

Nevertheless the author is to be congratulated on her industry in completing the task she set herself and on publishing a hitherto unknown source for the study of sub-Antarctic shipwrecks. (Ian R. Stone, Laggan Juys, Larivane Close, Andreas, Isle of Man IM7 4HD.)

A WINDOW ON WHALING IN BRITISH COLUMBIA. Joan Goddard. 1997. Victoria, BC: Jonah Publications. viii + 114 p, illustrated, soft cover. ISBN 1-895332-14-1.

This is a very readable and well-illustrated account of whaling in British Columbia, dedicated by the author to the memory of her grandfather, a Newfoundlander who had been an active participant in whaling in the early part of this century. The publication was evidently produced largely as a piece of local history, but makes a fascinating addition to the world-wide picture of man's exploitation of the whale. Those wishing to research the subject in more detail are referred to archive deposits in the Vancouver Maritime Museum and the University of Washington.

After briefly sketching the evolution of commercial whaling in the Pacific, which started in the late eighteenth century, the author describes the six-year campaign by T.W. Roys, who brought his rocket harpoon methods to British Columbia in 1868. The twentieth century saw the arrival of the modern techniques, devised by Svend Foyn, involving fast catcher boats and explosive harpoons shot from a cannon mounted on the foredeck.

Two Nova Scotians established the Pacific Whaling Company in 1904, and the first shore station was constructed in Barkley Sound on the west side of Vancouver Island in the following year. Other stations followed, and by 1910 the company was operating 10 catcher boats and a freighter. The whale catcher boats were sailed from Norway, around the Horn, an epic voyage for such small craft, some 100 tons and 90 ft long, lasting four months. Once in British Columbia, they worked between 30 and 50 miles from the stations, bringing their catches for processing by shore crews largely made up of Japanese and Chinese labourers. The main quarry were sperm, blue, fin, and sei whales; the highly vulnerable populations of humpback that lived close to the shore were wiped out in one season.

Apart from the Norwegian gunners, who because of their expertise were rated as skippers, most of the boat crews were Newfoundlanders. Some of these initially came west to take part in the fur sealing, but this was an industry in serious decline; others came from the shore-whaling in Newfoundland (again, through over-exploitation, this lasted only six years and ended in 1904). Reluctantly, the Norwegians taught their skills to the Newfoundlanders and after 1910 were gradually replaced. After several company reformations, the west coast stations closed in 1946, although one enterprise was established at the northern end of Vancouver Island, 1957–1967.

This volume concludes with a summary of the whaling

species hunted, details of the whale products and their uses, a chronology of commercial whaling in the Pacific, a glossary, and suggestions for further reading. (Arthur Credland, Hull Maritime Museum, Queen Victoria Square, Hull HU1 3DX.)

ANTARCTIC OASIS: UNDER THE SPELL OF SOUTH GEORGIA. Tim Carr and Pauline Carr. 1998. New York and London: W.W. Norton. 256 p, illustrated, hard cover. ISBN 0-393-04605-2. £29.95.

This is an elegant and informative book. At first glance, thumbing the pages of striking photographs, one might surmise it is simply another coffee-table volume on the Antarctic or Southern Ocean. However, this book is a great deal more than that, as Tim and Pauline Carr's lively narrative portrays. On the one hand, this work is an account of the natural history and magnificent wildlife of South Georgia, and, on the other hand, it is a unique cruising guide and personal memoir about one of the most isolated islands on the planet.

Tim and Pauline Carr are internationally known sailors who have roamed the world's oceans during the past three decades. They have lived nearly all of this time aboard their stout Falmouth cutter (or, more correctly, quay punt) *Curlew*. During the past five years they have sailed the 28-foot *Curlew* in the waters around South Georgia and have worked as resident curators of the South Georgia Whaling Museum. South Georgia's location — south of the Antarctic Convergence, more than 720 nautical miles southeast of the Falkland Islands, and nearly 800 nautical miles northeast of the Antarctic Peninsula — makes it among the most remote destinations for any ship, let alone a small sailing cutter. The Carrs have written about many of the unique challenges they have met living year-round in such an isolated place. They have made the most of their stay on South Georgia: cruising the coast to unbelievably small harbours and coves, skiing, climbing several of South Georgia's peaks, photographing wildlife and scenery, and finding time to build the Whaling Museum at Grytviken. Their exploits during summer and winter 'cruises' are vividly told. All these adventures aboard *Curlew* require exceptional navigation and seamanship skills made all the more challenging since *Curlew* has no engine! Also quite unusual is the story of the cutter itself — in 1998 celebrating her centenary year since launching in the West Country of England. The book's final chapter is a tribute to this remarkable gaff-rigged boat, including deck and interior layouts and a sail plan. This history also includes the Carr's return in *Curlew* to Falmouth and a chance meeting with the relatives of the first owner, Frank Jose.

The subtitle 'Under the spell of South Georgia' is highly appropriate, since throughout each chapter the authors are in praise of South Georgia's abundant wildlife and majestic mountain scenery. Even HRH The Duke of Edinburgh's foreword notes the unique natural environment of South Georgia and that *Antarctic oasis* captures that essence. In addition to the nearly 200 stunning

photographs (a handful of *Curlew* and the vast majority of South Georgia), *Antarctic oasis* has 15 local or sketch maps distributed throughout. Their addition is very welcome and, for me, they were indispensable for locating the Carrs during their many treks and voyages around the island.

The authors are at their best when they describe their extraordinary encounters with the wildlife of South Georgia. Their mingling with elephant seals, Weddell seals, and a variety of penguin species — macaroni, king, and chinstrap — will stir the emotions of even the most experienced travellers and adventurers. Two full chapters are also devoted to the island's albatrosses (wandering, grey-headed, black-browed, and light-mantled sooty) and to other birds such as skuas, petrels, and Antarctic terns. On several occasions, individual birds and seals 'adopted' the Carrs, displaying absolutely no fear of their human neighbours. South Georgia's history — Cook's 1775 landing, Shackleton's crossing in 1916, Larsen and the whaling era, and the Argentine occupation in 1982 during the Falklands War are key examples — is woven appropriately into the narrative.

The publisher has maintained very high standards of quality of production, design, and editing with *Antarctic oasis*. The end maps of South Georgia are excellent, and the photographic printing would be difficult to match. The only thing missing is a list of key works on South Georgia, which I am sure were consulted by the authors in their research; such a list of recommended books would be useful to those readers unfamiliar with the Antarctic and South Atlantic region. In summary, *Antarctic oasis* is a handsome, readable book that will be an important addition to all polar, nautical, and natural history collections. (Lawson Brigham, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

GLOBAL WARMING: CAN CIVILIZATION SURVIVE. Paul Brown. 1996. London: Blandford. 235 p, illustrated, soft cover. ISBN 0-7137-2602-4. £12.99.

Paul Brown is the environment correspondent for *The Guardian*, a man whose coverage of the various scientific, environmental, and political issues associated with the controversial area of anthropogenically induced climate change, or more specifically 'global warming,' has given him rare insight into the ramifications of the subject. He is a much-respected reporter of the issues that are covered in the growing number of summits, meetings, and symposia given over to the whole environmental issue. The subtitle and opening declaration of the introduction — 'Can civilisation survive the crisis it has created?' — gives an indication of the author's pitch, primarily on the side of those who believe mankind has already done irrevocable damage to the environment, leaving the option of mediating, rather than preventing, the possible devastating effects of global warming. However, Brown's journalistic zeal may be forgiven, for the book is the best general

account of the history, science, and politics of the global-warming debate that this reviewer has yet come across, and there is, as Brown states, much literature on the subject.

The book's introduction begins with the bold statement of the author's belief that global warming is a reality; there is no doubt in his mind that the time for prevarication has long since passed. The subsequent chapters review the background and scientific evidence for this assertion in considerable detail, with a broad discussion of the possible outcome should governments not consider the issue seriously enough to take appropriate action. This, of course, amounts to money being spent, particularly by the more solvent nations of the world, and international agreements being adhered to, with appropriate support given to those less able to implement controls due to financial constraints. Whether having read this account one subscribes to the supposition that disastrous consequences are on their way, or believes that less extreme effects are more likely, will depend on one's evaluation of the evidence. Indeed, one might find the evidence so sensational that it is unconvincing, but there should be no doubt that a closer look at the evidence presented elsewhere just might reveal a grain of truth, and the book's bibliography would be a good place to start. This reviewer was left with no doubt that the time for concerted international action is long overdue, but this must be mitigated by the belief, based on polar research, that mankind has brought about a radical change in climatic and oceanographic patterns.

This account of the global-warming process is at pains to explain the complexity of the global climatic/oceanographic system operating on the planet and the difficulties encountered in making statistically significant predictions of the consequences of uncontrolled discharge of industrial effluents. The review of these effluents, particularly the greenhouse gases and those implicated in the destruction of the ozone layer, is very thorough, but here again the author has shown himself aware of the difficulties likely to be encountered in controlling these substances. There now seems to be broad international agreement that there must be significant reduction in the release of these agents just to maintain present levels of damage. Brown has examined closely whether the current round of meetings and agreements has done enough to reach some sort of acceptable compromise and concludes that the subject is still very much open to discussion. The future implications of global warming as a consequence of disturbances to the natural and life-sustaining process referred to as 'the greenhouse effect' will, of course, depend on the climate model to which one subscribes. Nevertheless, the author points out the fact that all of the climatic models suggest 'some' damage to the environment as a result of a continued lack of control, and his assertion is that the scenario can only deteriorate if the nettle is not grasped before it is too late. However, there is a powerful anti-climate-change lobby that suggests that the climatic models are imprecise, even to the point of being totally wrong, and there have been accusations of model-rigging to secure research