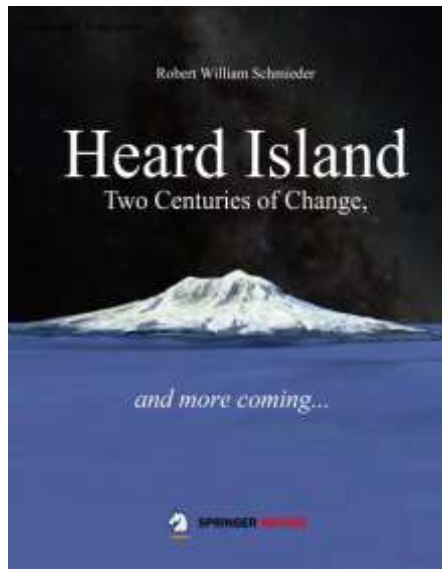


# HEARD ISLAND

## Two Centuries of Change, *and more coming*

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This book presents Heard Island within the overall theme of *Change*: changes in the physical environment (volcano, glaciers, streams, lakes, etc.), the ecosystem (biota, ocean, atmosphere, sky), and the use and management by humans. The book describes the discovery of the island in 1853; the frantic commercial exploitation and destruction of the wildlife; the transition to research interests in the late 19<sup>th</sup> and early 20<sup>th</sup> Centuries; the occupation of the island by Australia 1947-1955, the subsequent development of research and other special-interest expeditions in the second half of the 20<sup>st</sup> Century, the development of tightened restrictions in the early 21<sup>st</sup> Century, and speculations on the future.



The audience of the book includes: scientists who are involved with understanding and modeling changes, especially changes due to climate; resource managers who have the responsibility of protecting the physical and biological resources of the island; journalists and authors who are involved in describing subantarctic islands to the general public; students and researchers interested in rapidly obtaining a broad understanding of changes in subantarctic regions; and tour operators and travelers who may be considering visits to Heard Island and other subantarctic islands.

The present monograph is not a comprehensive review of Heard Island, but rather presents instances of change in the environment, biota, and human involvement with the island. The book is akin to an *exhibition*, presenting numerous examples of change: past, present, and future. A central fact is that subantarctic islands are exceptionally sensitive to global climate change. Careful monitoring of the conditions on such islands can provide early warning of potential dangers, of which, barring the adoption of climate sanity in politics, we will be unaware until it is too late. The book can therefore be both informative and motivational. The urgency to record and summarize observations of the conditions on the island, especially evidence for recent and accelerated change, was a central motivation for the author's expeditions to Heard Island (1997, 2016), and is a central motivation here.

The book was partially motivated by the author's two expeditions to Heard Island (1997, 2016). Those expeditions included a full range of scientific and communications projects; they resulted in about 30,000 photographs and about 30 significant scientific discoveries.

Robert William Schmieder has published ten previous books based on this scientific expeditions, including two other Springer titles *Rocas Alijos: Scientific Results of the Cordell Expeditions* (1997) and *Edward Cordell and the Discovery of Cordell Bank* (2018). This book comprises 896 pages, including 1349 pictures and other illustrations.

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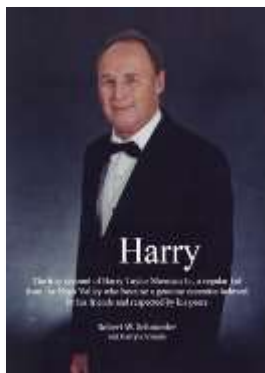
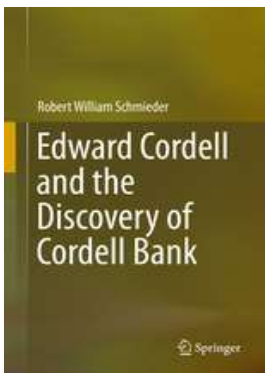
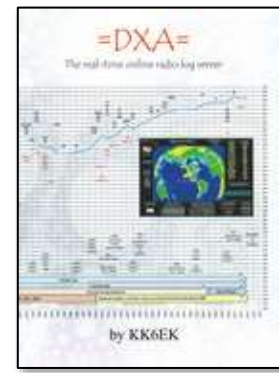
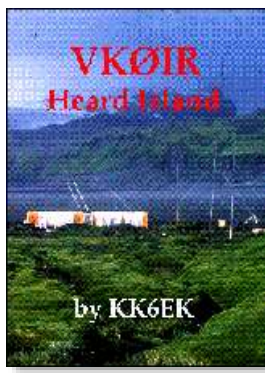
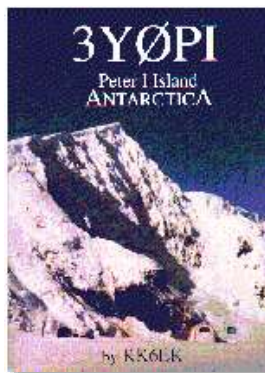
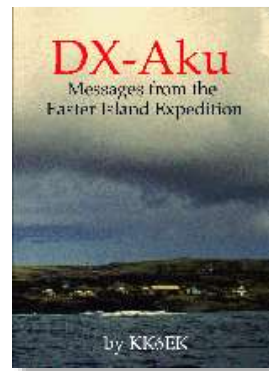
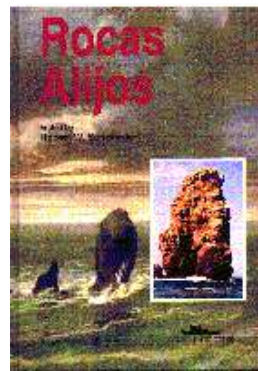
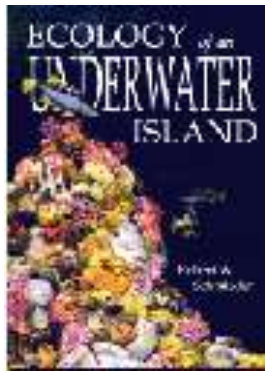
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