

BOOK REVIEW

Review of *A journey in Antarctica: exploring the future of the white continent*, by Sergio Rossi (2022). Cham, Switzerland: Springer Praxis Books. 198 pp. ISBN 978-3-030-89491-7; ISBN (eBook) 978-3-030-89492-4.

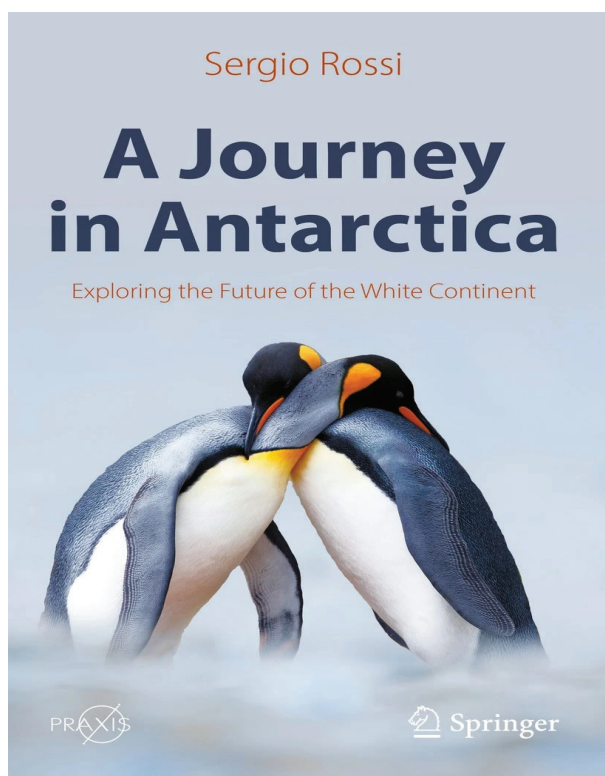
Antarctica, the coldest, windiest, driest continent—and the continent with the highest average elevation—is the Earth's final terrestrial frontier of human exploration. During his career as a biological oceanographer, author Sergio Rossi has participated in three oceanographic expeditions aboard the German research vessel *Polarstern*. In his book, *A journey in Antarctica: exploring the future of the white continent*, Rossi shares with non-specialist readers his firsthand insights into Antarctica's unique and fragile natural beauty.

The book's 23 chapters address aspects of the white continent ranging from its climate and ecology to its history and politics. The first section of the book briefly covers the history of Antarctic exploration, ranging from James Cook's initial sightings of the coast to the race for the South Pole by Roald Amundsen and Robert F. Scott during the Heroic Age of Antarctic exploration. Rossi highlights the *Endurance* crew's incredible tale of survival after the vessel was wrecked in the Weddell Sea. The evolution of Antarctica's climate through the ages is then reviewed, providing the back story to the region's harsh climate today. Rossi highlights how Antarctica's extreme climate and isolation have created natural laboratories—such as the Dry Valleys and Lake Vostok—for space studies. By the end of this part of the book, the reader has learned about main features of the key components that make up the Antarctic's land- and seascape: glaciers, icebergs and sea ice.

Life in the Antarctic ecosystem—from microbes, through sea-ice algae and krill to seabirds and marine mammals—is the topic of the next segment of the book. For birds and mammals, Rossi gives a brief description of their population state and highlights some of the anthropogenic threats they face. Unfortunately absent here is mention of small limno-terrestrial microfauna, plants and fungi. Antarctica is home to mosses, liverworts, lichens, macrofungi and even two species of flowering plants: *Deschampsia antarctica* and *Colobanthus quitensis*. Adapted to a very limited amount of ice-free space and extreme climatic conditions, these species have had an interesting

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evolutionary histories (Peat et al. 2007; Velasco-Castrillón et al. 2014).

Rossi addresses climate change as one of Antarctica's main threats in the third part of the book. He makes special mention of the Larsen ice shelf, off the eastern side of the Antarctic Peninsula. The author was a participant on the *Polarstern* ANT XXVII-3 Expedition when it was the first to reach the Larsen C area. The area has experienced major episodes of ice-shelf collapse since that time.

The human impacts of pollution and fishing are the topic of the fourth part of the book, along with potential natural resource exploitation, such as mining and harvesting benthic organisms—currently forbidden, thanks to the Protocol on Environmental Protection to the Antarctic Treaty (also known as the Madrid Protocol). Apart from this prohibition, the movement of glaciers, ice shelves and icebergs hinders the establishment of fixed extraction infrastructures in most parts of the continent. Rossi also touches on so-called ecotourism—and the alien species that tourism and research transport to Antarctica.

The book's fifth part explores the politics that govern human presence on the continent and sets out the Antarctic Treaty as an unprecedented achievement of human international cooperation. Thanks to the treaty,

Antarctica and the Southern Ocean have been managed as a vast region of international cooperation, peace and science. Rossi explains how the presence of scientific bases has been the primary driver of human presence on the white continent since the mid-20th century. He also describes some of the 76 recognized scientific stations (COMNAP 2017), such as Neumayer and McMurdo, and very isolated ones, like Vostok and Kunlun. Using China's recent large investments in its Antarctic infrastructure as an example, the author raises questions about the motives behind the growing presence of countries in Antarctica. In 2048, the treaty will expire, potentially opening up a new scenario for resource extraction and geopolitics.

Near the conclusion of *A journey in Antarctica*, the reader is invited to reflect on how her or his actions can have repercussions even in this far-away region. A continent without borders and governed by cooperation, Antarctica nevertheless faces threats that jeopardize its conservation, such as increasing tourism, illegal fishing and climate change. Drawing from his own experiences, and those of his colleagues affiliated with institutions around the world, Rossi has taken an intimate approach to scientific outreach, reflecting the Antarctic spirit of cooperation, a theme that resonates throughout the book. The challenging task of scientific outreach is all the more important in such an isolated place. Exploring important themes from both a personal and a scientific perspective, *A journey in Antarctica* lives up to the book's epigraph by offering the general reader "A book that explains why we should care about what happens on the white continent."

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- Velasco-Castrillón A., Gibson J.A.E. & Stevens M.I. 2014. A review of current Antarctic limno-terrestrial microfauna. *Polar Biology* 37, 1517–1531, doi: 10.1007/s00300-014-1544-4.

Briefly noted at the Editorial Office

Cecil Meares' reputation after Scott's last expedition—assertions, hypotheses and evidence, by Bill Alp. Upper Hutt, New Zealand (2023). 122 pp. ISBN 978-0-473-68697-0.

Cecil Meares (1877-1937) was a British military officer who went with Robert F. Scott on his ill-fated Terra Nova Expedition (1910-13). Meares was primarily responsible for the dogs. Tackling the negative portrayal of Meares in earlier works about the failed expedition, Alp musters a range of evidence that paints a different picture of Meares' character and performance. The book will be of interest to those seeking immersion in the details of Scott's failed expedition, in particular, the so-called Dog Party. It may also be a useful resource for readers concerned with the dogs (and ponies) that were brought to Antarctica during the Heroic Age of Antarctic exploration. The book illustrates that it is not only the large figures of this period—such as Scott and his nemesis Roald Amundsen—whose stories are still being scrutinized and recast and whose honour is still contested.

Antarctic pioneer: the trailblazing life of Jackie Ronne, by Johanna Kafarowski. Toronto: Dundurn Press (2022). 285 pp. ISBN 978-1459749535.

The author of *The polar adventures of a rich American dame: a life of Louise Arner Boyd* (2017; reviewed in this journal) now turns to Jackie Ronne (1919-2009), one of the first women to overwinter in Antarctica. With her husband, Finn, she planned and carried out the tumultuous Ronne Antarctic Research Expedition of 1946-48, serving as its communications chief and records-keeper. Her numerous newspaper and magazine articles about the scientific, exploration and other aspects of the expedition generated much-needed funds. She was an early promoter of Antarctic tourism, advocated for the Antarctic Treaty and made over a dozen trips to the continent. Kafarowski depicts Jackie Ronne, whose views about women were steeped in the attitudes predominant in her day, as complicit in her own marginalization in the history of Antarctica. The book is a nuanced contribution to the narrative of Antarctic history and to the literature on the changing position of women during the 20th century.