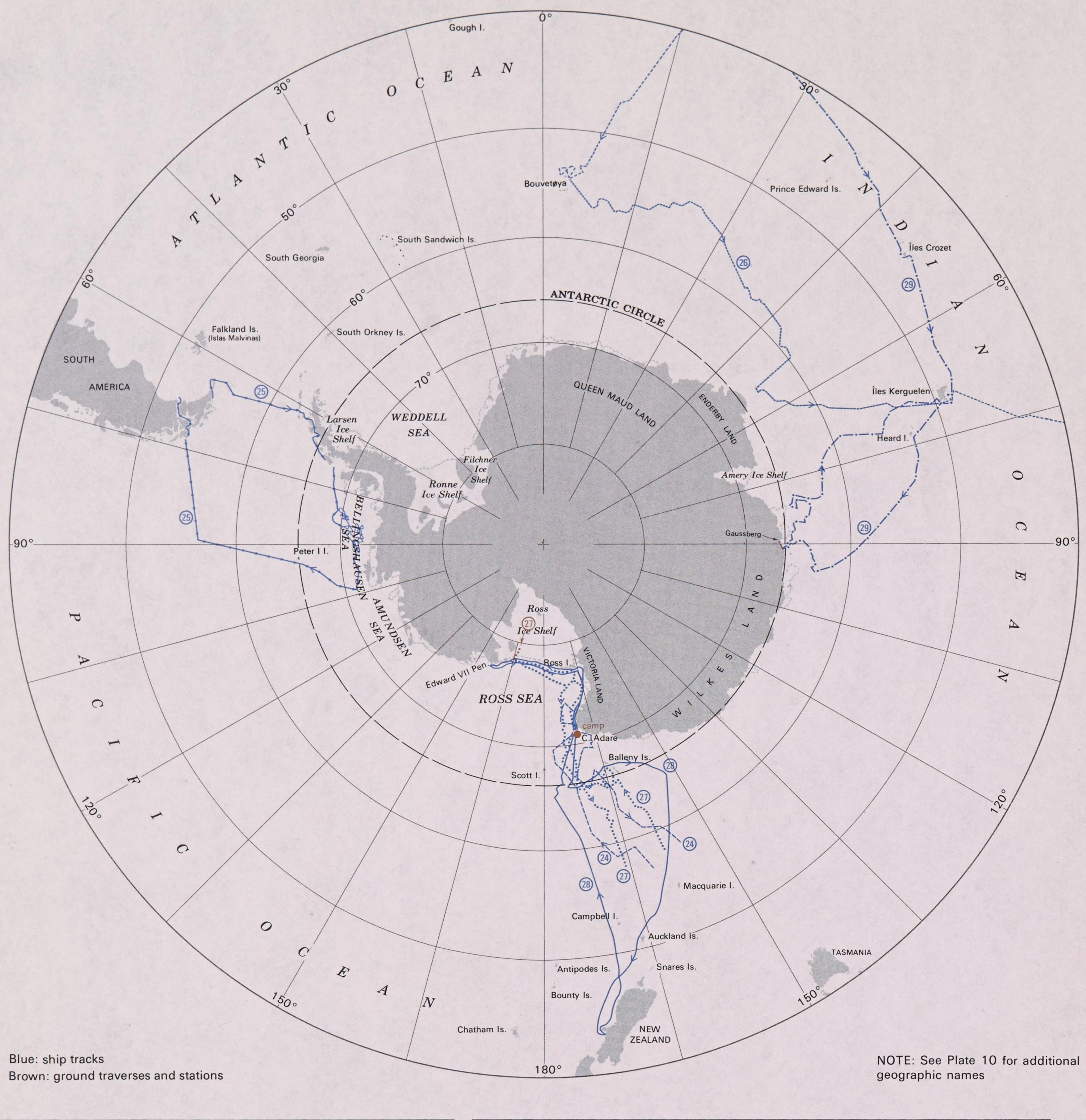
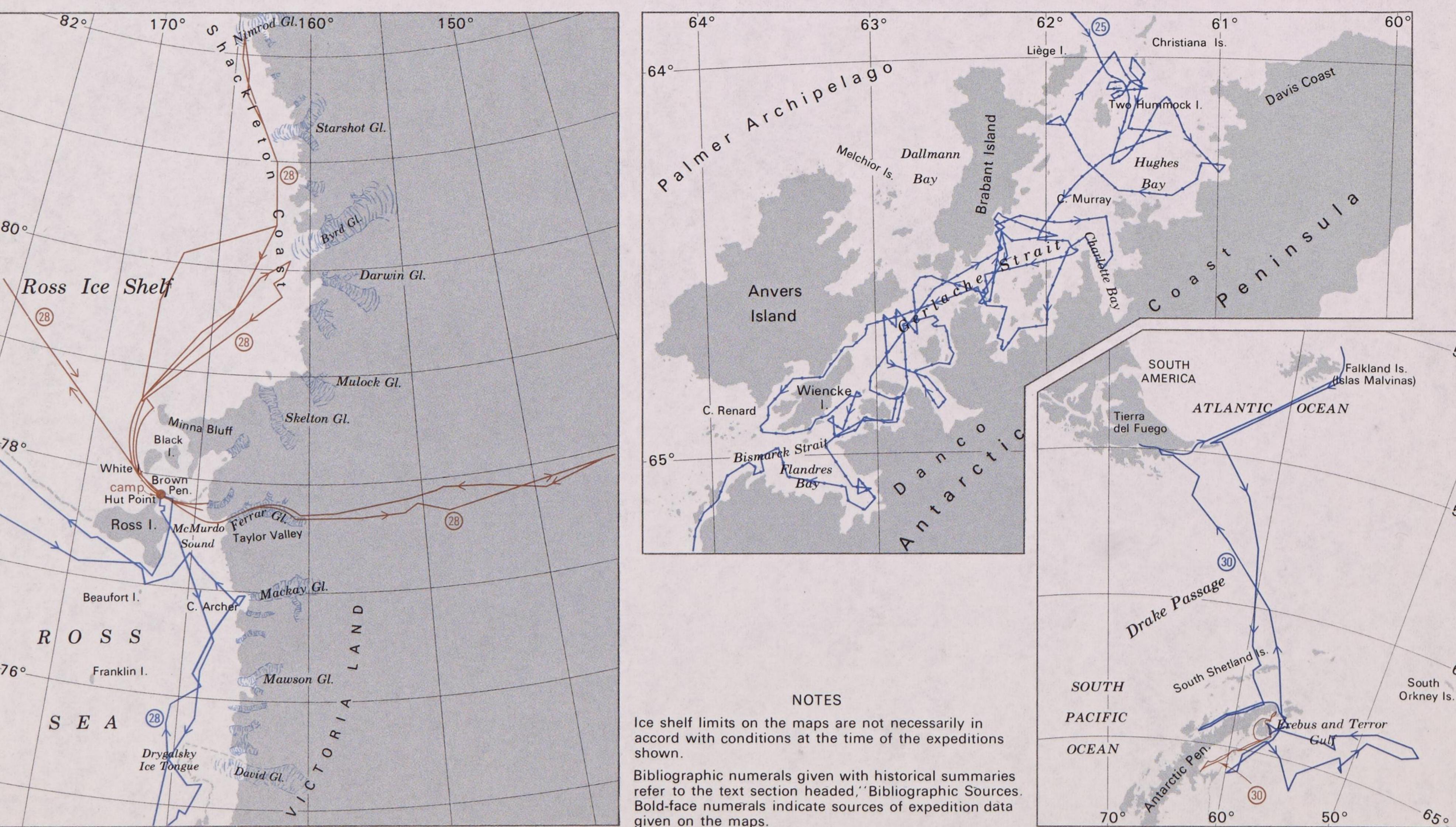
FOLIO 19-HISTORY

ANTARCTIC MAP FOLIO SERIES





24) 1894-1895 Leaders: Capt. Leonard Kristensen, H. J. Bull Sponsor: Svend Foyn Ship: Antarctic Purpose: Investigation of commercial whaling possibilities in Antarctic waters Bibliography: 23, 34, 119, 261

Although this expedition found none of the valuable right whales it was seeking, it was significant for a number of new accomplishments. A landing at Cape Adare was the first on the main body of the continent. While at Cape Adare, the party collected rock specimens, lichens, and seaweeds; rocks and lichens were also obtained from Possession Island, and penguins were captured for later study. The party was the first to find mummified seals in the Antarctic. Bull interpreted this discovery as proof that the polar climate could not support land mammals; such animals should have found and eaten the dead seals. The expedition continued beyond Cape Adare and the Possession Islands until its most southerly point was recorded at 74°S.

25) 1897-1899 Leader: Lt. Adrien de Gerlache Sponsors: Government grants and private contributors Ship: Belgica Purpose: Scientific investigation Bibliography: 5, 6, 22, 31, 43, 53, 155, 161, 168, 254

The Belgica left Tierra del Fuego on January 13, 1898 and sailed toward Smith Island in the South Shetland Islands, taking a line of deep-sea soundings along the way. The ship then crossed the Bransfield Strait and went on to explore and name "Belgica Strait"-now called Gerlache Strait in honor of its discoverer. Several landings were made; grasses, mosses, lichens, and algae were collected and observations were made of Antarctic birds and seals; geological and glaciological investigations were carried out. Passing out the southwest end of Gerlache Strait, the Belgica continued southwestward into the Bellingshausen Sea where she was beset in the pack ice and drifted for over a year. This, then, was the first scientific expedition to winter in the Antarctic, and the party was able to record for the first time a consecutive series of Antarctic winter temperatures.

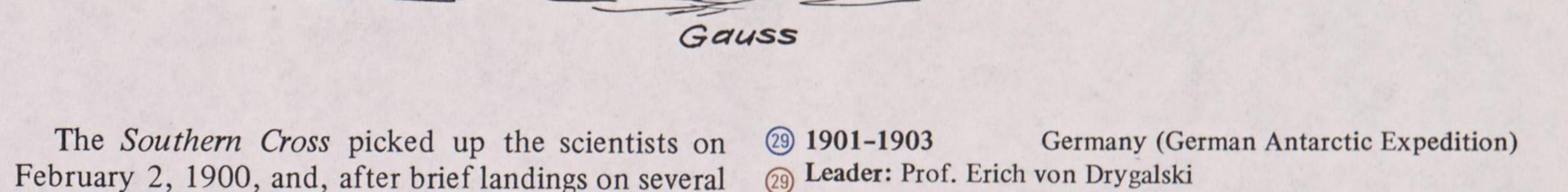
26) 1898 Germany Leader: Prof. Karl Chun Sponsor: German government Ship: Valdivia Purpose: Scientific investigation Bibliography: 83, 159, 208, 225, 258

Chun's expedition made oceanographic and biological observations in the Indian and South Atlantic Oceans; the Valdivia penetrated as far as 64°15'S at 54°20'E. The oceanographic findings of the expedition considerably modified the existing idea of the form of the ocean bed in the far south; it was found to be much deeper than had been thought. The most important geographic achievement of the expedition is considered to be the rediscovery and accurate determination of the position of Bouvetøya; this was accomplished in November 1898. The ship also visited the Îles Kerguelen in December of the same year.

27) 1898-1900 Great Britain Leader: C. E. Borchgrevink Sponsor: Sir Georges Newnes Ship: Southern Cross Purpose: Magnetic and meteorological studies Bibliography: 14, 22, 24, 25, 26, 43, 143, 262

While he was with Kristensen and Bull on their expedition to Cape Adare in 1894-1895, Borchgrevink had conceived a plan of returning with his own party. He was able to carry out his plan, and arrived at Cape Adare in February 1899. His was the first Antarctic expedition to establish a base on the main body of the continent.

The party obtained meteorological data and made measurements of the earth's magnetic field. They made extensive studies of terrestrial and marine life. Rock samples were collected. Investigations of the marine fauna proved the existence of shallow-water species along the coast, thus refuting earlier contentions that these waters could not support animal life.



Sponsors: Government grant and support from Counts

Bibliography: 65, 66, 67, 68, 82, 84, 160, 226, 246, 247

Ship: Gauss Purpose: Exploration and scientific studies

Baudissin and Posadowsky

The Gauss party set up a magnetic observation station at Ile Kerguelen and then proceeded toward Antarctica. At about 90°E they found and Great Britain (National Antarctic named Emperor Wilhelm Land-now called Wilhelm II Coast. Between 91° and 92°E, south of the Leader: Capt. Robert F. Scott, RN Antarctic Circle, the Gauss was frozen into the pack Sponsors: Government grant, Royal Geographical Society, ice where she was forced to remain for over a year. During most of the time magnetic, geodetic, Purpose: An attempt to reach the South Pole; determination climatological, and tidal data were taken at stations of the nature and extent of lands surrounding the Pole established on the ice. In March 1902 Drygalski made Bibliography: 15, 22, 43, 108, 143, 211, 212, 251, 265 an ascent in a captive balloon to extend his observations of the surrounding terrain. A sledging After making several landings along the coast of journey was made to an apparently extinct volcano, which the party named Gaussberg. Glaciological studies were conducted on the mainland and geologic specimens were collected. Biological work included observations of birds and collection of marine fauna,

lichens, and mosses.

Victoria Land, the Discovery skirted the Ross Ice Shelf and discovered Edward VII Peninsula. Upon returning westward along the ice shelf, the party moored in an inlet near the Bay of Whales. Here, on February 4, 1902, Scott made an ascent in a captive balloon. From this vantage point he saw that the ice shelf stretched southward to the horizon. The party then continued to Ross Island where a camp was established at Hut Point and the ship was left to freeze into the pack ice of McMurdo Sound. The three summers of Scott's visit were devoted to extensive scientific investigations and numerous exploratory sledging probes of the mainland. The staff's geological observations in Victoria Land proved valuable, as did their studies of the abundant life of the area. During the summer of 1902-1903 a party made a journey southward on the ice shelf to 82°17'S in an attempt to reach the South Pole. This was the deepest Antarctic penetration to that time. That same summer, Armitage, Scott's secondin-command, led a party up the Ferrar Glacier. On January 3, 1903, they became the first men to reach the polar plateau, the vast ice sheet that covers most of the interior of Antarctica.

islands and extensive charting along the coast of

Victoria Land, the ship cruised along the Ross Ice

Shelf. A landing was made at the Bay of Whales

(78°30'S, 164°20'W). Borchgrevink and two other

men sledged on the ice shelf to 78°50'S, man's

farthest south thus far.

Royal Society, and private donors

Expedition)

Ship: Discovery

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During the summer of 1903-1904 Scott led a small party up the Ferrar Glacier again, but this time the party traveled farther out on the polar plateau, reaching 77°59'S, 146°33'E, on November 30, 1903. During the descent of the Ferrar Glacier on the return trip, the party digressed to the north and discovered a valley completely free of snow and ice-now known as Taylor Valley. While Scott's party was on the polar plateau, two other parties were making explorations on the Ross Ice Shelf.

In February 1904 the relief ships Morning and Terra Nova arrived. The Discovery was freed from the pack ice and the three ships started north, ending man's longest stay in the Antarctic to date.



(30) 1901-1903 Sweden (Swedish Antarctic Expedition) 1 Leader: Dr. Otto Nordenskjöld Sponsors: Private donors Ship: Antarctic Purpose: Exploration and scientific investigation Bibliography: 4, 143, 163, 164, 165, 259

A particular goal of this party was the exploration of the eastern coast of the Antarctic Peninsula, but it explored Gerlache Strait en route. Geological and botanical specimens were collected during stops on the journey. After an unsuccessful attempt to penetrate the Weddell Sea, Nordenskjöld and five men were left to establish an observation station on Snow Hill Island. The remaining staff and crew of the Antarctic returned to winter in South Georgia where geologic studies were carried out. In the spring the ship sailed for Snow Hill Island, but when storms and pack ice kept her from completing her journey, a small party was set ashore at the northern tip of Trinity Peninsula to attempt to reach the Snow Hill Island group by land. Unable to do so, the party returned to the point where it had left the ship and set up winter quarters on the shore of the bay later named Hope Bay in their honor.

Meanwhile, the Antarctic, commanded by Capt. Larsen, was beset and crushed in the Erebus and Terror Gulf, and the ship's crew had to establish itself on Paulet Island. Miraculously, all three groups eventually met at Snow Hill Island and were rescued by the Uruguay, sent by the Argentine government.

Scientific studies were carried out by each of the three sections of the expedition. The Snow Hill party, under Nordenskjöld, established a record for the length of time that continuous meteorological and magnetic observations had been taken in Antarctica. Hourly meteorological readings were made throughout most of the period. Measurements were made of magnetic declination, inclination, and vertical and horizontal magnetic intensity; magnetic variations were determined, with particular emphasis on periods that had been internationally agreed upon. Cartographic and geologic observations were made along extensive sledge journeys. Numerous well-preserved fossils were found. Unfortunately, some of the collection was lost with the Antarctic, though many samples had been sent home earlier. Other investigations were devoted to hydrography and glaciology.