## The Lichenologist

## AN INTERNATIONAL JOURNAL EDITED BY

D. H. BROWN

R. M. BROWN, B. J. COPPINS, P. D. CRITTENDEN,J. HAFELLNER, P. L. NIMIS, D. H. S. RICHARDSON,C. W. SMITH, T. TØNSBERG and M. WEDIN



ACADEMIC PRESS LONDON SAN DIEGO NEW YORK BOSTON SYDNEY TOKYO TORONTO

ISSN 0024-2829

## BRITISH LICHEN SOCIETY

## **OFFICERS** 1999

President

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

Vice President and Conservation Officer

A. Fletcher, Ph.D., F.L.S., The Holly Hayes Environmental Resources Centre, Leicestershire Museums Service, 216 Birstall Road, Birstall, Leicester LE4 4DG

Secretary

A. Waterfield, B.Sc., c/o 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, Penmore, Perranuthnoe, Penzance, Cornwall TR20 9NF

Regional Treasurer (America)

S. Clayden, Ph.D., The Herbarium, New Brunswick Museum, 277 Douglas Avenue, Saint John, New Brunswick E2K 1E5, Canada

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

Bulletin Editor P. W. Lambley, The Cottage, Elsing Road, Lyng, Norwich, Norfolk NR9 5RR

w. Lambley, The Cottage, Elsing Road, Lyng, Norwich, Norloik 1989

Mapping Recorder and Archivist

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

S. P. Chambers. T. Chester O. L. Gilbert D. L. Hawksworth B. Hilton R. I. Lewis Smith F. Rose W. R. G. Stevens

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 31, 1999, published bimonthly for the British Lichen Society, by Academic Press at 24–28 Oval Road, London NW1 7DX, UK. Annual worldwide subscription price including postage: £245. 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: 0181-308 5700). 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.

Periodicals postage paid at Rahway, NJ 07001, USA.

The Lichenologist, c/o Mercury Airfreight International Ltd, 2323 Randolph Avenue, Avenel, NJ 07001, USA.

USA POSTMASTERS: Send change of addresses to *The Lichenologist*, c/o Mercury Airfreight International Ltd, 2323 Randolph Avenue, Avenel, NJ 07001, USA.

This journal is covered by Current Contents and Biological Abstracts.

Academic Press journals do not levy page charges.

Printed in UK.