

continued from inside frontcover

Copying. This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA. Organizations in the USA who are also registered with CCC may therefore copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to CCC of the per copy fee of \$16.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0954-1020/2018 \$16.00. ISI Tear Sheet Service, 3501 Market Street, Philadelphia, PA 19104, USA, is authorized to supply single copies of separate articles for private use only.

Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions.

For all other use, permission should be sought from Cambridge University Press.

This journal issue has been printed on FSCTM-certified paper and cover board. FSC is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests. Please see www.fsc.org for information.

Printed in the United Kingdom by Bell & Bain.

ANTARCTIC science

Volume 33 Number 4 2021

CONTENTS

EDITORIAL

- The future role of the Scientific Committee on Antarctic Research
STEVEN L. CHOWN 333

BIOLOGICAL SCIENCES

- Breeding behaviour of colour-aberrant Adélie penguins (*Pygoscelis adeliae*) at Cape Crozier, Ross Island, Antarctica
PARKER M. LEVINSON, ANNIE E. SCHMIDT, VIRGINIA MORANDINI, MEGAN ELROD, DENNIS JONGSOMJIT & GRANT BALLARD 335

- Drilling predation on Antarctic tusk shells: first records on Recent scaphopods from the Southern Hemisphere
SANDRA GORDILLO & MARIANO E. MALVÉ 344

- Species distribution modelling of the Southern Ocean benthos: a review on methods, cautions and solutions
CHARLÈNE GUILLAUMOT, BRUNO DANIS & THOMAS SAUCÈDE 349

- Lithostratigraphy, age and distribution of Eocene volcanic sequences on eastern King George Island, South Shetland Islands, Antarctica
JOHN L. SMELLIE, RICHARD J. HUNT, WILLIAM C. MCINTOSH & RICHARD P. ESSER 373

- Experimental determination of reflectance spectra of Antarctic krill (*Euphausia superba*) in the Scotia Sea
ANNA BELCHER, SOPHIE FIELDING, ANDREW GRAY, LAUREN BIERMANN, GABRIELE STOWASSER, PETER FRETWELL, LOUISE IRELAND & GERAINT A. TARLING 402

EARTH SCIENCES

- Sulphur and oxygen isotope signatures of dissolved sulphate in freshwater from King George Island, Antarctic Peninsula
YEONGMIN KIM, INSUNG LEE, BERNHARD MAYER, GUEBUEM KIM, JONG IK LEE & HYOUNGBUM KIM 415

- First glaciological investigations at Ridge B, central East Antarctica
ALEXEY A. EKAYKIN, ALEXEY V. BOLSHUNOV, VLADIMIR YA. LIPENKOV, MIRKO SCHEINERT, LUTZ EBERLEIN, EVGENIY BROVKOV, SERGEY V. POPOV & ALEXEY V. TURKEEV 418

PHYSICAL SCIENCES

- Ice-free valleys in the Neptune Range of the Pensacola Mountains, Antarctica: glacial geomorphology, geochronology and potential as palaeoenvironmental archives
DAVID SMALL, MICHAEL J. BENTLEY, DAVID J.A. EVANS, ANDREW S. HEIN & STEWART P.H.T. FREEMAN 428

Antarctic Science is abstracted in *Current Contents*, *SciSearch*, *Research Alert*, *Geo Abstracts*, *Current Awareness in Biological Sciences*, *Mineralogical Abstracts*, *Meteorological & Geo-astrophysical Abstracts*, *Current Antarctic Literature*, *GeoArchive*, *GeoRef*, *Biosis*, *Oceanographic Literature*, *Environmental Periodicals Bibliography* and *Polar & Glaciological Abstracts*

Cambridge Core

For further information about this journal please go to the journal website at:
cambridge.org/ans



MIX
Paper from
responsible sources
FSC® C007785

CAMBRIDGE
UNIVERSITY PRESS