

Diving



to the End of the World

By Kristi Evans

According to the readers' choice awards in *Scuba Diving* magazine, tropical destinations are by far the most popular. Frigid exceptions are British Columbia's Pacific coastline, ranked first in the North American region, and the Great Lakes for best shipwreck diving. Antarctica is nowhere on the list, but Lisa (Trotter) Kelley '99 BS considers it a best-kept secret. She is the only person on record who both learned to scuba dive and completed her certification in Antarctica. She also wrote the first and only dive guide to the region. Kelley now accompanies travelers to the White Continent as an expedition leader aboard *National Geographic Explorer*.

Once the exclusive realm of military and scientific divers, the Antarctic has recently attracted recreational types eager for an unconventional experience. The extreme environment—water temperatures around 30 degrees F throughout the year—requires added preparation and about 150 pounds of gear. Kelley wears a long-underwear base layer topped by a 500g Thinsulate jumpsuit and finally a drysuit made of either crushed neoprene or trilaminate. The air tanks on her back have two regulators in case one stops working properly. Kelley also carries a camera in a waterproof housing.

“It is an incredibly rich environment with lots of invertebrates and colors you wouldn't believe,” she writes in an email from the boat during a recent expedition. “I've been around the world, and Antarctica is still my favorite place to dive on the planet. On any given day, you never know what you will find. There has been so little research underwater here that it is possible we might find something that has never been seen before.”

Kelley almost had an earlier initiation to cold-water diving, albeit in Lake Superior. She had to drop the scuba class at NMU before its first session because it conflicted with soccer practice (Kelley was team captain).



After earning a bachelor's degree in health education and human biology, she completed post-graduate work in immunology before her career path took an unexpected turn.

“My grandparents, who raised me, were longtime Lindblad Expeditions travelers,” she explains. “When I finished my post-grad work, they asked if I wanted to go on a trip with them to Western Europe, starting in Portsmouth, England, and ending in Lisbon, Portugal. I was the youngest person onboard, and

because my grandfather had some physical constraints, I was always back at the landings early and ended up helping people in and out of Zodiacs.

“Towards the end of the trip I asked the crew how they got into this line of work and they said they had a position open in the gift shop if I wanted to apply. I did and ended up getting the job.

“Because I like to keep busy, I asked the undersea specialist if he would train me to dive. So while I was the gift shop manager, I learned to dive in Antarctica.”

Kelley has since logged more than 900 hours exploring the region via scuba and a remotely-operated

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vehicle (ROV). This experience led her to write *Below Freezing: The Antarctic Dive Guide*, first published in 2006 and now in its second edition. Kelley also served as the winter 2010 station manager at Palmer Station, a U.S. research complex located on a protected harbor off the Antarctica Peninsula. “I made sure everyone was happy and healthy, and that the station continued to run smoothly and be productive.”

Now Kelley spends most of the year working aboard *National Geographic Explorer* as an expedition leader, naturalist and undersea specialist. Such a nomadic career typically is not conducive to finding a spouse, but Kelley discovered about the only

A Harpagiferidae, or spiny plunderfish, (left) and leopard seal (below) are among the undersea creatures Kelley (above) encounters in Antarctic waters.



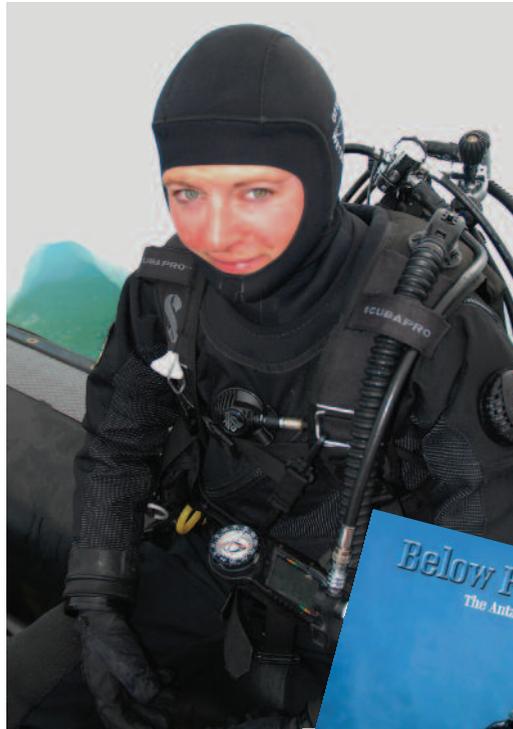
Photos courtesy of Lisa Kelley

workable solution for her situation: she married a Lindblad naturalist, Jason, works on the same vessel and has the same schedule.

“Because my husband is usually one of the staff I supervise, we definitely have to be careful to keep work separate from the personal. We do pretty well. Half the time, the guests don’t realize we’re married, as we are professional when outside the cabin. But I do find that being away from shore-based friends and family is difficult.”

Kelley has traveled from the remote islands of the Mid-Atlantic Ridge to Europe, as well as both coasts of South America and Africa. Most of her voyages are to polar regions, and she prefers it that way.

“Any itinerary in Antarctica is my favorite because it is an incredibly dynamic area,” says the Buffalo, N.Y.

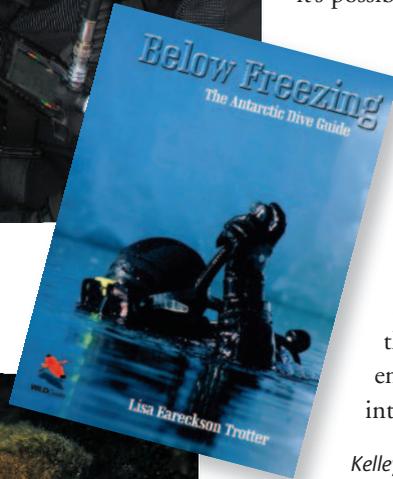


native. “Every week the ice and animals change. A rewarding part of my job is to see the smiles on people’s faces after being face to face with a penguin or seeing an iceberg for the first time.”

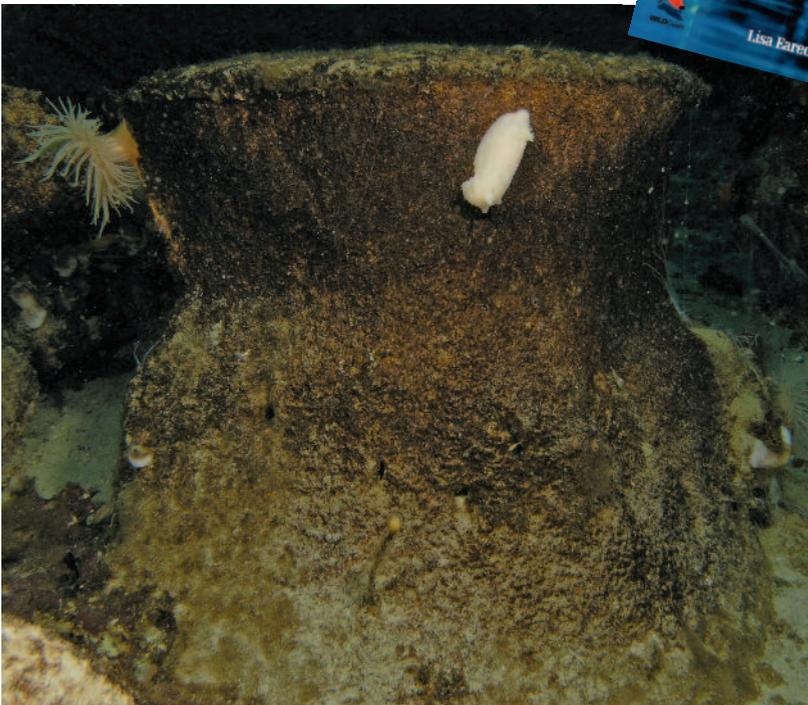
Written or spoken words will likely fall short in describing the environment of Antarctica, much less what it’s like to venture below the water’s surface. Few have experienced the invigorating thrill of diving there, but it’s possible to do so vicariously

through Kelley. A fascinating 2008 video that shows her exploring the undersea beauty and diversity can be viewed on YouTube.

Enter her maiden name, Lisa Trotter, in the search field and enjoy your own journey into the frigid deep. ■



Kelley’s book, Below Freezing, details 25 dive sites on the Antarctic Peninsula and South Georgia and includes diving techniques for those up to the challenge.



Encrusted whale vertebrae provide habitat to a nudibranch and an anemone in Port Lockroy harbor, which was a haven for whalers. The sea bed is as deep as 62 meters in this area, and is home to limpets (circular sea snails that look like alien spaceships), sea stars, worms, isopods (14-legged crustaceans resembling armadillos or wood lice), sponges and leopard and Weddell seals.

At press time, another Wildcat explorer, David Branson '97 BS, was on a research cruise aboard the RVIB Palmer off the west coast of Antarctica sampling benthic invertebrates. He is working on his doctorate at Auburn University, focusing on marine molecular ecology.

