



POLAR RECORD

VOLUME 24 NUMBER 148 JANUARY 1988

CAMBRIDGE UNIVERSITY PRESS

Polar Record

Journal of the Scott Polar Research Institute, University of Cambridge, Cambridge CB2 1ER, UK
Published by Cambridge University Press.

Editor: Dr Bernard Stonehouse

Editorial advisors:

Terence E. Armstrong	Sidney Brown	G. P. Donovan
Julian Dowdeswell	David G. Drewry	Valerie Galpin
Geoffrey Hattersley-Smith	R. K. Headland	Gareth Rees
Gordon de Q. Robin	W. Gilles Ross	Vernon Squire
C. W. M. Swithinbank	Piers Vitebsky	Peter Wadhams
David W. H. Walton		

Production: Kate Gordon-Rogers, Rosemary Graham, Irene Lawton, Robert Massom, Sally Stonehouse

Polar Record (ISSN 0032-2474) is published four times yearly in January, April, July and October, the four issues making up a volume. First published in January 1931, it appeared twice yearly up to July 1954 and three times yearly up to September 1987. *Polar Record* reports progress in all fields of research for the polar community.

Contributions

Contributions are invited on all subjects of polar interest, including accounts of fieldwork. The Editor welcomes articles (normally up to 8000 words), notes (up to about 2000 words), letters, brief items of interest, and books, reports, etc for review. Discussion with the Editor beforehand may save time and trouble. For details of style, see a recent copy of *Polar Record*.

Please send manuscripts to **The Editor, *Polar Record*, Scott Polar Research Institute, Lensfield Road, Cambridge CB2 1ER, UK.** Manuscripts that appear suitable for publication are refereed, and those accepted for publication will usually be published within a few months—normally less than a year from original receipt. Authors receive proofs for correction. Authors of articles receive 30 free reprints; additional reprints may be ordered when proofs are returned. Books, reports and other publications for reviewing should be sent direct to the Editor at the above address, marked "For review"; they will be reviewed at the Editor's discretion.

Copyright ownership is normally vested in the publishers of *Polar Record*, but will be reassigned to contributors on request. Opinions expressed by contributors are not necessarily those of the Editor, the Director or Management Committee of Scott Polar Research Institute, or the University of Cambridge.

Place names used in *Polar Record* are those authorized by the administrative authorities recognized by the British Government; names not so authorized are avoided or set in quotation marks. Russian names are transliterated by the system agreed in 1947 between the United States Board on Geographic Names and the Permanent Committee on Geographical Names for British Official Use; see *Polar Record* 6(44): 546 (1952).

Copying

Polar Record is registered with the Copyright Clearance Center, 21 Congress St., Salem Mass. 01970 USA. Organizations in the USA that are also registered with the CCC may copy material (beyond limits permitted by sections 107 and 108 of US copyright law) subject to payment to CCC of the per copy fee of \$5.00. This consent does not extend to multiple copy for promotional or commercial purposes. Code 0032-2474/88. For all other use, permission should be sought from the Cambridge or the American Branch of Cambridge University Press (addresses below).

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** at either **The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, UK, or 32 East 57th St, New York, NY 10022 USA.** The subscription price of vol 24, 1988, including postage, is: for individuals, £25.00 (US\$50.00 in USA and Canada), for institutions £35.00 (US\$70.00 in USA and Canada). Second class postage paid at New York NY and at additional mailing offices. Separate issues cost £10.00 (US\$20.00 in USA and Canada) plus postage. POSTMASTER: send address changes in the USA and Canada to *Polar Record*, Cambridge University Press, 32 East Street, New York NY 10022.

Claims for missing issues can be considered only if made immediately after receipt of the subsequent issue.

Back Issues

For vols 1-23 inclusive apply to Bluntisham Books, Oak House, East St, Bluntisham, Huntingdon Huntingdon, PE17 3LS UK. For vols 24 onward apply to Cambridge University Press, UK or USA.

Advertising in *Polar Record*

Prices appear in the advertisements section; for details apply to the Editor or to the publishers.