join the '300 Club,' which involved taking off our clothes and racing around the Pole in the buff. But we were there to do science and the Navy had made it very clear about our not creating any problems—or they would ship us out immediately. We declined."

They needn't have worried. "They made mistakes," Bull said. "They made just the same number of

mistakes as four boys would have done." He laughed. “There is a rumor that they burned down their tent, but it doesn't really matter because many boys have done that."

For the most part, the expedition went as planned with few problems, although the women did experience an occasional heart-stopping moment. These included a helicopter crash, when a bolt holding one of the propeller blades blew off, causing the blades to separate from the aircraft.

"We were on our way to another field location to take collections, and had just taken off," Terrell said. "All of a sudden we heard what sounded like a rifle shot and the helicopter started falling out of the sky. I sat there wondering which of us would survive. We all were wearing flammable clothing. You know how young people feel immortal? In that one moment, I ceased being immortal."

Everyone survived. Interestingly, "we, the ladies, knew how to set up the survival equipment and the guys did not," Terrell said. "They did not pay attention in snow school. We'd started melting ice and making a meal by the time the rescue helicopter came."

Terrell, who went on to a long scientific career with the U.S. Fish and Wildlife Service, was heartbroken when the expedition ended. "I didn't want to go home," she said. "It was just the most exciting, interesting place I'd ever been in my entire life."

—By Marlene Cimons, NSF

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