

Generally the biology described is accurate, but there are some problems with dimensions. About the only way one will ever see a 90 lb emperor penguin is as an overfed resident of Sea World, or as a male that is arriving in late fall at the colony and is prepared for a 120-day fast during the ensuing breeding season. As for a four-foot-tall penguin, I do not know where one might be found, but probably in the same place as a little blue penguin with the mass of a starling. Issues of another scale are those of the population status of penguins. Naveen says there are only three species that are 'in environmental difficulty and none in the Antarctic.' Such a view is optimistic considering that recent studies show that several populations of Antarctic penguins have been declining for the last several years. There is further cause for concern regarding a dozen of the temperate species of penguins. These are minor criticisms of a book that would be an entertaining prelude during the crossing on a tour ship bound for the Antarctic, or just some light reading in biology. If one wants details of penguin natural history presented in a more orderly and succinct way, then some of the technical books would be more useful. And by the way, what is a group of penguins called? Naveen tries a 'gaggle of gentoos.' The alliteration is catchy, but so it is for geese as well. (Gerald Kooyman, Scholander Hall, 0204, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, CA 92093, USA.)

FOOTHOLD ON ANTARCTICA. Charles Swithinbank. 1999. Lewes, Sussex: The Book Guild. viii + 260 p, illustrated, hard cover. ISBN 1-85776-406-4. £18.50.

This book is the third volume of the author's record of the polar operations in which he took part, and it may be hoped not the last. In the previous volumes (reviewed in *Polar Record* 34 (189): 153–154 and 34 (190): 265–266), tantalizing hints were to be found of his role on the Norwegian–British–Swedish Antarctic Expedition, 1949–52, but now we have the full story. The expedition was to serve as inspiration and indeed model for the organization of the International Geophysical Year, 1957–58. For Charles Swithinbank, the youngest member of the expedition, it provided an entrée to a career in polar research, from which he never looked back.

In January 1939, on the strength of exploration by Norwegian whaling expeditions through the years, territory between longitudes 20°W and 45°E in the Antarctic was annexed by Norway as Dronning Maud Land, in order to forestall any possible claim by Germany, following the despatch of the German Antarctic Expedition in 1938. Professor Hans Ahlmann of Stockholm University had studied published German air photographs of the region, and had noted wide areas of ice-free land, suggesting retreat of the ice sheet through climatic change. He decided that this was a region to be investigated further. Already the father of modern glaciology, he now became the father of this new expedition, which was organized by a directing committee drawn from Norway, Britain, and

Sweden. The selected 14-man team was finally composed of four men from each of these countries, plus an Australian and a Canadian, under the leadership of Norwegian John Giaever.

With his usual thoroughness, Swithinbank prepared himself as assistant glaciologist by taking a crash course in crystallography and an army course in driving and maintaining Weasel tractors, which had been developed during the war and, with dog teams, now provided the expedition's transport. He also spent three weeks at a field station on Kebnekajse, Swedish Lapland, where he was instructed in glaciological techniques by Valter Schytt, the expedition's chief glaciologist.

In late October 1949, Swithinbank and some expedition members sailed from Sandefjord in a whaling factory ship for a rendezvous with the expedition ship *Norsel* in the Scotia Sea; the reader is spared no gory detail of activities on the factory ship's deck in the whaling grounds. Following the rendezvous, all members of the expedition were united aboard *Norsel*, which headed south for Dronning Maud Land, where, by the end of February 1950, the base Maudheim was fully established on an ice shelf just south of 71°S and not far northeast of Kapp Norvegia.

Swithinbank provides a full account of life at Maudheim and of the travels in the 1950–51 season of the glaciological, geological, and seismic survey parties, ranging southeast among the inland mountains to 74°S and beyond. He frequently records his sense of awe and wonderment at the Antarctic landscape seen for the first time. He felt this especially during his work from the base, often at night in temperatures as low as –40°C, when he was skiing alone on the ice shelf to measure snow depths and to survey the network of stakes, set out to measure ice movement. 'The many long hours that I spent alone away from the base were some of the happiest I can remember...it was the silence that moved me the most' (page 106).

For the main journeys, an advance base with food and fuel depot had been established 300 km south of Maudheim, and from there Weasels and dog teams supported the field parties — tractors being used successfully for the first time in the Antarctic. It was at the advance base that Swithinbank and his companions learned of the terrible accident at Maudheim in late February 1951, claiming three lives, after a Weasel had fallen over an ice cliff in a whiteout. The work of the seismic survey party was temporarily curtailed, as two key men were needed back at Maudheim. Only the high morale that characterized the expedition carried it through the tragedy.

Then, in mid-March near the advance base, misfortune struck the geological party, when Alan Reece was blinded in one eye from a flying splinter, while collecting a rock specimen. Common sense might have dictated Reece's immediate return to Maudheim, but the decision was made — in which Swithinbank played no part — not to disrupt the geological plans. Thus, the geological party remained in the field for a further two and a half months, with Reece bearing himself with extreme stoicism. They eventually

returned to Maudheim on 30 May 1951, 11 days after the Sun had set for the winter, much to the relief of the understandably worried Gjaever. Of their return, Swithinbank writes that 'they were fit and well,' a condition that hardly applied to Reece, for two months later he had his eye removed by the young doctor Ove Wilson, an operation performed on radio instructions from a Swedish specialist and described in some detail. The reader is left wondering whether the eye might have been saved if the patient had returned to Maudheim immediately after his accident. It is sad to add that the gallant but unlucky Reece was killed in an air crash near Resolute, Arctic Canada, in 1960.

In 1951–52 a shorter field season was imposed by the probable arrival of *Norsel* in early January for the evacuation of Maudheim. While geological and glaciological parties were deployed for further reconnaissance in the mountains to the southeast, Swithinbank took part in a seismic survey traverse under the leadership of Gordon Robin, who had devised a sledge-mounted caboose to be towed behind a Weasel to serve as laboratory and living and sleeping quarters. The arrangement worked very well, and was copied by later expeditions. Ice depths were measured at intervals southeastwards from Maudheim to a furthest point on the ice cap south of 74°S, where, at an altitude of 2700 m, an ice thickness of 2000 m was found.

The expedition returned to Europe in February 1952, with a rich harvest of scientific results to be published by Norsk Polarinstitutt in a series to which Swithinbank contributed six monographs on his part in the glaciological work. Now he has added this well-balanced general account of the expedition, with excellent photographs and maps. Of his companions, Swithinbank makes some less than flattering comments, which he offsets by including distinctly unflattering comments about himself by companions. In fact, and transcending the scientific work, the members lived in remarkable harmony for more than two years, which Swithinbank attributes to 'each one of us, to the best of our ability, [leaning] over backwards to suppress our national prejudices and preconceptions' (page 226).

This book deserves to be widely read, especially by those interested in the critical advances in field research and technology made by the Norwegian–British–Swedish Antarctic Expedition. (Geoffrey Hattersley-Smith, *The Crossways*, Cranbrook, Kent TN17 2AG.)

JOURNEY TO THE SHORES OF THE POLAR SEA. John Franklin. 1998. Dartmouth, Nova Scotia: CD-Academia Book Co (Arctic Discovery vol. 1). Compact disk reproducing 768 p, illustrated. ISBN 1-894127-01-3.

SECOND EXPEDITION TO THE SHORES OF THE POLAR SEA. John Franklin. 1998. Dartmouth, Nova

Scotia: CD-Academia Book Co (Arctic Discovery vol. 2). Compact disk reproducing 478 p, illustrated. ISBN 1-894127-04-8.

Readers of *Polar Record* will need little introduction to John Franklin's two books about his Arctic land expeditions, 1819–1822 and 1825–27. The first expedition was sent in conjunction with William Edward Parry's seaborne expedition in the hope that their combined results might indicate the route of a Northwest Passage to the Pacific. Franklin and his party descended the Coppermine River and explored and charted parts of the Arctic coast before making an arduous return journey. Although 11 of the original 20 men of the expedition died of starvation, exhaustion, murder (in the case of Midshipman Robert Hood), and execution (of the voyageur Michel), and the remainder only survived due to help from local Indians, Franklin returned to England a hero.

Franklin's second expedition was sent to extend his explorations of the Arctic coast west from the Coppermine River to Icy Cape, Alaska. Descending the Mackenzie River, Franklin explored to the west and John Richardson explored to the east, completing the mapping of an extensive part of the Arctic coastline and returning with little incident.

When the books were published in 1823 and 1828, respectively, they were both hugely successful. Despite Franklin's rather tedious writing style, each book is today a classic, which, in a well-kept copy of its original John Murray edition, will cost the collector considerably more than £1000. Even the excellent Hurtig reprint of several decades ago has become almost prohibitively expensive. Therefore it is a great service to the polar community that these books have now been published on CD.

The publisher, CD-Academia Books, has clearly thought through its new series of books on Arctic exploration, of which these are the first two volumes. The entire books are produced on the CD both as an image of the original pages and also as a computer-readable text, which is not only much easier to read on a computer screen, but can be searched for retrieval of data.

The issue of variability of computers is dealt with by the CDs including an installer for an Acrobat reader. The ease of viewing is also increased by the inclusion of a zoom feature for small screens and by a 'full screen view' that allows the increase of the viewing area by 15–25% (depending on the size of the monitor screen), making the text easier to read. The publisher has also attempted to make the file size as small as possible to speed up the process of loading the files.

These CDs, and their successors, are likely to become very valuable additions to the literature of Arctic exploration. The publisher should be commended for producing them. (K.B. Shabby, History Department, Texas A&M University, College Station, Texas, USA.)