

# BRITISH LICHEN SOCIETY

## BULLETIN

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President: O. L. Gilbert, Ph.D.

## Lichens on stone: beauty or blight?

Although the physical effects of lichens on stone, both mechanical and chemical, have received a certain amount of study, the visual effects of these plants have been almost entirely ignored in scientific publications. Yet the visual appearance of lichens on masonry is often more important than the direct physical effects, because the latter are generally small when compared with weathering caused by the elements, especially frost and rain, and air pollution, especially sulphur dioxide. In rural areas lichens colonise many types of building surface, giving them colour and character, and ensuring that they blend with their surroundings. The application of cow manure is frequently recommended for new surfaces as a means of hastening lichen growth, although scientific trials of such a method do not appear to have been carried out. It would be very useful to know the true effectiveness of such applications.

Today, however, there is an increasing awareness of the discolouration caused by lichens to building surfaces. While many people find such colonisation attractive,

The good and bad visual effects of lichens on a limestone sphinx, probably 18th century, in the gardens of Blickling Hall, Norfolk. The conspicuous whitish orbicular thalli of Buellia canescens on the face and neck disfigure the head; in contrast with the smaller less-prominent lichens of Lecanora dispersa f. albescens, Physcia orbicularis (in hair on shoulder) and Verrucaria nigrescens (on forehead) occurring elsewhere which give the statue a pleasing venerable appearance so that it blends with its surroundings.

Photograph: J. R. Laundon 1976.



others, especially architects and those concerned with the conservation of buildings, will view these very same changes as quite undesirable. Architects generally prefer their buildings to retain their original appearance and not to change colour slowly over the years. Whilst limestone buildings in rural areas become covered with attractive orange and whitish lichens, those in towns are colonised by the ugly black thalli of dark urban forms of Candelariella aurella and Lecanora dispersa, high levels of air pollution preventing the entry of more colourful species. The reasons why L. dispersa develops a dark thallus (called forma dissipata) in towns, when in rural areas its thallus is whitish in colour, is a scientific mystery which has still to be solved. The expensive cleaning of town buildings, which was started in earnest in England with St Paul's Cathedral in 1962, chiefly to remove soot but which has removed lichens as well, has brought the problem of lichen colonisation to the forefront. Now that the air in towns is much cleaner with dramatic reductions in smoke concentrations, it is lichens rather than soot which is becoming the most obvious cause of discolouration. Cleaning in rural areas has not yet become fashionable, although some village buildings, such as the splendid but grimy 14th century church at Holbeach in Lincolnshire, would certainly benefit visually from this measure.

The cleaning of town buildings is not usually a subject of debate, except in so far as some restored buildings can look rather antiseptic with a loss of dramatic qualities. The cleaning of memorials and statues, on the other hand, is much more controversial. Lichens on statues give them an attractive mellow appearance, but large orbicular whitish species, such as Buellia canescens on limestone and Ochrolechia parella on sandstone, can cause acute disfigurement. An interesting photograph of Ochrolechia on a sphinx at Fontainebleau in France was published by Degelius in HEDVALL, J. A. (Editor) 1962. Chemie im Dienst der Archäologie Bautechnik Denkmalpflege: plate 170. Richardson's The Vanishing Lichens (1975) includes a picture (plate 9) of lichens disfiguring a modern figure by Henry Moore, but unfortunately the species responsible are not named. The appearance of churchyard memorials is generally enhanced and beautified by lichens, although they often obscure the carvings and inscriptions by growing over them so that they become hidden, and also by being so strikingly colourful in themselves that they attract the eye away from the carved work. The British Lichen Society urges that any essential cleaning of old memorials should be confined to the inscriptions so that the removal of lichens is kept to a minimum.

The most widespread cleaning of memorials is carried out at considerable labour and expense in the war cemeteries scattered over the face of Europe. Many of these are maintained by the Commonwealth War Graves Commission and some are major tourist attractions. Indeed, the couriers for Global Tours, who run package excursions to the Netherlands, even describe a visit to the Arnhem-Oosterbeek War Cemetery as the highlight of a weeks stay in Holland, and the impending release of Sir Richard Attenborough's epic film "A Bridge Too Far" of the Arnhem airborn landings will sustain this interest. The rows of simple uniform white limestone headstones at these lawn cemeteries are now chemically treated with toxic washes (especially Thalox Q), these having now largely replaced physical cleaning which is abrasive as well as more expensive in labour costs, to destroy and prevent lichen growth. Indeed, if the headstones became dirty and discoloured the cemeteries would tend to take on a neglected appearance. Evidently the chemical treatment is more effective against some lichens than it is against others, for a visit this year to the Arnhem-Oosterbeek Cemetery showed Catillaria lenticularis to be quite abundant on the otherwise bare headstones - indeed it was the only lichen present.

The Department of the Environment is now carrying out new research at Princes Risborough Laboratory to find out more about organisms which live on building materials and cause problems of disfigurement. It is hoped that systems of maintenance can be devised to prevent such growths, materials can be selected which do not readily support plant life, and design features eliminated where growth is encouraged. Lichenologists can play a leading part in research of this kind by studying the effects, aesthetic and physical, of lichens on building surfaces. It is a neglected field which will grow rapidly in importance.

Nominations for Officers and Council Members

Nominations for Officers for 1977 and Council Members for 1977-78 should be sent to the Secretary before 25 December 1976 on the form at the end of this Bulletin. No person may be nominated without their consent. Any number of nominations may be entered, but not more than one per position. Mr F. S. Dobson and Dr F. Rose retire from the Council and are not eligible for re-election.

Mapping meeting 7 January 1977

A short meeting of members interested in mapping to discuss problems and policy will be held on Friday 7 January 1977 from 11.00 until 12.00 in the Education Section's laboratory (off Whale Hall, ground floor), British Museum (Natural History), Cromwell Road, London SW7 5BD. Items for discussion should be sent to the Mapping Recorder, Mr Dr M. R. D. Seaward, Postgraduate School of Environmental Science, The University, Bradford, West Yorkshire BD7 1DP, before 10 December 1976 for inclusion on the agenda. Non-members are welcome. This meeting will be followed by meetings of the Society's Conservation Committee at 14.00 and Council at 16.30. See Annual General Meeting, Lecture and Exhibition Meeting 8 January 1977, below.

The Annual General Meeting will be held at 10.00 on Saturday 8 January 1977 in the Conversazione Room (at end of Insect Gallery, ground floor), British Museum (Natural History), Cromwell Road, London SW7 5BD. The nearest Underground (metro) station is South Kensington, and Cromwell Place connects with the museum. It is hoped all members will endeavour to attend.

- Agenda
1. Apologies for absence.
  2. Minutes of the last Annual General Meeting.
  3. Matters arising.
  4. Reports of the Officers.
  5. Subscription rates from 1 January 1978.
  6. Place, dates and leaders of annual general, spring, summer and autumn meetings 1978.
  7. Election of Honorary Member: Dr Ursula K. Duncan, Arbroath.
  8. Election of Auditor.
  9. Election of three members of Council.
  10. Election of Officers.
  11. Any other business.

J. R. LAUNDON  
Honorary Secretary

Following the Annual General Meeting there will be an exhibition meeting from 11.00 until 12.00. Members are kindly requested to make a special effort to contribute exhibits of lichenological interest. Exhibits relating to "lichenologists past and present" would be particularly appreciated, and should enable members to display their old photographs, trophies, etc. Demonstrations should include a title and name of exhibitor.

The lecture meeting will continue in the afternoon in the same building. The meeting is entitled LICHENOLOGISTS PAST AND PRESENT. Non-members are welcome. Please display the enclosed poster, kindly prepared by the President. The full programme is as follows:

- 10.00. Annual General Meeting.
- 11.00. Exhibition Meeting.
- 12.00. Lunch. Members are kindly requested to make their own arrangements. The restaurants Barino (1 Harrington Road), Daquise (20 Thurloe Street) and Piccola Venezia (39 Thurloe Place) are recommended; they are listed in order of ascending price.
- 14.00. Lecture: P.W. LAMBLEY: Some East Anglian lichenologists and their travels.
- 14.25. Lecture: B.J. COPPINS: Some past Scottish eccentrics.
- 14.50. Lecture: D.J. GALLOWAY: Lichenological exploration in the South Pacific.

1770-1970.

- 15.15. Lecture; A.E. WADE: Lichenologists and lichenology in Britain 1920 - 39.  
 15.40. Tea interval (Tea and Biscuits 10p)  
 16.10. Lecture; M.R.D. SEWARD: Clerics and medics in 19th century Lichenology.  
 16.35. Lecture; O.L. GILBERT: "Bumble" Hardy and the Rev. W.S. Johnson two eminent  
 Victorians.
- Day excursion in the New Forest March 1977

A day excursion for lichens and bryophytes in the New Forest, Hampshire, will be held on Saturday 19 March 1977 under the leadership of Dr F. Rose, in conjunction with the Southampton Natural History Society. Meet at Lyndhurst Road Station at 11.00. Train leaves Waterloo, London, at 9.30 for Southampton; change at Southampton for 11.15 Lyndhurst Road. Gum boots and packed lunch are essential. The Rufus Stone area, Stricknage Wood and Stubbs Wood will be visited in cars provided by local members. Stricknage Wood is an ancient beech wood in a deep valley with many species characteristic of *Fagus*, while Stubbs Wood is one of the best ancient oak woods in western Europe - very rich in *Lobaria* and associated crustose species. Please note that collecting will be restricted to the common lichens only, as the New Forest local rarities must not be taken. There are return trains from Lyndhurst Road at 49 minutes past each hour. Please check train times before departure.

F. ROSE

Spring field meeting at Louth, Lincolnshire, 1977

The first half of the spring field meeting based on Louth, Lincolnshire, will be held under the leadership of Dr M. R. D. Seaward from the morning of Saturday 16 April 1977 to the afternoon of Tuesday 19 April, allowing time to travel to the venue of the second half of the meeting. The headquarters will be the King's Head Hotel, Louth (telephone: Louth 2965), but accommodation is also available at the Masons Arms Hotel and the Holme Garth Guest House. Participants should book their own accommodation and assemble at the King's Head at 13.30 on 16 April.

A detailed programme, to include visits to a variety of sites for specialists of corticolous, saxicolous and terricolous lichens in moderately polluted areas, together with an ecological/conservation project based on the important *Cetraria islandica* site at Linwood Warren, has been arranged. Beginners and non-specialists will find much of interest, but there will be little opportunity for collecting a wide range of lichens. Other arrangements include a churchyard tour of both architectural and lichenological distinction, pub lunches, a special dinner (c. £4.50 including wine), and laboratory work and short lectures in the local Adult Education Centre. Why not fill in the form at the back of the Bulletin now?

M. R. D. SEWARD

Spring field meeting in Buckinghamshire 1977

Following the field meeting at Louth, a meeting will be held in Buckinghamshire from the morning of Wednesday 20 April 1977 to the evening of Friday 22 April under the leadership of Dr D. L. Hawksworth, to explore the central and northern parts of the county which have received little attention, apart from unpublished studies by Dr Bowen, in recent years. The meeting will be centred on Aylesbury which can be reached by Metropolitan Line/British Rail from London, after changing at Harrow on the Hill or Amersham. The following two hotels are recommended:

Bell Hotel, Market Square, Aylesbury (telephone: Aylesbury 82141). Bed & breakfast from £6.50 (single) or £11.50 (double), evening meals from £1.85. HEADQUARTERS.  
 King's Head Hotel, Market Square, Aylesbury (telephone: Aylesbury 5158). Bed & breakfast from £6.85 (single) or £11.20 (double), restaurant.

Participants should meet outside the Bell Hotel at 9.30 on 20 April and at this time on each successive morning. Those attending should return the form at the end of the Bulletin to Dr Hawksworth after booking accommodation. It is proposed to study sites at Wotton Underwood, Claydon and Quainton on the 20th, Stowe Park, Whittlewood Forest, Akeley on 21st and Addington, Swanbourne, Stewkley and Wing on 22nd. Maps 152 & 165.

D. L. HAWKSWORTH

## Day excursion to Kent May 1977

1977 was chosen as the summer field

The fourteenth annual day excursion with the Kent Field Club led by Mr F. H. Brightman and Mr J. R. Laundon will be held on Sunday 8 May 1977. All groups of plants will be studied on walls in Romney Marsh. Meet at Ashford Station, Kent, at 11.00. Bring packed lunch. Train leaves Charing Cross, London, at 9.30 arriving at Ashford at 10.38; train times should be checked before departure.

## Summer field meeting in the Lake District 1977

A meeting will be held in the Lake District from Wednesday evening 13 July until Wednesday morning 20 July 1977. The headquarters will be the Brathay Field Study Centre at Ambleside, Cumbria (grid 35/367034) and the meeting will be lead jointly by Dr Pauline Topham and Mr F. R. Gomm. Old Brathay (which houses the centre) comprises an 18th century house with adjacent buildings that include additional bedrooms and two laboratories. Accommodation is of dormitory type but members will be accommodated in separate rooms sleeping two or three persons; there are no single rooms. The laboratory is excellent and, although members are advised to bring their own microscopes, some will be provided. Common room, library and drying facilities are available, within the overall cost of £38 which includes all meals, bed-linen and transport to and from Windermere Station if required. The meeting will assemble in front of Old Brathay at 9.30 on Thursday 14 July, about an hour to midday avocacy

Alternative accommodation may be found in nearby hotels: Skelwith Bridge (telephone: Ambleside 2115) at c. £60 per week, Rothay Manor Hotel (telephone: Ambleside 3605) at c. £80 per week. There is also a youth hostel. Those attending should book their own accommodation as early as possible stating that they are members of the society. Those travelling by rail should inform the centre of their time of arrival at Windermere Station with a request to be met. Members should return the form at the end of this Bulletin to Mr Gomm.

The epiphytic woodland lichens of the Lake District have been studied and it is hoped that this meeting will concentrate on the little known areas of the higher fells and corries. Some days may involve strenuous walking and strong boots, warm clothing and waterproofs are essential.

## Summer field meeting in the Borders 1977

The second part of the summer field meeting will be held in the Scottish Borders, under the leadership of Mr Brian Coppins, from Wednesday evening 20 July until Wednesday morning 27 July 1977. Melrose in Borders will be the centre and the Burts Hotel will be the headquarters. Members should meet outside here at 9.30 on Thursday 21 July. Members must book their own accommodation and return the form at the end of this Bulletin to Mr Coppins. Packed lunches will be required each day. Members unable to travel to Melrose by car should inform Mr Coppins who will make alternative arrangements. Hotels in Melrose are listed below; prices are for 1976 and include VAT and service (if any):

Burts Hotel, Market Square (headquarters). (telephone: Melrose 2285). 14 double, 13 single.

2 family, 13 single. £4.40 bed & breakfast, £6.60 with evening meal. Bon Accord Hotel, The Square. (telephone: 2645). 5 double, 2 family, 2 single. £11.00 bed & breakfast, £5.50 with evening meal.

George & Abbotsford Hotel (telephone: 2308). 13 double, 2 family, 6 single. £11.00 bed & breakfast, £5.00 with evening meal.

King's Arms Hotel, High Street. (telephone: 2213). 6 double, 2 single. £3.40 bed & breakfast; no evening meal.

Waverley Castle Hotel (telephone: 2244). 94 double, 6 single. £4.75 bed & breakfast, £6.50 with evening meal.

Mr Coppins, Royal Botanic Garden, Edinburgh EH3 5LR, will supply members with a more detailed list of accommodation if required. Information may also be obtained from the Tourist Information Centre, Priorswood Gardens, Melrose, Borders (telephone: 2555).

B. J. COPPINS

## Lichen Programme at Tampa Congress 1977

The International Association for Lichenology will be an active participant in the 1977 International Mycological Congress at Tampa, Florida, U.S.A. Dr I. M. Brodo (Ottawa) is the association's representative and programme chairman to the congress. There will be four lichenological symposia as well as pre-congress field trips. Details of the congress are obtainable from Dr M. S. Fuller, Department of Botany, University of Georgia, Athens, Georgia 30602, U.S.A. The proposed schedule is as follows:

- 19 - 21 August. American Bryological & Lichenological Society foray to north Michigan.  
22 - 23 August. ABLS meetings - Michigan State. Symposium on Austral Islands.  
24 - 28 August. IAL excursion. Great Smoky Mountains to northern Florida by bus.  
29 August - 3 September. International Mycological Congress.

Tentative cost estimates are \$150 for the Michigan State portion, including ABLS foray and \$410 for the IAL excursion (Michigan to Florida) and International Mycological Congress. The dates of the excursions and costs given are provisional to aid in the preparation of a budget.

Further details on the event programme will be sent to Mr T. H. J. NASH, Executive Secretary, IAL project office, 100 Newgate Street, London EC1A 7AA, England. Applications for financial assistance for travel to the International Mycological Congress should be sent to the Executive Secretary, IAL project office, 100 Newgate Street, London EC1A 7AA, England.

## Funds for Tampa Congress 1977 etc.

The Royal Society, 6 Carlton House Terrace, London SW1Y 5AG, are able to offer a generous number of grants towards the travelling expenses of those attending the Second International Mycological Congress at Tampa, Florida, U.S.A. in 1977. The Society for General Microbiology and the British Mycological Society have also contributed towards this grant. Members of the British Lichen Society who are resident in the United Kingdom and who wish to obtain assistance from the fund should write to Miss B. M. deVere at the Royal Society (telephone: 01-839 5561 ext. 222) as soon as possible, requesting an application form. The closing date for applications is 1 February 1977. The awards will be made by a panel set up by the Botany Subcommittee of the British National Committee for Biology, and it is hoped that assistance might be given to about 10 - 20 of the Lichen Society's members. The outcome of the applications should be known by the middle of March 1977. It is regretted that grants will not completely cover travelling expenses; the cheapest available air fare is likely to exceed £250.

There is also a fund to assist young botanists (up to 35 years old) to attend other international botanical meetings and to participate in excursions related to such meetings. Applications for the relevant form should be made to the Executive Secretary of the Royal Society and should quote the reference "International Botanical Congress, (Edinburgh) Fund". The closing date for receipt of applications are as follows:

1977, 1978, 1979: 15 January: for travel between February and June.  
15 June: for travel between July and January.

## Lichen courses 1977

DEVON. Slapton Ley Field Centre, Slapton, Kingsbridge, TQ7 2QP. 27 July - 3 August 1977.

Lichens. D. L. Hawksworth.

DYFED. Orielton Field Centre, Pembroke. 3 - 10 August 1977. Lichens. P. W. James

TAYSIDE. Kindrogan Field Centre, Enochdhu, Blairgowrie. 6 - 13 July 1977. The

identification and ecology of lichens. F. H. Brightman & Pauline B. Topham.

The wardens at the field centres will supply further details and information regarding any bursaries and grants which may be available.

## Distribution Maps Scheme

The list of members who wish to be associated with particular species for the forthcoming Atlas of British Lichens is on pp. 7 - 8. These members will be responsible essentially for the compilation of older records and the accompanying rubric for the published maps. Post-1950 records will be supplied from the data bank at the University of Bradford. Enquiries relating to individual species should be directed to the member concerned, and general enquiries to the Mapping Recorder, Dr M. R. D. Seaward, School of Environmental Science, The University, Bradford, West Yorkshire, BD7 1DP.

## BRITISH LICHEN SOCIETY MAPPING SCHEME

## INDIVIDUAL MAPPERS

<i>Alectoria</i> spp.	D.L.Haworth	<i>Fulgensia</i> spp.	O.L.Gilbert
<i>Anaptychia</i> spp.	F.Rose	<i>Graphina anguina</i>	B.J.Coppins
<i>Arthonia aspersella</i>	B.J.Coppins	<i>Graphis elegans</i>	F.Rose
<i>Alcinereopruinosa</i>	F.Rose	<i>Gyalecta ulmi</i>	B.J.Coppins
<i>A.impolita</i>	F.Rose	<i>Gyalectina carneolutea</i>	D.L.Haworth
<i>A.lurida</i>	B.J.Coppins	<i>Haematomma elatinum</i>	F.Rose
<i>A.stellaris</i>	B.J.Coppins	<i>Hypogymnia intestiniformis</i>	Miss P.B.Topham
<i>A.tumidula</i> (= <i>A.cinnabarinum</i> )	B.J.Coppins	<i>H.physodes</i>	D.H.Brown
<i>Arthopyrenia</i> spp. (marine)	A.Fletcher	<i>H.tubulosa</i>	D.H.Brown
<i>A.cinereopruinosa</i>	B.J.Coppins	<i>Ionaspis</i> spp.	P.M.Earland-Bennett
<i>Anthothelium ilicinum</i>	B.J.Coppins & P.W.James	<i>Lecanactis premnea</i>	F.Rose
<i>Bacidia</i> spp.	B.J.Coppins	<i>Lecania fuscella</i>	B.J.Coppins
<i>Baeomyces</i> spp.	C.J.B.Hitch	<i>Lecanora chlorona</i>	B.J.Coppins
<i>Biatorella</i> spp.	P.M.Earland-Bennett	<i>L.conizaeoides</i>	J.R.Laundon
<i>Buellia canescens</i>	Miss P.B.Topham	<i>L.epanora</i>	P.M.Earland-Bennett
<i>B.epigaea</i>	P.W.Lambley	<i>L.epibryon</i>	O.L.Gilbert
<i>Calicium</i> spp.	C.J.B.Hitch & B.J.Coppins	<i>L.intricata</i> (and var. <i>soralifera</i> )	P.M.Earland-Bennett
<i>Caloplaca</i> spp.	A.Wade & A.Fletcher	<i>L.intumescens</i>	B.J.Coppins
<i>C.stillicidiorum</i>	O.L.Gilbert	<i>L.jamesii</i>	F.Rose
<i>C.teicholyta</i>	P.W.Lambley	<i>L.muralis</i>	M.R.D.Seaward
<i>Catillaria atropurpurea</i>	F.Rose	<i>L.polytropa</i> (and vars.)	P.M.Earland-Bennett
<i>C.bouteillei</i>	O.L.Gilbert	<i>L.straminea</i>	O.L.Gilbert
<i>C.lightfootii</i> (fertile)	B.J.Coppins	<i>L.subaurea</i>	P.M.Earland-Bennett
<i>C.sphaeroides</i>	F.Rose	<i>L.verrucosa</i>	O.L.Gilbert
<i>Catinaria grossa</i>	B.J.Coppins	<i>Lecidea</i> spp. (excl.those listed below)	P.W.James
<i>C.subsphaeroides</i>	B.J.Coppins	<i>L.cinnabarina</i>	F.Rose
<i>Cavernularia hultenii</i>	F.Rose	<i>L.decipiens</i>	P.W.Lambley
<i>Cetraria</i> spp.	M.R.D.Seaward	<i>L.pulveracea</i>	J.R.Laundon
<i>Cetrelia cetrarioides</i>	F.Rose	<i>L.templetonii</i>	O.L.Gilbert
<i>Chaenotheca</i> spp.	C.J.B.Hitch & B.J.Coppins	<i>Lepraria candelaris</i>	J.R.Laundon
<i>Cladina</i> spp.	O.L.Gilbert	<i>L.chlarona</i>	J.R.Laundon
<i>Cladonia amaurocraea</i>	O.L.Gilbert	<i>L.incana</i>	J.R.Laundon
<i>C.desticta</i>	O.L.Gilbert	<i>L.neglecta</i>	J.R.Laundon
<i>C.furcata</i> var. <i>subrangiformis</i>	F.H.Brightman	<i>L.zonata</i>	P.M.Earland-Bennett
<i>C.impexa</i>	O.L.Gilbert	<i>Leproplaca</i> spp.	J.R.Laundon
<i>C.luteoalba</i>	M.R.D.Seaward	<i>Lichina</i> spp.	A.Fletcher
<i>C.strepsilis</i>	O.L.Gilbert	<i>Lobaria</i> spp.	F.Rose
<i>C.uncialis</i> agg.	O.L.Gilbert	<i>Lopadium fuscoluteum</i>	O.L.Gilbert
<i>Collema furfuraceum</i>	B.J.Coppins	<i>Mycoporellum</i> spp.	B.J.Coppins
<i>C.subfurvum</i>	B.J.Coppins	<i>Nephroma laevigatum</i>	F.Rose
<i>Coniocybe</i> spp.	C.J.B.Hitch & B.J.Coppins	<i>N.parile</i>	F.Rose
<i>Cornicularia</i> spp.	M.R.D.Seaward	<i>Normandina pulchella</i>	F.Rose
<i>Cyphellium</i> spp.	R.H.Bailey	<i>Ochrolechia frigida</i>	O.L.Gilbert
<i>Dermatocarpon aquaticum</i> (= <i>D.fluviatile</i> )	O.L.Gilbert	<i>O.inversa</i>	F.Rose
<i>D.hepaticum</i>	P.W.Lambley	<i>O.tartarea</i>	M.R.D.Seaward
<i>Dimerella diluta</i>	P.W.Lambley	<i>Opegrapha lyncea</i>	F.Rose
<i>D.lutea</i>	F.Rose	<i>O.prosodea</i>	F.Rose
<i>Diploschistes scruposus</i>	R.H.Bailey	<i>Pachyphiale cornnea</i>	F.Rose
<i>Enterographa crassa</i>	F.Rose		
<i>Ephebe lanata</i>	O.L.Gilbert		

<i>Pannaria pityrea</i>	F.Rose	<i>Pseudevernia furfuracea</i>	D.L.Hawksworth
<i>P.rubiginosa</i>	F.Rose	<i>Pseudocyphellaria spp.</i>	F.Rose
<i>P.sampaiana</i>	F.Rose	<i>Ramalina spp.</i>	P.W.James, B.J.Coppins & M.R.D.Seaward
<i>Parmelia acetabulum</i>	F.H.Brightman & F.Rose	<i>Ramonia chrysophaea</i>	P.W.Lambley
<i>P.alpicola</i>	Miss P.B.Topham	<i>Rinodina spp. (excl. R.isidioides</i>	J.W.Sheard
<i>P.arnoldii</i>	F.Rose	<i>&amp; R.roboris)</i>	F.Rose
<i>P.caperata</i>	D.H.Brown & F.Rose	<i>R.isidioides</i>	F.Rose
<i>P.crinita</i>	F.Rose	<i>R.roboris</i>	F.Rose
<i>P.dissecta</i>	F.Rose	<i>Roccella spp.</i>	M.C.F.Proctor
<i>P.elegantula</i>	F.Rose	<i>Schismatomma decolorans</i>	F.Rose
<i>P.endochlora</i>	F.Rose	<i>S.niveum</i>	B.J.Coppins
<i>P.exasperatula</i>	F.Rose	<i>S.virginium</i>	P.W.James & D.L.Hawksworth
<i>P.horrescens</i>	F.Rose	<i>Solenopsora candicans</i>	P.W.Lambley
<i>P.incurva</i>	M.R.D.Seaward	<i>Solorina spp.</i>	O.L.Gilbert
<i>P.laciniatula</i>	F.Rose	<i>Sphaerophorus fragilis</i>	Miss P.B.Topham
<i>P.laevigata</i>	F.Rose	<i>S.glabesus</i>	F.Rose
<i>P.mougeotii</i>	Miss P.B.Topham	<i>S.melanocarpus</i>	F.Rose
<i>P.perlata</i>	F.Rose	<i>Squamarina spp.</i>	P.W.Lambley
<i>P.quercina (= P.carporrhizans)</i>	D.L.Hawksworth	<i>Stenocybe spp.</i>	C.J.B.Hitch
<i>P.reddenda</i>	F.Rose	<i>Stereocaulon nanodes</i>	F.H.Brightman & M.R.D.Seaward
<i>P.reticulata</i>	F.Rose	<i>S.pileatum</i>	F.H.Brightman & M.R.D.Seaward
<i>P.revoluta</i>	F.Rose	<i>Sticta canariensis</i>	P.W.James
<i>P.sinuosa</i>	F.Rose	<i>S.dufourii</i>	P.W.James
<i>P.soredians</i>	F.Rose	<i>S.fuliginosa</i>	F.Rose
<i>P.stygia</i>	Miss P.B.Topham	<i>S.limbata</i>	F.Rose
<i>P.taylorensis</i>	F.Rose	<i>S.sylvatica</i>	F.Rose
<i>Parmeliella spp. (excl. P.plumbea)</i>	P.W.James	<i>Teloschistes spp.</i>	M.C.F.Proctor
<i>P.plumbea</i>	F.Rose	<i>Thamnolia vermicularis</i>	D.A.Walkinshaw
<i>Parmeliopsis ambigua</i>	F.Rose, B.J.Coppins & D.L.Hawksworth	<i>Thelopsis rubella</i>	F.Rose
<i>P.hyperopta</i>	Miss U.K.Duncan	<i>Thelotrema lepadinum</i>	R.H.Bailey
<i>Peltigera spp.</i>	R.H.Bailey	<i>Thrombium epigaeum</i>	O.L.Gilbert
<i>Pertusaria albescens (incl. var.corallina)</i>	R.H.Bailey	<i>Tomasellia spp.</i>	B.J.Coppins
<i>P.emara</i>	R.H.Bailey	<i>Toninia coeruleonigricans</i>	P.W.Lambley
<i>P.coccodes</i>	F.Rose	<i>Umbilicaria spp.</i>	Miss P.B.Topham
<i>P.flavicans</i>	J.R.Laundon	<i>Usnea spp.</i>	P.W.James
<i>P.hemisphaerica</i>	F.Rose	<i>Verrucaria amphibia</i>	A.Fletcher
<i>P.hymenea</i>	R.H.Bailey	<i>A.degelii</i>	A.Fletcher
<i>P.multipuncta</i>	R.H.Bailey	<i>V.ditmarsica</i>	A.Fletcher
<i>P.velata</i>	F.Rose	<i>V.erichsenii</i>	A.Fletcher
<i>Petractis clausa</i>	P.W.Lambley	<i>V.internigrescens</i>	A.Fletcher
<i>Phaeographis dendritica</i>	B.J.Coppins	<i>V.maura</i>	A.Fletcher
<i>Phlyctis agelaea</i>	B.J.Coppins	<i>V.microspora</i>	A.Fletcher
<i>Physcia spp.</i>	A.Wade	<i>V.mucosa</i>	A.Fletcher
<i>Placopsis gelida</i>	Miss P.B.Topham	<i>V.striatula</i>	A.Fletcher
<i>Placynthium nigrum</i>	P.W.Lambley	<i>Xanthoria spp.</i>	F.Rose
<i>Polyblastia allobata</i>	B.J.Coppins		
<i>Polychidium muscicola</i>	O.L.Gilbert	<i>Addenda:</i>	
<i>Porina coralloidea</i>	B.J.Coppins	<i>Buellia wahlenbergii</i>	D.L.Gilbert
<i>Pleptalea</i>	B.J.Coppins	<i>Parmelia pastillifera</i>	D.L.Hawksworth
<i>P.olivacea</i>	B.J.Coppins	<i>Psoroma hypnorum</i>	P.W.Lambley

Letters to the editor

Old trees in medieval England

Editorial note

Sir, in Bulletin 37: 69 (1975) there appeared a paragraph on the history of old trees, in which a paper of mine in The British Oak was quoted. I remarked at the time that the extract given from what I had said in the paper was very one-sided, but I did not then consider myself sufficiently misrepresented to warrant taking the matter up with you. Since then you have published a letter from Dr Rose attacking the position attributed to me, and I ought therefore to make it clear what I actually said.

My quoted remarks on the rarity of big or old oaks in medieval times were, as my paper makes clear, limited to woodland trees. Had your reviewer read on, he would have found a section on oak in hedges and wood-pasture situations (e.g. parks and Royal Forests). I there point out that old pollards and big timber trees have occurred in such sites from the Middle Ages onwards. My views in the paper as a whole are therefore almost identical to those of Dr Rose in his letter.

I have since collected some further information on this point. There can be little doubt that in the Middle Ages very large timber oaks were somewhat rarer than they are now. There was a special trade - nation-wide, not limited to places like Ely - in outsize trees for special purposes, which were very expensive and were transported at great cost occasionally for as much as 250 miles. Some sources of such trees were Royal Forests (e.g. Sherwood, Gillingham (Dorset), Inglewood (Cumberland)) but by no means all Forests produced them. A conservation order in the Close Rolls for 1257 suggests that the supply of such trees in Forests was already running low. From what I have seen of the timbers these outsize oaks were not particularly long-lived and were not necessarily good lichen habitats. I strongly suspect that the kind of continuity of bark habitat which lichens require would, then as now, have been provided largely by pollards in parks, Forests, and possibly in those days in hedges. The most favoured sites would probably have been on very infertile soils on which the trees would be slow-growing, long-lived, but not necessarily very large, and on which they would be less subject to eutrophication by dust.

Yours faithfully,

OLIVER RACKHAM

Botany School, Downing Street, Cambridge CB2 3EA

Back numbers of The Lichenologist

Back numbers of The Lichenologist should be obtained from Academic Press Inc., Sales Department, 224 Oval Road, London NW1 7DX (telephone: 01-267 4466). Members should state that they belong to the Society and are therefore entitled to a discount of 40 per cent. Back numbers are no longer available from the Society.

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5(5/6)	1973 Oct	£7.50	£4.50	£8.70	£5.22
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### British Lichen Society

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Mr K. Wolder, Skovmindevej 11, DK 2840 HOLTE, Denmark.

## Subscriptions

All membership subscriptions should be sent to the Assistant Treasurer, Mr P. W. Lambley, British Lichen Society, c/o Castle Museum, Norwich NR1 3JU, United Kingdom. The 1976 and 1977 subscriptions are £5 per year for ordinary members, £1 for junior associate members and £0.25 for family members. Reading Circle subscriptions are £1 per year. The ordinary subscription in dollars is \$12.50 at present. Please note that acknowledgments are not sent unless requested because of postage costs.

## International Association for Lichenology introduces subscriptions

The International Lichenological Newsletter, published twice yearly, is now available until 1981 for a single payment of \$5.00. Because of rising publication costs lichenologists are urged to contribute an additional \$5.00. Dues are payable immediately to Professor Dr H. Hertel, Botanische Staatssammlung, Menzinger Str. 67, D-8000 München 19, West Germany.

£1.00      T. H. NASH  
\$5.00      Secretary, IAL

## Lichenologist published

Part 1 of volume 8 of The Lichenologist was published on 16 June 1976. Any paid-up ordinary member for 1976 who did not receive a copy should inform the Assistant Treasurer, Mr P. W. Lambley, British Lichen Society, c/o Castle Museum, Norwich, Norfolk NR1 3JU.

## Death of Dr E. Frey

Dr Eduard Frey of Bern, Switzerland, died on 23 April 1974. An obituary appears in Mitt. naturf. Ges. Bern II, 32: 141 - 143 (1975). He was born on 3 November 1888. His chief lichen work involved taxonomic studies of the genus Umbilicaria, and important ecological and sociological research. In 1922 and 1923 he had the foresight to take a series of photographs, notes and drawings of lichen communities which he then studied again and rephotographed at various intervals in later life, to show the changes (or in many cases lack of change) which occurred over a long time span, 34 years in one instance. The results and photographs appear in Ergebn. wiss. Unters. schweiz. Natnparks II, 6: 237 - 319 + 80 plates (1959), certainly Frey's most remarkable publication. His herbarium is at the Botanisches Institut der Universität Altenbergrain 21, CH-3013 Bern, Switzerland.

## French and Nordic Lichen Societies formed

The British Lichen Society is no longer the only national society entirely devoted to the study of lichens. In August 1975 the Nordisk lichenologisk forening (Nordic Lichen Society) was formerly established with a committee of P. M. Jørgensen (Norway), R. Moberg (Sweden), U. Søchting (Denmark) and O. Vitikainen (Finland). The main activity of the society will be field meetings. In 1976 the Association Française de Lichenologie was formed for both professionals and amateurs; the Secretary is R. Lallement, Laboratoire de Cryptogamie, Université Pierre et Marie Curie, 9 quai Saint-Bernard, 75005 Paris, France. The British Lichen Society welcomes the formation of these new associations and wishes them both every success.

## Surviving with lichens

"Lichens. These are coral-like or disc-like plants which have no flowers, leaves, stems or roots. They are widespread and plentiful in the north. They don't have much food value but you can live for some time on lichens alone. Mix them with other foods in stews and soups to stretch out your rations. Some lichens contain a bitter substance which can make you sick if you eat them raw. Cook or at least soak all lichens before eating them. Lichens are most edible when soaked overnight, dried until brittle, crushed into a powder and then boiled for 1 hour. Figure of Reindeer lichen and rocktripe lichen." (pp. 50 - 51)

ANON. 1942 (?). Army Air Forces Survival. Air forces manual no. 21w. Prepared by Arctic, Desert and Tropic Information Center. Published by Training Aids Division Office of Assistant Chief of Air Staff, Training Headquarters Army Air Forces, Park Avenue, New York. (77 pages.)

D. H. S. RICHARDSON

## Literature on lichens - 27 (Shortage of space prevents further entries).

BROWN, D. H., HAWKSWORTH, D. L. & BAILEY, R. H. (Editors) 1976. Lichenology: Progress and Problems. Academic Press, London. (Wide-ranging review, incorporating much original data, reflecting the current style of lichen research. £19.00; £14.25 to members.)

HAWKSWORTH, D. L., REID, D. G. & SEWARD, M. R. D. 1976. A Preliminary Bibliography of British Lichens. Nature Conservancy Council, London. (Duplicated pre-publication document listing over 2000 references; vice-county cross-reference.)

BULLETIN 39. Issued by the British Lichen Society, c/o Department of Botany, British Museum (Natural History), Cromwell Road, London SW7 5BD (telephone: 01-589 6323 ext. 552). Edited by J. R. Laundon, who is the author of all unsigned items. The views of the contributors are not necessarily those held by the British Lichen Society. Duplicated by F. H. Brown Ltd., Lithographic Printing Division, Helena Street Works, Burnley, Lancashire, BB11 1RP. December 1976.

Expenditure & Income Account for Year to 31 December 1975

1974 £ Expenditure 1975 £ Income 1975  
£ Academic Press £ 1480 £ 1974 £ 1975

Academic Press		1433	1851	Members' Subscriptions	1860
The Lichenologist					
Subscriptions paid:-					
22 Revue Bryol et Lich.	26	7	Reading Circle	14	
22 American Bryologist	22	46	Lichenologist sales	9	
50-51 Council for Nature	7	9	Duplicated Keys	2	
2 Biological Council	3	7	Check Lists	9	
10 Inter. Mycol. Association	1	1	B.M.S. publications	3	
121 The Bulletin (net)	166	13	Dr. U.K. Duncan's book	2	
39 Stationery etc.	45	52	Donations	8	
48 Postage	43	1	Interest received:-		
Devon Booklets	10	88	Bank	91	
55 Loan-Mapping Scheme	66	4	Central Invest.	56	
Excess of Income over			City of Cambridge	20	167
expenditure	323				
Miscellaneous	-	-	Miscellaneous		4

World Wildlife Fund

Payments authorised:		Grants received:	
1973	250	1973	500
1974	250	1974	500
1975	155		
Balance in hand	345		
	<hr/>		<hr/>
	1000		1000

BALANCE SHEET AT 31 DECEMBER 1975

<u>Liabilities</u>	£	<u>Assets</u>	£
Subscriptions paid in advance	49	Investments:	
Sundry Creditors:		Central Investments	700
Academic Press	16	City of Cambridge -	
Dr U.K.Duncan	12	Loan 1975/6 11½%	1500
World Wildlife Fund	345	Cash:	
Bank Overdraft	1226	National Giro	19
General Fund at 31/12/74	722	Bank-Deposit Acc.	474
Add excess of income over expenditure	323		
	1045		
			2693
			2693

S. N. Tallowin  
Hon. Treasurer  
18 August 1976

Audited and in my opinion a correct record of the accounts of the British Lichen Society.

R. T. Ashby, Hon. Auditor  
25 August 1976