

and indeed the whole topic of Bernier's press campaign will appeal to anyone interested in the cultural history of polar exploration. Almost as an aside, Saint-Pierre observes that Bernier and Laurier, so different in all other ways, were both Quebecers who followed the unusual course of seeking success in English Canada (page 161). Both had to adopt the rhetoric of Anglo-Canadian nationalism, which was then strongly imbued with British imperial ideals. It is unfortunate that she did not explore this theme more fully. In doing so, she might have

taken a major step towards placing Bernier's northern career in its proper historical context. (Janice Cavell, Historical Section (PORH), Foreign Affairs and International Trade Canada, 125 Sussex Drive, Ottawa, Ontario K1A 0G2, Canada.)

Reference

Bernier, J.E. 1939. *Master mariner and Arctic explorer: a narrative of sixty years at sea from the logs and yarns of Captain J.E. Bernier F.R.G.S., F.R.E.S.* Ottawa: Le Droit.

HEALTH OF ANTARCTIC WILDLIFE: A CHALLENGE FOR SCIENCE AND POLICY. K.R. Kerry and M.J. Riddle (Editors). 2009. Heidelberg, Berlin: Springer-Verlag. 470 p, illustrated, hard cover. ISBN: 978-3-540-93922-1. £180.

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This book provides a useful and interesting introduction to the health and related issues of Antarctica's seabirds and seals. It includes a great deal of information about known diseases and is therefore intended for, by the authors' own admission, a broad audience, including veterinary and biological scientists and policy makers and administrators who are tasked with ensuring the continued health of Antarctica's wildlife. As an ecologist with more than a passing interest in policy related matters I found this volume to be of considerable interest. In numerous places the book causes the reader to recall the continued importance of disease as a selective pressure and how this is important in shaping ecological interactions. More explicitly it also links this concept with the many current and varied international efforts to understand climate variability impacts on the Antarctic ecosystem. Climate change will potentially allow a variety of introduced diseases to enter the Antarctic system, with unforeseen consequences. The importance of appropriate policy and management is therefore critical for ensuring the continuing health of Antarctica's seabirds and seals.

The editors have separated the book into two parts: the first section covers wildlife disease and comprises nine contributions covering disease reviews, case studies and health assessments; the second section covers external factors and comprises eight contributions covering environmental, administrative and legal issues.

As yet there is no conclusive evidence that humans have been responsible for the introduction or spread of any disease, alien introduced or endemic, amongst wildlife populations or breeding aggregations in the Antarctic. This is a remarkable achievement. Nevertheless, the risk of introducing alien organisms is real and may be increasing with climate change. The considerable efforts of the international community working within the Antarctic are therefore important and there is a continuing need to develop and implement precautionary measures.

Disease organisms are normal ecological components that affect all plants and animals in both the Antarctic marine and terrestrial systems. In pre-history, disease outbreaks would have occurred, as they will continue to occur into the future. Antarctica's remoteness means that such outbreaks are generally unobserved, and even where they have been recorded, it is rare that an infective organism or cause is ever isolated. Further, clinical symptoms do not necessarily mean that an isolated pathogen is actually the cause of a reported disease outbreak.

Thus, the first part of this volume is extremely valuable in that it provides a brief overview of the different diseases commonly found in wild populations of Antarctic seabirds (Chapter 2) and seals (Chapter 3). Mass mortality events do occur and it is remarkably difficult to attribute cause (Chapter 1). If this is difficult, then it is also recognised that it is also even more difficult to stem the progress of such an event. An important conclusion is therefore that humans must, as a priority, refrain from exacerbating naturally occurring disease or mass mortality events. Reports of naturally occurring disease events (Chapters 4 to 6) are therefore extremely valuable as they provide important experience for others coming across or managing such situations. Determining whether disease levels are unusual, or abnormal, requires information about the expected species, types and levels of infective organisms commonly encountered in a given species of seabird or seal. Such descriptions (Chapters 7 to 9) are rare and must be encouraged, particularly those that take an epidemiological standpoint.

The Antarctic is different to many other parts of the planet. It is large, remote and inhospitable to humans. Such factors mean therefore that managing human interactions in the Antarctic that may exacerbate naturally occurring disease or mass mortality events is critical. Understanding how man may introduce disease or how man's influence on climate may lead to increased transmission of infective organisms from other more temperate or sub-polar latitudes is complex. Certainly critical ecological interactions may be unexpected. Thus understanding the drivers of change and developing risk based procedures to prevent change are fundamental. The second part of the book starts with a brief discussion (Chapter 10) of Antarctic climate; such a starting point emphasises how climate must be considered in all situations, both as a contributing factor and as an impediment to understanding. The main expeditions to the Antarctic include those of national operators (Chapter 11) and those of non-governmental tourist operations (Chapter 12). Such expeditions have very different 'footprints' and both generate different risk situations. Humans have definitely impacted upon Antarctic wildlife (Chapter 13) through the harvesting of marine living resources, though as yet humans have not knowingly been involved in introducing disease. Human interactions are also thought to expose wildlife to stress, so measuring stress levels in a variety of seabird and seal species is increasingly important (Chapter 14). Similarly, understanding the potential pathogenic levels associated with human sewage treatment and disposal (Chapter 15) is essential. Legislating (Chapters 16 and 17) for these and other possible factors leading to impacts on health and/or outbreaks of disease requires careful consideration.

The editors note in their introduction that mechanisms are now in place within the Antarctic Treaty System, particularly through the Madrid Protocol of 1991 (implemented through the Committee for Environmental Protection) to protect the health

of Antarctica's seabirds and seals (and indeed other wildlife) through informed debate and the regulation of human activity. They conclude that what is needed now is the will of all nations involved in activities that have a 'footprint' in the Antarctic to work to the spirit (and not just the letter) of the existing regulatory framework. This is likely to become progressively more important in the future as climate change and increased human activity in the Antarctic lead to greater risk of disease introduction or transmission.

This volume set out to provide an up-to-date overview for a broad audience. Such a task is a 'tall order'; however, this book does not disappoint and offers a comprehensive primer and source of reference for both scientists and policy advisers alike. It brings together a comprehensive set of contributions and an important bibliography that I for one, will consult well into the future. (P. Tratham, British Antarctic Survey, High Cross, Madingley Road, Cambridge CB3 0ET.)

TRACING THE CONNECTED NARRATIVE: ARCTIC EXPLORATION IN BRITISH PRINT CULTURE, 1818–1860. Janice Cavell. 2008. Toronto and London: University of Toronto Press. Studies in Book and Print Culture. xi + 332 p, illustrated with plates, hard cover. ISBN: 978-0-8020-9280-9. UK £40. doi:10.1017/S0032247410000057

When John Ross returned, miraculously, from the Arctic in 1833 he was embraced by a vibrant print culture. Long before an official narrative was published, newspapers and periodicals energetically circulated his story. Across the country, songsters hailed his endeavours, theatre impresarios mounted melodramas in his name, and panoramic shows and grand outdoor spectacles tempted the public to dig into their pockets to experience the wonders of the Arctic icescape. His admirers courted him. The explorer-hero found himself honoured in verse and ridiculed in satirical prints, such was the currency of his celebrity. He was, by all accounts, albeit for just a moment, the most well-known man in Britain, the lion of the season. He was certainly the most written about, and 'read about', polar explorer yet seen. His reputation was malleable, retelling the expedition allowed editors to increase their share of a rapidly expanding readership or articulate their patriotism by associating with his successes. For some he was a champion of self-improvement and religious conviction, others took pride in his nautical daring, whilst most of the public thought the spectacle of an expedition to the Arctic just mildly interesting, if not an utter waste of time.

Surprisingly, the drama of Ross's expedition in the 1830s does not command much coverage in this book. Cavell's focus on Arctic exploits as represented in periodical culture is drawn more, as one might expect, toward the machinations of Sir John Barrow, the all consuming tragedy of Sir John Franklin's final expedition, the often cited journalism of Dickens, and newspaper reports following the search for the missing party, culminating in the celebrated return of Leopold McClintock in 1859. This is a satisfying, but frustrating mix.

Within a wealth of source material, Cavell discovers wide ranging similarities in the presentation of explorers, what she calls 'the connected narrative', which apparently united the disparate elements of society to a common interest in their exploits. She borrows a neat turn of phrase from *The Illustrated London News*, the editor of which encouraged his readers to follow his list of polar stories to be found in its pages during 1854. Cavell's examination of exploration as a textual exercise performs a similar function, this is much more than a list, of course, but as a compilation cast within a 40 year gaze it necessarily directs attention to some aspects of Arctic history, whilst leaving many others aside. Which books to review, which polar explorers to focus upon, which readers to bring

forward? Exploration aroused mixed responses that often defy easy categorisation. An equal measure of naval fortitude and indecision during this period was matched by intense public excitement and governmental indifference. Yet, Cavell points to the evolution of an 'Arctic metanarrative', an imagining that conditioned the way people thought of, spoke for, debated against, perhaps even dreamed about explorers. Readers can neither be considered as generic and passive, nor circumstances and contexts generalised, else they become meaningless. One feels wary to ascribe an overarching narrative to such variety.

There are omissions. A book of this length, yet with its ambition of detail, could not hope to be definitive, but there are also some errors that injure an otherwise well considered textual foray. The major missing feature of this examination of the literary landscape is that of visual culture, for one aspect cannot operate in isolation from the other. Although there are a few familiar portraits and the odd plate from a published narrative, there is little or no detailed interpretation of the images that we find within books themselves or, in fact, any reflection on the idea that images are themselves *texts*, to be translated, scrutinised, given a history, as much as the printed word.

If one strays a little from the familiar then one can discover an overwhelmingly bright visual culture that frequently cast the dryly written, lengthy, not to mention expensive, official tomes into the shade. One feels that illustrations in Cavell's book, and her analysis more generally, ought to have engaged this material, for a major premise here is that exploration was as much read about during this century, as it was viewed and encountered in theatres, lecture halls and society soirees. Her definition of print culture is too narrow. There is little or no discussion of popular ballads, magic lantern shows and theatrical entertainments. There is not much on the buoyant illustrated press or juvenile literature, nor is there any coverage of the many panoramas and other Arctic entertainments that generated, and in turn fed from, the popular interest in explorers and their adventures.

A useful example of this mistake is embodied in the image chosen to adorn the front cover of Cavell's book. It is a defaced detail from a handbill for a magic lantern spectacular in 1875, as the Navy was turning its attentions to the Arctic once again with an expedition under George Strong Nares. I can only assume this was chosen for the eccentric beauty of its typesetting, for she makes no mention of it in her book. This particular performance, by veteran showman Edward Bennett, featured his 'brilliant diaphanic diorama' of the perils of Arctic exploration, a lecture accompanied with maps, portraits, photographs, and various mechanical and pyrotechnic effects including a 'luminous' aurora and the beauties of the polar night. Bennett urged his audience to look forward to future success amongst the ice: 'A GLORY GREAT AS THAT OF TRAFALGAR, viz, the DISCOVERY OF THE NORTH POLE!'. To concentrate solely