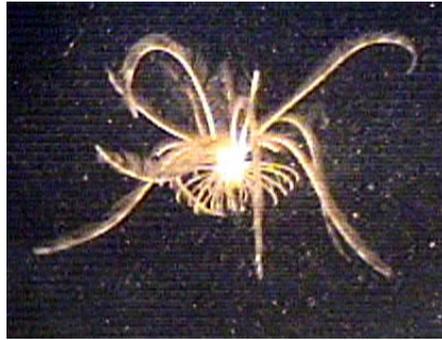
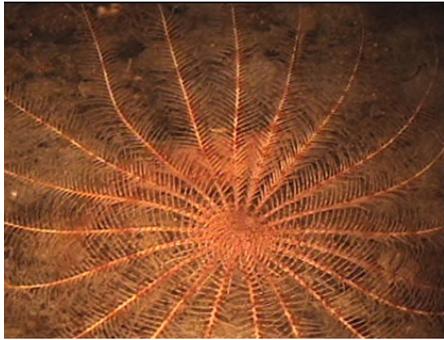


## From the National Geographic Explorer at Sea



### The Drake Passage

*"In memories we were rich. We had pierced the veneer of outside things. We had suffered, starved and triumphed, groveled yet grasped at glory, grown bigger in the bigness of the whole. We had seen God in his splendor, heard the text that nature renders. We had reached the naked soul of man..."*

**Sir Ernest Shackleton**

A day at sea aboard the expedition ship *National Geographic Explorer*. It is difficult to say a day at sea is something that we 'need,' as most would love for our adventure to continue. Yet somewhere around the fourth day we found it difficult to come up with new adjectives or expletives to summarize what we were feeling and seeing, so time to reflect and take pause, simply grasp the enormity of Antarctica or catch up on downloading photos and sleep, is welcome.

In looking back over the voyage, one barely knows where to begin, when did we first fall in love with Antarctica, and then continue to do so over and over as we discovered something new? Was it when we saw our first tabular iceberg? Was it the first time we heard an Emperor Penguin trumpet? Whether we have taken 1 or 100,000 pictures this voyage, our experiences are forever embedded in our minds, and the tough part lies ahead, trying to convey the feeling to our friends and family back home.

Our exploration of Antarctica has not just been above the surface of the Southern Ocean, but below as well. Onboard the *National Geographic Explorer* we use a variety of tools to explore the underwater world, including an HD camera in an underwater housing and an ROV (Remotely Operated Vehicle). This week the "monster" of the trip was a swimming crinoid. The most ancient and perhaps primitive of the living echinoderms, (which include sea urchins, sea cucumbers, and sea stars) 80 species exist today. Often called sea lilies, they can reach over 1 meter (3.3 feet) in diameter, with a crown of feathery arms numbering between 5 and 40. The crinoid can move easily across the sea floor using their 'feet' called cirri, or alternatively they can swim through the water column, alternating a third of their arms at a time, using the water pressure to keep themselves elevated in the water column.

Today we will once again sail through the Antarctic convergence, an area of water where the colder northern-flowing waters of the Antarctic, meet with the warmer waters of the sub-Antarctic. We will also pass the political boundary of Antarctica at 60° South, and although we are far from land, these boundaries will

be our last and reluctant step out of the Antarctic.

***Lisa Trotter, Undersea Specialist; Photos: Lisa Trotter and Abbott King, Assistant Undersea Speciali***

