

POLAR RECORD

VOLUME 36 NUMBER 198 JULY 2000



Polar Record

Journal of the Scott Polar Research Institute, University of Cambridge. Published by Cambridge University Press.

Editor: Dr BEAU RIFFENBURGH

Assistant Editor: Dr ELIZABETH CRUWYS

Editorial Advisors:

Professor WILLIAM BARR, University of Calgary LAWSON W. BRIGHAM, University of Cambridge Dr PETER D. CLARKSON, Scientific Committee on Antarctic Research Professor JULIE CRUIKSHANK, University of British Columbia Professor RICHARD C. DAVIS, University of Calgary Dr GEOFFREY HATTERSLEY-SMITH Professor MARTIN O. JEFFRIES, University of Alaska Fairbanks Professor MARGARET E. JOHNSTON, Lakehead University Dr Lorne K. KRIWOKEN, University of Tasmania Dr RICHARD M. LAWS Professor KEITH RICHARDS, University of Cambridge Professor JAMES M. SAVELLE, McGill University IAN R. STONE Dr DAVID W.H. WALTON, British Antarctic Survey

Production: AILSA MACQUEEN

© Scott Polar Research Institute 2000.

Polar Record (ISSN 0032-2474) is published four times yearly — in January, April, July, and October — the four issues making a volume. First published in January 1931, *Polar Record* appeared twice yearly until July 1954 and three times yearly until September 1987. Scholarly contributions are invited on virtually all subjects of polar interest. For information on contributions, see 'Instructions for authors,' in *Polar Record* 36 (196): 72–74, January 2000, or write The Editor, *Polar Record*, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER, UK. E-mail: bar10@cus.cam.ac.uk

Subscriptions

Orders, which must be accompanied by payment, should be sent to any bookseller or subscription agent, or direct to the publisher:

Cambridge University Press The Edinburgh Building Shaftesbury Road Cambridge CB2 2RU UK

or:

```
40 West 20th Street
New York, NY 10011-4211
USA
```

The subscription price of vol 36, 2000, including postage (excluding VAT), is: for individuals, £54.00 (US\$90.00 in USA, Canada, and Mexico), for institutions £90.00 (US\$150.00 in USA, Canada, and Mexico). Periodicals postage paid at New York, NY, and at additional mailing offices. Separate issues cost £25.00 (US\$41.00 in USA, Canada, and Mexico) plus postage. EU subscribers (outside the UK) who are not registered for VAT should add VAT at their country's rate. VAT registered subscribers should provide their VAT registration number. Japanese prices for institutions are available from Kinokuniya Company Ltd, PO Box 55, Chitose, Tokyo 156, Japan. Prices include delivery by air. POSTMASTER: send address changes in the USA, Canada, and Mexico to *Polar Record*, Cambridge University Press, 110 Midland Avenue, Port Chester, NY 10573-4930.

Claims for missing issues can be considered only if made immediately after receipt of the subsequent issue. Information about *Polar Record* and all other Cambridge journals can be accessed via http://www.cup.cam.ac.uk/ and in North America via http://www.cup.org/.

POLAR RECORD

VOLUME 36, NUMBER 198, JULY 2000

Contents

ARTICLES	193	Antarctica in museums: the Mawson collections in Australia Barbara Wheeler and Linda Young
	203	An assessment of tundra degradation resulting from the presence of a field camp in Kongsfjorden, Svalbard <i>M.H. West and A.P. Maxted</i>
	211	The use of permafrost for the storage of oil and oil products and the burial of toxic industrial wastes in the Arctic <i>E.M. Chuvilin, E.D. Yershov, N.S. Naletova, and E.S. Miklyaeva</i>
	215	Adélie penguin colonies in eastern Prydz Bay: 'biological indicators' of exploration history and political change <i>F.I. Norman</i>
	233	Biological activity on a decaying caribou antler at Cape Herschel, Ellesmere Island, Nunavut, high Arctic Canada Antony J. Sutcliffe and Weston Blake Jr
NOTES	247	Polar icebreakers at the end of the twentieth century Lawson W. Brigham
	249	Non-government aviation in Antarctica 1999/2000 Charles Swithinbank
	250	Hook and nose: an interaction between a male southern elephant seal and a long-line fishery Clive R. McMahon, Iain Field, Tony Dorr, Charlie Hammond, and Dale Washington
REVIEWS	253	Mawson: a life, by Philip Ayres Ian R. Stone
	254	Keyguide to information sources on the polar and cold regions, by William Mills and Peter Speak Stuart Hibben
	255	Norwegian maritime explorers and expeditions, by Kåre Berg, Thor N. Devig, Øystein Kock Johansen, and Henrik Ulven T.R.D. Grade
	256	The Antarctic region: geological evolution and processes, edited by C.A. Ricci Peter D. Clarkson
	257	Across Arctic America: narrative of the Fifth Thule Expedition, by Knud Rasmussen E. Cruwys
	259	The English language edition of the geocryological map of Russia and neighbouring republics, by P.J. Williams and I.M.T. Warren Ben Seligman
	260	By airship to the North Pole: an archaeology of human exploration, by P.J. Capelotti William Barr

	260	Development in the Arctic, edited by Tom Greiffenberg John Ash
	261	The Alaska–Klondike diary of Elizabeth Robins, 1900, edited by Victoria Joan Moessner and Joanne E. Gates Jan R. Stone
	262	Noel Wien: Alaska pioneer bush pilot, by Ira Harkey Charles Swithinbank
	263	The centennial of S.A. Andrée's North Pole expedition, edited by Urban Wråkberg K.B. Shabby
	264	'Boston Men' on the northwest coast: the American maritime fur trade, 1788–1844, by Mary Malloy Barry Gough
	265	A bibliography of Tristan da Cunha, by P.J. Helyer and M.K. Swales Albert Beintema
	265	The laws of the Australian Antarctic Territory, by Stuart B. Kaye, Donald R. Rothwell, and Susan Dando Peter J. Beck
	266	Brief Reviews
OBITUARIES	267	Sir Laurence Kirwan
	268	Hugh Alison Lang
	269	Moira Dunbar
	270	Alton A. Lindsey
	270	Oleg Viktorovich Bychkov
SCAR BULLETIN	272	SCAR BULLETIN No 138
	272	Life under the Ice and the Climatic Evolution of Antarctica
	273	Summary Report of a Workshop on Subglacial Lake Exploration, Cambridge, United Kingdom, 26–29 September 1999
	275	Interannual Variability in the Southern Ocean: Summary Report of a Work- shop, Cambridge, United Kingdom, 2–7 August 1999 Eileen E. Hofmann and Julian Priddle
	278	A composite gazetteer of Antarctica Roberto Cervellati, Chiara Ramorino, Jörn Sievers, Janet Thomson, and Drew Clarke
COVER PICTURE		Chinstrap penguin (<i>Pygoscelis antarctica</i>), at Half Moon Island, South Shetland Islands, Antarctica, January 2000. Photo by Peter Carey.