

of my book, prominently including the quest for *Vinland*, do not engage McGovern's attention. Nor need such literary themes as may be tangential to the arctic and sub-arctic experience seriously detain archaeology buffs. I heartily agree with McGovern on the excellence (it contains translated saga texts) and usefulness of the newly revised *Norse Atlantic Saga*, a comprehensive book by Professor Gwyn Jones (this despite the latter's seeming adherence to a shopworn interpretation of Erik the Red's land-take). That book, furthermore, is "engagingly written."

A major purpose of a work on controversial subjects should be, not to "infuriate," but to stimulate further discovery and discussion. Surely, the ambitions of archaeologists aspiring to produce books incomparably superior to mine — the "magisterial" tomes of Dr. McGovern's asserted expectation — have not been truncated. *Crescat scientia.*

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BRITISH OCEANOGRAPHIC VESSELS 1800-1950. By A.L. RICE.
The Ray Society, c/o British Museum (Natural History), Cromwell
Road, London, SW7 5BL. 1986. 200 p. £18.

Alert, Alexander, Blossom, Discovery, Enterprise and Erebus were some of the vessels employed in arctic discovery in the 19th century. Besides that, they were engaged in varying degrees on oceanographic work. The names are well known, but it is not always easy to find details of the ships and their voyages.

Tony Rice, Curator of Crustacea at the Natural History Museum and now benthic scientist at the Institute of Oceanographic Sciences, found the same difficulty in his work. He started an index that grew into this book, and it is impressive. In 200 pages he has listed over 100 ships that contributed to hydrography and oceanography. Likewise well known are some of the names of men who were in the Arctic, Aldrich, Beechey, Belcher and so on to Scoresby and Allen Young. Dr. Rice lists quite 250 men and gives a bibliography with 300 references. There is also a general index.

With the support of the Ray Society, he has been able to include nearly 100 photographs, sketches and maps, all well presented. He has now been told of two errors in official information he was given. The picture of the *Shearwater* is of a ship of 1901. The photograph of the *Egeria* is of another ship. The text includes a "biography" of each ship in a detailed, reliable and readable way — a book to dip into as well as for reference.

It will be a blessing to many engaged in the history of hydrography and exploration, to those who want elusive information in a few moments. This is a work that has long been lacking. It is well produced.

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WHALING LOGBOOKS AND JOURNALS, 1613-1927: AN INVENTORY OF MANUSCRIPT RECORDS IN PUBLIC COLLECTIONS. Originally compiled by STUART C. SHERMAN; revised and edited by JUDITH M. DOWNEY and VIRGINIA M. ADAMS. N.Y. and London: Garland Publishing Co., 1986. xiv + 496 p., indexes, bib. US\$80.00.

This book owes its existence to the long-standing dream of Stuart Sherman. Perhaps Sherman's interest in whaling was generated by a lifetime of summers on Martha's Vineyard; certainly it was nourished by the gift, in 1956, of the valuable Nicholson collection of whaling journals and logbooks to the Providence, Rhode Island, public library. It was Sherman's task as librarian to catalog and index that gift in a

careful work published in 1965, *The Voice of the Whaleman, with an Account of the Nicholson Whaling Collection*. Sherman moved on to Brown University, but from that time until his death in 1983 he devoted his energies to the grander scheme: a union catalog of all known surviving whaling logs and journals. With the publication of *Whaling Logbooks and Journals, 1613-1927*, the dream comes as close to realization as is practically possible.

The heart of the volume is 5018 entries, of which the following is a typical sample:

2701. *Junius (Bark)*. New Bedford, Mass.
January 21, 1848 — November 14, 1849. *Master*: Chester F. Smith. *Keeper*: John Winslow. *Ground*: S. Pacific. *Repository*: RP

That more than 5000 logs and journals survive is perhaps the most amazing statistic to come from this book. Sherman in 1965 calculated a total of 13 927 known American whaling voyages, for which he estimated that some 3200 logs survived. That in fact closer to one out of three of those voyages left a permanent record is an interesting bit of data in its own right, and one strikingly different from the British and French whaling experiences from which very few logbooks survive, as shown by the scarcity of non-American entries in this volume, though many foreign libraries were searched. It will come as no surprise, however, that the vast majority of logs listed date from the 19th century (three are from the 17th, 62 from the 18th, and 190 from our own 20th). It should be noted, as well, that while *Whaling Logbooks and Journals* is a considerable accomplishment, it lists only records in public collections; it is hardly possible to locate every logbook held by private collectors or whaleman's descendants. Similarly, it should be stressed that considerably fewer than 5000 vessels made the 5018 voyages. To take an extreme case, the long-lived *Charles W. Morgan* survives in 41 logs and journals (nos. 954-62 as a ship, and 963-95 riggered as a bark).

Nevertheless, with all due credit to Sherman and to his successors, Judith Downey and Virginia Adams of the New Bedford Whaling Museum, one may still ask — as with other large-scale dreams — what, ultimately, is the value of the accomplishment? From the standpoint of the volume itself, a simple list of logs would be of use only to the researcher in search of a particular vessel or its voyage. For that reason, the five indexes that organize the entries are as important as the entries themselves. In these, voyages are organized by home port, master and logkeeper, year of voyage, grounds visited and repository (there is also a useful guide to repositories, which provides information on most of the 82 institutions surveyed). By the standards of comprehensiveness and ease of information retrieval, *Logbooks and Journals* should be given high marks, with one caveat only. The "Index by Ground" lists only 12 entries: Antarctic, Davis Strait, Greenland, Hudson Bay, Indian, North Atlantic, North Pacific, Okhotsk, South Atlantic, South Pacific, Spitsbergen and Western Arctic. While this arrangement is helpful for Spitsbergen, from which ground only nine records survive, it is of little help for the South Pacific, for example, with thousands of entries. Many voyages, as might be expected of whalers, visited several grounds, so this index contains many more than 5000 entries. Fortunately, in the particularly difficult case of the South Pacific, researchers may consult Robert Langdon's *Where the Whalers Went: An Index to the Pacific Ports and Islands Visited by American Whalers* (Canberra, 1984), which gives precise data on Pacific landfalls based on the microfilm logbook collection of the Australian National University's Pacific Manuscript Bureau and catalogued in Langdon, *American Whalers and Traders in the Pacific: A Guide to Records on Microfilm* (Canberra, 1978). PAMBU's collection, alas, is by no means as comprehensive as Sherman's list; even worse, however, the interested scholar is likely to find no similar list at all for other grounds.

Still, the question remains of the overall value of Sherman's work. To this, students of the impact of whaling will be quick to respond, for the logs and journals have been essential to the preparation of recent studies, such as John Bockstoe's *Whales, Ice, and Men* (Seattle, 1985) on the Western Arctic or W. Gillies Ross on *Whaling and Eskimos: Hudson Bay, 1860-1915* (Ottawa, 1975). Without these records, and a means to locate them, many of the social, economic and

ecological repercussions of an industry with worldwide impact would be lost to historians and those who need historical data in such projects as marine mammal censusing. In sum, this is an important reference book, not meant for the casual student, but absolutely essential for the research library and the professional scholar deeply involved in the subject. To put it another way, the researcher or library that makes frequent reference to the standard works, such as Starbuck's *History of Whaling*, Hegerty's addition to Starbuck, Langdon's two books and, most recently, Honore Forster's *The South Sea Whaler: An Annotated Bibliography* (Sharon, MA., 1985), will find Sherman's work to be well worth the substantial price of this volume.

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BIBLIOGRAPHY ON THE FATE AND EFFECTS OF ARCTIC MARINE OIL POLLUTION. By S.C. YOUNG. Environmental Studies Revolving Funds Report No. 026. Ottawa: ESRF, 1986. 212 p. Cdn\$50.00.

This bibliography is a product of a collaborative effort between the Arctic Science and Technology Information System (ASTIS) — for which Stuart C. Young, of the Arctic Institute of North America, Calgary, undertook the demanding task of compiling the bibliography — and the Environmental Studies Revolving Funds, which is a creature of the Canada Oil and Gas Lands Administration and which performed the less demanding task of levying a reluctant oil and gas industry to fund the enterprise.

To quote the ASTIS order form:

The bibliography contains 748 citations on the physical, chemical, and biological fate, and on the biological effects, of petroleum and its hydrocarbon constituents in arctic seas. Virtually all citations have abstracts, and one or more location codes indicating libraries where the document can be obtained on interlibrary loan. [It] is 212 pages long, plus a 12 page introduction.

As is described in its Introduction, the bibliography is largely based on a 1980 Environment Canada Report, "A selected bibliography on the fate and effects of oil pollution relevant to the Canadian marine environment" (Report EPS-3-EC-80-5), by A.L. Samson, J.H. Vandermuellen and P.G. Wells, which was a product of the Arctic Marine Oilspill Program's now defunct Standing Committee on the Fates and Effects of Oil.

Perhaps it is a sign of changing economic times that the Environment Canada report, with its 1794 citations, was distributed *gratis* until it became out of print, while the ESRF report, with 748 citations, sells for Cdn\$50.00. It is available for purchase from the Arctic Institute in Calgary or from Pallister Resource Management Ltd. of Calgary. A microfiche version is available for \$24.00. It is noteworthy that Environment Canada makes available *gratis* as part of its EE Series reports a set of 15 reports comprising various bibliographies on oil and hazardous material spills.

The objective of this bibliography is to provide a convenient and complete bibliography of the physical, chemical and biological fate and biological effects of oil in the geographic region of the Arctic, including Cook Inlet, the Gulf of Alaska and selected other areas, and including laboratory studies of arctic relevance. This reviewer cannot resist noting that the accepted authority for the "area of maximum sea ice extent" is none other than the Central Intelligence Agency. The stated objective is clearly satisfied, and in a "user-friendly" fashion. The primary citations are listed by author, with indexes for subject, geographic region, title and serial — e.g., journal or proceedings. Particularly useful is a statement of document availability. Each citation is followed by an abstract, usually prepared by the author, which is invaluable to the user as an indication of content and scope.

Interestingly, only 7 of the 748 citations are to papers in this journal.

The primary criticism that can be levelled at the content of the bibliography relates to its scope. Much information about arctic oil spills can be obtained from temperate spills. For example, the Buz-zard's Bay spill was in ice conditions, and useful experiences have been gained from other temperate winter events. Unfortunately these are excluded. Insights into behaviour of oil spills in the arctic summer can be gleaned from accounts of temperate spills. Oil spill detection and tracking studies have been excluded, as has work on oil spill disper-sants, although work on the fate and effects of oil/dispersant mixtures has been included. The compiler has clearly stated such limitations, and while arguments can be advanced that the bibliography would have benefitted from a wide scope, it is not easy to "draw a better line."

It is not clear why the scope of this bibliography should be restricted to the Arctic, since many Canada lands, such as the Hibernia area, are not arctic.

A search for omissions was fortunately not very successful. The chapter "Oil Pollution in Ice-Covered Arctic Waters" by Weller in the text by Geyer (Marine Environmental Pollution I, Hydrocarbons, Elsevier) is not included. The pioneering work on the Alert Bay beach spill by Green, Buckley, Cretney and Wong (Pacific Marine Science Report 74-9) is absent. There are no citations at all to the work of C.S. Wong. Of the eight chapters in Engelhardt's text *Petroleum Effects in the Arctic Environment*, three have been omitted, obviously consciously.

It is questionable if some citations, such as to the Oil Spill Intelligence Report, should be included. The EE Series of reports by the Environmental Emergencies Branch of Environment Canada is not cited. But these are relatively minor criticisms that spring from a personal belief that bibliographies should err on the side of including rather than excluding.

In summary, this is a valuable bibliography, which deserves a place on the bookshelf of those concerned with researching or commenting on the environmental effects of petroleum development in the Arctic. Unfortunately in these times of tight budgets it is unlikely that it will get the exposure it deserves because of its excessive cost. If the ESRF really wants to disseminate information of this type, it should do so in a less profiteering fashion.

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ICE SCOUR BIBLIOGRAPHY. Edited by C. ROSS GOODWIN, JEAN C. FINLEY and LYNNE M. HOWARD. Environmental Studies Revolving Funds Report No. 010. Ottawa: ESRF, 1985. xi + 99 p., index. Softbound. Cdn\$40.00.

Ice scour (gouge, plough mark, furrow, score) is defined as the disturbance of subaqueous bottom sediments by floating ice. When an ice keel loads and disturbs the sea floor, it either becomes grounded and ceases to move on, or, if it has sufficient energy under the influence of swell, currents, wind or pressure from other ice, the keel penetrates the sea floor sediment and excavates a trough, which is referred to as a scour. Two types of ice scours are important in influencing seabed disturbance — iceberg scours and sea or lake ice pressure ridge scours. Ice and iceberg scour is a significant process in high latitude environments and as such is important to both the glacial scientist and engineer. Both modern and relict scour can represent a hazard to sea floor facilities, such as hydrocarbon pipelines. It is for this reason that the bibliography was initiated and funded by the Environmental Studies Revolving Funds, a petroleum industry research fund administered by Canada Oil and Gas Lands Administration of the Canadian Government.

The bibliography begins with a short Introduction, in both English