The Lichenologist

AN INTERNATIONAL JOURNAL EDITED FOR THE BRITISH LICHEN SOCIETY

BY

D. L. HAWKSWORTH

B. J. COPPINS, D. J. HILL, P. M. McMANUS AND A. PENTECOST



ACADEMIC PRESS

LONDON ORL
SAN FRANCISCO MONTREAL SYDNEY

ORLANDO NEW YORK

SAN DIEGO YORK TORONTO TOKYO SÃO PAULO

ISSN 0024-2829

BRITISH LICHEN SOCIETY

OFFICERS, 1984

President

J. R. Laundon, F.M.A., Department of Botany, British Museum (Natural History), Cromwell Road, London, SW7 5BD.

Vice-President and Editor

D. L. Hawksworth, D.Sc., F.L.S., F.I. Biol., Commonwealth Mycological Institute, Ferry Lane, Kew, Surrey, TW9 3AF.

Secretary Miss F. J. Walker, Department of Botany, British Museum (Natural History), Cromwell Road, London, SW7 5BD.

Treasurer

S. N. K. Tallowin, Lakeham Farm, Higher Ashton, Exeter, EX6 7RB.

Assistant Treasurer

P. W. Lambley, B.Sc., Castle Museum, Norwich, NR1 3JU.

Regional Treasurer (N. America)
J. W. Sheard, Ph.D., Department of Biology, University of Saskatchewan, Saskatoon, Saskatchewan, Canada.

Mapping Recorder

M. R. D. Seaward, D.Sc., F.L.S., School of Studies in Environmental Science, The University, Bradford, West Yorkshire, BD7 1DP.

Assistant Editors

P. M. McManus D. J. Hill A. Pentecost B. J. Coppins

Bulletin Editor

O. L. Gilbert, Ph.D., Department of Landscape Architecture, University of Sheffield, Sheffield, S10 2TN.

Librarian, Archivist and Reading Circle Secretary D. H. Brown, Ph.D., Department of Botany, The University, Woodland Road, Bristol, BS8 1UG.

Conservation Officer A. Fletcher, Ph.D., Leicestershire Museums Service, 96 New Walk, Leicester, LEI 6TD.

Curator R. K. Brinklow, B.Sc., Dundee Museums and Art Galleries, Albert Square,

Dundee, DDI IDA.

Elected Members of Council

C. J. B. Hitch O. W. Purvis F. H. Brightman B. W. Ferry P. W. James A. M. O'Dare

Membership of the British Lichen Society is open to all persons anywhere in the world interested in any part of lichenology. Subscriptions, due on joining and afterwards on 1 January each year, are: ordinary members, £12.50; junior associate members, £4; family members £0.25. Details of membership, activities of the Society and application forms may be obtained from the Secretary (address above). 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. Junior associate members do not receive The Lichenologist.

1984, Volume 16, 3 issues (February, June, October): Inland £40.80 including postage; abroad \$107.00 including postage. Subscription orders should be sent to Academic Press Inc. (London) Ltd, High Street, Footscray, Sidcup, Kent DA14 5HP, England, Except those from Canada, Central and South America and the U.S.A., which should be sent to Academic Press Inc., 111 Fifth Avenue, N.Y. 10003, U.S.A.

Send notices of change of address to the Assistant Treasurer and office of the Publishers at least 6-8 weeks in advance. Please include both old and new addresses.

Postmaster, send changes of address to The Lichenologist, 111 Fifth Avenue, New York, N.Y. 10003.

Air freight and mailing in the U.S.A. by Publications Expediting Services Inc., 200 Measham Avenue, Elmont, N.Y. 11003, U.S.A.