

BRITISH LICHEN SOCIETY

BULLETIN

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President: F. H. Brightman, B.Sc.

Lichens used as landmarks in Saxon England

Although the earliest British lichen records are generally attributed to the 16th century, which saw the publication of Gerard's Herball in 1597, Oliver Rackham has recently drawn attention to the much earlier recording of lichens in this country. In his book Trees and Woodland in the British Landscape (1976) Dr Rackham quotes (p. 49) from the "Boundary of Hurstbourne Priors (Hants), dated A.D. 901" which states: "Start from Twyford along the road to Bracken Ridge, from there along the road to Carrion Barrow; then in a straight line to the pear tree; ... from there along the road from where it adjoins the wood ... by the little hedge along the spinney ... along the hedge to the old maple tree ... from there to the hoar [i.e. lichen-covered] apple tree; then along the ditch out to the River Test; ... along the bank back to Twyford."

Dr Rackham (personal communication) remarks that "Anglo-Saxon charters contain many examples of hoar apple-trees, hoar maple-trees, hazels, etc.", and that the Old English adjective har (=hoar) refers to a white or grey colour with a shaggy texture which "when applied to trees or rocks this must inevitably mean a conspicuous growth of some fruticose lichen." Dr Rackham mentions that amongst the earliest lichen records of this kind are "the 'hoar thorn' and 'hoar apple-tree' in the bounds of Thorpe by ..."

Presidential confab

Mr Frank Brightman (left) was elected President of the British Lichen Society in January 1978 in succession to Dr Oliver Gilbert (right). The picture shows the two Presidents studying lichens on the Society's autumn field meeting 1977 in the churchyard at Old, Northamptonshire. Behind Mr Brightman is Mr John Manning of Kettering. Photograph: P. R. Chapman October 1977.



Chertsey, Surrey, purporting to be dated 675."

J. A. H. Murray's A New English Dictionary on Historical Principles confirms Dr Rackham's statements. The word hoar (vol. 5: 311 (1899)) "referred perhaps to the grey lichen with which aged tree-trunks are clad", whilst (p. 313) hoar-stone was "A stone (ancient or grey with lichen), frequently mentioned in charters as marking a boundary line." Thus it is clear that lichen-covered trees and stones were widely used as landmarks for defining boundaries in Saxon times, when much of the present pattern of the English landscape was established. From old charters it may still be possible to identify today particular lichened stones referred to by the Saxons, although of course the hoar-trees will have long disappeared. In Saxon England air pollution was considerably less widespread than it is today, and therefore fruticose lichens were doubtless generally abundant, frequently forming a conspicuous covering on many trees and rocks, as indeed the charters confirm. The use of lichens as indicator plants might be thought of as a recent development, but in fact their use for this purpose goes back at least to the seventh century.

Autumn field meeting at Whitby October 1978

As mentioned in the last Bulletin, the autumn meeting of the Society, 20 - 22 October 1978, based on Whitby and led by Mr A. Henderson, will be primarily concerned with studying some representative sites of the North Yorkshire Moors. Saturday 21 October will be spent in visiting a variety of sites in the Goathland-Saltergate area; Sunday 22 October will be devoted to Eskdale, its tributary valleys and to the Cleveland region, where W. Mudd did much collecting. A convenient map covering all relevant areas is the one-inch Ordnance Survey North York Moors Tourist Map, price £0.95.

Access to Whitby by rail is difficult from the south. As the only route terminating at Whitby involves a considerable detour north via Darlington, British Rail suggest a route which finishes at Scarborough, thus entailing a one-hour bus journey from there to Whitby. Members travelling this way may find it helpful to contact Mr A. Henderson, Botany Experimental Gardens, 6 Grosvenor Mount, Leeds 6, or Dr M. R. D. Seaward, Postgraduate School in Environmental Science, The University, Bradford, as it may be possible to arrange lifts by car from Scarborough or York to Whitby. Anyone arriving by car is asked to take any opportunity of lichen recording from any part of the moors en route, as the area as a whole has been sparsely covered.

Those attending the meeting are asked to return the form at the end of the Bulletin to Mr A. Henderson. Information on hotels can be obtained from the Information Centre, New Quay Road, Whitby, North Yorkshire, YO21 1DH. However, members are urged to inform Mr Henderson on the form that they would like either accommodation booked for them or would welcome a recommended hotel.

A. HENDERSON

Meetings 1979

Provisional arrangements for the Society's meetings in 1979 include the annual general, lecture and exhibition meeting on 6 January at the British Museum (Natural History) London, the spring meeting in Devon, the summer meeting at Penrith and in north-west Yorkshire near Wensleydale, and the autumn weekend meeting at Canterbury. In addition day excursions to Kent and the New Forest (Hampshire) are planned.

Lichen courses 1978

The following addition to those given in the last Bulletin should be noted: HIGHLAND. Ardtornish, Morvern. 6 - 13 September 1978. Lichens, F. Rose. Details and applications to J. Raven, Docwra's Manor, Shepreth, Royston, Herts SG8 6PS.

Between close-up photography (up to about x5 magnification) and transmitted light photography is a region of magnification (from about x8 to x30), of potential interest to lichen photographers, that is difficult to photograph with a camera and camera lens. Subjects at these magnifications are best photographed by reflected light, using low-power objectives, e.g. x3, or x5, on a microscope. Objectives of this power have the added advantage of requiring a reasonable distance between the subject and the objective, thus allowing more choice in the angle of illumination. Subjects for photography in this range of magnification must be as far as possible in one plane, as the depth of field is limited.

Electronic flash is the most convenient source of light but the major problem is to calculate the required distance between the subject and the light source. For a 35 mm single lens reflex camera this distance can be calculated as follows:

1. Attach the camera to the microscope and choose a combination of eye-piece and objective to give a suitable size of image on the focusing screen of the camera. Replace the object to be photographed with a millimetre rule and count the number of millimetres (X) visible across the narrow width of the ground glass screen. The magnification (M) is then 25/X. (The narrow width of the screen is 1/4 inch = 25mm.)
2. Calculate a photographic aperture (F) from the numerical aperture (NA) of the objective: $F = 2 / (NA^2)$ e.g. NA = 0.10, F = 5.
3. Calculate the distance in inches from the flash-gun to the subject (d) using the Guide Number (G) of the flash-gun (in feet) for a given film speed, as follows: $d = \frac{G \times 12}{M + 1}$

Example: microscope with x7 eye-piece and x3 objective, NA = 0.10. Because 3 mm is visible on the screen, M = x8. Calculated photographic aperture = 5. The flash-gun guide number = 88 (feet) for 50 ASA film.

$$d = \frac{88 \times 12}{9 \times 5} = \frac{1056}{45} = 23.5 \text{ inches}$$

If the guide number of the flash-gun is only given for one film speed, the corresponding distance for another film speed can be calculated as follows: Supposing $d_{50} = 23.5$ inches, $d_{32} = d_{50} \times \frac{23.5}{32} = 18.8$ inches for 32 ASA.

The distances calculated as described above should be regarded as approximate, and exposures should be made for comparison above and below the calculated value. It is important to note that the magnification (M) is that on the camera screen as described above, and is not calculated from the combined powers of the eye-piece and objective.

Subscriptions 1978

The 1978 subscription was due on 1 January and members who have not paid should do so as soon as possible in order to receive an uninterrupted supply of the Society's publications. The subscription is £7.00 for ordinary members, £1.00 for junior associate members and £0.25 for family members. The U.S. dollar rate is \$15.00 for ordinary members. Reading circle subscriptions are £1.00 per year. Subscriptions should be sent to the Assistant Treasurer, Mr P. W. Lambley, British Lichen Society, c/o Castle Museum, Norwich, NR1 3JU, United Kingdom, except for members living in North America, who should send theirs to the Regional Treasurer, (North America), Dr J. W. Sheard, Department of Biology, University of Saskatchewan, Saskatoon, Saskatchewan S7N 0W0, Canada. Please note that acknowledgements are not sent unless requested because of postage costs.

Recording in Scotland

A Guide to Biological Recording in Scotland is available free on receipt of a large stamped (12p) addressed envelope from BRISC, 8 Dublin Street, Edinburgh EH1 3PP.

Books on lichens - 9

Professor Poelt's keys to European lichens are well-known and widely used for the identification of specimens. A supplement, with keys to species in 53 genera, has now been published by J. Cramer. This is, of course, in German, and Poelt and Vegda are co-authors. The work is called Bestimmungsschlüssel europäischer Flechten. Ergänzungsheft I. and can be obtained from J. Cramer, P.O. Box 48, D-3306 Lehre, Federal Republic of Germany, for DM 50.00.

Dr Hawksworth and Dr Seaward's Lichenology in the British Isles 1568 - 1975 was published in December 1977 by placing copies in the major libraries during the last month of the year. It is now generally available, and may be obtained from the Richmond Publishing Co. Ltd., Orchard Road, Richmond, Surrey TW9 4PD, for £21.30. The high price appears to be due to the small print order. The book is expected to be regarded as a standard work on the history of lichenology in Britain and as a reference source for British lichen studies.

Mark Seaward's book Lichen Ecology was also published in December 1977. This is a multi-author major review volume, comparable with Ahmadjian & Hale's The Lichens (1974). Included is a complete account of all the major lichen communities present in the British Isles, a bibliographic guide to the lichen floras of the world, and ten other chapters packed with a remarkable array of facts on various ecological aspects and areas. The book is available from Academic Press, Sales Department, 24 Oval Road, London NW1 7DX, for £23.00. The US Edition is available from Academic Press, 111 Fifth Avenue, New York, NY 10003, for \$44.90.

Book review

A Nature Conservation Review Ed. D.A. Ratcliffe. 1: xvi + 401 pp + 9 plates + 9 maps. 2: viii + 320 pp. Cambridge University Press, Cambridge. 1977. 1: £35.00; 2: £25.00.

In July last year the Nature Conservancy Council published its long awaited Nature Conservation Review. In it they identify over 700 key areas which they believe adequately represent all major types of natural and semi-natural vegetation in Britain together with their characteristic assemblages of plants and animals. This number far exceeds the 150 declared National Nature Reserves, and the review suggests that voluntary bodies, county councils and other organisations should co-operate to have as many as possible protected. Vol. 1 is a feast of ecological information summarising most of the conservation survey and evaluation work which has gone on in the last 30 years. Ecological habitats are described and classified, the case for safeguarding them set out, and there is a most valuable and frank explanation of how assessment of their quality was made. A four-point grading has been made for sites of SSSI quality and above, the top two classes being regarded as of national importance; they are termed key sites. There are 735. Grade 1 sites are of the highest importance and their survival is regarded as essential to the success of nature conservation in Britain. Grade 2 sites are slightly lower in quality. Grade 1 with a star are super-élite sites thought to be of international importance. The key sites are described individually in Vol. 2.

Lichens receive considerable mention in relation to woodlands, a number of park woodlands being specially included as key sites on account of their rich lichen flora. It is especially gratifying to see classic lichen localities such as Eridge Park, Sussex; Bocomoc Park, Cornwall; Great Wood, Borrowdale; Glasdrum, Argyll; the Loch Sunart deciduous woodlands; the Strathfarrar pine-woods and of course the New Forest included as grade 1, most of international importance. Regarding other lichen habitats, most of the sites mentioned by Rose & James in Bulletin 41 (1977) as of international status are recognised as such in the review. These include Denge Beach (=Dungeness), Kent, and the islands of Skomer and Skokholm. Lichenologists sometimes speculate whether sites rich in lichens coincide with localities which are also good for other groups of plants and animals. The review

suggests they do, because a very high proportion of the sites considered by the British Lichen Society's Conservation Committee as of national or international importance for their lichen flora are recognised as key sites by a method of assessment which included the totality of interest. Park woodlands are an exception to this, as several are included with lichens as their prime known asset.

A surprising feature in a work of such importance is the lack of attention paid to lichen nomenclature, which is said to follow (and does in part) Watson's Census Catalogue of British Lichens, presumably owing to ignorance of James's Check-list of British Lichens. Confusion is compounded by a number of misspellings, such as Toximia lobulata and T. caerulea var. nigricans (Vol. 1: 178). This peccadillo apart, the new national policy embodied in the review appears to take very good care of the known lichen interest of Britain.

O. L. GILBERT

David Hawksworth elected editor of The Lichenologist

At the Annual General Meeting on 7 January 1978 Dr D. L. Hawksworth was elected editor of The Lichenologist. Dr Hawksworth has been Assistant Editor of the journal since 1970 and therefore has considerable experience. Manuscripts for publication in the journal should in future be sent to Dr Hawksworth at the Commonwealth Mycological Institute, Ferry Lane, Kew, Richmond, Surrey. Dr Hawksworth has appointed Dr Gilbert, Dr Jackson Hill, Mr James and Dr Topham as assistant editors. At the Annual General Meeting the retiring editor, Mr James, was presented with a leather-bound presentation copy of Lichenology in the British Isles 1568-1975, and a specially printed card, as a token of appreciation for his 20 years' work in editing the journal.

Views on Lichenologist required

The Council would like to have the views of the membership on the number of issues which The Lichenologist should publish each year. At present there are two issues, but the number of MSS of high quality received suggests that an increase should be considered. Any increase would of course mean a higher subscription and therefore Council would like to know if members favour this course of action, or if everyone is satisfied with the present two issues at the present subscription. A form for the expression of views is included with this Bulletin, which all members are kindly urged to complete.

Lichenologist published

Part 2 of volume 9 of The Lichenologist was published on 12 November 1977. Any paid-up ordinary member for 1977 who did not receive a copy should inform the Assistant Treasurer, Mr P. W. Lambley, British Lichen Society, c/o Castle Museum, Norwich, NR1 3JU.

Herbarium catalogue available

A catalogue listing the specimens in the Society's herbarium is now available, running to 193 pages. Locality and substrate date are included. The catalogue is available from the Curator, Dr J. D. Guiterman, The Nook, Rosehill, Lostwithiel, Cornwall, for £2.26 post free. Miss A. M. Burnet is thanked for the typing.

For Sale

The Lichenologist, vol. 4 - 9 (1968 - 77), in parts, mint condition, £15 post free. G. C. Ainsworth, 42 Monmouth Street, Topsham, Exeter, Devon EX3 0AJ.

The Lichenologist, vol. 5 (1971 - 73), in 3 parts mint, £2 post free. A. C. Jermy, Department of Botany, British Museum (Natural History), Cromwell Road, London SW7 5BD.

Report on exhibition meeting 1978

The lecture and exhibition meeting, held after the Annual General Meeting on Saturday 7 January 1978 at the British Museum (Natural History), London SW7 5BD, was attended by c. 72 persons. The lecture meeting went according to plan; summaries of the lectures were distributed on a poster issued with the last Bulletin. The following exhibits were displayed:

- BUTLIN, HONOR M. Quarry Garden Lichen. (Poem)
CHAPMAN, P. R. Lichen hunters at Kettering 1977.
CHAPMAN, P. R. Colour photographs of lichens.
DALBY, CLAIRE. Original drawings for The Observer's Book of Lichens.
DAVEY, S. R. Lichens on chalk downland in central southern England.
DOBSON, F. S. More lichen photographs.
GILBERT, O. L. A Cladonia probably under-recorded in Britain. (C. amaurooraca)
GILBERT, O. L. A Cladonia species not seen in Britain this century. (C. stellaris)
GILBERT, O. L. Lecanora subcircinata.
GUITERMAN, J. D. The Herbarium Catalogue.
RICHMOND PUBLISHING COMPANY: Bookstall.
ROSE, F. Lichens of Danish forests and heaths.
SEAWARD, M. R. D. BLS distribution maps scheme.
SWINSCOW, T. D. V. & KROG, H. A lichen species. (Usnea)
TOPHAM, PAULINE B. Canary Islands lichens and literature.
TOPHAM, PAULINE B. Lecanora subradiosa Nyl.

Geoff Bratt dies

Dr G. C. Bratt died on 16 October 1977 following a kidney transplant in the summer. Geoff Bratt lived at West Moonah in Tasmania, Australia, and made extensive collections and detailed studies of the Tasmanian lichen flora, publishing a number of papers.

New members

- Dr R. A. Anderson, Department of Biological Sciences, University of Denver,
DENVER, Colorado 80208, U.S.A.
Dr R. M. Barnes, 26 Glenwood Avenue, Bassett, SOUTHAMPTON.
Mr R. P. Beckett, 72 Market Street, ST ANDREWS, Fife, KY16 9NU.
Miss J. Blackwood, Ebony House, Whitney Drive, STEVENAGE, Hertfordshire SG1 4BL.
Mr D. K. B. Boddy, Rose Cottage, Duncombe Street, Wollaston, STOURBRIDGE,
West Midlands.
Mrs A. S. Corley, Pucketty Farm Cottage, FARINGDON, Oxfordshire SN7 8JP.
Mr R. Coutu, 3537 Adam Street, MONTREAL, Quebec H1W 1Y7, Canada.
Mr T. P. Davis, 29 Drayton Gardens, Winchmore Hill, LONDON N21.
Mr R. T. Earl, Cropwell Lings, CROPWELL BUTLER, Nottinghamshire NG12 2JS.
Mrs K. Erickson, 37418 W. Lake Walker Dr S.E., ENUMCLAW, Washington 98022, U.S.A.
Mr J. Erickson, 37418 W. Lake Walker Dr S.E., ENUMCLAW, Washington 98022, U.S.A. (F.M.)
Mr A. Fordham, 342 Long Road, LOWERSTOFT, Suffolk.
Mr W. H. G. Hale, Department of Biology, The University, SOUTHAMPTON, SO9 5NH.
Mr N. A. Hardcastle, 89 Birchington Avenue, Birchencliffe, HUDDERSFIELD,
West Yorkshire, HD3 3RB.
Miss A. R. Joyce, Department of Botany, The University, St Machar Drive,
ABERDEEN, AB9 2UD.
Dr A. C. King, Beaumont Hall, Stoughton Drive South, LEICESTER, LE2 2NA.
Mr J. Lovett, 28 Balmoral Road, SALISBURY, Wiltshire SP1 3PX.
Mr R. J. Pitts, Sao's House, Coventry College of Education, Kirby Corner Road,
Canley, COVENTRY, CN4 8EE.
Mrs N. Rolf, 4 Gervase Avenue, St Thomas, EXETER, EX2 8AF.
Ms D. M. Sainsbury, 10 Atherford Road, Stockwell, LONDON SW9 9LW.
Mr D. J. Sanders, 15 Moorhills Croft, Shirley, SOLIHULL, West Midlands B90 2QB.
Dr J. A. Snider, Department of Biological Sciences, University of Cincinnati,
CINCINNATI, Ohio 45221, U.S.A.
Mrs S. M. Taylor, 41 Tweedholm Avenue, WALKERBURN, Peeblesshire EH43 6AP.

Specimens Form - In 1975, BSBF News 11: 16-17 published a letter from Alison Rutherford with details of an all-purpose form for professional botanists to return to keen amateurs following the receipt of parcels of specimens. One of the members of the British Lichen Society considered that a similar form should be available for lichenologists. Therefore the following form has been devised for use by members following the receipt of unsolicited lichen material sent for determination.

To..... Date.....
Tick (where appropriate).....
..... Thank you for your postcard/letter/packet/parcel/Venesta box/air freight/shipment/missile of..... It is most kind of you to send it.
..... I hope to study your collections immediately/as soon as possible/when more time is available/next week/month/year/decade/century/on completion of my thesis.
..... Your collections are now identified/not identified/mislaid beneath bunf/stolen by rail thieves/gone mouldy/in cupboard/undergoing TLC.
..... I regret your collections could not be identified, because they were sterile/fragmentary/parasitised/eaten/rubbed/basal squamules only/mouldy/depauperate.
..... I regret the delay in dealing with your collections. This was/is because I was/ams overworked/on holiday/in east Africa/in Tenerife/ill/snowed under/dealing with higher priorities/fell off my bicycle/forgetful/visiting my GP/MP/aunt.
..... Further material should be dried, properly packed and fully labelled. Your last parcel/..... was mistaken for hamster food/bomb/Christmas box/present/mouldy fungi/waste paper/important material. Please use more stiffening and send return postage.
..... Please wrap your further specimens in more interesting packing; I prefer Times/Guardian/Der Spiegel/Sun/Private Eye/Penthouse/Playgirl/Peaches Special.
..... Send no further material until I contact you. I am leaving this establishment at town/county/country/Common Markets.
..... Signed.....

Literature on lichens - 30
ALSTRUP, V. 1977. Cryptogams on imported timber in west Greenland. Lichenologist 9: 113 - 117. (Includes introductions from Denmark. Habitat photographs.)
ASTA, J. & ROUX, C. 1977. Etude écologique et phytosociologique de la végétation lichénique des roches plus ou moins décalcifiées en surface, sur étages subalpin et alpin des Alpes Françaises. Bull. Mus. Hist. nat. Marseille 37: 23 - 81.
BAILEY, R. H. & JAMES, P. W. 1977. Distribution maps of lichens in Britain. Thelotrema. Lichenologist 9: 175 - 187.
CHATER, A. O. 1977 ("1976") Early Cardiganshire gravestones. Part 1. Archeologia Cambrensis 125: 140 - 161. (Includes discussions on dating, cleaning and moving of gravestones, etc., as well as removal of lichens.)
COOKE, R. 1977. The Biology of Symbiotic Fungi. Wiley, London. (Review.)
COPPINS, B. J. 1977. Field Meeting at Girvan, Ayrshire. Lichenologist 9: 153 - 167. (Lichens recorded.)

- CULBERSON, C.F. & CULBERSON, W. L. 1976. Chemosyndromic variation in lichens. Syst. Bot. 1: 325 - 339. (Study of Cetrelia and discussion of "species-pairs". The "differentiation in Cetrelia occurred through a combination of parallel morphological and parallel chemical evolution".)
- CULBERSON, C.F., CULBERSON, W.L. & JOHNSON, A. 1977. Thermally induced chemical artifacts in lichens. Phytochemistry 16: 127 - 130. (Thermal degradation of lichen substances has occurred in lichen specimens which have been heat-dried, or collected from volcanic sites, and has led to taxonomic errors in Hypotrachyna.)
- CULBERSON, C.F. & JOHNSON, A. 1976. A standardized two-dimensional thin-layer chromatographic method for lichen products. J. Chromat. 128: 253 - 259.
- CULBERSON, W.L., CULBERSON, C.F. & JOHNSON, A. 1977. Pseudevernia furfuracea-olivetorina relationships: chemistry and ecology. Mycologia 69: 604 - 614. ("If no chemotype/ecology correlations are found... the recognition of the two major chemotypes as species should be seriously questioned.")
- ESSLINGER, T. L. 1977. A chemosystematic revision of the brown Parmeliae. J. Hattori bot. Lab. 42: 1 - 211. (World monograph; 107 species.)
- FOLLMANN, G. 1976. Lichen flora and lichen vegetation of the Canary Islands. In KUNKEL, G. (Editor) Biogeography and Ecology in the Canary Islands: 267 - 286. Junk, Den Haag. (Sociology.)
- GARTY, J., GALUN, M. & FUCHS, C. 1977. Heavy metals in the lichen Caloplaca aurantia from urban, suburban and rural regions of Israel. (A comparative study.) Wat. Air Soil Poll. 8: 171 - 188.
- GILBERT, O. L. 1977. Phenotypic plasticity in Cladonia pocillum. Lichenologist 9: 172 - 173. (Cladonia pocillum resembles C. pyxidata as pH declines. Photographs.)
- GREEN, T. G. A. & SNELGAR, W. P. 1977. Parmelia scabrosa on glass in New Zealand. Lichenologist 9: 170 - 172. (Includes photograph.)
- HALLBAUER, D. K., JAHNS, H.M. & BELTMANN, H.A. 1977. Morphological and anatomical observations on some precambrian plants from the Witwatersrand, South Africa. Geol. Rdsch. 66: 477 - 491. ("The original plant... showed a definite resemblance to certain types of lichens ... the name of Thuchomyces lichenoides is suggested for the fossilized plant".)
- HAWKSWORTH, D.L. 1977. Taxonomic and biological observations on the genus Lichenocmium (Sphaeropsidales). Persoonia 9: 159 - 198. (Taxonomic revision; 10 species, nine of which are lichenicolous; three new.)
- HAWKSWORTH, D. L. & SEAWARD, M. R. D. 1977. Lichenology in the British Isles 1568 - 1975. An Historical and Bibliographical Survey. Richmond Publishing Co., Richmond, Surrey. (£21.30. Standard work; c. 2,700 references indexed by vice-county, illustrated history, herbaria, etc.)
- HENDERSON, A. 1977. In the wake of the Clean Air Act? A note on the lichens of a Leeds alleyway. Naturalist, Hull 102: 141 - 143. (Colonisation of a Leeds 'snicket' by Hypogymnia and Parmelia spp., previously unknown in the inner urban area.)
- JØLLE, O.H. 1977. Ny lav for Norge og Sverige: Cladonia cyathomorpha. Blyttia 35: 163 - 166. (Cladonia cyathomorpha new to Norway and Sweden.)
- JØRGENSEN, P. M. 1977. Foliose and fruticose lichens from Tristan da Cunha. Skr. norske Vidensk.-Akad. mat.-nat. Kl. II, 36. (84 species, four new. "The lichenflora has a pronounced South American affinity and appears to be poor in endemic species ... the 'roaring forties' ... is acting as an efficient dispersal agent of lichen propagules.")
- KROG, H. & SWINSCOW, T. D. V. 1977. The Parmelia borreri group in east Africa. Norw. J. Bot. 24: 167 - 177. (Taxonomic treatment of 11 species.)
- KUROKAWA, S. 1976. A note on Parmelia omphalodes and its related species. J. Jap. Bot. 51: 377 - 380. (Taxonomic account of three species: Parmelia omphalodes (L.) Ach., P. pinnatifida Kurok. (new name for P. omphalodes var. panniformis Ach.) and P. discordans Nyl.)
- LAAKSOVIRTA, K. & OLKKONEN, H. 1977. Epiphytic lichen vegetation and element contents of Hypogymnia physodes and pine needles examined as indicators of air pollution at Kokkola, W Finland. Annls bot. fenn. 14: 112 - 130.
- MCCARTHY, P. M. 1978. A lichen "oasis" in Cork city. Ir. Nat. J. 19: 154 - 156. (46 species from Alnus swamp.)

- MOBERG, R. 1977. The lichen genus *Physcia* and allied genera in Fennoscandia. *Symb. bot. upsala* 22 (1). (Detailed taxonomic revision of 23 species involving generic splitting and species sinking. The correct name for *Physcia leptalea* is shown to be *P. semipinnata* (Gmelin) Moberg.)
- OSTHAGEN, H. & JAMES, P. W. 1977. *Cladonia fragillissima*, a new lichen species from NW Europe, Norw. *J. Bot.* 24: 123-125. (*Cladonia fragillissima* Osth. & P. James sp. nov. from Scotland and Norway.)
- PENTECOST, A. 1977. A comparison of the lichens in two mountain streams in Gwynedd. *Lichenologist* 9: 107 - 111. (Discussion of ecological factors.)
- POELT, J. & VEZDA, A. 1977. *Bestimmungsschlüssel europäischer Flechten*. *Ergänzungsheft I.* (Bibliotheca Lichenologica 9) Cramer, Vaduz. (Supplement of keys to 53 genera of European lichen species. *Cladonia impexa* becomes *C. portentosa* (Duf.) Zahlbr., *C. tenuis* becomes *C. ciliata* Stirt. In German. DM. 50.00 from J. Cramer, P.O. Box 48, D-3306 Lehre, Federal Republic of Germany.)
- PROCTOR, M. C. F. 1977. The growth curve of the crustose lichen *Buellia canescens* (Dicks.) De Not. *New Phytol.* 79: 659 - 663.
- RENNER, B. 1977. Rapid haematoxylin staining of lichen nuclei. *Lichenologist* 9: 143 - 145. (Includes photographs.)
- RIEDL, H. 1976. Die Flechte *Bacidia chlorococca* (Stenh.) Lettau und ihre Beziehungen zu Formgattungen der Fungi imperfecti. *Phyton, Horn* 17: 337-347. (The "well known algal covers on tree bark in towns are formed by sterile thallus web of *B. chlorococca*.")
- RIEDL, H. 1977. Vorstudien zu einer Revision der Gattung *Arthopyrenia* Mass. *sensu* et amplo III - Zur Nomenklatur und Systematik von *Arthopyrenia punctiformis* auct. *Sydowia* 29: 115 - 138. (Taxonomic revision with lectotypification.)
- RITSCHEL, G.A. 1977. Verbreitung und Soziologie epiphytischer Flechten in Nordwestbayern. (Bibliotheca Lichenologica 7.) Cramer, Vaduz. (Detailed study of distribution and sociology of epiphytic lichens in northern Bavaria. In German.)
- ROGERS, R. W. 1977. The 'city effect' on lichens in the Brisbane area. *Search* 8: 75 - 77. ("Some species and genera show enhanced development in industrial areas, others are less developed or absent." Seven maps.)
- SHEARD, J. W. 1977. Paleogeography, chemistry and taxonomy of the lichenized ascomycetes *Dimelaena* and *Thamnolia*. *Bryologist* 80: 100 - 118. (Distribution in relation to continental drift and plate tectonics.)
- SEAWARD, M. R. D. 1977. Contributions to the lichen flora of south-east Ireland. *III.* *Proc. R. Ir. Acad. B.* 77: 119 - 134. (Summary of work with lichen records.)
- SEAWARD, M. R. D. (Editor) 1977. *Lichen Ecology*. Academic Press, London. (£23.00) Review incorporating much original data. British sociology, etc.)
- SUTCLIFFE, A. J. 1977. Further notes on bones and antlers chewed by deer and other ungulates. *Deer* 4: 73 - 82. (Includes use of lichens in assessing the time that bones have lain undisturbed.)
- VOBIS, G. 1977. Studies on the germination of lichen conidia. *Lichenologist* 9: 131 - 136. (Development of mycelia from conidia. Photographs.)
- WIT, T. DE. 1976. Epiphytic Lichens and Air Pollution in the Netherlands. Cramer, Vaduz. (Bibliotheca Lichenologica 5.) (Detailed study with distribution maps; "a decline almost everywhere in the country.")
- YOSHIMURA, I. & KUROKAWA, T. 1976. Simple identification of lichen aliphatic acids by using thin-layer chromatography and microcrystal tests. *Bull. Kochi Gakuen J. Coll.* 7: 55-60 + pl. 1-3. (In Japanese with English abstract. Includes microcrystal photographs of 10 aliphatic acids.)

Summary of Report of the Conservation Committee for 1977

The major work of the Committee has been described in the last Bulletin where the fascinating range of sites designated as of international and national importance was described. There still remain many good sites that have to be judged for regional status, while annual field work forays still produce new sites which deserve consideration of the highest category. Thus the evaluation of sites and the compilation of records have been the chief activities. Few endangered sites have been brought to our notice.

F. N. HAYNES

Secretary's report for 1977

The year 1977 saw a modest increase in the overall membership total, which was 499 at the end of December, compared with 492 at the end of 1976. It is gratifying to record that the number of members passed the 500 mark earlier in December before falling back. Forty-four new members joined during the year, in comparison with 59 for 1976. We record with deep regret the death of Dr G. C. Bratt who did much important work in Tasmania and had been a member since 1963.

A number of new developments took place within the Society which call for special notice. Firstly I mention the administrative and other responsibilities taken over by the President Dr Gilbert, of which the arrangement and publicity of the lecture meeting this afternoon is just one example. Next I mention the autumn weekend meeting at Kettering which was the first major excursion to be held in conjunction with a local society; this had the mutual benefit of providing us with local knowledge and facilities, whilst the local group had the benefit of our expertise in lichen taxonomy. Indeed, over 50 persons attended the evening lecture given by George Peterken, a relation of our former Treasurer and President, the late Joseph Peterken. I hope that future meetings with local natural history societies might be arranged, as they establish many new contacts. The Louth field meeting also broke new ground, with an ecological survey of Cetraria islandica. Lastly, the Society was represented in the major exhibition: "Change & Decay: The future of our churches" at the Victoria and Albert Museum. These developments indicate a healthy flexibility rather than a rigidity in the conduct of our affairs, which bodes well for the future.

Apart from the field meetings at Louth and Kettering already mentioned, there were others to Buckinghamshire, the Lake District and the Borders, as well as day excursions to the New Forest and Romney Marsh. Mr F. H. Brightman, Mr B. J. Coppins, Dr O. L. Gilbert, Mr F. R. Gomm, Dr D. L. Hawksworth, Mr J. R. Laundon, Dr F. Rose, Dr M. R. D. Seaward and Dr Pauline B. Topham are thanked for arranging and leading these excursions.

Two parts of both The Lichenologist and the Bulletin were published. The editor of The Lichenologist, Mr James, announced his resignation from this onerous office after almost 20 years service, during which time the journal has developed into a leading serial publication. However, I wish to thank not only the editor, but all officers, referees and members who have helped in the running of the Society.

J. R. LAUNDON
Honorary Secretary.

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