

also presented with the less salubrious aspects of life on the North Slope: the premature death by tuberculosis of Bodfish's step-father left him alone at fifteen to hunt and trap for his mother and her children until she remarried. In sum, this is above all the life history of a distinguished Inupiaq hunter for whom upon retrospective reflection 'the happiest time of our lives, in all those years, [was] when I was hunting'. As such it is both a revealing and entertaining tale. (M. J. Whittles, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

#### POLAR ICE TECHNOLOGY

ICE TECHNOLOGY FOR POLAR OPERATIONS. Murthy, T. R. S., Paren, J. G., Sackinger, W. M. and Wadhams, P. (editors). 1990. Southampton, Computational Mechanics Publications. 426 p, illustrated, hard cover. ISBN 1-85312-091-X. £83.00.

This book contains the proceedings of the second conference on Ice Technology for Polar Regions, held at Scott Polar Research Institute, Cambridge, in September 1990. The 31 papers are divided into the following areas: Ice environment; Vessels and structures in ice; Ice operations and management; Remote sensing of sea ice; Ice forecasting; and Ice acoustics. The quality of the papers varies considerably and the presence of several errors — particularly grammatical errors — in some leads one to suspect that editing may have been superficial and rushed. Although the main emphasis of the book is on technology, several papers are of a purely scientific nature, the most notable being 'The wave structure in the seas off an ice edge' by Cox and Squire. Here a more rigorous treatment has led to a more complete solution for this difficult wave dynamics problem, an improvement to existing theory that will be much appreciated by both the scientific and the engineering communities.

Of the review papers, the two most useful are by Wadhams on sea ice thickness measurement techniques and by Horn on the design, planning and execution of large multi-national arctic experiments. Of the eight papers on icebreakers I found the one by Kennedy, Voelker and St John on the design and operation of a new US Antarctic research vessel most informative. Clearly the excellent RV *Polarstern* will soon have a worthy rival in the southern hemisphere. In the category of gripping reading, the account by Voelker and Siebold of a polar icebreaker caught in an active shear zone near Prudhoe Bay, Alaska, is definitely the winner. This unscheduled field test should give icebreaker designers food for thought.

No fewer than seven papers on remote sensing indicate area of technology development that is likely to be most active for the foreseeable future. Holt, Kwok, Carsey and Curlander give an excellent overview of the Alaska SAR facility which undoubtedly intends to be in the front line of research efforts to produce usable products from the ERS-1, JERS-1 and RADARSAT satellites. In summary, the book is a useful library reference. However, it hardly warrants an investment of £83.00 by the individual.

(Robin G. Williams, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

#### BRIEF REVIEWS

WEIRD AND TRAGIC SHORES: THE STORY OF CHARLES FRANCIS HALL, EXPLORER. Loomis, C. C. 1991. Lincoln, Nebraska, Bison Books. 388p, illustrated, soft cover. ISBN 0 8032-7937-X. £12.30.

Reprint of the classic account of the Cincinnati engraver, newspaper publisher, mystic and enthusiast who set out in 1860 to discover the whereabouts of Sir John Franklin's missing expedition, and died in mysterious circumstances on a later journey toward the North Pole. A fascinating story of one of the Arctic's more colourful explorers, with an afterword written for this edition.

TO THE SOUTH POLAR REGIONS. L. Bernacci. 1991. Bluntisham, Bluntisham Books. 348p, illustrated, hard cover. ISBN 1 85297 035 9. £39.95, US\$80.00.

Another beautifully-fashioned reprint of a polar classic from Bluntisham, with cover and contents styled to match the 1901 original — a collector's item. But this is also a highly readable account of the Antarctic (*Southern Cross*) Expedition 1898–1900, a small private expedition, funded by publisher Sir George Newnes and led by Carsten E. Borchgrevink, that was the first to winter on the Antarctic continent. Louis Bernacci, the Tasmanian expedition physicist, wrote it soon after his return from Antarctica and shortly before joining Scott's *Discovery* expedition. There is an informative introduction by D. W. H. Walton. A limited edition of 450 copies, obtainable directly from Bluntisham Books, Oak House, East Street, Bluntisham, Hunts. PE17 3LS, UK: prices include postage.

A PRACTICAL GUIDE TO THE EUPHAUSIIDS OF THE WORLD. Baker, A. de C., Boden, B. P. and Brinton, E. 1990. London, Natural History Museum Publications. 96 p, illustrated, soft cover. ISBN 0-565-00985-0. £25.00.

Indeed a practical guide, well illustrated and annotated, to the 86 species so far recognized of this cosmopolitan and ecologically-important group. Lie-flat binding will facilitate use in the laboratory, for which the practical guide is no doubt intended. Identification is restricted almost exclusively to morphological criteria, using what seem to be clear and precise keys. Those interested in biogeographical or seasonal distribution, breeding times and other biological information on euphausiids will need to look elsewhere. In this the list of references may be helpful, though it does not include, for example, Miller and Hampton's key *Biology and ecology of the Antarctic krill (Euphausia superba Dana): a review*, published in 1988.

ULTIMA THULE. Malaurie, J. 1990. Paris, Bordas. 320p, illustrated, hard cover. ISBN 2-04-018400-7. 495 FF.

An elegantly illustrated history, in French, of the 170-year relationship between the northernmost people on earth and the explorers, adventurers and conquerors, military and

scientific, who in one way or another intruded on their isolation. An overview of the history of exploration and 'conquest' of Greenland and a long introduction are followed by chapters on Ross, Franklin, Kane, Hall, Nares, Hendrik, Greely, Peary, Cook, Mylius-Erichsen, Rasmussen, Freuchen, Koch, Shackleton, Holtved and Malaurie, with digressions on lesser figures and happenings. Malaurie is interested in people and human interactions as much as in geographical exploration, making this to some degree an idiosyncratic Arctic counterpart of the excellent *Readers Digest Antarctica: great stories from the frozen continent*. One could look far for a more entertaining or better-illustrated account of Arctic history.

**INDIGENOUS PEOPLES OF THE SOVIET NORTH.** IWGIA. 1990. Copenhagen, International Work Group for Indigenous Affairs (IWGIA Document No.67). 56p. ISSN 0105-6387.

In March 1990 the Soviet Union's Association of Northern Peoples was founded at a historic congress held in the Kremlin (see report elsewhere in this issue). This publication collects and translates the Chairman's opening speech, the declaration of the congress and the Association's statutes and programme. These are preceded by a helpful introduction by IWGIA's representative at the congress, Jens Dahl. Themes such as environmentalism, public health, constitutional reform and self-government emerge clearly as major preoccupations. Recent IWGIA publications have unerringly chosen to translate some of the most important current Russian texts on northern peoples and this booklet continues this trend. Indispensable for anyone interested in circumpolar peoples or in any aspect of the Soviet North. (Piers Vitebsky.)

**THE NATIONALITIES QUESTION IN THE SOVIET UNION.** G. Smith, (editor). London and New York, Longman. 389 p, hard cover ISBN 0-582-03953-3 £28.00. Soft cover ISBN 0-582-03955-X £14.95.

The problem of ethnic consciousness in the USSR, which Lenin thought would fade away in favour of class consciousness, now seems almost more urgent than that of economic reform. In this book, western specialists have written substantial and up-to-date chapters on 21 ethnic groups across the entire country, with a strong emphasis on the perestroika period. For readers with an interest in Siberia and the Arctic, these include the only contemporary accounts in English of the Buryat (Caroline Humphrey) and Yakut (Piers Vitebsky). The editor's introduction and the chapter on the Russians as the dominant nationality (Simon Dixon) are also helpful. There are extensive tables and references. (Piers Vitebsky.)

**ARCTIC VILLAGE.** Marshall, R. 1991. Anchorage, University of Alaska press. 403p, illustrated, soft cover. ISBN 912006-51-X.

Subtitled 'A 1930s portrait of Wiseman, Alaska', this is a reprint of an account, first published in 1933, of a small

mid-Alaskan village settlement where Robert Marshall, a forester, found himself living during the early 1930s. Marshall went north to study growth of trees at the timberline, but ended up studying the mixture of white folk and Eskimos who made up the community. He considered them the happiest folk he had ever encountered, and his account of them, here rated '... one of the most revealing and inspiring books ever written about the American frontier', glows with his discovery.

**QUESTIONNES SIBERIENNES, SIBERIAN QUESTIONS, SIBIRSKIYA VOPROSY.** (Bulletin No. 1, Peuples autochtones). 1990. Institut d'études slaves, Paris. ISSN 1150-1340; ISSN 2-7204-0251-6.

This new journal is edited by Boris Chichlo, anthropologist and doyen in the west of Siberian affairs. The first number, entirely in French, is devoted to the northern native peoples. It includes translations of some important Russian articles as well as specially commissioned pieces by authoritative Soviet commentators. There are also interviews, reports on conferences, reviews of other journals and résumés of theses in progress. The editorial, which is in French, English and Russian, stresses the mutual interdependence of native peoples and the northern environment and promises a second issue devoted specifically to ecology. There is much of importance here which cannot be found elsewhere in any western language. (Piers Vitebsky.)

**INDIVIDUAL RECOGNITION OF CETACEANS.** Hammond, P. S., Mizroch, S. A. and Donovan, G. P. (editors). 1990. Cambridge, International Whaling Commission. (Report of the IWC Special Issue 12). 440p, illustrated, hard cover. ISBN 0-906975-23-9. £40.00, US\$75.00.

A collection of over 40 papers on the use of photo-identification and other techniques for estimating population parameters and other variables of whale and dolphin stocks. The volume incorporates the proceedings of a symposium and workshop on individual recognition and estimation of cetacean population parameters, held on 1-4 May 1988. Following the report of the workshop, papers are grouped under five headings: Field and laboratory methodology; Analytical problems; Population parameters, dynamics and behaviour; Case studies (by species) and Preliminary/feasibility studies. Obtainable from the IWC, The Red House, Station Road, Histon, Cambridge: include £5.00 (US\$12.00) for mailing.

**ARCTIC BIOLOGY COURSE 1989, IGLOOLIK NWT CANADA.** Jørgensen, M. (editor). 1991. Copenhagen, Zoologisk Museum, University of Copenhagen. 140p, illustrated, soft cover. ISBN 87-982514-3-0. £8.00, DK90.00.

Report of a two-week polar field course for Danish university students, held in northern Canada under an agreement between University of Copenhagen and McGill University, Canada. The fortunate students studied hydrographic and sea ice conditions, marine plankton, terrestrial and