

Chapter 2, “Penguin Haunts,” reviews the habitats in which penguins are found and discusses how these birds can cope with a range of conditions, from the intense tropical sun of the Galapagos Islands to the chilling cold of the Antarctic winter. The chapter closes with a subsection called “Penguin Imposters” about auks, members of the avian family Alcidae, which could be termed “imposters” only by a true penguin aficionado. Included in this discussion are anecdotes about the fate of penguins that have been taken by humans to the Northern Hemisphere.

Chapters 3 and 4, “Sex and the Single Penguin” and “Family Life,” go into the social systems and behavior of these birds, as does Chapter 6, “The Cycle Ends.” Subjects covered include advertising, pair bonding and breakup, egg laying, and chick rearing, as well as the penguins’ interactions with the scavengers and predators associated with their colonies, a topic also treated in Chapter 5.

Chapter 5, “Breakfast, Lunch and Dinner,” discusses what penguins eat and how they catch their prey, as well as a bit more on what eats them at sea. I was intrigued by the author’s attempts to explain why penguins don’t eat more fish than they do and—not to criticize the author’s expertise or insights—by the fact that like many other researchers, he has been tricked by what Daniel Pauly, renowned University of British Columbia fishery biologist, refers to as the “sliding baseline syndrome.” A myth circulating rampantly among biologists studying the Southern Ocean is that it is still pristine, or nearly so, and has been altered recently only by the pressures of climate change. Most have forgotten about the millions of whales that lived there well before they began to “practice ecology,” and the repercussions on the ecosystem of their loss. But more importantly, they have lost track of the vast schools of fish that used to ply the waters of the banks and shelves ringing the Antarctic and sub-Antarctic islands and the continental shelves of Antarctica itself. While Lynch makes an admirable attempt to explain why there are no fish, it is apparently not within his ken that, quite simply, we humans have eaten them all, having vacuumed clean important areas during the 1960s and 1970s (a fact well documented in at least three books on fishes; see Gon and Heemstra, 1990; Kock, 1992; Duhamel et al., 2005). No wonder that present-day penguins eat krill and squid, and no wonder that the book’s Appendix 2, “Penguins and People,” describes briefly how humans have affected the well-being of penguins—but without a word about industrial fishing.

Appendix 1, “Penguins of the World,” presents for each species a short text and a map detailing where it lives, its population size, and its status, though Lynch does not specify the source of the status information.

Anyone planning a trip to the Southern Ocean, especially to experience its natural world, should read this book from cover to cover. It will also be of interest to anyone who wishes to develop a fuller appreciation of penguins and who doesn’t have the time or resources to review the primary literature, some of which is listed under “Further Reading” at the end of the book.

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- EIGHT MEN IN A CRATE: THE ORDEAL OF THE ADVANCE PARTY OF THE TRANS-ANTARCTIC EXPEDITION 1955–1957. By ANTHEA ARNOLD. Based on the diary of RAINER GOLDSMITH. Norwich and Huntingdon, United Kingdom: The Erskine Press and Bluntisham Books, 2007. ISBN 978-1-85297-095-6. 133 p., maps, b&w illus. Softbound. £12.75.

Starting with Robert Falcon Scott’s 1901–04 Antarctic Expedition, the British Commonwealth had launched nine land expeditions to Antarctica prior to the Vivian Fuchs and Edmund Hillary Commonwealth Trans-Antarctic Expedition in 1955. The author of *Eight Men in a Crate* based her story principally on the diary of the advance party’s young medical officer, Rainer Goldsmith. Anthea Arnold also relied on access to photographic materials and reflections by other members of the expedition. As was the case with Shackleton’s unsuccessful 1914 Trans-Antarctic expedition, when that expedition’s support party was left to endure a miserable winter on the shores of the Ross Sea, Vivian Fuchs’ Trans-Antarctic Expedition also overshadowed and diminished the extraordinary ordeal of an advance party of eight men left to winter in Antarctica in 1955.

Dr. Goldsmith’s first impression of the 650-ton motor vessel, *Theron*, their transport to Antarctica, sounds familiar to readers of other 20th-century British expedition accounts. The vessel was small, heavily loaded above and below deck with crates, dogs, barrels, coal, materials for the expedition hut, even track vehicles and a relatively new addition to Polar exploration, an airplane. Fuchs’ Trans-Antarctic plans called for the advance party, under the leadership of Kenneth Blaiklock, to establish “Shackleton Base” near Vahsel Bay in the Weddell Sea. The expedition hut was to be erected at the base before the *Theron* headed home, leaving eight men behind.

Goldsmith’s descriptions of conditions onboard are easily imagined. In the heat of the equatorial passage, the smell of dogs, suffocating lack of ventilation in the cabins,

and sea sickness were an endurance test for the young physician. Reaching the colder climes of South Georgia was a relief. On 16 December, they reached Grytviken, the centre of Antarctic whaling activities and the burial place of Shackleton, who died there in 1922. The young Goldsmith must have had moments of quiet reflection when he visited Shackleton's grave. The expedition Goldsmith had joined was about to enter the infamous Weddell Sea, where the *Endurance* had been trapped in the ice in mid-January 1915. After drifting with the ice for nine months, the party abandoned the ship, and crushing ice sent it to the bottom a month later, leaving expedition members on the drifting pack for four more months. They finally had to take to the lifeboats, making their way to Elephant Island, where Shackleton launched his desperate, open-boat journey to South Georgia and equally desperate overland trek to Grytviken. Dr. Goldsmith must have hoped that much had been learned since Shackleton's days.

In chapter 3, the author provides a brief sketch of the history of the Weddell Sea, sufficient for the initiated reader, but somewhat sparse for anyone new to this part of the world. Not only had Shackleton's expedition come to grief in the Weddell Sea, but only two years earlier, members of the Second German South Polar Expedition, led by Wilhelm Filcher, had narrowly escaped the sea's icy grip following their unsuccessful attempt to establish a base at Vahsel Bay. Shackleton had followed Filchner's route from South Georgia, keeping well to the east upon entering the Weddell Sea. Even so, the *Endurance* was trapped in the ice before making landfall. Unfortunately for the eight men in the 1955 advance party, Vivian Fuchs had his own ideas about the dynamics of ice movements in the Weddell Sea. His decision to sail more directly towards the coast could easily have ended in disaster had it not been for the airplane onboard. Caught in the ice, *Theron* drifted northward as the Norwegian Captain, Marø, desperately tried to bring the vessel out of the ice pack. It was punishing work for the small vessel, and time was getting short. The battle lasted for nearly four weeks before they came into enough open water for the senior New Zealand pilot, John Claydon, to risk getting the float plane into the air. With little room to spare, the daring pilot sketched an escape route later followed successfully by Marø. Then, with time at a premium, they headed for the Caird Coast, reaching Halley Bay on 27 January 1956.

At this point, the author makes a brief reference to the presence in Halley Bay of another British expedition. Only three weeks earlier, members of the Third International Polar Year (IGY) had chosen Halley Bay as their base, following several unsuccessful attempts to reach Vahsel Bay in their expedition ship *Tottan*. The author remarks that Vivian Fuchs made a number of flights over the area, but decided that only as a last resort would the place be acceptable for his purposes. I suspect that there is far more to this almost off-hand remark. Had Fuchs not been invited to participate in the long-planned IGY expedition to Halley Bay, or had he declined? One would think that coordination

and cooperation between the two British expeditions would have saved both time and effort. As the winter progressed, members of Fuchs' advance party must have reflected on what conditions their expedition brethren were living in little more than 100 km away: surely better than the misery they themselves were enduring.

According to Rainer Goldsmith, the landing and unloading of expedition goods in Vahsel Bay revealed not only panic and fear that the ship would get stuck for the winter, but also less than good planning and care in the selection of expedition equipment. The description of a hurried unloading at Vahsel Bay is amazingly similar to that of the frenzied landing of Shackleton's shore party in Ross Bay in 1914 (Richards, 2003). In Vahsel Bay, the Norwegian captain had good reasons to be concerned. His vessel, already severely beaten up by the ice on the way south, was being pounded against the bay ice edge, where the unloading was taking place. Dogs, two tractors, and two weasel carriers were unloaded. The scene was one of confusion caused by lack of coordination and leadership. At one point seawater began flowing over the ice, engulfing stores and materials not yet brought to shore. At another, gale force winds forced the captain to lay off in a heaving swell that could easily have broken up the bay ice. Five men were left on shore until the following afternoon, when the ship returned and the unloading continued. Materials for the hut were piled high at the base site. During the unloading, Fuchs used the Auster airplane to investigate the terrain the expedition would have to cross in the following year. A shifting wind began to drive the pack ice close to the ship. The hoisting of the plane back on board was followed by last-minute rushing around, according to Goldsmith, who together with his comrades watched the ship recede in the blowing snow. Left scattered in various piles were mounds of supplies and fuel to be brought up from the ice. Instead of an expedition hut, their base would consist of tents for sleeping and the converted Sno-cat crate for cooking and eating. Life for the eight men would be a test of stamina and physical and mental endurance only a true British explorer could fully appreciate. But things got worse. Goldsmith's diary entries for the week of 21–28 March describe the onslaught of a horrific blizzard that not only buried all supplies and materials scattered about, but also broke up the bay ice, sending all the remaining supplies out to sea. The stage was set for a true survival story.

Work on the hut proceeded as time and conditions allowed. Blizzards and windswept snow regularly stopped all progress, burying tents, equipment, and supplies while the men kept shoveling and tunneling. The reader is reminded that the expedition took place in the age of electronic communication and the men established radio contact with the outside world. In August, Goldsmith abandoned his tent and moved into the partly finished expedition hut, where eventually they all lived. In September, the first depot-laying journey took place in support of the coming Trans-Antarctic crossing. In October they received a

message from Vivian Fuchs, who was now getting ready to head south. On 14 January 1956, nearly a year after Goldsmith and his seven companions had been left on the icy shores of Vahsel Bay, Fuchs and party arrived on the newly built Danish vessel *Magga Dan*. For Goldsmith it was the end of his 356-day adventure in Antarctica. I suspect that he wasn't too upset at having to leave on the *Magga Dan* when she headed east and north through the Weddell Sea.

The publication of Rainer Goldsmith's diary provides us with an important addition to this mostly forgotten chapter in Antarctic exploration. Although the story could have been broadened in scope, the extraordinary circumstances experienced by the eight men during the 1955–56 Antarctic wintering are sufficient to recommend the book to anyone interested in polar expeditions.

REFERENCE

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UNKNOWN WATERS: A FIRST-HAND ACCOUNT OF THE HISTORIC UNDER-ICE SURVEY OF THE SIBERIAN CONTINENTAL SHELF BY USS *QUEENFISH* (SSN651). By ALFRED S. McLAREN, Captain U.S. Navy (Retired). Tuscaloosa: The University of Alabama Press, 2008. ISBN 978-0-8173-1602-0. xxii + 243 p., maps, b&w illus., glossary, bib., index. Hardbound. US\$29.95.

The reviewer must start by declaring some special circumstances. The first is that he and Fred McLaren are old shipmates from expedition cruises on Russian icebreakers in Arctic waters, including voyages to the North Pole, so much of this tale has been discussed in lectures on board, over drinks in the bar, and at the dinner table. This is the first time, however, that this retired icebreaker captain has had the opportunity to live the experience in its entirety, albeit vicariously—which brings me to the second circumstance, which is that no inducement would be sufficient to get me into a submarine, especially one going under the ice.

Captain McLaren has produced an account of this hazardous adventure so detailed that either he must be blessed with a prodigious memory if not total recall, or he has kept meticulous records and done exhaustive research—or more likely, all of the above. The book will certainly be of most

interest to those readers who have some knowledge of navigation and seafaring—especially submariners—but much of it is somewhat technical in nature and may be beyond the understanding of a casual reader without a background in nautical matters. As a professional ice navigator, I can empathize with the *Queenfish* crew every mile of the way—it is difficult enough to penetrate the ice on the surface, where one can see what is happening; it must be doubly nerve-wracking to be doing it blindfold underwater. The book gives a valuable insight into the U.S. Navy's nuclear submarine program and the process of selecting and training those qualified to serve as officers and crew. It is obvious from the narrative that the crew complement of *Queenfish* was a very close-knit team, and while it is admirable to give credit where credit is due, I found it somewhat redundant to give name and rank (only the serial number was missing) every time anyone on board executed an order, turned a valve, pressed a button, or even made a remark.

The story begins with a rollicking tale of “Man Overboard!” as *Queenfish* sets off on her momentous voyage, but the next five chapters give a much better indication of what kind of book this is: much more academic in nature, with the footnotes to prove it. As an absolute sucker for footnotes—I have to read every one of them in case I am missing something—I find that they rather break the continuity of narrative. There is also great emphasis placed on the make and model of each piece of equipment in the vessel, which left me reeling with an alphabetic overload, intelligible to some perhaps, but not to most of us. I presume this level of detail was included for the record, as this book is certainly intended to be the definitive account of Operation “SUBICEX 1-70,” forming a basis for historians to study for generations to come. With the start of chapter 7, when Captain McLaren and his crew have taken over the submarine and begun their mission, the story changes to an adventure, and from then on it holds the reader's attention without too much footnote distraction.

The composition and literary style of this book are delightful, with nary a typographical error or phrase that grates upon the ear to be detected. As for factual errors, not being U.S. Navy trained I failed to notice any, apart from an editorial lapse on page 120, where Amundsen's *Maud* voyage along the Northern Sea Route (1918–20) is characterized as going from east to west, when the text indicates (correctly) that it was in the opposite direction. I am sure that the thoroughness with which this book was put together would naturally have captured any serious errors before they got into print; however, I was surprised that Dr. McLaren (being a well-respected polar scientist as well as a USN Captain) opted to use the old imperial units of feet and inches when quoting the International Ice Code for ice thickness, which the World Meteorological Organization has promulgated in metric units. Somehow “2.0 to 4.0 m thickness of ice” seems much tidier than “6.6 to 13.1 feet” (p. 84; and Notes: Chapter 16, #5 for example).