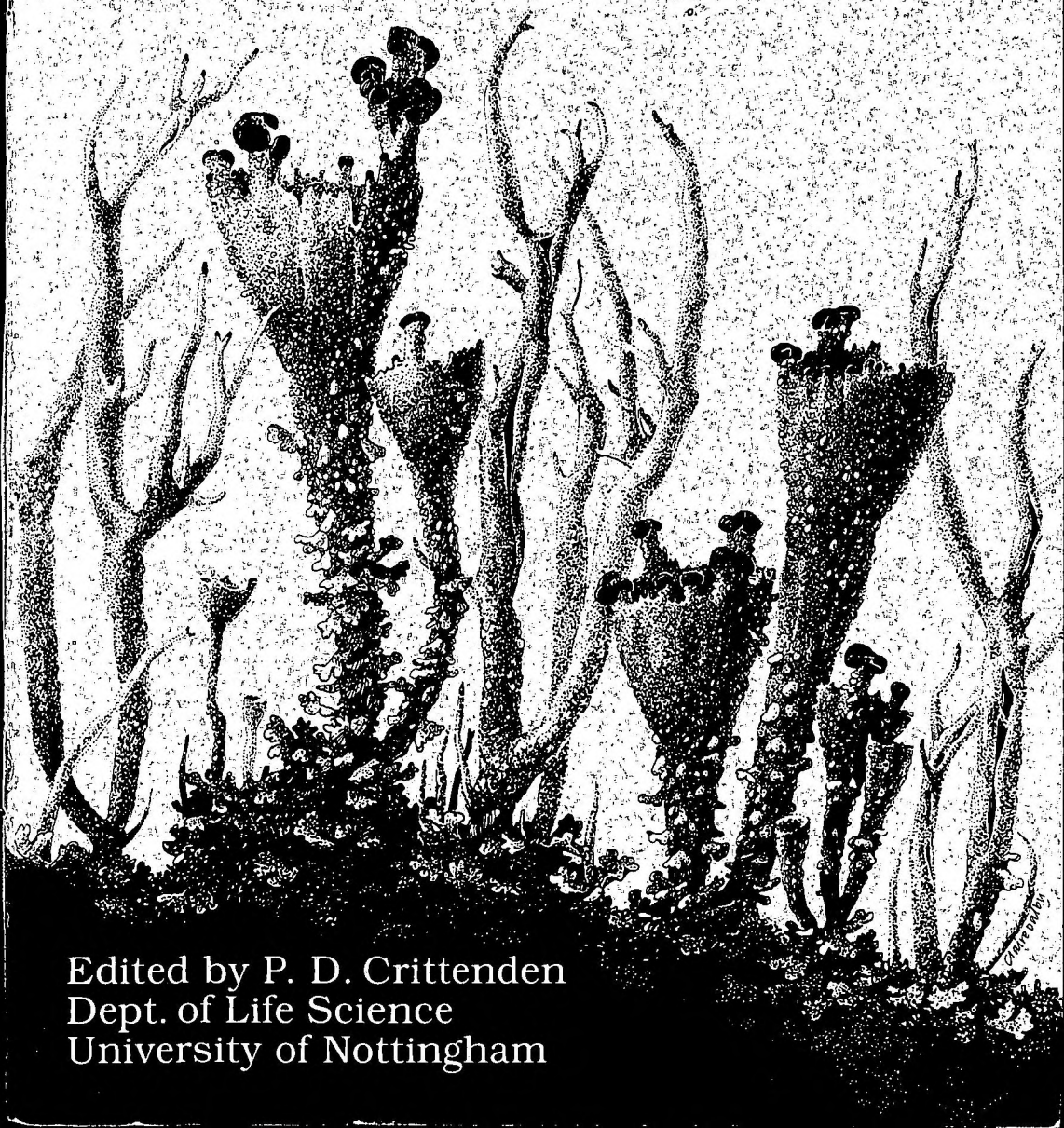
BRITISH LICHEN SOCIETY BULLETIN

No. 77 Winter 1995



Edited by P. D. Crittenden
Dept. of Life Science
University of Nottingham

FORTHCOMING BLS MEETINGS

ABERYSTWYTH - Lichens on disused mines
Leaders: Steve Chambers and Alan Fryday — 29 - 31 March 1996

KILLARNEY
Leader: Howard Fox — 27 April - 4 May 1996

DEVON (Slapton Ley) - *Parmelia* and *Ramalina* Workshop
Leader: Peter James — 26 July - 2 August 1996

1996 MEMBERSHIP AND SUBSCRIPTION RATES
Annual rates except where indicated
(Dollar rates are two times the Sterling Rate except where indicated)

ORDINARY MEMBERSHIP for individuals (i.e. not available to institutions) who have signed the Application Form and paid the subscription, being entitled to all publications and facilities of the Society £25.00
5 year membership (1995-1999) £112.50
(1995 members may pay balance of £87.50)

LIFE MEMBERSHIP for persons over 60 years of age and having the same entitlement as Ordinary Members (10 times annual rate) £250.00

Each of the categories of **ASSOCIATE** membership enjoys full entitlement to all the facilities of the Society as well as the *Bulletin* **but without *The Lichenologist*.**

ASSOCIATE MEMBERSHIP £18.50

SENIOR ASSOCIATE MEMBERSHIP for persons over 60 years of age £7.50

JUNIOR ASSOCIATE MEMBERSHIP for persons under 18 years of age, or full-time students £5.00

FAMILY MEMBERSHIP for persons of the same household as a member, having entitlement to the facilities of the Society but receiving no publications and having no voting rights £5.00

***BULLETIN* only** subscriptions (from Assistant Treasurer)
for institutions only £15.00

***LICHENOLOGIST* only** subscriptions (from Academic Press):
institutions rate £200.00

Renewal membership subscriptions by **Sterling cheque**, payable to The British Lichen Society, **drawn on a UK Bank or on a Bank with a UK Branch or Agent** should be sent to Mr J M Gray, Assistant Treasurer, British Lichen Society, Myrtle House, Church Lane, Kingston St. Mary, Taunton, Somerset, TA2 8HR, UK (Tel. and fax 01823 451636).

US Dollar renewal membership Subscriptions should be sent to Dr J W Sheard, Department of Biology, 112 Science Place, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 5E2, Canada.

Overseas members may find it most convenient to pay subscriptions by Post Office GIRO (Girobank, Lyndon House, 62 Hagley Road, Birmingham, B16 8PE, UK): the British Lichen Society Giro Number is 24 161 4007.

Applications for membership should be made to The Secretary, The British Lichen Society, c/o The Natural History Museum, Cromwell Road, London SW7 5BD.

SUBMISSION DEADLINE - 22 March 1996

Cover artwork by Claire Dalby

THE FORMATION OF THE BRITISH LICHEN SOCIETY

The formation of the British Lichen Society in 1958 was one of the most important developments in the history of lichenology. Unfortunately little has been published on the way in which the society was formed or of the events at the inaugural meeting. Some of what has appeared has been erroneous (Brightman & Seaward 1989: 380; Moxham 1983: 291), in contrast to one accurate account (Swinscow 1968). Therefore an attempt is made here to provide a detailed description of the formation, chiefly by reference to original documents.

Lichenology in the Fifties

Walter Watson of Taunton was the dominant figure in British lichenology during the thirties and forties of the twentieth century. Following the publication of his Census Catalogue (Watson 1953), giving the vice-county distribution of every species - a method of recording which has never been continued, he retired from active lichenology and died in 1960. Watson's retirement left a void and gave rise to a period aptly called "the lean years" (Gilbert in Jones 1982). During the fifties there were only a few botanists with much knowledge of British lichens, and very few publications for increasing this knowledge. The low level of lichenological activity was demonstrated by the fact that the lichen herbarium at the British Museum (Natural History) (now called The Natural History Museum), London, was consulted only once by one visitor, Fred A. Sowter, during the whole of 1953, compared with an average of about one visitor per working day during the 1980s.

Fortunately active measures were taken to revive British lichenology. Fred Sowter of Leicester began a 'Lichen Study Group' which circulated parcels of named specimens. Eilif Dahl came over from Norway to work for a while at Cambridge University from where he published a set of duplicated keys to British macrolichens (Dahl 1952), which proved a considerable aid to identification; before then the only guides in print were the difficult small handbook (Smith 1921) and the equally difficult large monograph (Smith 1926) which dealt mostly with microlichens. In 1955 the trustees of the British Museum appointed Peter W. James to the elite scientific officer class to work on lichens at the British Museum (Natural History) where he established a lichen section and adopted a leading role in the promotion of lichenology. Charles Sinker of the Field Studies Council helped arrange the first course on lichens at a field centre in 1955; it was at Malham Tarn and was run by Arthur E. Wade of the National Museum of Wales at Cardiff. This rise in lichenological activity led to the consideration of a society

devoted to lichen studies. Arthur Wade did not consider that there was sufficient support for an independent society and so informal discussions began with both the British Bryological Society and the British Mycological Society with the aim of establishing a lichen section within either one or the other. These efforts, however, were suddenly eclipsed by a most unexpected development.

Swinscow's Proposal

In November 1957 T. Douglas V. Swinscow sent a letter to everyone in Britain with any interest in lichens, however slight, about 60 persons all told. In the letter, sent with minimal consultation, he proposed the formation of a British Lichen Society. What was surprising was that Douglas Swinscow, a medical editor by profession, had taken no previous active interest in lichens, but was keen on ferns and bryophytes and published on both (e.g. Swinscow 1953; 1959). Equally astonishing he had thought of forming the society only three weeks beforehand whilst walking through Borrowdale in Cumbria on 10 October 1957 (Swinscow 1968). Remarkably only one lichenologist, namely Fred Sowter, showed any resentment at this impulsive initiative. The duplicated letter to botanists was undated and sent from Douglas's home in Knebworth, Hertfordshire; it read as follows:

'Dear [name entered in ink]

In response to inquiries I have recently made, a number of lichenologists have told me that they are keen to start a British Lichen Society. They include A. E. Wade, F. Sowter, D. Pigott, P. James, and Miss U. K. Duncan. I am writing now to ask if you think you would be willing to join such a society.

The exact form the society should take has not yet been decided. It might, for instance, be a group within one of the established botanical societies, or be affiliated to one of them, or be independent. Its purpose would be to advance the study of lichens by holding meetings, circulating specimens, and publishing records. A number of botanists believe there is a need for such work to be carried out, and that the time is ripe to start it.

No doubt at first the society would be a small one - and it should be possible to keep the subscription reasonably low. Field meetings would presumably be held, but whether or not in conjunction with the field meetings of other societies, such as the B.B.S., is for members to decide. There are arguments for and against having joint meetings.

The study of lichens is more difficult than it need be for two reasons: first, the literature is rather obscure and inaccessible; secondly, the slow growth of these plants and their relative scarcity in some parts of Great Britain, make inadvisable an organized exchange of specimens such as some other botanical societies run. A lichen society would not only help to overcome these difficulties but seems the best way of doing so. In addition to holding meetings and sending out publications (if at first of a modest nature) so that knowledge of lichens can be advanced, a society might hold a central collection of lichens from which members could borrow specimens, and it might extend the system by which at present a parcel of lichens circulates among the members of a study group.

Such, very briefly, is an outline of what a society might do, but all suggestions are welcome. I hope you may feel inclined to join such a society, and would be grateful to have your views.
Yours sincerely,
[signed] Douglas Swinscow.'

Almost everyone sent favourable replies to this letter and in December 1957 Douglas Swinscow sent out a second undated duplicated letter from his home at Knebworth reading as follows:

'Dear [name entered in ink]
About fifty people have now agreed to support a lichen society. This seems to be a sufficient number with which to start one. Opinion is overwhelmingly in favour of its being an independent society and not affiliated in some way to an established society, though many people have said they would prefer field meetings in conjunction with another society such as the B.B.S. or the B.M.S.

In order to draw up its constitution a meeting will be held at the British Museum (Natural History) - i.e., the Natural History Museum - Cromwell Road, London, S.W.7, on Saturday, February 1, 1958, at 2.15 p.m. By kind permission of the Museum authorities it will be in the board-room.

You are cordially invited to attend this meeting. If you will be too far away to do so, and would like the meeting to discuss any views other than those you have already given to me, would you please send them to me before then?
Yours sincerely,
[signed] Douglas Swinscow.'

The Inaugural Meeting

The inaugural meeting took place as arranged in the formal atmosphere of the impressive boardroom at the British Museum (Natural History), London, on the fine but cold afternoon of Saturday 1 February 1958 at 14.15. Twenty-four botanists and Douglas Swinscow, most wearing smart suits, sat around the long table; at each place was a duplicated set of proposed rules previously prepared by Douglas. Unfortunately a list of persons present was not compiled, and has only recently been attempted, with incomplete results (Table 1).

TABLE 1. Known attenders of the inaugural meeting of the British Lichen Society on 1 February 1958

Mr David J. Bellamy	* Mr Alan H. Norkett
Mr Frank H. Brightman	Mr Joseph H. G. Peterken
Mr Cyril P. Castell	Professor Paul W. Richards
Dr C. Geoffrey Dobbs	Dr David C. Smith
Mr John L. Gilbert	Mr David T. Streeter
Mrs Brenda D. Haynes	Dr T. Douglas V. Swinscow
Mr Fred N. Haynes	Mr John H. Tallis
Mr Peter W. James	Mr Arthur E. Wade
Mr A. Clive Jermy	Mr Edward C. Wallace
Mr Jack R. Laundon	Miss S. Wilson

*Did not join the society and therefore not a founder-member. Five other persons also attended but remain unidentified despite extensive enquiries.

Dr Swinscow welcomed everyone to the meeting and reported that several people could not attend either because of distance (e.g. Ursula Duncan) or ill health (e.g. Fred Sowter). However, he said that those who could not be present had sent their support.

No agenda was circulated but Douglas took the chair and at once proposed that a lichen society be formed. By a unanimous vote this was agreed. Next the name of the society was considered. Douglas read out a letter from Fred Sowter stating that the name 'British Lichen Society' was bad English, and proposing that 'British Lichenological Society' should be the title. A vote on this proposal was taken, but it was lost by 23 votes to one. Only Arthur Wade voted in favour of the name 'British Lichenological Society', and said that his reason for doing so was in order to show support for his absent friend! Thus the British Lichen Society was formed: British by name, yet international by nature.

Next the draft rules were considered (see Appendix). Alterations were made to the draft rules following discussion. Douglas was concerned that undesirable persons did not become members, but eventually accepted that new members need not be nominated as long as they could be easily removed for misconduct. The number of council members was increased to six. Eventually the amended rules were adopted. They still form the basic rules today, although a number of alterations have been made over the years.

Officers, three members of Council, and referees were then elected, but the position of President was left unfilled. Subscriptions were fixed at £1 for ordinary membership.

Mr Joseph Peterken proposed a vote of thanks to Dr Swinscow for all his work in setting up the British Lichen Society and this was greeted with acclamation. The meeting closed before 17.00, everyone leaving with a great sense of achievement.

The Follow-up

After the inaugural meeting Douglas Swinscow sent another undated duplicated letter from his home in Knebworth. This read as follows:

> 'Dear [name entered in ink]
> Now that the British Lichen Society has been founded,would you please send any further communications on it to the Secretary, Mr. Wade? I enclose a report of the inaugural meeting, with some notes appended to it by the Secretary. So that the Society may now get going in earnest, would you please send your subscription to the Treasurer, Mr. Peterken?
>
> Since the Society is not going to organize an annual exchange of specimens, owing to the scarcity of many lichens, a herbarium from which members can borrow accurately named specimens should be of help. Having been appointed curator of the herbarium, may I appeal to members to send me any duplicates they can spare? Common species will be as welcome as rare ones. When I have accumulated a reasonable stock, members will be informed of what they can borrow. The sooner I receive specimens, the sooner we can get this service going.
>
> With best wishes for the success of the Society,
> Yours sincerely,
> [signed] Douglas Swinscow.'

With this letter there was a duplicated report of the foundation meeting together with a duplicated copy of the approved rules of the society. The report was as follows:

"INAUGURAL MEETING OF BRITISH LICHEN SOCIETY

At a meeting in the afternoon of February 1, 1958, at the British Museum (Natural History) the British Lichen Society was formed by the unanimous vote of the 24 people present at the invitation of T. D. V. Swinscow. Dr. Swinscow in opening the meeting reported that about 50 people had agreed to support the Society.

The meeting then considered at some length a set of Rules defining the constitution of the Society and after certain amendments had been made it was resolved that the Rules be adopted.

The Rules provide for the appointment of certain officers. The meeting decided to fill some of these posts but to leave those of President and Vice President vacant for the time being. The posts filled, by unanimous votes of the meeting, were as follows:

Secretary: A. E. Wade, Department of Botany,National Museum of Wales, Cardiff.
Treasurer: J. H. G. Peterken, 73 Forest Drive East,Leytonstone, London, E.11.
Editor: P. James, Cryptogamic Botany Department,British Museum (Natural History), Cromwell Road, London, S.W.7.
Librarian: D. C. Smith, University Department of Botany, South Parks Road, Oxford.
Recorder: P. James, Cryptogamic Botany Department,British Museum (Natural History), Cromwell Road, London, S.W.7.
Curator: T. D. V. Swinscow, "Everley", London Road, Knebworth, Herts.

Of the six elected members of the Council, the meeting decided to elect three immediately (E. C. Wallace, Miss S. Wilson, and F. A. Sowter, who was unable to attend, and subject to his being able to accept) and to defer filling the remaining three vacancies until next year. In this way the election of half the elected members of the Council for their term of two years will alternate with the election of the other half of the elected members.

A. E. Wade and P. James undertook to act as referees in determining specimens, and J. R. Laundon (British Museum (Natural History), Cromwell Road, London, S.W.7), for the genus *Cladonia*. The names of Miss U. K. Duncan, Parkhill, Arbroath, Angus, and F. A. Sowter, Greenholme, Stoughton Lane, Stoughton, Leicester, who were unable to attend, were also included in the panel of referees:

The meeting fixed the ordinary membership subscription at £1, junior membership subscription at 10s., and family membership subscription at 5s.

No decision was taken on any publication to be issued by the Society, though some of the problems were discussed. The question of the publication of a cyclostyled Bulletin was left to the Officers. It is hoped to issue a first number as soon as possible.*

Arrangements for the time and place of the next meeting are to be considered.

On the proposal of J. H. G. Peterken the meeting expressed its thanks to T. D. V. Swinscow for his work in getting the Society started and requested that this be recorded in the report of the meeting.
Signed:
T. D. V. Swinscow, Convenor of Meeting. A. E. Wade, Secretary, B.L.S.

*Notes, records, and other lichenological items for the Bulletin would be welcomed by the editor.

New county records should be sent to Mr. Peter James, accompanied, if possible, by sufficient material to provide a specimen for both the British Museum and the Society's own collection.

Dr. D. C. Smith (Librarian) would be glad to receive for the Society's Library books or separates which members may care to present.

Subscriptions: Members are asked to send their subscription for 1958 to the Treasurer as soon as possible."

The British Lichen Society was now up and running. It began as a vibrant organization dedicated to the study of lichens. Its officers and first members (James 1958) had a unity of purpose and enthusiasm which ensured its success. These friendly pioneering days had a vitality and spirit of co-operation which has never been equalled. A forum for the dissemination of scientific information and for the promotion of research on lichens had been provided for all who wished to participate.

Acknowledgements

My thanks to Fred and Brenda Haynes for sending me their interesting recollections of the inaugural meeting and to Sir David Smith for supplying me with photocopies of the documents. Mr Frank Brightman, Dr Geoffrey Dobbs, Mr Clive Jermy, the late Professor Paul Richards, Mr David Streeter, and Dr John Tallis kindly informed me that they attended the inaugural meeting on 1 February 1958, and Dr Kery Dalby, Mr Peter Hall, Mr Charles Jeffrey, Dr Ken Kershaw, Dr Donald Pigott, Dr Michael Proctor, Dr Dennis Ratcliffe, Dr Francis Rose, Dr George A. M. Scott, and Mr Cliff Townsend wrote that they were unable to be present; Dr Ken Alvin does not remember attending.

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Jack Laundon

APPENDIX

'British Lichen Society

Rules

1. *Name and Objects*. - The name of the Society shall be the British Lichen Society. Its objects shall be to encourage the study and conservation of lichens.

2. *Membership*. - The Society shall have honorary members, ordinary members (including family members), and junior members.

Honorary members shall be distinguished lichenologists and others who have

rendered valuable service to the Society. They shall be nominated by the Council and elected on a majority vote of those present and voting at a general meeting of the Society. They shall enjoy the same rights and privileges as ordinary members, but shall pay no subscription.

Each candidate for ordinary membership shall be nominated in writing by one other member of the Society. The nomination shall be sent to the secretary and placed by him before the Council at its next meeting. Admission to membership shall be by a majority vote of those Council members present and voting at a meeting of the Council. Membership shall continue subject to payment of the subscription and the provisions of Rule 3. When more than one member of a family are ordinary members of the Society, one shall pay the full subscription and the others may pay such reduced subscription, and be entitled to such lesser rights and privileges, as the Society may decide in accordance with Rule 4. With the approval of the Council, societies and institutions may become members on the same terms as ordinary members, with the right to send one representative (who has the privilege of voting) to any meeting of the Society.

Junior members shall be admitted to membership (or removed from it) in the same way as ordinary members, but shall pay such smaller subscription as the Society may determine in accordance with Rule 4. They shall enjoy the rights and privileges of ordinary members except that they shall not be allowed to vote at the Society's meetings or to hold office in the Society. Junior membership shall be open to persons under the age of 21 years and to those persons under the age of 25 who are receiving full-time education.

3. *Removal from Membership*. - Any member whose conduct, in the opinion of the Council, is prejudicial to the interests of the Society may be removed from membership by a two-thirds majority vote of those present at a meeting of the Council, on the agenda paper of which the words "Removal of a Member" shall have appeared; provided no member may be so removed unless due notice has been sent to the member of the intention of the Council to proceed under this Rule and of the nature of the charges made and an opportunity has been afforded of answering such charges to the satisfaction of the Council. A member so removed shall forfeit any claim upon the Society.

4. *Subscriptions*. - The rate of the ordinary, family, and junior subscriptions shall be determined, as and when necessary, at a general meeting of the Society by a majority vote of those present and voting. Subscriptions shall be payable in advance on January 1 each year, and must be paid by March 31.

A person who has paid his subscription as an ordinary or junior member, but awaits election to membership by the Council at its next meeting, shall be entitled to receive the Society's publications issued during the period for which his subscription is valid, to attend its meetings, and to have the services of its referees; but he may not vote at its meetings, or borrow books, periodicals, or any documents from the library, or borrow specimens from the herbarium.

5. *Officers*. - The officers of the Society shall be the president, the vice-president, the secretary, the treasurer, the editor, the librarian, and such referees, recorders, and curators as the Council shall decide.

6. *Election of Officers*. - The president shall be nominated by the Council and elected for a term of two years, dating from the following 1st of January, by a majority vote of those present and voting at an annual general meeting of the Society. The vice-president, who will normally succeed the president in office, shall be nominated by the Council and elected for a term not exceeding two years, dating from the 1st of January, by a majority vote of those present and voting at an annual general meeting of the Society. All other officers shall be nominated by the Council and submit themselves for election annually at the annual general meeting of the Society.

7. *Council.* - The Council shall consist of the officers of the Society and of five members each elected at a general meeting of the Society for a term of two years dating from the following 1st of January. The members thus elected shall not be eligible for re-election until one year after the end of their term of office.

8. *Duties of Council and Officers*. - The Council, through its officers, shall administer the affairs and funds of the Society. The president, or in his absence the vice-president, shall preside at all meetings of the Society and the Council. In the absence of both, a chairman shall be elected by majority vote of those present. In case of equality of votes on any matter, the president (or chairman of the meeting) shall have a casting vote in addition to the vote he has by virtue of his membership of the Society and attendance at the meeting. The treasurer or his appointed deputy shall keep an account of all receipts and expenditure, a statement of which, certified by the auditors, shall be presented by him at the annual general meeting. The secretary, treasurer, editor, librarian, and curators shall submit reports to the Council at its annual meeting.

9. *Meetings*. - The Society shall hold an annual general meeting, and such others as the Council may decide. The Council shall hold an annual meeting and such others as it may decide. The secretary (or in his absence a person appointed by the chairman of any meeting) shall publish to all members of the Society the formal decisions taken at every meeting and any other report of it that he, or a voting majority at the meeting, deem advisable. Minutes shall be taken at all formal indoor meetings of the Society and its Council. Notice of a general meeting of the Society shall be sent to members at least four weeks in advance. The procedure and order of business at meetings shall be decided by the chairman.

A special general meeting of the Society shall be convened on the requisition of the Council or of twenty members. The requisition shall be addressed to the secretary and shall specify the purpose for which the meeting is to be called. A convening notice, stating this purpose, shall be sent to every member at least seven days before the meeting is to take place.

10. *Change of Rules*. - Changes in these Rules may be made only at annual or special general meetings of the Society, and must be approved by not less than two-thirds of the members present at the meeting. Proposals to change the Rules must be detailed in the notice convening the meeting sent to every member."

TREASURER'S REPORT ON THE ACCOUNTS FOR THE PERIOD FROM 1/7/94 TO 30/6/95

The Society has had another successful year with the *Flora* continuing to sell well and through its sales we have already recovered over 70% of the cost of the reprint.

Looking at the expenditure side of the accounts it will be noted that the net cost of *The Lichenologist* has been reduced. This is due to our share of the profits having substantially increased in value. It is hoped that this improvement will be sustained in future years. Printing costs include mapping cards, the new colour prospectus for the Society and leaflets on our publications. The printing of the test version of the Churchyard Project cost £758 but this now has been reduced by £220 due to a generous grant from the Curry Fund of The Geologists' Association. Miscellaneous items mentioned consist of a book for the Society's library and the purchase of inscribed quaiches for presentation to our Honorary Members.

The major change in our income is the increase in the subscriptions received. It is the policy of the Society to try to keep the subscription rate stable for a period of five years. This was the first year of such a cycle and therefore a substantial increase in subscriptions is shown in the accounts. Some of this sum will be needed in the later years of the cycle when the expenditure normally exceeds subscription income.

The balance sheet shows a healthy situation with reserves of £98,357 at the year end. The Council is working on a number of projects, such as coloured illustrations to supplement the *Atlas*, and these items will require a fairly substantial commitment of capital from the Society.

It would be impossible to do the Treasurer's work on my own and I would like to give my sincere thanks to John Sheard for looking after the transatlantic members, to Jeremy Gray for coping so efficiently with the office of Assistant Treasurer and to Mr D E W Oliver for the auditing of the accounts.

F S Dobson
Hon. Treasurer

BRITISH LICHEN SOCIETY

EXPENDITURE & INCOME FOR THE YEAR 1/7/94 TO 30/6/95

1993/4	EXPENDITURE			1993/4	INCOME			
	Printing and distributing				Subscriptions		18,073	
	The Lichenologist	12,238			Add 1/5 life membership		441	
8,099	Less profit sharing	(7,500)	5,738		Less refunds	(137)		
	Printing and distributing			10,728	Paid in advance	(3,969)	(4,106)	14,408
	The Bulletin	2,231		3,934	Interest received			4,013
2,547	Less receipts	(254)	1,977	160	Donations			74
815	Secretarial and committee expenses		1,236		*Flora* Sales and stock at cost		13,623	
696	Printing		1,014	5243	Costs, postage etc.		(10,266)	3,357
402	Bank charges		293	42	Profit on sales of stock			707
	A.G.M. and buffet	573		(82)	Profit (Loss) on exchange rate			(112)
193	Less receipts	(290)	283	529	Profit on book sale			56
	Field trips etc.		–					
(24)	Churchyard project		758					
150	Accounting and audit		150	£20,554			Total	£22,503
100	Insurance		103					
273	Subscriptions paid		82	7,303	Excess income over expenditure			10,297
–	Miscellaneous		572					
£13,251		Total	£12,206	£13,251			Total	£12,206

BALANCE SHEET AS AT 30/6/95

	LIABILITIES				ASSETS		
430	Sundry creditors (inc. advance subs)		5,309	91,186	Cash at Banks		98,154
1,525	Life members		1,764	2,920	Stock		11,483
3,307	Burnet/Wallace Memorial Fund		3,307	116	Debtors		–
900	Grants and funds in hand		900				
	General Fund at 30/6/94	88,060					
88,060	Plus surplus for 12 months	10,297	98,357				
£94,222		Total	£109,637	£94,222		Total	£109,637

AUDITOR'S REPORT TO THE BRITISH LICHEN SOCIETY

I have been unable to examine the Register of Members or confirm it is complete, neither have I checked the stock.

Subject to the foregoing, in my opinion, the attached accounts prepared under the historical cost convention and the notes thereon give a fair view of the state of affairs of the Society and the income and expenditure of the Society for the year ended on 30 June 1995.

D E W Oliver, FCIB, ATII, APMI

Notes to the Accounts

1. Managers' remuneration: no officer of the society received remuneration and none is due in the twelve months covered by these accounts.
2. Status: the Society is a registered Charity, number 228850.

JANUARY MEETINGS 1996

Nominations

Nominations for Officers for 1996 and four members of Council for the period 1996-1997 should be sent in writing to the Secretary, Dr O W Purvis, Department of Botany, The Natural History Museum, Cromwell Road, London SW7 5BD before 22 December 1996, please. No person may be nominated without their consent.

E John, O L Gilbert, B J Coppins and J H H Looney retire from Council and are not eligible for re-election as Council members.

Council Meeting

Council will meet at 14.00 on Friday 5 January 1996 in the Meeting Room of the Linnean Society, Burlington House, Piccadilly, London W1V OLQ. [Half way between Green Park and Piccadilly tubes stations on the north side of Piccadilly, the Linnean Society rooms are to the left immediately beneath the entrance]. Please let the Secretary have any items you wish Council to discuss by Friday 29 December 1996.

Dougal Swinscow Memorial Lecture / evening buffet

The first Dougal Swinscow Memorial lecture will be presented by Professor Per Magnus Jørgensen on the topic "Linnaeus and the Lichens" on Friday 5 January at the Linnean Society at 18.00. This will be preceded by tea and

coffee at 16.30, followed by an evening buffet which will cost £10.00 per head including one glass of wine. Please note that this year there will be no booksale and short video presentations will take the place of the slide show.

Please complete the enclosed tear-off form and send your cheque for £10.00 (payable to the Linnean Society of London before 19th December so that arrangements for catering can be made.

Annual General Meeting/Exhibitions/Lecture Meeting

The Annual General Meeting will be held in the meeting room of the Linnean Society at 10.30 on Saturday 6 January 1996. Please bring along exhibits of lichenological interest for display.

Programme

9.45 Coffee and reception
10.30 Annual General Meeting

AGENDA

1 Apologies for Absence
2. Minutes of Annual General Meeting 7 January 1995
3. Matters arising
4. Officer's Reports
5. Meetings 1995-1996
6. Election of Officers
   President (Council's nomination) R G Woods
   Vice President (Council's nomination) P D Crittenden
   4 members of Council
7. Any other business
8. Date and place of next AGM

11.30 Coffee and Exhibition Meeting
12.00 Lunch (to be taken at local venues)

Lecture Meeting: "Lichens and Mineralisation"

14.15-14.50 Lichens of Derbyshire volcanic deposits (B W Fox)
14.50-15.25 Lichens of disused Welsh mines (A M Fryday)
15.25-15.55 Coffee
15.55-16.30 Lichens and metals (O W Purvis)
Discussion
17.00 Close

FROM THE ASSISTANT TREASURER

Reduced Rate Subscriptions and receipts

Members who have not yet renewed their subscriptions beyond 1995 may wish to consider taking advantage of reduced rates for five year subscriptions (1995-1999) by paying the balance of £87.50. This offer will not be repeated! Receipts are not normally issued for annual subscriptions but have been sent to those who have taken advantage of the reduced rates.

Membership List

The Membership List, published as a Supplement, comprises the names and addresses of members at 1 October 1995 arranged alphabetically by Name, as well as names by UK Counties and Overseas Countries. My understanding is that alterations are expected to some county boundaries during 1996. I hope that before the next membership list is published members will have told me of any changes to their address.

Changes of address

Member's attention is drawn to the advice given in *The Lichenologist* (inside the front cover) that 6-8 weeks notice should be given of change of address. Unless at least six weeks notice is given Academic Press cannot undertake to replace copies of *The Lichenologist* sent to a previous address and not forwarded.

Late payers frustrated

I am aware of the frustration felt by a number of members who have paid their annual subscription late and experience delay in receiving back numbers of publications. Such late payers cannot necessarily expect to receive publications earlier than six weeks after payment was sent, though we will do out best. Members are reminded that claims should, in future, be sent direct to Academic Press. The only way to be sure of receiving publications as soon as they are published is to pay your year's subscription by the due date - the 1st January!

A Standing Order Mandate form is enclosed with this *Bulletin* for the use of those members who have UK bank accounts and who wish to ensure that subscriptions are paid on time without having to remember.

Publications for Sale at the AGM.

Because of low demand in the past very limited stocks of publications for sale will be brought to the AGM. Please write to me beforehand to be sure of what you want being available.

COUNTRY DIARY: INCHNADAMPH, NORTH-WEST HIGHLANDS

Setting off into low cloud and driving rain to search for a remote lochan that may, or may not, contain a rare lichen, is not much incentive when the alternative is to hog the fire in one of Scotland's best hotels. However, the weather front that was to bring these conditions was still 3 hours away so we headed up the stalkers' path into the hills. Soon we were fording streams and tussling with peat hags as the short, well-drained, turf of the Durness limestone gave way to Cambrian quartzite bog. The day's objective was to refind *Aspicilia melanaspis*, the first and only British record of which had been made by Peter James and Dougal Swinscow in 1958. I knew the name of the tiny lochan where it had been found but the grid reference was for an adjacent square and there was reputedly limestone in the catchment which was not the case with the lochan that was our goal. A phone call to London requesting more information had been met with an answer phone message. It might have been prudent to delay setting out, but for sometime this 'lost lichen' had been shining like a lamp in my mind drawing me northwards.

Eventually we breasted a rise and in front of us lay a pool of brown peaty water. It was still in the grip of winter and surrounded by snow patches, it looked like a thousand other water bodies in the Highlands - hardly worth a second glance. The only stones projecting from the water were at the outflow. I knelt to examine these, each was completely covered with a thick crust of the *Aspicilia* (Fig 1). This beautiful, silvery-grey species is so strongly lobate that it has recently been transferred to a new genus *Lobothallia*. As I triumphantly raised my face from near water level it was hit by a blast of icy rain, the sky grew dark, and I realised my world had been reduced to a few feet by thick cloud. Waves started to break over the rocks; it was as if the Gods of the mountain were angry that their secret had been discovered. The next twenty minutes were desperate as, in the gathering storm, I wrote notes with frozen fingers, back turned to the wind, and hopelessly tried to observe lichens through five layers of water, one on the specimen, others on both sides of my hand-lens and spectacles. The *Aspicilia* was growing in a semi-inundated zone with *Dermatocarpon luridum*, local eutrophication was indicated by the presence of *Physcia caesia*, though whether this was associated with red deer, sheep or birds was not clear.

A cursory inspection of the rest of the lochan, and others in the vicinity, failed to find any more of the lichen but by now white horses were breaking on the shore and conditions were becoming impossible. The objective

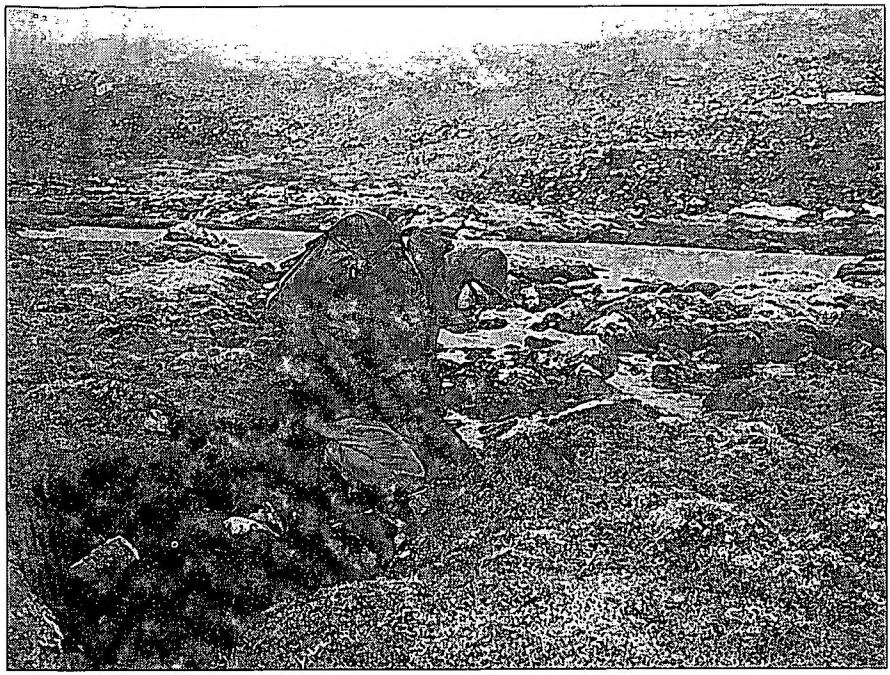


Fig. 1. The sole UK habitat *of Aspicilia melanaspis.*

achieved, we started the return journey, but far from being at peace, my mind was active with a question that would not go away "What had drawn that pair to such a remote and seemingly unpromising spot 37 years ago?" I was determined to find out.

Oliver Gilbert

Oliver's timely note brings back happy memories of the wonderful pioneering days in lichen study and collecting in the late fifties and early sixties when the richness of the British flora, especially in west Scotland was being revealed. The reason for Dougal and myself straying so far from the beaten track was that we were young and much fired with enthusiasm and that our then current interest was in those lichens associated with the interface between calcareous and acid rocks, especially interrelated streams and edges of lochans; fortunately, as well remembered, the weather was blissfully fine and we both complained of sunburn. Incidentally, the packet containing our prize was accidentally knocked into the breakfast frying pan in the kitchen of the Inchnadamph Hotel where our specimens had been put to dry above the stove. The cook was most apologetic but no harm ensued.

Peter James

LETTER FROM AN OVERSEAS CORRESPONDENT

Lichenology in India - 1994

Most of the significant Indian lichenological events of 1994 related to two International Congresses. A paper entitled, "Landmark of Indian Ethnolichenology" was presented by Dr D K Upreti, during the IVth International Congress of Ethnobiology, 17-21 November 1994; this comprised a detailed account of lichen species traditionally utilised by the different ethnic groups of India in medicine, spices, food, fodder, dying and stuffing material.

In accordance with the Botany 2000-Asia Programme, the Central Department of Botany, Tribhuvan University, Kathmandu, Nepal, organised a week-long international seminar-cum-workshop in lichen taxonomy from 12-18 December 1994. The Workshop was intended to bring together experts working on lichens of South and Central Asia and will facilitate an exchange of experience and the development of lichen taxonomy. During the workshop three days were devoted to discussions on lichen taxonomy. The remaining days were used for a field visit to the Ziri area of Nepal to examine the diversity of lichens, their common usage and economic potential. Fourteen Nepalese, one Sri Lankan and six Indian lichenologists attended the Workshop. The papers presented were mostly concerned with chemical constituents, morphology, distribution and diversity of lichens of India and Nepal. At present the lichenological investigations at the National Botanical Research Institute, Lucknow, are concentrated on the *Lecanora subfusca* group. Morphotaxonomic studies on 23 corticolous species of this group have been completed. At Agharkar Research Institute, (MACS Institute) Pune, taxonomic studies have been completed on 42 species of the lichen genus *Arthothelium* from India with 21 new species and 7 new records. Presently the group is involved in lichen culture studies.

D K Upreti
NBRI Lucknow, INDIA

SECOND HAND COPIES OF *THE LICHENOLIGIST*, THE BLS *BULLETIN* AND *THE BRYOLOGIST*

Complete or nearly complete sets of volumes of the above publications, some bound, have become available for sale. Please contact the Assistant Treasurer who will put you in touch with the vendors with whom the sale price should be negotiated.

CHURCHYARDS PROJECT: ANNUAL REPORT 1994-5

Our small committee, as usual, has met three times since the last report, in late December, early April and late July, and the minutes were capably taken by Keith Palmer. Immediately following the last meeting, we stayed in Wantage for two nights for what Keith has christened our 'works outing'. This brief time together gives us the opportunity to refine our survey techniques and to attempt to iron out any difficulties of species interpretation, which in effect means that, as a group, we are now consistent in calling a spade a spade even if it turns out to be a diamond! We visited eight sites in the Vale of the White Horse and, without discovering any great rarities, achieved some nice totals in an underworked vice-county.

Ishpi Blatchley, in her role as Conservation Co-ordinator, has been spreading the word by sending out our leaflet with an accompanying letter to Wildlife Trusts throughout the country. An unusual adversary has emerged recently in the shape of an unemployed English graduate from Wiltshire who has been advertising his services as a grave tender and cleaner for £65 a year. His scheme entitled *Pilgrim Services* has received publicity in at least two national newspapers and he is, apparently, planning to set up a nation-wide network of agents.

During the past twelve months, mapping cards have been gratefully received from Humphrey Bowen, Sandy and Brian Coppins, Frank Dobson, Norman Hammond, Peter James, Ivan Pedley, Francis Rose, Mark Seaward, and Mike Simms, as well as committee members. As a result, at least 38 of the remaining 157 blank 10km squares on the lowland map (see p22 of the last *Bulletin*) have been filled in, while new churchyard species continue to be added to the full British list which is now well in excess of 500. The most recent saxicolous addition is *Pertusaria hemisphaerica* found by Francis Rose on a cherty, Upper Greensand wall top at Whitwell on the Isle of Wight. An immense amount of Phase 2 Upland work is also being carried out, especially in the north of England and the southern fringes of Scotland by Don Smith and Norman Hammond. Don has now surveyed in excess of 750 sites, while Norman and his wife Florence lead conducted tours and also give numerous audio-visual presentations on churchyard natural history.

Much of my own survey work this year has been carried out in Northamptonshire. I was fortunate at the beginning of the year to be awarded a generous grant from the British Ecology Society in order to complete a survey of all 350 sites in the vice-county, to analyse the main saxicolous

habitats and to set up a conservation strategy. As I live on the county border, the task has involved a considerable amount of travelling. The 90 churchyards still without a visit are all at least 40 miles from home. In fact, I am now having to resort to staying at B&B farmhouses for a couple of nights at a time. I hope to complete at least all but the really urban yards before the winter sets in. I am grateful to Ivan Pedley for regularly meeting up with me at weekends and in the school holidays and giving invaluable assistance. Together we found over 100 species at Cottesbrooke, including *Petractis clausa* and *Hymenelia prevostii* on the boundary wall. Other highlights were finding *Physcia aipolia* on a 19th century limestone cross at Lowick (the third recent saxicolous record for VC32) and, most exciting of all, abundant *Lecanora pruinosa* at Islip in the Nene Valley (see p38).

Excursions further afield have been mainly confined to BLS Field Meetings and the journeys to and from them. In October 1994, while others scaled the heights of the Malvern ridge, eight surrounding churchyards were visited and 148 taxa recorded. The north wall of Malvern Priory in the centre of the town and close to a busy road revealed a surprising richness of species - i.e. at least two dozen, including *Baeomyces rufus* and much *Stereocaulon pileatum* and *S. vesuvianum* var. *symphycheileoides*. A thallus of *Lecanora pannonica* on the south wall represented easily the most westerly record of this species. There were over 50 species growing on the medieval St Edburga's church at Leigh and 26 on an ancient cross at Hanley Castle, where a second thallus of *L. pannonica* was also found. *Parmelia loxodes* at Bromesberrow (found originally by Oliver Gilbert in 1992) has been recorded on stone at only one other churchyard in lowland Britain. Earlier in the same month Francis Rose, Ken Sandell and I visited Winchester Cathedral and the surrounding Close discovering no less than 112 species, including *Lecanora pruinosa* which Francis has subsequently found in 12 more Hampshire yards.

En route to the early summer meeting on Anglesey, I called in at Handley churchyard in Cheshire and realised the appropriateness of its name when, on a sandstone chest-tomb, I found a quite spectacular covering of what appeared to be *Lecanora handelii* growing with the more usual *L. soralifera*. The soredia were most distinctively aligned along the edges of the areoles. When I reached the hotel at Cemaes Bay, I showed a specimen to Brian Fox and he agreed with my diagnosis. Having crossed over the Britannia bridge onto the island, my first port of call, however, was the church at Llanfairpwllgwyngyllgogerychwyrndrobwllllantysiliogogogoch. This site, as well as revealing design inadequacies in the mapping card, must be one of the few that has more letters in its name than lichens in its

churchyard! Altogether on Anglesey, seven sites were looked at in detail and another four visited briefly in passing. One of the most interesting, Llanbadrig, was fortunately the nearest perched on the cliff top less than a mile from our base. It is said to be the oldest church in Wales, dating back to AD 440 and dedicated to St Patrick. A natural outcrop rose up behind the chancel end and there was a strange juxtaposition of ancient and modern as one looked out from its summit inland to lines of wind turbines and along the coast to the ugly bulk of the nuclear power station at Wylfa Head. There were typical maritime species such as *Anaptychia runcinata* and *Caloplaca marina* on the south boundary wall which was well within the spray zone, and a single thallus of *C. granulosa* on a nearby marble cross - yet another addition to the ever growing national churchyard list. The fierce winds made standing, let alone collecting, almost impossible and one had to retreat to the landward side of the building just to write down a new discovery. While looking at the dune lichens of the south coast, most of the group visited the remains of the church on Llanddwyn Island and found two further typical maritime, untypical churchyard species - *Caloplaca thallincola* and *Verrucaria maura*. At the same time, I went off to look at another ancient island church - St. Tysilio's (AD 630) - situated in the Menai Strait between the two bridges. The whole island is the churchyard and at the highest point, adjacent to the war memorial, is a sunny, south-facing natural outcrop which boasts at least 26 species including *Parmelia omphalodes, P. loxodes* and lots of *Lecanora gangaleoides*. As a whole, despite these natural intrusions, the yards were not especially rich and, in all, only 137 taxa were recorded. A number of common lowland species such as *Aspicilia contorta, Candelariella medians, Dirina massiliensis* f. *sorediata, Lecanora muralis, Lecidella stigmatea, Lepraria incana, Phaeophyscia orbicularis, Physcia caesia* and *Psilolechia lucida* were noticeably scarce, while *Leproloma vouauxii, Parmelia sulcata* and *Xanthoria calcicola* were not recorded at all. On the plus side, a specimen collected from Llaneilian on the north coast was later determined by Brian Coppins as *Lecania atrynoides* and another confirmed by Jack Laundon as an unusually western specimen of *Caloplaca ruderum*.

All three main BLS field meetings this year are in Wales and, as I write, I have recently returned from the second, the *Cladonia* Workshop at Orielton in Dyfed. By way of a change, it was decided to spend some time on the Monday in a nearby churchyard and, after some deliberation and poring over maps, Stackpole Elidor was chosen. It was a wise choice. Although not large, the yard was on a steep, south-facing valley slope and sheltered, though not excessively shaded, by sycamore, holm oak, ash, cherry and a

single yew. It had most of the credentials - boundary and retaining walls, two wooden gates (one a lych), a somewhat irregularly shaped fourteenth century church with a deeply shaded enclave on the south side, some accessible roof slates and some copper run-off. The building was constructed of a fairly haphazard mix of Carboniferous Limestone and Old Red Sandstone. The memorials were likewise variable; in age, geology and design. There was even an old rugged cross with a sufficiently large stepped base for us all to sit round and eat our packed lunches. The vicar's wife who appeared later said that, had she known we were coming, she would have opened up the village hall and provided us with cups of tea. The expertise of Peter James naturally was in great demand and he was harried from pillar to post. One minute it was *Verrucaria dufourii* found by Steen Christensen from Denmark at the base of a headstone and the next *V. caerulea* at the base of the aforesaid cross. It was soon clear that the stones were providing a goodly list and the trees augmenting it most satisfactorily. We were well in excess of 100 species. After dinner, back in the workroom and, with much help from Trevor Duke and Brian Fox, I was able to TLC some sterile, powdery crusts and turn them, as if by magic, into *Lepraria lobificans* and *Leproloma diffusum*. Meanwhile, Neil Sanderson was examining the spores of black dots on twigs and announcing species such as *Eopyrenula grandicula* and *Leptorhaphis maggiana* that I had never even heard of let alone found in churchyards before! On retiring somewhat belatedly for the night, I was pretty sure that, on 4th September 1995, we had found a churchyard richer in species than any other so far in Britain. On the following Wednesday, prior to setting out on my homeward journey I couldn't resist yet another look and managed to add four more common saxicolous species missing from the list, including *Lecanora conizaeiodes* (rare in these unpolluted parts), and *Cladonia chlorophaea* (ironically for a *Cladonia* Workshop) missed by us all two days before. While I was there, Neil also reappeared and added three more epiphytes. The next Sunday, having examined all his packets, he phoned through five more, including two more *Opegrapha* species making no less than ten in all. With some determinations still to be made, the total already stands at a magnificent 160. If you would like full churchyard lists for any of the meetings, please ring me on 01280 702918.

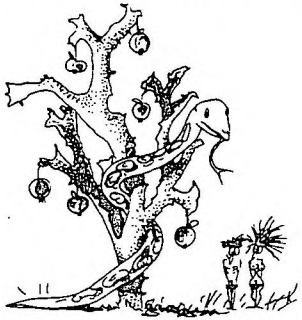
On the way to Orielton, I stayed with Hilary and Edward Lees in Gloucestershire and surveyed three more blank squares. Hilary is a free-lance writer and her books on Cotswold and Cornish churchyards have given lichens some welcome publicity. She is now preparing a similar book on Wiltshire and I was able to pass on some relevant snippets of information. The hospitality of Joy and Michael Ricketts of Worcester provided me with

a welcome break on my return journey. Joy is a new member keen to try out the project pack described in the last *Bulletin* on local schools. We visited two nearby yards and another neglected habitat, the cathedral cloister, which, even in pouring rain, showed promise.

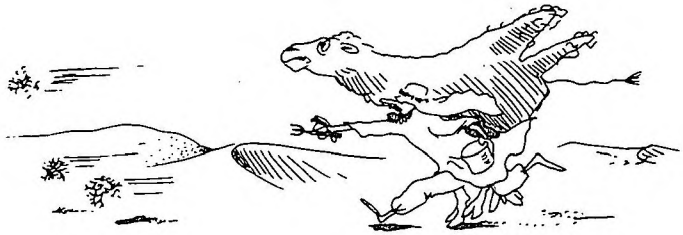
When I eventually returned home, there were fifteen letters waiting for me, and I have had daily phone calls since, requesting copies of the pack, "Exploring Churchyard Lichens". It was publicised in the September issue of *Linkword* which is sent out to all Watch leaders. Since the pack was produced in early June, distributing it has kept me more than a little busy. Initially, 300 copies were produced as a trial run with grants from the BLS and the Geologists' Association's Curry Fund. My stock is now virtually depleted, except for a few I am withholding to pass on to possible sponsors or publishers and one which will be on display at the AGM. They have been sent out to 32 English vice-counties, to Scotland, Wales, Northern Ireland and Germany, to primary, middle and secondary schools, to science advisors, to field centres, and to university education and science departments. Copies have been received by Francesca Greenoak who writes on environmental education matters in the *Times Educational Supplement,* and by the editors of *Teaching Earth Science* and the *Biological Sciences Review.* Thanks to Val Cooper, it has been distributed to persons of influence in English Nature, the Scottish and Welsh equivalents and the Urban Wildlife network. It is being used by county rangers, girl guide associations and at least 28 Watch groups. One of the most worthwhile aspects is that I have been able to put some groups in touch with one another and with BLS members. I worked, for example, with a huge Watch group of over 40 children at an Oxfordshire primary school on 20 September, while two Essex Watch leaders came along to Keith Palmer's churchyard day at Castle Hedingham three days later. I hope that this network of interest will in some way be maintained and built upon before it dissipates. It may even result in some new young members.

Tom Chester

Lichens and the lichenologist . . .

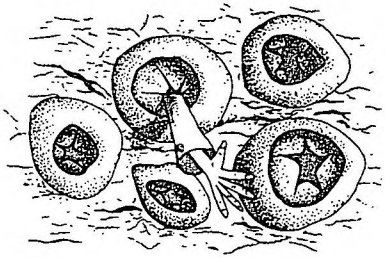


They tempt him . . .



. . . but always from a distance.

They are his Everest . . .



and absorb him to the end.

GREAT WOOD AND ENVIRONS TWENTY-FIVE YEARS ON

Revisiting Great Wood after an interval of twenty-five years was something of a traumatic experience. My first lichenological exploration of Great Wood, and other woods around the northern end of Derwentwater, Cumbria, had been during an excursion with Brian Coppins and Francis Rose on 3-5 June 1969 (Rose *et al.*, 1970). I did not re-visit the area again until 1-6 August 1994; the dramatic change witnessed in the *Lobarion* prompts this note.

Calf Close Bay (NY(35)/270215)
In 1969 material of *Lobaria pulmonaria* was so abundant on oak in woods by Calf Close Bay that it was collected for transplant studies, with material being introduced into both Derbyshire and Hampshire (Hawksworth, 1971). In 1994, no *L. amplissima* (in 1969 with shrubby cephalodia to 2 cm tall), *L. pulmonaria, L. virens* or *Sticta* species were seen. The *Lobarion* had been on both *Ulmus* and *Quercus* here, and some trees close to the edge of Derwentwater itself that had been standing in 1969 were represented only by cut stumps in 1994.

Castle Head Wood (NY(35)/269226)
No *Lobaria pulmonaria, L. virens* or *Thelotrema lepadinum*, all present on oaks in 1969, were refound in 1994. Parts of the wood had become much denser, which could be a contributory factor.

Great Wood (NY(35)/274215)
In 1969 we commented that this wood supported "the best *Lobarion* communities we had seen anywhere in the British Isles or Brittany" (Rose *et al.*, 1970: 54), with *Lobaria amplissima L. pulmonaria and L. virens* "all common and dominant on *Ulmus glabra* and *Quercus* forming sheets extending from the base often continuously to at least 35 metres up the trunks". In 1994, only *L. pulmonaria* was noted as a few rather scrappy specimens on *Quercus*, and I even failed to find any *Sticta* or *Thelotrema*. Interestingly, however, *Bryoria fuscescens* thalli to 15 cm in length occurred on *Quercus* near the car park; that species, not seen here in 1969, is characteristic of bark with a lower bark pH than that generally supporting *Lobarion* communities.

James & Wolseley (1992) had already documented the deterioration of *L. virens* in one quadrat on a tree in Great Wood between 1986 and 1990, with the loss of mature parts of the thallus and some establishment of new lobes, but that had scarcely prepared me for the shock.

I subsequently ascertained that many of the last standing elms were cut down early in 1994, primarily for public safety reasons because of their proximity to the car park, but by that time the bark was reported as dead and falling off the trees along with its associated lichens. However, I was pleased to learn from John Hooson (Regional Biologist, The National Trust) that with the assistance of Ivan Day an attempt had been made to transfer some *Lobaria* thalli to other trees. It will be of interest to see how these translocations fare in the long term, especially in the light of experience from the experimental transplants noted below.

Stable Hills (NY(35)/271218)

However, there was one observation of a positive note to temper this otherwise lichenologically depressing experience. Surprisingly, the oak built into the wall near Stable Hills and jutting out into the road and reported on in 1969 still had *Lobaria amplissima* (thalli now 6 and 20 cm diam) and *L. pulmonaria* (six pieces, the largest 5 cm diam) and *Nephroma laevigatum* (one piece 1.8 cm diam) just as it did 25 years ago, although a single thallus of *Sticta limbata* present in 1969 had disappeared. This road supports exceptionally heavy traffic in the tourist season with car exhausts passing within 1.5-2 m of the tree. This is clear evidence that car exhausts have no significant affect on *Lobarion* communities.

Discussion

As in the case of depletions of certain lichens in Devon (Hawksworth, 1987), losses can be due to a wide variety of factors, some known and others hypothesized. In these particular woods a combination of the loss of elms due to Dutch Elm Disease (*Ophiostoma novo-ulmi)* and acid precipitation seem to be the major candidate causes. The loss of elms thus has had two separate effects: (a) the loss of species characteristic of *Ulmus* (Watson *et al.*, 1988); and (b) the effect of that loss on the ecology of the site, in the case of Great Wood the loss of mature trees and subsequent regrowth and replanting.

That acid rain may be significant in this area is evidenced by an experiment in which *Lobaria* species were transplanted from Loch Sunart in Argyllshire to Seatoller Wood to the south-west of Derwentwater; in comparison to control transplants, *L. amplissima* was most severely damaged, *L. pulmonaria* less so, and *L. virens* unaffected (Farmer *et al.*, 1992). Acid rain had already been proposed as a cause of *L. pulmonaria* decline documented in two sites in Northumbria by Gilbert (1986).

I was unable to survey the sites as completely in 1994 as we did in 1969, and surely missed some species still present as diminished populations. However, this does not detract from the main thrust of this note - the decline of the *Lobarion* communities. Indeed, the alternations witnessed in this area, albeit from a combination of causes, is of considerable concern for lichen conservation. If such dramatic changes continue apace, in England at least, the *Lobarion* and certain other rare lichen assemblages will be only remnants of what they were in the 1960s by the end of the century.

Acknowledgement

I am indebted to John Hooson (The National Trust, North West Region Office) for information on recent actions taken in Great Wood.

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David Hawksworth

LICHEN DIVERSITY AND STAND CONTINUITY IN THE NORTHERN HARDWOODS AND SPRUCE-FIR FORESTS OF NORTHERN NEW ENGLAND AND WESTERN NEW BRUNSWICK

This article by Steven B Selva (University of Maine) appeared in the *Bryologist* **97** (4), 1994, pp 424-429. Many British lichenologists interested in ancient woodlands may not have seen this paper. Professor Selva, with whom I have corresponded extensively, has attempted to apply the principles which I have used in the construction of the British RIEC and NIEC to NE American forests. I think he has been brilliantly successful in this.

Most British ecologists are, I believe, already aware that after 350 years of logging, few areas of 'old growth' forest remain in eastern north America. Professor Selva has, however, been able to identify by survey work, and the collection of data from various sources, a number of possible relict areas of old growth forest in northern New England and in New Brunswick (Canada). He analyses the lichen epiphyte floras of many of these areas in his paper; some are hardwood stands, some mixed, some largely coniferous.

He finds that a number of species that are characteristic of ancient woodlands in Britain are equally so in his study area. These include on hardwoods:

Catillaria atropurpurea
C. laureri
Collema nigrescens
C. subflaccidum
Lobaria pulmonaria
Loxospora elatina
Pyrenula laevigata
Strangospora microhaema

Not surprisingly, there are a number of non-European species that figure in his lists. Some British and European species that are not particularly confined to ancient woodlands with us also figure in his tables, such as:

Bacidia rubella
Dimerella pineti
Normandina pulchella, etc.

As in Britain, the correlations between the occurrence of certain lichens and the lack of disturbance of the forest areas is striking.

Francis Rose

ULTRACRYOMICROTOMY IN IMMUNOLOGICAL STUDIES ON LICHENS

Ultracryomicrotomy is widely used in immunological studies on animal cells (e.g. Wooding *et al.*, 1991; Hayashi *et al.*, 1994). However, applications of this technique to plant tissue have remained few (e.g. Marttila *et al.*, 1993) mainly because the rigid nature of plant cell walls makes the procedure very difficult to employ. Immunological studies on lichens have been carried out using conventional ultramicrotomy and mounting materials that allow the penetration of antibody. For example, Bergman and Huss-Danell (1983) localized the nitrogen fixation sites in cephalodial cyanobacterium of *Stereocaulon paschale* using labelled antibodies raised against different enzymes of the N_2-fixation pathway. Hällblom *et al.* (1986) used gold-labelled antibodies of GS to localize the enzyme in the cyanobacterium *Nostoc* in two lichens *Peltigera aphthosa* and *P. canina*. Furthermore, Bergman and Rai (1989) used the same method in order to detect nitrogenase, GS, phycoerythrin and ribulose 1,5 -bisphosphate in *Nostoc* from *Nephroma arcticum*.

Immunological labelling is a highly specific means for detecting macromolecules in electron micrographs, but unfortunately the method is susceptible to chemical interruption which can lead to non-specific binding of the antibody. Since in cryomicrotomy the tissue is only slightly fixed and mounted by freezing without ethanol dehydration the method is likely to preserve the tissue closer to the natural state than conventional methods. Another advantage of this technique is that sample preparation is much faster. Although it is probable that ultracryomicrotomy will not encounter the same problems in lichens as in plants it has not been attempted with lichen material. In the present study we applied cryomicrotomy for the first time in the immunological detection of GS in the cyanobacterium of a lichen. *Stereocaulon glareosum* was collected on the island of Hailuoto (65°02'N, 24°42'E) near Oulu, Finland. Thalli were stored outdoors in open plastic boxes to maintain the environment as close to natural conditions as possible. Cephalodia containing a *Nostoc* cyanobacterium were excised from fresh thalli with forceps and a knife, fixed in a paraformaldehyde (3%)-glutaraldehyde (0.1%) solution for 2 hours and then infiltrated overnight in 2.1 M sucrose for cryoprotection prior to freezing (Griffiths *et al.* 1984). Prior to sectioning the samples were mounted on specimen holders (copper pins) by rapid freezing in liquid nitrogen where they could also be stored for several days.

Thin sections were cut using LKB Ultratome equipped with a cryo-attachment and a glass knife prepared with a LKB 7800 knife maker

modified according to Stang (1988). The knife and specimen temperatures were –85°C and –92°C respectively. Sections were picked up on nickel grids covered with a Formwar membrane (0.3 %), coated with carbon, and the grids were floated on a phosphate buffer. Staining and immunolabelling were conducted following the procedure of Marttila *et al.* (1993) with the modifications that bovine serum albumin was used instead of fetal calf serum and the gold particle size was 6 instead of 10 nm. The primary antibody was anti-rabbit-IgG raised against legume root nodule specific GS provided by the Soils and Crop Sciences Division, Rothamsted Experimental Station, Harpenden Herts, U.K. The lyophilized antibody was redissolved in 500 ml of water and diluted 10x and 100x with 5% BSA in PBS-glycine. Grids were stained with uranylacetate (0.4%) and covered with a methylcellulose (1.5%) membrane, and samples were studied under a transmission electron microscope (Jeol TemScan 100 Cx, 60 kV). Control samples were prepared in the same way but without antiserum treatment. For comparison of ultrastructural details the same lichen material was also prepared as follows, using conventional methods which do not support immunolabelling. Small sections were cut with a razor blade from the thalli. The tissue was fixed in 2.5 % glutaraldehyde in 0.05 M phosphate buffer (pH 7.0), and postfixed in 1 % buffered OsO_4 solution. Samples were dehydrated in ethanol and embedded in Ladd's LX-112. Ultrathin sections were stained with uranyl acetate and lead citrate and observed under a transmission electron microscope (Jeol 1200 Ex, 80 kV).

Since no heterocysts could be detected in cryomicrotomically or conventionally prepared samples the only images obtained were of vegetative cells. In cryomicrotomy structural details of samples were generally well-preserved, and the resolution was good (Fig. 1). The thickness of the cryosections varied substantially due to the difficulty of controlling the knife advance during sectioning. In a small number of cases samples were so fragile that they tore apart during the electronmicroscopic observation. The immunolabels were abundant all over the tissue, but especially in the vicinity of membrane structures (Fig. 1). They were also found in control samples, which indicated, that binding of the label was relatively non-specific.

Comparisons between differently prepared samples showed that in the cryomicrotome sections the overall picture of the cell was more porous and looked 3-dimensional (Fig. 1), whereas in the conventionally prepared sections the cells looked firmer and 2-dimensional (Fig. 2). In both samples membrane structures looked quite similar, although in conventional sections more were visible. In both samples it was possible to see particles in the cytoplasm. The cell walls and some membranes were more heavily stained

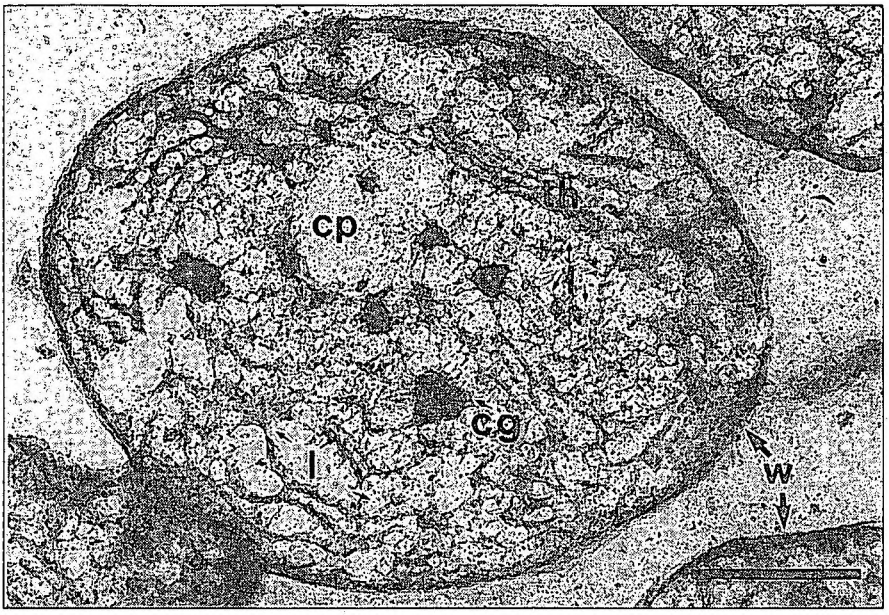

Fig. 1. Transmission electron micrograph of a cephalodial vegetative *Nostoc* cell of *Stereocaulon glareosum* prepared by means of ultracryomicrotomy and labelled with protein-A-gold conjugate (GS-antiserum treatment with a 10 x dilution). Abbreviations: cb = carboxysome, cg = cyanophycin granule, cp = centroplasm, l = label(s), s = polysaccharide sheat, th = thylakoids,w = cell wall. Scale bar = 1 µm.

in cryomicrotomically prepared samples than in those prepared using conventional methods whereas no differences between the two approaches could be found in the staining intensity of the cytoplasm and the organelles.

The results of this experiment confirmed that cryomicrotomy has great potential in immunological studies on lichens. It should be noted that, as the application of this technique to lichens becomes established, it should be possible to further improve the quality of the cryomicrotome samples. There are some details requiring further study, especially those concerning strength of the sections, resolution, and preventing the non-specific labelling. It has been suggested that non-specific binding could result from the affinity of protein-A in the labelled conjugate to glycoproteins (Mau & Clarke 1983). To overcome this kind of non-specificity an IgG-conjugate has been used instead of protein-A (Bergman *et al.* 1985). It is likely that the use of antiserum raised against the GS of *Nostoc* rather than that of legume nodules could have improved the binding specificity. The structure of GS varies from species to species to such an extent that enzymes may be

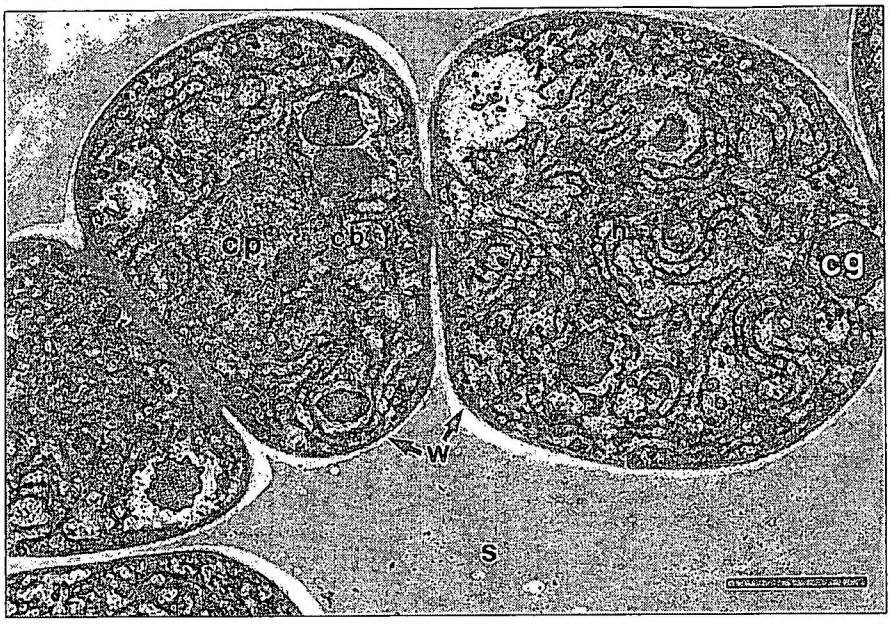

Fig. 2. Transmission electron micrograph of conventionally prepare (i.e. method does not support immunolabelling) cephalodial vegetative *Nostoc* cells. Abbreviations: see Fig. 1. Scale bar = 1 μm.

immunologically different and the antibody against root nodule specific GS2 (Cullimore & Miflin 1984) may not bind so closely to GS from the lichen cyanobacterium.

Acknowledgements

We thank S. Marttila for her advice on methods. We also thank J. Turner (Rothamstead Experimental Station, Harpenden Herts) for providing the antibody and the Maj and Tor Nessling Foundation for financial support.

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JANUARY 1996 MEETING AT ASHTEAD COMMON

A field meeting to Ashtead Common, Surrey, will be held on Sunday, January 7 1996 (the day after the AGM). Ashtead Common is a promising area of open woodland near Leatherhead and should prove interesting especially since the levels of pollution in the area have been dropping. It has now been taken over by the Corporation of London and both they and Vikki Forbes, their local woodlands officer, are very interested in obtaining a lichen survey for the Common. We also hope to visit Ashtead church which has a large churchyard with gravestones dating back to the 17th century. We will, no doubt, also visit a local pub for lunch.

We will meet at about 10.15 am by the gate to the Common. This is opposite the level crossing next to the station (grid reference 181591). For those coming by train, the 9.19 from Victoria to Dorking arrives at Ashtead at 10.16.

Frank Dobson

LICHENS AND RADIOACTIVE FALLOUT OVER NORTH WEST RUSSIA

A conference entitled *Arctic Town and Environment* was held in Vorkuta (Russian Federation) between 12-16 September 1994. It focused on the socio-economic and environmental problems of arctic communities across Russia, attracted about 100 scientists, administrators and politicians and received national media coverage. Vorkuta itself, situated at 67°N latitude in the north of the Komi Republic, is a tundra coal mining town currently with 13 productive mines and a population of *c.*230000 inhabitants.

Of interest to lichenologists were two papers discussing radioactive contamination in the Russian north. Prof. A.B. Tkachov from the Institute of Physiology in Arhangel'sk presented data on the distribution of radioactive fallout resulting from nuclear tests on the arctic island of Novaja Zemlja. Some ninety atmospheric tests were performed at this site between 1955-1962 after which there were about 42 underground tests up until 1992. Isolines of radiation dose rate measured at 1m above the ground 10h post-blast were shown for 3 tests in 1962. On these occasions dose rates >0.1 R h^{-1} were confined to a narrow zone extending roughly from central Novaja Zemlja in the north to northern regions of the Komi Republic in the south. On one of the three occasions Vorkuta fell within the 0.1 R h^{-1} isoline while the small coastal community of Amderma in the Neneckaja Republic was within the 5 R h^{-1} isoline. Tkachov presented medical statistics indicating that indigenous people in this arctic coastal region had elevated incidence of cancers of the lung, throat and stomach compared to indigenous populations in Alaska, Greenland, Scandinavia and southern parts of the Komi Republic. Furthermore, the incidence of these diseases grew steadily between 1980-1992. The well known problem of radionuclide concentration on ascending the lichen-reindeer-man food chain is implicated as a compounding factor and a program of analysis of reindeer tissue and plants is now planned in the region.

Until recently, data of this kind on radioactive contamination resulting from the Soviet nuclear test programme were secret. It is evident that such information is now becoming available to research workers under various contractual arrangements. Thus the data for the Novaja Zemlja tests presented in map form by Tkachov was obtained from the archives of the Radium Institute in St Petersburg; he did not know the methods used to obtain the data (e.g. how rigorously the region was sampled).

Some 1000km to the south east of Novaja Zemlja, on the Kola Peninsular, current radioactive contamination remains close to background. Anatoly

Semenov of the Murmansk Area Department for Hydrometeorology & Environmental Monitoring reported that the radionuclide content of *Cladonia* lichens in the region is lower than in those further south in Scandinavia. Small areas *c.* 20 km in diameter with slightly higher levels of contamination were thought to be due to localised rainout of Chernobyl-derived products. Dr V. Krychkov from the Institute of Economic Problems, Apatity, confirmed that dose rates in the region are generally within the range 13-16 R h^{-1}.

Peter Crittenden

WE ARE STILL LOOKING FOR THE LARGEST LICHEN

In 1989 (Bulletin **65**:22) Oliver Gilbert asked the question 'Where are Britain's largest lichens?' In this article he refers to a number of large lichens that he had seen in his travels as a lichenologist. These lichens included a *Caloplaca flavescens* 27 cm in diameter in the churchyard at Burford, Oxfordshire, an *Ochrolechia parella* 54 x 52 cm seen in Caenlochan Glen, Angus, and a *Lecidea fuscoatra* 35 x 33 cm at Melrose Abbey, Roxburghshire.

Prof. G. Degelius followed this with accounts of some large lichens he had found on the Island of Vega Norway (Bulletin **66**:25). The largest of these being an *Anaptychia runcinata* 75 cm in diameter and a *Parmelia alpicola* about 70 cm in diameter.

All these lichens, being large, are almost certainly of some considerable age. This produces the problem of whether they are one large thallus or, at some time in the past, formed from two or more genetically similar thalli which have fused together. It is not possible to be certain and possibly the best that it is possible to do is to look for thalli that have roughly circular outlines. Obvious distortions in the outline may well be caused by thalli growing together.

Since the time of these articles there has been silence and I feel that it is now time to recommence the search. Since 1989 the lichens have had quite some time in which to grow larger! The largest lichen which I know about is the famous specimen of *Lobaria amplissima* found by Francis Rose near Lawrenny in Pembroke. I measured the thallus in 1993 when the greatest continuous width was 998 mm and the maximum depth 795 mm. Comparing the photograph below with one taken two years earlier it does appear to

have grown. It is therefore likely that this has now passed the one metre mark. I will report on its size next time I am in the area.

Is this the largest lichen in Britain? I think so; but I expect that some member of the Society will be able to prove me wrong.

Frank Dobson

Lobaria amplissima at Lawrenny, Pembroke. Is this Britains largest lichen?

LICHEN FLORA OF SURREY

I have started work on a Lichen Flora of Surrey and would be very grateful to receive any records that you may have in your possession. Interesting comments on sites or species will be especially welcome. The area to be surveyed is that of Vice-county 17 'Surrey' and not the reduced size that the county now has after the local government reorganisations.

Please send any information to me at the address given under Treasurer on the back inside cover.

Frank Dobson

NEW, RARE AND INTERESTING BRITISH LICHEN RECORDS

(Contributions to this section are always welcome. Please submit entries to Chris Hitch, The Whin, Wadd Lane, Snape, Saxmundham, Suffolk IP17 1QY, in the form of species, habitat, locality, VC no, VC name, Grid Reference (GR), altitude, where applicable, in metres (m), date, comments and recorder. An authority with date after species in only included, when the record is new to the British Isles. *In the interests of accuracy, typecript is much appreciated. Please only use one side of the paper.)*

Abrothallus suecicus: on blackened thalli of *Ramalina farinacea* on *Acer pseudoplatanus*, Kindrogan Field Centre, Strath Ardle, VC 89, East Perthshire, GR 37/05-62-, 1995. New to Scotland, and apparently a new host.

A M & B J Coppins

Arthonia zwackhii: on *Quercus* on N side of River Dart, near junction with River Webburn, Holne Chase, VC 3, South Devon, GR 20/71-71-, 1995.

A M & B J Coppins

Bacidia friesiana: on *Sambucus* and rusting iron in chalk pit nature reserve, Little Blakenham, VC 25, East Suffolk, GR 62/10-49-, April 1995. New to the County. Determined B J Coppins.

P M Earland-Bennett & C J B Hitch

Bacidia subfuscula: on brick garden wall, Ipswich, VC 25, East Suffolk, GR 62/18-42-, November 1994. Confirmed B J Coppins.

P M Earland-Bennett

Buellia arborea: on lignum of old fence rails with *Protoparmelia oleagina* [both collections], S of Lower Meads, Rogate, VC 13, West Sussex, GR 41/80-23-, 1970, coll B J Coppins; Shobrooke Park, Crediton, VC 3, South Devon, GR 21/85-01-, 1970, coll B J Coppins & F Rose. New to England. Both collections confirmed by TLC (atranorin and placodiolic acid). *B. arborea* is easily mistaken in the field for *B. griseovirens*. The *P. oleagina* is new to Devon.

B J Coppins

Caloplaca lucifuga: on trunk of ancient *Quercus* in grounds of Dawyck House, Stobo, VC 78, Peebles, GR 36/16-35-, 1995. New to Scotland.

A M & B J Coppins

Collema limosum: on garden lawn, Kesgrave, Ipswich, VC 25, East Suffolk, GR 62/23-45-, May 1995.

P M Earland-Bennett

Cornutispora lichenicola: on thallus of *Lecanora conizaeoides* on twigs of *Crataegus* bush on top of Roman wall, Colchester, VC 19, North Essex, GR 62/00-25-, January 1994. Determined E Punithalingam.

P M Earland-Bennett

Endococcus parietinus: on thallus of *Rinodina gennarii* on mortar of old wall at coast, Boyton, VC 25, East Suffolk, GR 62/39-47-, August 1991. Only the second known record on this host. Confirmed D L Hawksworth.

P M Earland-Bennett, C J B Hitch & P N Cayton.

Epicladonia sandstedei: lichenicolous on the thallus of *Cladonia humilis* on gravelly soil, Wick Farm Quarry, VC 25, East Suffolk, GR 62/01-35-, September 1994. New to Suffolk. Confirmed D L Hawksworth.

C J B Hitch

Gelatinopsis ericetorum: on thallus of *Baeomyces roseus*, North Hill, VC 3, South Devon, GR 31/09-06-, 1991. New to S W England. Determined B J Coppins.

B Benfield

Graphina pauciloculata: on *Ilex* by East Webburn River, Lizwell Wood, Holne Chase, VC 3, South Devon, GR 20/71-73-. Third major site in SW England.

A M & B J Coppins

Lecanora navarrensis: on *Quercus* trunk, 9 km ENE of Ballater, Dinnet Oakwood NNR, VC 92, South Aberdeen, GR 37/4—9—, 1994. New to Scotland.

A M & B J Coppins & G Kantvilas

Lecanora pannonica: on vertical sandstone on the south side of the church, Great Malvern Priory, VC 37, Worcester, GR 32/77-45-, October 1994, and on an east-facing, sandstone window-sill, St Mary's church, Hanley Castle, VC 37, Worcester, GR 32/83-41-, October 1994. New to Worcestershire and much to the west of other recorded sites.

T W Chester

Lecanora pruinosa: on window sills and chamfered plinths on all sides of

the church, on a limestone chest tomb (1855), a coped tomb and a 1914-18 war memorial, Islip churchyard, VC 32, Northampton, GR 42/94-85-, August 1995. New to Northamptonshire and easily the most north-easterly site so far for this recently re-discovered species.

T W Chester

Lecidea lapillicola Vain. (1883): on side of siliceous boulder in woodland, 9 km ENE of Ballater, Dinnet Oakwood NNR, VC 92, South Aberdeen, GR 37/4—9—, 1994. New to the British Isles. This species will be transferred to *Micarea* in a forthcoming paper [some possible earlier names need to be checked]. It is similar to *M.erratica*, but has a thallus of minute granular areoles and a "micareoid" photobiont.

A M & B J Coppins & G Kantvilas

Licea parasitica: growing amongst lichens together with *Ramonia interjecta* on bark of branches of *Sambucus*, Baythorne End, VC 19, North Essex, GR 52/72-42-, April 1994. This minute myxomycete may be found growing among or *on* lichen species but it is not parasitic (B Ing, pers comm). It is the commonest corticolous species of myxomycete in the British Isles. I have found it several times in Essex and Suffolk, although it is more common outside East Anglia. It is most common on *Sambucus*, but is not confined to this phorophyte. Confirmed E Punithalingam.

P M Earland-Bennett

Macentina abscondita: on shaded *Sambucus* in chalk pit nature reserve, Little Blakenham, VC 25, East Suffolk, GR 62/10-49-, April 1995. Only the sixth known record of this species, of which three are from East Suffolk!

P M Earland-Bennett & C J B Hitch

Melaspilea amota: on *Quercus* with *Rinodina isidioides*, Stubbs Wood, New Forest, VC 11, South Hampshire, GR 41/3—0—, 1974, collected F Rose & S R Davey; on *Quercus* on N side of River Dart, Holne Chase, VC 3, South Devon, GR 20/72-72-, 1995, collected B J and A M Coppins - New to England. On *Quercus*, Talyllyn, Doly-y-cae, W side of Nant Cader, VC 48, Merioneth, GR 23/72-11-, 1972, coll B J Coppins - New to Wales. This species was previously regarded as endemic to southern Ireland. Representative specimens in E.

B J Coppins

Micarea curvata: on side of flat pebble in area of stablilized, riverside shingle, upper reaches of Whiteadder Water, by Johnscleugh, Lammermuir Hills, VC 82, East Lothian, GR 36/63-66-, alt 290m 1995. Second British

record. As with the material from Torrs Warren (*Bulletin* **74**: 60), this too had a K+ violet epithecium. The upper side of the pebble was colonized by *Lecidea plana, Porpidia crustulata, P. soredizodes, P. tuberculosa* and *Rhizocarpon obscuratum*.

B J & A M Coppins

Nectriella robergei: growing with *Illosporium carneum* on thallus of *Peltigera didactyla* on soil of old railway sidings, Eight Ash Green, Colchester, VC 19, North Essex, GR 52/95-25-, June 1995.

P M Earland-Bennett & J F Skinner

Opegrapha parasitica: on thallus of *Aspicilia calcarea*. Selected examples: Dolebury Warren, Mendip Hills, VC 6, North Somerset, GR 31/44-58-, 1984 (E); Port Eynon, Gower, VC 41, Glamorgan, GR 21/46-84-, 1990 (E); Dunkerron, North Kerry, VC H1, 1800s, collected T. Taylor (BM - as *'O. cerebrina')*. This species is apparently confined to *Aspicilia calcarea*, and in the recent British Checklists was provisionally referred to '*O. monspeliensis* Nyl.', which is probably a synonym of *O. parasitica*. The *Opegrapha* on foveolate pyrenocarpous species of the *Verrucariaceae*, which has often been called *"O. parasitica"* (e.g. *Flora*, p. 411), should be called *O. rupestris* Pers. (1794).

B J Coppins

Opegrapha rotunda Hafellner (1994) [see "Literature Pertaining" in previous issue]: lichenicolous on thallus of *Physconia distorta*, specimens of mine in E determined from three localities; on tree branch, SW of Cannich, Balcladaich, VC 96, Easterness, GR 28/29-25-, 1975; on *Populus,* between Aberfeldy and Weems, VC 88, Mid-Perth, GR 27/84-49-, 1976; on *Fraxinus*, Dunkroisk, Glen Lochay, VC 88, Mid-Perth, GR 27/5—3—, 1978. New to the British Isles.

B J Coppins

Parmelia conspersa: on slate roofs, Wakes Colne, VC 19, North Essex, GR 52/88-28-, May 1995. This is the first Essex record for thirty years and is present at this site in great quantity.

P M Earland-Bennett & C J B Hitch

Parmelia protomatrae: on slate roof, Framlingham, VC 25, East Suffolk, GR 62/28-61-, May 1995. Third British record - all from East Suffolk! Determined B J Coppins.

P M Earland-Bennett & C J B Hitch

Parmelia pulla: on slate roof, Campsey Ash, VC 25, East Suffolk, GR 62/32-55-, May 1995.

P M Earland-Bennett & C J B Hitch

Phaeosporobolus alpinus R. Sant., Alstrup & D Hawksw, in Alstrup & Hawksworth (1990) [see *Bulletin* **67**: 42]. On thallus of *Pertusaria multipuncta*, N of Buckland Bridge, Holne Chase, VC 3, South Devon, GR 20/71-72-, alt 100 m. New to the British Isles. Can be distinguished from *P. usneae* by its smaller conidia (mostly 10-15 vs 15-25 µm) which have smaller cells (3-4 vs 4-6 µm).

A M & B J Coppins

Plectocarpon sampaianae Diederich & Etayo (1994) [see "Literature Pertaining" in previous issue]: lichenicolous on thallus of *Pannaria sampaiana*, specimens of mine in E recently identified from two further localities, 3 km E of Drochaid Sgainnir, Glenfinnan, VC 97, Westerness, GR 17/93-79-, 1978; Glasdrum NNR, VC 98, Main Argyll, GR 27/00-45-, 1976.

B J Coppins

Protoparmelia oleagina: - see entry under *Buellia arborea* (above).

Psammina stipitata: on green coccoid algae on young *Fraxinus*, Clopton, VC 25, East Suffolk, GR 62/22-54-, May 1995.

P M Earland-Bennett

Pyrenopsis impolita with *Placynthium flabellosum* on N-facing, steeply sloping, flushed rocks, Traprain Law, VC 82, East Lothian, GR 36/58-74-, alt *c.* 180 m. New to southern Scotland.

B J & A M Coppins

Sphaerellothecium propinquellum (Nyl.) Rouz & Triebel (1994) [see "Literature Pertaining" in this issue]: in apothecia of *Lecanora carpinea* on *Sorbus*, 3 km NW of Tomintoul, Wester Fodderletter, VC 94, Banff, GR 38-14-20-, 1990. New to the British Isles.

B J & A M Coppins

Steinia geophana: on soil of old railway sidings, Eight Ash Green, Colchester, VC 19, North Essex, GR 52/95-25-, June 1995.

P M Earland-Bennett & J F Skinner

Stigmidium congestum (Körb.) Triebel (1991): in apothecia of *Lecanora chlarotera* on *Populus tremula*, 9 km ENE of Ballater, Dinnet Oakwood

NNR, VC 92, South Aberdeen, GR 37/4—9—, 1994. New to the British Isles.

B J & A M Coppins & G Kantvilas

Usnea fulvoreagens: on *Betula*, Culbin Forest, VC 95, Moray, GR 28/99-63-. 1983. New to Scotland.

B J Coppins

Verrucaria bryoctona: on sandy ground in old coastal dune system, Aberlady Bay Nature Reserve, VC 82, East Lothian, GR 36/46-82-, 1991. New to Scotland.

B J Coppins & S Ekman

Verrucaria bryoctona: on the ground in land-fill of road junction, near Fleydmore, NE of Forfar, VC 90, Angus, GR 37/48-51-, 1993. Same site as for *Aphanopsis coenosa* and *Leptogium byssinum*. Determined B J Coppins.

R C Munro

Verrucaria bryoctona: on turf of solifluction terrace, near summit of Mam Sodhail, VC 106, East Ross, GR 28/1—2—, alt *c*1000 m. First montane record.

A M Fryday

Wentiomyces lichenicola ssp. *bouteillei*: on thallus of *Bacidia caligans* on mossy top of brick garden wall (10 metres from my front door!), Ipswich, VC 25, East Suffolk, GR 62/18-43-, February 1995. Third British record. Determined D L Hawksworth.

P M Earland-Bennett

Xanthoria elegans: many thalli on concrete tops of walls in urban area, Colchester, VC 19, North Essex, GR 52/95-24-, May 1995. also at Colchester, VC 19, North Essex, GR 62/01-26-, April 1995.

P M Earland-Bennett

Xanthoria elegans: on top of concrete post, Ipswich, VC 25, East Suffolk, GR 62/15-47-, March 1995; also present on concrete tops of walls at Stowupland, VC 25, East Suffolk, GR 62/06-59-, March 1995; Martlesham, VC 25, East Suffolk, GR 62/24-56-, May 1995; Ipswich, VC 25, East Suffolk, GR 62/17-45-, June 1995.

P M Earland-Bennett

LITERATURE PERTAINING TO BRITISH LICHENS - 18

Lichenologist 27(3) was published on 31 May 1995, 27(4) on 13 July 1995, and 27(5) on 12 October 1995.

Taxa prefixed by * are additions to the checklist for Britain and Ireland. Aside comments in square brackets are mine.

ARUP, U 1994. The genus *Caloplaca* on seashore rocks in eastern North America. *Bryologist* **97:** 377–392. Includes accounts of several species that also occur in the British Isles, as well as discussion of the problems involving the names *C. holocarpa*, *C. lithophila* and *C. vitellinula*, and also the distinction between *C. verruculifera* and *C. granulosa*.

EGEA, J M & TORRENTE, P 1994. El género de hongos liquenizados *Lecanactis* (Ascomycotina). *Bibliotheca Lichenologica* **54:** 1–205. This monographic revision of *Lecanactis* s.lat. restricts *Lecanactis* s.str. in the British Isles to *L. abietina* (type of the genus) and *L. dilleniana*. The following species have been included in the new genus *Lecanographa* Egea & Torrente as: *L. abscondita* (Th.Fr) Egea & Torrente, *L. amylacea* (Ehrh. ex Pers.) Egea & Torrente, *L. grumulosa* (Dufour) Egea & Torrente, *L. hemisphaerica* (Laundon) Egea & Torrente, and *L. lyncea* (Sm.) Egea & Torrente. *Lecanactis* and *Lecanographa* are separated on account of differences in ascus structure, exciple structure and perispore (absent from the ascospores of *Lecanactis*). Also, the apothecia of *Lecanographa* species have a greater tendency to be lirelliform. *Lecanactis premnea* has previously been transferred to *Cresponea* (see *BLS Bull.* **74:** 68). Because they are not yet known with apothecia, *Lecanactis latebrarum* and *L. subabietina* are considered to be of uncertain systematic position. *Lecanactis umbrina* is referred to *Schismatomma* [although in his recent world revision of that genus, Tehler (see *BLS Bull.* **73:** 68) placed it in *Lecanactis* s.lat.!].

EGEA, J M & TORRENTE, P 1995. The lichen genus *Sclerophyton* in the Sonoran Desert. *Bryologist* **98:** 207–217. The genus is shown to be currently represented by two groups: one, including the type species (*S. elegans*), with colourless ascospores; the other, with dark brown spores, that includes *S. circumscriptum*. Several photographs of *S. circumscriptum* are included.

GILBERT, O L 1995. The conservation of chalk grassland lichens. *Crypt. Bot.* **5:** 232–238. A paper given to the IAL2 symposium in 1992. [see also *Lichenologist* **25:** 379–414.]

GILBERT, O L & ARDRON, P A 1995 ['1993']. New rare and interesting lichens from North Derbyshire. *Sorby Record* **30:** 48–53. Includes accounts of recent studies in a range of habitats, as well as the reporting of 39 species new to the county.

GIRALT, M & MAYRHOFER, H 1995. Some corticolous and lignicolous species of the genus *Rinodina* (lichenized Ascomycetes, Physciaceae) lacking secondary compounds and vegetative propagules in Southern Europe and adjacent regions. *Bibliotheca Lichenologica* **57:** 127–160. Two of the treated species are so far known from Britain: *R. pyrina* and *R. sophodes*.

HAFELLNER, J & KALB, K 1995. Studies in the Trichotheliales ordo novus. *Bibliotheca Lichenologica* **57:** 161–186. The family Trichotheliaceae is removed from the Pyrenulales and placed in the new order Trichotheliales, and its representative genera are discussed. Of these, *Porina* is divided into two genera, largely based on acetone insoluble pigments in the perithecial walls. Of the species studied, species of *Porina* s.str. are characterized by having a yellow to orange (K+ reddish brown) pigmentation (*Porina*-yellow). The genus *Pseudosagedia* (Müll. Arg.) M. Choisy (1949) is resurrected to accomodate those species containing either *Pseudosagedia*-violet (subgenus *Pseudosagedia*) or *Sagedia*-red. The former pigment is dull brown to blackish with a purple to violet tinge that disappears in K. The latter pigment is purple-red to dark violet, turning to blue then blackish in K. British species referred to subgenus *Pseudosagedia* are: *Pseudosagedia aenea* (Wallr.) Hafellner & Kalb, *P. borreri* (Trevisan) Hafellner & Kalb, *P. chlorotica* (Ach.) Hafellner & Kalb, *P. curnowii* (A.L. Sm.) Hafellner & Kalb, *P. grandis* (Körb.) Hafellner & Kalb, *P. guentheri* (Flot.) Hafellner & Kalb and *P. interjungens* (Nyl.) Hafellner & Kalb. Those species with *Sagedia*-red are accommodated in the new subgenus *Limosagedia* Hafellner & Kalb, and British representatives are: *Pseudosagedia byssophila* (Körb. ex Hepp) Hafellner & Kalb, *P. ginzbergeri* (Zahlbr.) Hafellner & Kalb and *P. linearis* (Leight.) Hafellner & Kalb. The asci of *Porina* and *Pseudosagedia* have an apical, chitinoid ring structure, which is absent in *Porina* (*Zamenhofia*) *coralloidea*. Hence, unlike recent trends, the genus *Zamenhofia* is retained, at least for this species. [Watch this space for further developments!].

HENSSEN, A 1995. *Psoroglaena costaricensis*, a new lichen from Costa Rica, and remarks on other taxa of the genus *Psoroglaena* (Verrucariaceae). *Bibliotheca Lichenologica* **57:** 199–210. *Macentina stigonemoides* Orange is transferred to *Psoroglaena* Müll.Arg.(1891) as *P. stigonemoides* (Orange) Henssen; the genus characteristically has a filamentous or deeply incised

lobate thallus containing a yellow-green filamentous cyanobacterium as photobiont.

HERTEL, H & RAMBOLD, G 1995. On the genus *Adelolecia* (lichenized Ascomycotina, Lecanorales). *Bibliotheca Lichenologica* **57:** 211–230. Includes a full description and a European distribution map for *A. pilati*, and many additional observations on the genus and its systematic position.

KALB, K 1994. *Frutidella*, eine neue Flechtengattung für *Lecidea caesioatra* Schaerer. *Hoppea* **55:** 581–586. A new genus is described to accommodate *Lecidea caesioatra*, which now becomes *Frutidella caesioatra* (Schaer.) Kalb. It is placed in the *Biatoraceae*.

KNOPH, J-H & SCHMIDT, R 1995. Untersuchungen einiger Arten der Gattung *Lecidella* mit Hochdruckflüssigkeitschromatographie unter besonderer Berücksichtigung von epiphytischen Proben. *Bibliotheca Lichenologica* **57:** 307–326. Presents results of chemical examination by high performance liquid chromatography of nine species of *Lecidella*. Three "chemotypes" were found among material of *L. elaeochroma* s.lat.

KNOPH, J-H, SCHRÜFER, K & SIPMAN, H J M (eds) 1995. Studies in lichenology with emphasis on chemotaxonomy, geography and phytochemistry. Festschrift Christian Leuckert. *Bibliotheca Lichenologica* **57:** 1–476. Twenty-eight papers contributed by many of Professor Leuckert's friends and colleagues, on the occasion of his 65th birthday. Most of the papers are in English, and many of them are relevant to the British lichen flora - the most pertinent being included in this listing.

KÜMMERLING, H, LEUCKERT, C & WIRTH, V 1994. Chemische Flechtenanalysen IX. *Lecanactis latebrarum* (Ach.) Arnold. *Nova Hedwigia* **58:** 437–446. Includes a map of the species' European distribution [but no British records!] and phytosociological notes.

KÜMMERLING, H, LEUCKERT, C & WIRTH, V 1995. Chemische Flechtenanalysen X. *Lepraria rigidula* (B. de Lesd.) Tønsberg. *Nova Hedwigia* **60:** 233–240. *L. rigidula* is shown to contain atranorin and nephrosteranic acid. The latter substance is a fatty acid previously referred to as 'rigidula unknown'. The species is shown to be of wide occurrence in Europe and present also in Turkey and Morocco.

LAUNDON, J R 1995. On the classification of lichen photomorphs. *Taxon*

44: 387–389. To avoid the unfortunate consequence of having to use the same name for two very different photomorphs of the same lichenized fungus (e.g. *Sticta canariensis* and '*S. dufourii*') that often also have very different distributions or ecologies, it is proposed that the rank of forma be used for the younger name. No new combinations are made, however.

LOHTANDER, K 1995. The lichen genus *Leproloma* in Finland and some notes on the *Lepraria neglecta* group. *Ann. Bot. Fennici* **32:** 49–54. *Leproloma cacuminum* is transferred as *Lepraria cacuminum* (Massal.) Lohtander, and is considered to belong to the *L. neglecta* group.

LUMBSCH, H T 1994. Die *Lecanora subfusca*-gruppe in Australasien. *J. Hattori Bot. Lab.* **77:** 1–175. Although few 'European' species are treated, this is an essential reference for serious students of this difficult group. The well-illustrated introductory parts provide much valuable information on anatomy and chemistry. There is also a list of examined types of non-Australasian taxa, with some additional notes.

LUMBSCH, H T & FEIGE, G B 1994. Comments on the exsiccat "Lecanoroid Lichens" II. *Mycotaxon* 52: 429–442. *Haematomma leprarioides* auct. europ. non (Vain.) Vain. , from oceanic western Europe, is newly described as *H. neglectum* Lumbsch & Feige. Its thallus contains atranorin and chloroatranorin only, whereas that of *H. leprarioides* s.str., which is apparently confined to South America, contains additional thiophaninic acid as the major substance.

MITCHELL, M E 1995. 150 years of Irish lichenology: a concise survey. *Glasra N.S.* **2:** 139–155. Surveys the history of Irish lichenology up until 1953, and includes portraits of many of the leading characters.

NAVARRO-ROSINÉS, P & ROUX, C 1995. Le genre *Weddellomyces* (Dothideales, Dacampiaceae) en Catalogne et en Provence. *Mycotaxon* **53:** 161–187. Includes a revised key to the six species, two of which occur in Britain.

OBERMAYER, W 1994. Die Flechtengattung *Arthrorhaphis* (Arthrorhaphidaceae, Ascomycotina) in Europa und Grönland. *Nova Hedwigia* **58:** 275–333. Five species are treated, including: *A. alpina*, *A. citrinella*, *A. grisea* and *A. muddii* Obermayer (*A. fuscireagens* auct.). The last is the correct name for the species occurring on *Baeomyces rufus* (= *Dibaeis baeomyces*), and treated in the *Flora* as *A. fuscireagens* [the type of this name was found to be *A. grisea* on *B. rufus*].

ROUX, C & TRIEBEL, D 1994. Révision des espèces de *Stigmidium* et de *Sphaerellothecium* (champignons lichénicoles non lichénisés, Ascomycetes) correspondant à *Stigmidium schaereri* auct. *Bull. Soc. Linn. Provence* **45:** 451–542. The distinction between *Stigmidium* and *Sphaerellothecium* is clarified. British specimens are cited for *Stigmidium degelii* and **St. mitchellii* Roux & Bricard sp. nov.; the latter is a parasite of *Pannaria conoplea*, and is based on material from W Galway (VC H16). [Several of the other 21 species treated are likely to occur in Britain or Ireland, and two species (*St. congestum* and *Sph. propinquellum*) already have! See 'New, Rare and Interesting' in this issue].

ROUX, C, TRIEBEL, D, BRICAUD, O & LE COEUR, D 1995. Le *Stigmidium lecidellae* sp. nov. et remarques sur le genre *Stigmidium* (champignons lichénicoles non lichénisés, Ascomycètes). *Can. J. Bot.* **73:** 662–672. The value of the use of the dye cresyl blue, at the species level in the genus *Stigmidium*, is demonstrated. A key is provided to *Stigmidium* and *Sphaerellothecium* species occurring in the apothecia of their hosts.

TIBELL, L 1994. Distribution patterns and dispersal strategies of Caliciales. *Bot. J. Linn. Soc.* **116:** 159–202. Includes world distribution maps for *Calicium lenticulare*, *Chaenotheca chrysocephala* and *Cyphelium tigillare*. [A thought provoking review, with much discussion pertinent to the phytogeography of British lichens.]

TIBELL, L & RYMAN, K 1995. Revision of *Chaenothecopsis* with short stalks. *Nova Hedwigia* **60:** 199–218. Includes description of the previously enigmatic *C. retinens* (Nyl.) Tibell (1991) [not included in the *Flora*], which is shown to be a parasite on *Schismatomma cretaceum*, and so far known only from the type collection from Jersey. It is characterized by its very shortly stalked apothecia, internally reddish pigmentation, and rather large, minutely warted, 1-septate ascospores, 7–11 x 2.5–3.5 µm, whose septum is of similar contrast to the outer wall.

TRIEBEL, D, RAMBOLD, G & ELIX, J A 1995. A conspectus of the genus *Phacopsis* (Lecanorales). *Bryologist* **98:** 71–83. Of the 13 species accepted, two occur in the British Isles: *P. huuskonenii* and *P. oxyspora*. The latter is divided into three varieties: var. *oxyspora* [hypothecium ±hyaline, I+ blue]; var. *defecta* Triebel & Rambold [hypothecium ±hyaline, I-]; *var. *fusca* Triebel & Rambold [hypothecium brown to dark brown, I-]. No material of the var. *defecta* is cited from the British Isles.

Brian Coppins

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