Reviews

VOYAGES IN SEARCH OF A NORTHWEST PASSAGE 1741–1747; VOLUME I: THE VOYAGE OF CHRISTOPHER MIDDLETON 1741–1742. William Barr and Glyndwr Williams (Editors). 1994. London: Hakluyt Society. xii + 333 p, illustrated, hard cover. ISBN 0-904180-36-0. £30.00.

Publishing books largely made up of documents, especially eighteenth-century documents, is often a risky venture. Lack of context and continuity and the selection of dense excerpts from hard-to-follow journals and correspondence can often leave the reader, particularly the general reader, confused and bored. Happily, Voyages in search of a Northwest Passage 1741-1747; Volume I: The voyage of Christopher Middleton 1741-1742 has avoided these pitfalls by providing an interesting and thorough examination of one of the more controversial, if littleknown, chapters in the saga of northern exploration. Editors William Barr and Glyndwr Williams have included in this volume a good selection of journals and correspondence that together with their introductory material and extensive notes provide an accessible chronology of the Middleton voyage and its controversial aftermath. These documents survey in workman-like fashion the history of the voyage from its origins in the efforts of Irish MP Arthur Dobbs, to the pamphlet wars between Dobbs and Middleton, which followed the latter's unsuccessful attempt to discover a navigable passage to the Pacific along the northwest coast of Hudson Bay above 64° N.

Since the European discovery of Hudson Bay, probably in the early sixteenth century, hopes had been high for the discovery of a Northwest Passage to the Pacific. The seventeenth-century voyages of Henry Hudson, Thomas Button, William Baffin, Jens Munk, Luke Foxe, and Thomas James were unsuccessful in finding the elusive passage, however, and, as enthusiasm dwindled during the next century, European interest in Hudson Bay was largely restricted to the commercial pursuits of the Hudson's Bay Company (HBC), a fur-trade concern established by royal charter in 1670.

With the publication of his 70-page 'Memorial on the Northwest Passage' in 1731, Dobbs, an Ulster promoter and MP, and later Surveyor General of Ireland, began his 10-year quest to secure Admiralty backing for a voyage to Hudson Bay in search of a Northwest Passage. In 1741 Dobbs' efforts were rewarded when the Admiralty sent two ships, *Furnace* and *Discovery*, to the Bay under the command of Middleton, an experienced Hudson's Bay Company sea captain, who for many years had piloted supply ships between England and the Company's bayside factories. After wintering at the HBC post at Churchill under the watchful eye of post governor James Isham (the Company was mistrustful of such voyages, afraid that the

discovery of a Northwest Passage would put an end to its exclusive commerical rights in the region), Middleton succeeded in sailing farther north than any previous European explorer, charting Roes Welcome Sound, Wager Bay, Repulse Bay, and Frozen Strait, north of Southampton Island. Middleton failed to find a passage, however, and, despite being awarded a gold medal by the Royal Society for his treatise 'Captain Middleton's account of the extraordinary degrees and surprizing effects of cold in Hudson's Bay,' he was attacked publicly by Dobbs, who accused him of negligence and being in the pay of the HBC. An angry exchange of charges and counter-charges followed, bribed witnesses were brought forward, and a succession of pamphlets was published that effectively ruined Middleton's reputation and career. Without the offer of another command until 1745, Middleton was placed on the half-pay list in 1748, where he remained until his death in 1770, never completely escaping the false charges laid by Dobbs some 30 years earlier.

Divided into four parts, The voyage of Christopher Middleton 1741-1742 traces the story through editorial introductions and a series of letters, journals, and published pamphlets. Section I, 'Genesis of the voyage,' reproduces in part Dobbs' 'Memorial,' along with his correspondence with, among others, Middleton, Sir Charles Wager of the Admiralty, and HBC governor Sir Bibye Lake. The editors have also included in this section Company correspondence with Richard Norton, the HBC factor at Churchill, and an extract from the journal of John Scroggs, a Company servant who had sailed into Roes Welcome Sound in 1722. Section II, entitled 'Preparations for the voyage,' details Dobbs' and Middleton's efforts to mount the search and includes extracts from Admiralty minutes and correspondence with the Hudson's Bay Company's London Committee. The documents provide information on the alterations carried out on Furnace and Discovery, as well as data on the selection of the expedition crew, provisions, and Middleton's sailing orders. Middleton's daily log of the voyage, which departed from the Nore in June of 1741, is included in Section III (although only that portion after 24 July is reproduced), as is Middleton's record of the expedition's wintering at Churchill and the text of his aforementioned paper on the climate of western Hudson Bay. The last section of the book, simply entitled 'Controversy,' reproduces a selection of the correspondence between Dobbs, Middleton, and the Admiralty that followed the unsuccessful voyage, as well as long excerpts from Middleton's spirited public defense against the accusations levelled against him by Dobbs. Extensive notes by the editors in this section provide the reader with information on the minor players in the controversy, along with comments on the motive for

and accuracy of some of the charges.

This division of the text works well. Barr and Williams have been judicious in their selection of documents, while their introductory remarks provide much of the required context and background. This is a book, too, where the footnotes should be read carefully, for a good part of the story emerges in the editors' explanatory and biographical notations. If some documentary excerpts might seem hard to follow, such as Dobbs' 'Memorial' (a treatise largely incomprehensible to those without an intimate knowledge of sea ice, tidal action, and the sometimes quirky nature of eighteenth-century notions of geography and climate), others are accessible and interesting. I particularly enjoyed Middleton's account of life at Churchill during the expedition's 11-month stay at the post, as well as his later paper on climatic conditions on the Bay.

The voyage of Christopher Middleton 1741–1742 has been meticulously researched and edited. Well illustrated with both contemporary and period maps and illustrations, the book is a fitting addition to the publications of the Hakluyt Society, which has been publishing scholarly works on exploration since 1846. A companion volume in the series Voyages in search of a Northwest Passage 1741–1747, which deals with the voyage of William Moor in 1746–1747, will soon be published by the Society. Taken together, these two texts should make a significant and scholarly contribution to our understanding of the eighteenth-century search for a Northwest Passage. (Robert Coutts, Heritage Resource Management, Parks Canada, Winnipeg, Manitoba R3B 3E8, Canada.)

ELEPHANT SEALS: POPULATION ECOLOGY, BEHAVIOR, AND PHYSIOLOGY. Burney J. Le Boeuf and Richard M. Laws (Editors). 1994. Berkeley and Los Angeles: University of California Press. xvii + 414 p, illustrated, hard cover. ISBN 0-520-08364-4. \$58.00.

In the wake of the excellent Antarctic seals, edited by R.M. Laws (see Polar Record 30 (173): 141–142 for review), comes another valuable compendium of chapters, this time concentrating on the two species of elephant seal (Mirounga leonina and Mirounga angustirostris). The volume is again edited by Laws, this time with Burney Le Boeuf of the University of California, Santa Cruz. A book comparing and contrasting these two species is long overdue, and the edited volume will be of value to anyone researching or interested in these fascinating marine mammals.

The book's origins lie in a conference held in 1991 in Santa Cruz, which aimed to draw together experts from all over the world to discuss research into diving physiology and energy expenditure at different stages of the elephant seal's annual cycle. At the same time, concern was expressed that while the northern populations of elephant seals seemed to be expanding, those in the south appeared to be in decline. *Elephant seals* came about as a result of the exchange of ideas and methodologies at the conference, and the product is a book of outstanding quality.

The first chapter, by the editors, is an introduction to the two species, pointing out the similarities and differences, especially in terms of life-cycle events and mating strategies. The chapter serves as an introduction to the more specialist articles that follow. These are divided into four sections: population ecology; behaviour and life history; diving and foraging; and physiological ecology.

The section on population ecology contains five chapters, four of them principally concerned with southern elephant seals. Chapters by Stewart et al. and by Laws review the historical and present status of northern and southern elephant-seal populations, respectively, while Hindell et al. and Bester and Wilkinson address the decline of numbers in southern elephant-seal populations, and offer explanations of why this might be occurring. While acknowledging that there will be interactions between factors, and that local factors may mask the effects of global ones, Hindell et al. advance two main hypotheses: that there are fluctuations in the ocean environment that affect many marine species, and that populations are undergoing an equilibrium process as a direct result of intense sealing since the eighteenth century. Hindell et al. examined the evidence of population decline in the Macquarie Island group independently of the populations at Kerguelen and South Georgia, and found that there were distinct differences. They conclude that there are difficulties in the application of both explanations, and that more demographic data are necessary before the precise reasons for both the general decline and the specific patterns of decline within the different breeding stocks can be fully understood. Bester and Wilkinson offer evidence that the most vulnerable group within the Marion Island population is that of recently matured cows, and that their elevated mortality appears to be due to factors that operate at sea, rather than on land.

The second section comprises five chapters on the behaviour and life history of northern elephant seals. Le Boeuf et al. assess the survivor rates among juveniles in the Año Nuevo rookery in California, when the colony size increased five fold during the study period. Survivorship was established by resightings of 8362 tagged seals, and by comparing body length and mass at weaning to survivorship over the first two years of life. It was found that body size was positively correlated with survival during the first year, but after that most mortalities occurred at sea. Body size is further assessed by Clinton in a chapter that examines sexual selection and life history in male northern elephant seals. Body size is also a factor considered by Deutsch and others in an analysis of sex- and age-related variation in the reproductive effort (RE) of northern elephant seals. 56 males and 73 females were measured over a period of 11 years. It was found that the RE of males and females was similar, in that both lost on average more than a third of their body weight, although male RE tended to be more variable. Absolute measures of investment in neonates were found to be directly proportional to maternal mass, and maternal investment was similar for male and female offspring. Dominant males inevitably obtained a greater mating success than subordinates, but this was found to be at the expense of a greater proportion of body stores