## The Lichenologist

AN INTERNATIONAL JOURNAL EDITED

BY

D. H. BROWN

V. AHMADJIAN, T. AHTI, R. M. BROWN, B. J. COPPINS, D. J. GALLOWAY, P. L. NIMIS, S. OTT and D. H. S. RICHARDSON



ACADEMIC PRESS LONDON SAN DIEGO NEW YORK BOSTON SYDNEY TOKYO TORONTO

ISSN 0024-2829

## BRITISH LICHEN SOCIETY

## **OFFICERS** 1995

President

Professor B. W. Fox, Ph.D., F.L.S., Tryfan, Longlands Road, New Mills, Stockport, Cheshire SK12 3BL

Vice President

R. G. Woods, B.Sc., Countryside Commission of Wales, 3rd Floor, The Gwalia, Ithon Road, Llandrindod Wells, Powys LD1 6AA

Secretary

O. W. Purvis, Ph.D., Department of Botany, The Natural History Museum, Cromwell Road, London SW7 5BD

Treasurer

F. S. Dobson, F.L.S., 57 Acacia Grove, New Malden, Surrey KT3 3BU

Assistant Treasurer

J. M. Gray, Myrtle House, Church Lane, Kingston St Mary, Taunton, Somerset TA2 8HR

Regional Treasurer (N. America)

J. W. Sheard, Ph.D., Department of Biology, University of Saskatchewan, Saskatchewan, S7N 0W0, Canada

Senior Editor, Librarian and Archivist

D. H. Brown, D.Sc., F.I.Biol., School of Biological Sciences, The University, Woodland Road, Bristol BS8 1UG

Bulletin Editor

P. D. Crittenden, Ph.D., Department of Life Sciences, The University, Nottingham NG7 2RD

Conservation Officer

A. Fletcher, Ph.D., F.L.S., Leicestershire Museums, Arts and Records Service, 96 New Walk, Leicester, Leicestershire LE1 6TD

Mapping Recorder

Professor M. R. D. Seaward, D.Sc., F.L.S., F.I.Biol., Department of Environmental Science, The University, Bradford, West Yorkshire BD7 1DP

Curator

R. K. Brinklow, B.Sc., Dundee Museums and Art Galleries, Albert Square, Dundee DD1 1DA

> Field Meetings Secretary T. G. C. Duke, B.Sc., Sandrock, The Compa, Kinver, Staffordshire DY7 6HS

> > Members of Council

I. Blatchley

P. M. Earland-Bennett O. L. Gilbert P. W. Lambley J. H. H. Looney F. Rose

E. John

Membership of the British Lichen Society is open to all individuals (not institutions) anywhere in the world interested in any part of lichenology. Subscriptions, due on joining and afterwards on 1 January each year, are: ordinary members, £25; associate members, £18.50; senior associate members, £7.50; junior associate members, £5.00. Members receive the *Bulletin* of the British Lichen Society and issues of The Lichenologist published in the year they join, and afterwards while they remain members of the Society, free of charge. Associate members do not receive The Lichenologist. Details of the membership, facilities and activities of the Society and application forms may be obtained from the Secretary (address above).

The Lichenologist: ISSN 0024-2829. Volume 27, 1995, published bimonthly for the British Lichen Society, by Academic Press Limited at 24-28 Oval Road, London NW1 7DX, UK. Annual subscription price including postage: £160 UK and US \$280 elsewhere. Buyers in Canada should add GST at the current rate of 7%. Subscription orders should be sent to: Foots Cray, Sidcup, Kent DA14 5HP, UK (Tel: 081-300 3322). Send notices of changes of address to the Assistant Treasurer and the publisher (Institutions) at least 6-8 weeks in advance, including both old and new addresses.

Second class postage rate paid at Jamaica, NY 11431, USA.

B. J. Coppins

Air freight and mailing in the USA by Publications Expediting Inc., 200 Meacham Avenue, Elmont, NY 11003, USA.

Inc., 200 Meacham Avenue, Elmont, NY 11003, USA.

This journal is covered by Current Contents and Biological Abstracts.

Academic Press journals do not levy page charges.

Printed in UK.

USA POSTMASTERS: Send change of addresses to The Lichenologist, c/o Publications Expediting