

PROPOSALS FOR THE FIRST AUSTRALIAN ANT-ARCTIC EXPEDITION. Cole, L. 1990. Melbourne, Dept. of Geography and Environmental Science, Monash University (Monash Publications in Geography 39). 74 p, illustrated, soft cover. ISBN 0 909685 43 6.

Subtitled 'An appraisal and reappraisal of the proposals and efforts of a joint committee formed by two of Melbourne's learned societies during the 1880s', this monograph describes efforts by the Royal Society of Victoria and the Victorian Branch of the Geographical Society of Australasia, through a jointly-formed Antarctic Exploration Committee, to gain government funding to despatch an expedition to Antarctica. Based on newly-examined primary material, the account throws light on the condition of scientific research, especially geographical exploration, in Australia at that time, and goes far toward explaining why a further two decades were to pass before Douglas Mawson was able to launch an Australasian Antarctic expedition.

NORTHERN HYDROLOGY; CANADIAN PERSPECTIVES. Prowse, T. D. and Ommanney, C. S. L. (editors). 1990. Saskatoon, National Hydrology Research Institute. 308 p, illustrated, hard cover. ISBN 0 662 17076 8.

Published in a limited edition, this book covers '... a wide range of hydrological phenomena, including material on water quality and management of water resources' in the Canadian North — here defined as poleward of the 60th parallel. The opening chapter is an overview by T. D. Prowse of northern hydrology: there follow chapters by different authors on snow, permafrost and ground-water hydrology, the hydrology of floating ice and glaciers, water quality research, regional energy balance, regional hydrology, and a concluding chapter on water management north of 60°N. The book ends with an extensive bibliography and appendices on symbols, abbreviations and acronyms. An essential reference book; copies may be obtained on request from the Chief, Scientific Liaison Division, National Hydrology Research Institute, 11 Innovation Boulevard, Saskatoon, Sask., S7N 3H5, Canada.

ATMOSPHERIC SCIENCES IN ANTARCTICA. Meriwether, J. W. Jr.(editor). 1990. Washington, American Geophysical Union. 366 p, illustrated, soft cover. ISBN 0034 6853 B. US\$22.00.

A selection of 17 research and review papers reprinted from *Reviews of Geophysics* 26, issues 1 (February) and 3 (August) 1988. The selection '... summarizes and updates our present knowledge in regard to a variety of topics in atmospheric sciences that benefited especially from the ground-based application of scientific instrumentation in the Antarctic'. Individual papers cover automatic weather stations (Stearns and Wendler), air quality monitoring at South Pole (Robinson and others), Antartarctic aerosols (Shaw), the ozone hole (Solomon), snowfall (Bromwich), surface winds (Parish) and many other topics.

THE SOUTH EAST AUSTRALIAN ALPINE CLIMATE STUDY. Ruddell, A. R., Budd, W. F., Smith, I. N., Keage, P. L., and Jones, R. 1990. Melbourne, University of Melbourne Department of Meteorology and Alpine Resorts Commission, Victoria. 115 p, illustrated, soft cover. A\$30.00.

Analysis of long-term weather data, derived mainly from synoptic stations, covering the alpine zone (above about 1400 m) of south-eastern Australia. Snow cover, though highly variable from year to year, correlate well with winter temperature, precipitation and streamflow measurements, currently showing no evidence of significant long-term trends. Available from the Alpine Resorts Commission, Level D1, World Trade Centre, Melbourne, Australia.

ACOUSTIC EFFECTS OF OIL PRODUCTION ACTIVITIES ON BOWHEAD AND WHITE WHALES VISIBLE DURING SPRING MIGRATION NEAR POINT BARROW ALASKA — 1989 PHASE. LGL Ltd. 1990. 284 p, illustrated, soft cover.

Subtitled 'Sound propagation and whale responses to playbacks of continuous drilling noise from an ice platform, as studied in pack ice conditions', this reports on a preliminary study, funded by the Alaska Outer Continental Shelf Region of the Minerals Management Service, US Department of the Interior, Anchorage AK, and conducted some 60 km east-northeast of Point Barrow, to measure the effects of recorded industrial noises on two species of whales during the spring migration.

SEARISE: A MULTIDISCIPLINARY RESEARCH INITIATIVE TO PREDICT RAPID CHANGES IN GLOBAL SEA LEVEL CAUSED BY COLLAPSE OF MARINE ICE SHEETS. Bindshadler, R. A. (editor). 1990. Washington, NASA. 55 p, illustrated, soft cover.

Report of a workshop on 23–25 January 1990 in College Park, Maryland, to discuss the role of polar ice sheets in global climate change. The 32 scientists involved agreed that the single most important aspect of the ice sheets' involvement in climate change is the potential of the marine ice sheets (those grounded well below sea level) to cause rapid changes in global sea level. The scientists' response is to create a new research initiative ('Sea-level Response to Ice Sheet Evolution') to facilitate prediction of the possible contributions of these ice sheets.

UNITED STATES ANTARCTIC RESEARCH REPORT TO SCAR, 31 – 1989. US Polar Research Board. 1990. Washington, National Academy Press. 102 p, soft cover. ISBN 0 309 04235 6. US\$10.75.

Annual report on US Antarctic activities prepared for the Scientific Committee on Antarctic Research. Part I is a record of activities during the year ending 31 March 1989; Part II covers projected activities in the following year. Available from the National Academy Press, 2101 Constitution Avenue, NW, Washington DC 20418 USA.