

- Chaim Rivkin

Lost Deep in the Frozen Expanse of Antarctic Ice Shelves, Would They Survive to Tell the Tale?

A brave explorer set out on an expedition to cross the vast icy Antarctic continent from one end to the other. However, his ship was damaged, there was no communication to the outside world and the party was stricken with strife that endangered everyone involved.

The members of the expedition fought the worst of the Antarctic winter with its brutal, frigid winds, food shortages, attacks by wild animals and all sorts of unimaginable dangers in a daily struggle to survive. Read about their dramatic and historic journey.

Expedition to Antarctica

“People wanted for a risky trip. Minimal pay, bitter cold, months of darkness, constant travel, safe return not guaranteed. Honor and recognition if successful.”

Would you respond to such an ad? Do you know *anyone* who might? This exact advertisement appeared almost a century ago. When it was published many people responded. *Many*. Close to 5,000, to be specific.

The advertisement was paid for by Sir Ernest Henry Shackleton, who was already famous for his Antarctic explorations. At that time only a handful of people had stepped foot on Antarctica, the last continent to be discovered, and it had captured the public’s imagination. Shackleton had joined British explorer Robert F. Scott on his 1901 mission to the South Pole. That expedition had brought its members within 745 miles of the South Pole, the closest humans had yet approached the vast ice desert. The unrelenting harsh conditions, food shortages and disease had forced that group back before they could reach their goal.

Despite that experience Shackleton vowed to return to Antarctica and on January 1, 1908, he was back. He and his three companions set out on the Nimrod Expedition to explore the continent and to be the first to “conquer” the South Pole. They made many scientific discoveries and by January 9, 1909, they were within 95 miles of their goal.

Once again, the combination of adverse conditions forced Shackleton to abort his trip without reaching the ultimate objective. “I thought you’d rather have a live donkey than a dead lion,” he explained to his wife later. On his return to England, Shackleton was knighted for his accomplishments.

Late in 1911 Norwegian explorer Raold Amundsen set out with 3 men and 52 dogs to reach the planet’s southernmost tip. Covering 40 miles a day, they made it to the South Pole for the first time in human history and returned safely from the 1,400 mile round trip. Scott arrived



In 1911 Norwegian explorer Raold Admunsen became the first person to reach the South Pole.



Would you respond to such an ad? 5000 people did!

at the Pole five weeks later and was stunned to find the relics of Amundsen’s expedition that had beat him there. Unlike Amundsen, however, Scott’s expedition failed to return safely. The entire group perished on the return trip.

Shackleton may have lost the race to the South Pole, but his Antarctic ambitions were not over. He set a new goal: to be the first to cross the entire Antarctic continent. He would traverse the ice from the Weddell Sea to the Ross Sea, crossing over the Pole along the way. To that end he published the above advertisement in a London newspaper in 1914 to find volunteers to join his newest expedition to Antarctica.

The Continent of Ice

The continent of Antarctica measures over 13 million square miles. Unlike other lands, Antarctica has no internationally recognized owner, although a number of nations (United Kingdom, France, Australia, Norway, Argentina and Chile) have made

territorial claims there. There are no cities, roads or infrastructure of any sort. Such systems do not hold up well on ice and 98% of the continent is covered in ice. In fact, 90% of the world’s ice is found there.

The average thickness of the Antarctic ice is over 7,000 feet, and in some places it is twice that. About one-tenth of the ice is in the form of massive ice shelves. These thick outcroppings are not supported by land and float on the ocean instead. The largest, the Ross Ice Shelf, is as large as France!

Why is there such an abundance of ice there? It probably has something to do with the extreme temperatures. The coldest temperature ever recorded on Earth (-128°F) was measured in 1983 by a scientific station there. That also explains the super-sparse population of the South Pole region.

The temperatures are bad enough, but you also have to factor in the wind-chill effect. While 30 MPH winds are common in the high plateaus, the coastal regions can be far fiercer. Winds as high as 200 MPH—2 ½ times the power of a hurricane!—make the bitter cold completely unbearable. At -20°F, winds as low as 10 MPH will make it feel like the temperature is -46°F. With a wind of 30 MPH the effect is of a temperature of -79°F.

How do explorers and scientists face such frigid conditions? A good, warm coat and plenty of extra layers from head to toe should be simple enough, right?

Wrong. Overdoing the insulation can lead to excessive perspiration which will eventually... freeze. Also, wet skin allows heat to escape 20 times as quickly as when it is dry. If the clothing becomes soaked, body heat can be lost at the same rate as if the clothing weren’t there.

Although primitive forms of plant and animal life exist in Antarctica in abundance, there is little there that can nourish humans. Whatever birds, fish and marine mammals do survive there are only found in the coastal



The Nimrod Expedition sets out to explore Antarctica.



Scott and his party at the South Pole. (L-R) Captain Lawrence Oates, Lieutenant Henry Bowers (seated), Captain Robert Falcon Scott, Dr. Edward Wilson (seated) and Petty Officer Edgar Evans.

areas. That means inland explorers have no hope of finding fruits and vegetables, meat and poultry or even roots to feed them. Any and all food must be brought along on the trip.

Drinking water? It is true that the Antarctic ice accounts for 70% of the world’s fresh water. Nevertheless, the southernmost continent is classified as a desert due to its unusually arid climate. The extremely low level of precipitation there averages just two inches annually in many areas.

In the summer, when the temperatures in some areas can rise above the freezing point, some of the ice melts