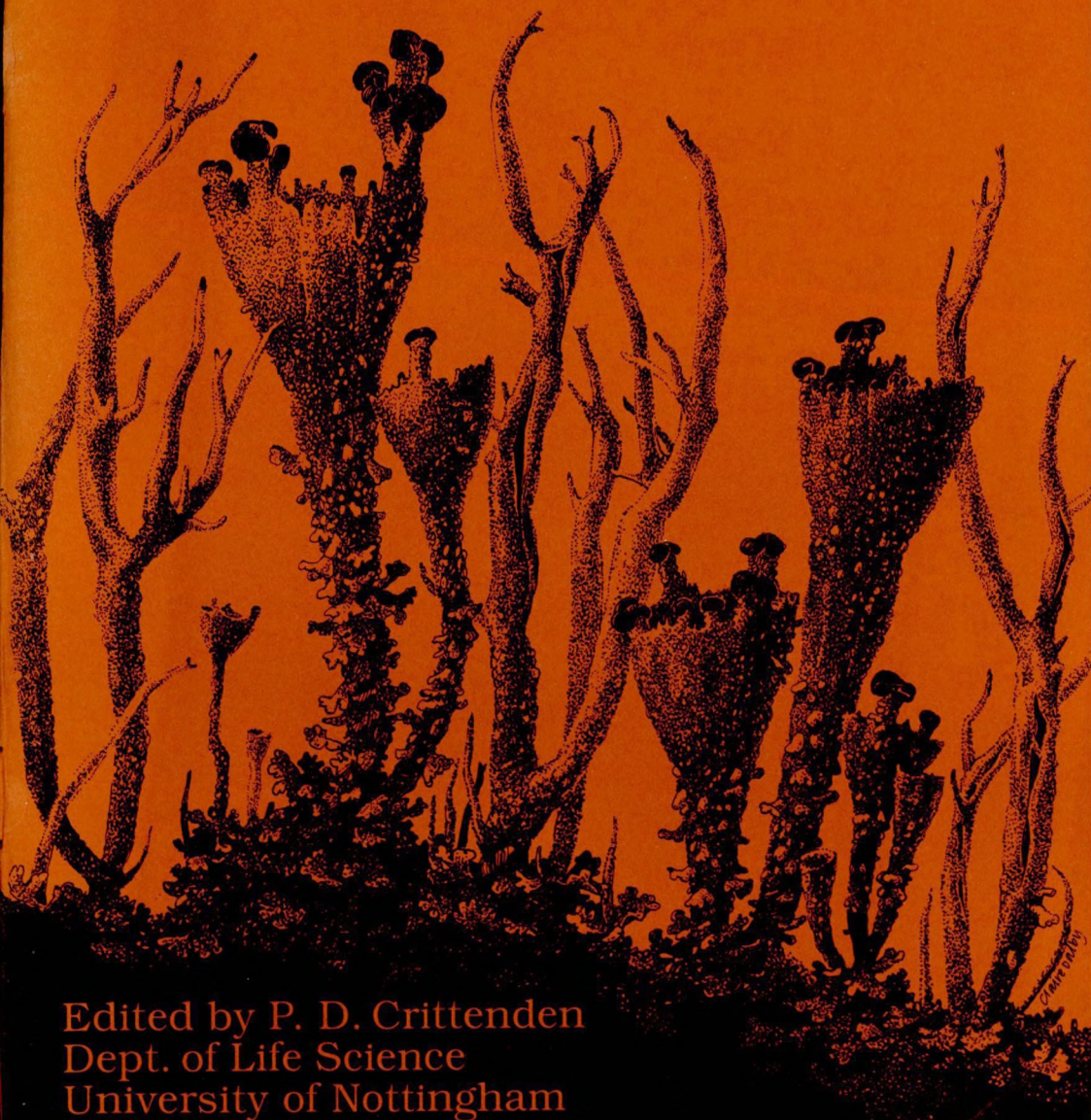


BRITISH LICHEN SOCIETY BULLETIN

No. 79 Winter 1996



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

FORTHCOMING BLS MEETINGS

DORSET

Leader: Brian Edwards

9 - 18 May 1997

DEVON (Slapton Ley) - *Caloplaca* Workshop

Leader: Peter James

15-22 August 1997

1997 MEMBERSHIP AND SUBSCRIPTION RATES

Annual rates except where indicated

(dollar rates are double the sterling rates 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
3 year membership £71.50

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 £214.00

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 JM Gray, Assistant Treasurer, British Lichen Society, Myrtle House, Church Lane, Kingston St. Mary, Taunton, Somerset, TA2 8HR, UK (tel. and fax 01823 451636). email: jmgray@argonet.co.uk

US dollar renewal membership subscriptions should be sent to Dr JW 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 - 20 March 1997

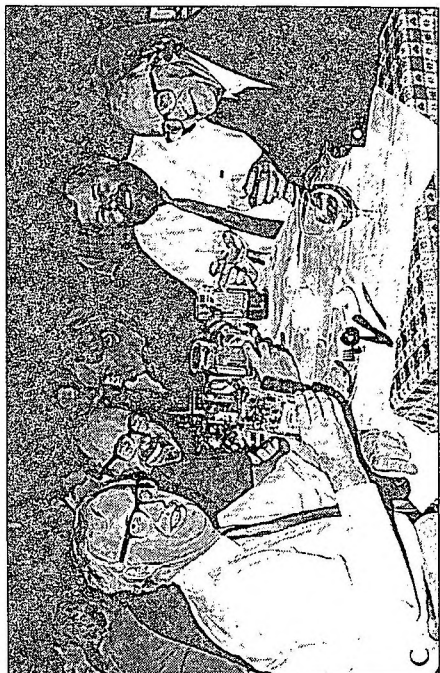
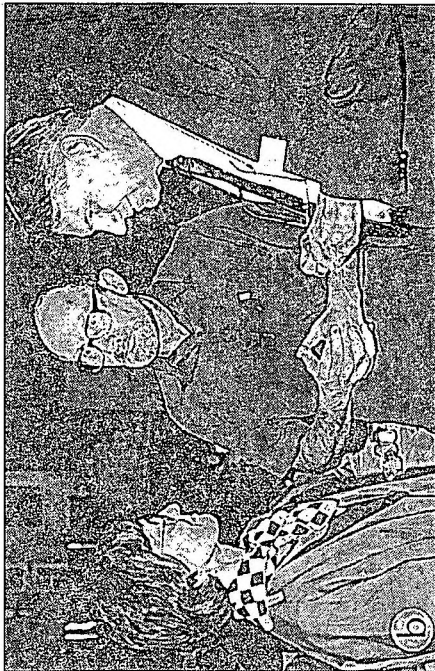
Cover artwork by Claire Dalby

IAL 3

The third symposium of the International Association for Lichenology (IAL 3) took place in the historic town of Salzburg between 1 - 7 September. Two hundred and ninety participants from 46 countries gathered in the spacious modern buildings of the Faculty of Natural Sciences at the University for a week of stimulating lectures and poster sessions punctuated with numerous breaks for discussion over coffee. On Wednesday evening a reception was given by the Governor of the Province of Salzburg and the Mayor of the City in the Alte Residence with the walls swathed in restoration garb and accompanied by a Mozartian concert of chamber music. At the IAL meeting on Thursday evening we saw the retirement of the complete IAL Council. The team comprising Ingvar Kärnefelt (President), Jack Elix (Vice President), André Aptroot (Secretary), Thorsten Lumbsch (Treasurer) and Clifford Smith (Deputy Treasurer) have been most effective in running the Association during the past 4 years and a new Council was elected comprising Martin Jahns (President), Dianne Fahselt (Vice President), Dagmar Triebel (Secretary), Edit Farkas (Treasurer) and Francois Lutzoni (Deputy Treasurer). Pier Luigi Nimis took over the editorship of the *IAL Newsletter* with the assistance of an editorial board comprising Tom Nash, Harrie Sipman, Mark Seaward, Clifford Smith and Roberto Zorer. There was general agreement to alter the the IAL constitution and the task of formulating proposals was delegated to a small subcommittee including Martin Jahns, Clifford Smith and Mats Wedin. Acharius medals were presented to Vernon Ahmadjian (*in absentia*), Siegfried Huneck and Christian Leuckart, a presentation speech for each of the recipients being made by Jim Lawrey, Jack Elix and Hannes Hertel, respectively. The Mason E. Hale Award for the most outstanding doctoral thesis was presented to Robert Lücking; the other nominees were Fracois Lutzoni and Mario Matzer. The meeting was followed by the IAL dinner held in the convivial surroundings of the great hall of the Stiegl-Bräu; a splendid occasion.

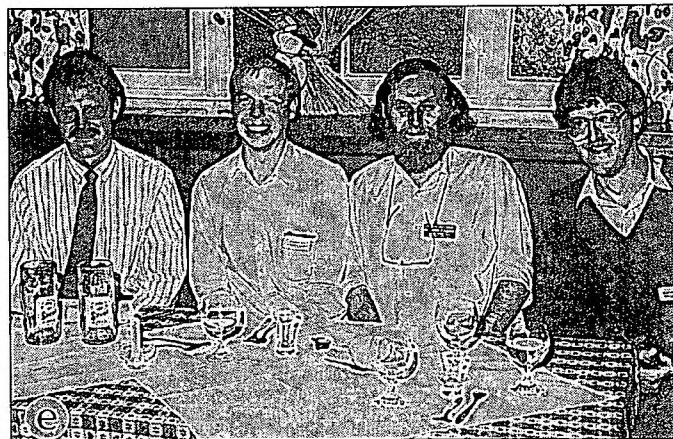
This symposium was scientifically rewarding and good fun. It was clear that all areas of lichenology are currently strong and attracting young talent. The application of molecular techniques to genetic and phylogenetic investigations of both lichen fungi and photobionts is now emerging as an important field and stimulated much discussion. All sessions were well-attended so that the week vanished in the University lecture hall (there were no parallel sessions) with little time to explore the beautiful city of Salzburg. The Organizing Committees, and especially the local organizers Roman Türk and Johanna Üblagger, did an excellent job and deserve to be extended congratulations and thanks from all those who attended.

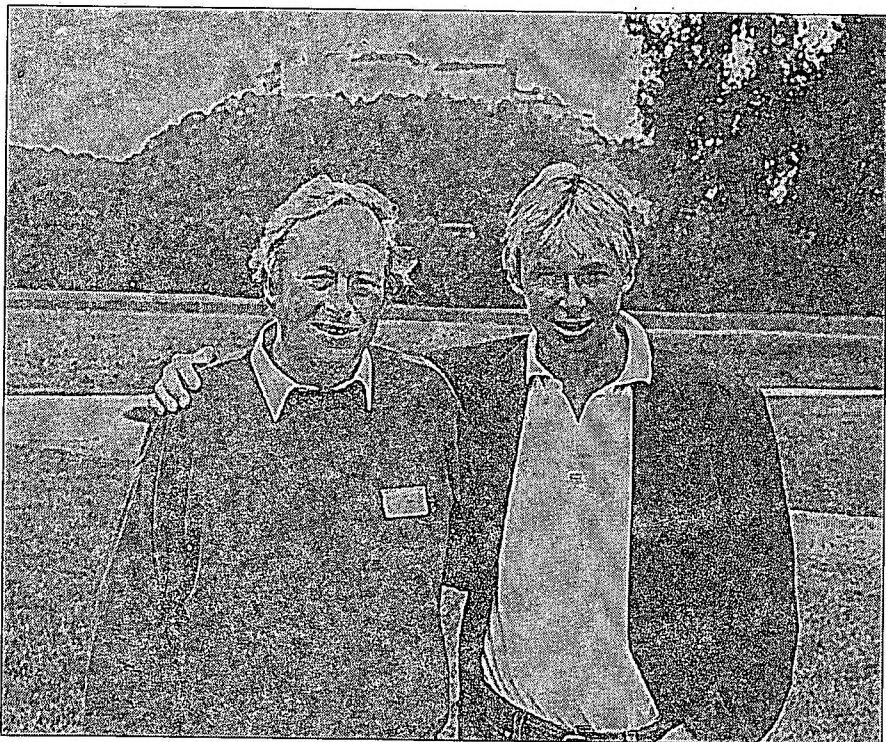
Peter Crittenden



Scenes from the IAL Dinner (*names in sequence from left to right*):

- (a) Pier Luigi Nimis (in foreground turning to face camera), Marie-Agnes Letrouit, Ana Crespo, Mark Seaward.
- (b) Sieglinde Ott, Clifford Smith, Teuvo (Ted) Ahti.
- (c) Dennis Brown, Clifford Smith, David Hill (not looking at camera), Allan Green, Otto Lange.
- (d) Sieglinde Ott talking to Brian Coppins, Margalith Galun, Christoph Scheidegger, Mathia Vust (seated), Daniele Armaleo (holding jacket with back to camera), Birgit Langenstein, Francois Lutzoni (top right corner).
- (e) Ulf Arup, Richard Beckett, Brian Coppins, Gintaras Kantvilas.
- (f) Ana Crespo, Xavier Llimona (local convener for IAL 4 to be held in Barcelona), Margot Schulz.





The President of the IAL, Martin Jahns, and the retiring president, Ingvar Kärnefelt, photographed in the grounds of the Institute of Natural Sciences, University of Salzburg, with the Hohensalzburg castle in the background.

FRANK BRIGHTMAN

With deep regret we report that Frank Brightman died on 20th June 1996. Frank was a founder member of the Society and one of its cornerstones for many years. He served the Society in numerous capacities: as organizer of the Lichen Study Group (1958-62), Curator (1964-70), referee for lichen identification (1966-90), President (1978-79), Conservation Officer (1987) and Conservation Chairman (1988-90), editor of the *Bulletin* (1987), and a member of Council on several occasions. He was elected an Honorary Member in 1988. Frank was one of the more colourful characters in British lichenology and he will be greatly missed. A full obituary will appear in a forthcoming issue of *The Lichenologist*.

JANUARY MEETINGS 1997

Nominations

Nominations for Officers for 1997 and four members of Council for the period 1997-1998 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 20 December 1996. No person may be nominated without their consent. Dr Francesca Blatchley, Mr Peter Earland-Bennett, Mr Peter W. Lambley and Dr Francis Rose retire from Council and are not eligible for re-election as Council members.

Council Meeting

Council will meet at 14.00 on Friday 10 January 1997 in the Meeting Room of the Linnean Society, Burlington House, Piccadilly, London W1V 0LQ. [Halfway between Green Park and Piccadilly tube 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 3 January 1997.

Evening buffet

The evening buffet will be held in the Meeting Room of the Linnean Society at 18.00. This will cost £12.00 per head including one glass of wine. Books will be available for sale, though there will be no auction this year. At this and future evening buffets we hope to present a series of short talks. This year Peter Lambley will talk on Sir James Smith and his friends. One other speaker will be sought. The work of these pioneering lichenologists has enabled a new and important step to be taken, with the production of the first Red Data Book on British Lichens. Professor D.L. Hawksworth will speak on this significant achievement. Provided printing schedules of this work go to plan, it is hoped the Joint Nature Conservation Committee will formally launch the book. If not, proofs will be available for inspection. Members are encouraged to bring along exhibits of lichenological interest for display: these can remain in place for the duration of the AGM.

Those wishing to attend should complete the enclosed tear-off form and send a cheque for £10.00 (payable to the Linnean Society of London) before 20th 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 11 January 1997. 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 1996
3. Matters arising
4. Officer's Reports
5. Meetings 1996-1997
6. Election of Officers
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 Conservation in the UK"

14.15	Lower plant biodiversity action plans in Scotland (AM & BJ Coppins)
14.50	Protected lichens in the UK (A. Fletcher)
15.25	Coffee
15.55	New Forest woodland lichen conservation by accident (N Sanderson)
16.30	Discussion
17.00	Close

William Purvis

SMALL ECOLOGICAL PROJECT GRANTS TO BE MADE AVAILABLE TO MEMBERS

At a recent Council Meeting the BLS decided that it was time to take an active role in promoting the study of British lichens through providing a number of small grants. These are to support focused field work on neglected habitats or to involve neglected species. A number of these have already been identified but members are free to submit their own projects. Finance is sufficient to cover fuel and B&B, but for distant destinations, such as the north of Scotland, it would be preferable if the member was already in the area and wished to prolong their stay by a few days so only subsistence and a small amount of travel required funding. Grants will not exceed £500 and will usually be less. Depending on demand about six might be approved in any year.

Examples of projects which might receive favourable consideration are listed below. The likely maximum contribution which the Society would make is indicated in brackets. Actual grants would depend on costs incurred.

Applications, briefly outlining your approach and expected costs, should be made to Dr O L Gilbert, 42 Tom Lane, Sheffield, S10 3PB, either for one of the projects below or giving details of one of your own which, to get funded, must be suitably original. For the time being, each application will be considered by a small committee as it arrives until the annual budget has been spent.

A grant will be paid on receipt of a satisfactory report, made within a year of receiving the grant offer. Where "lost" species have been sought for in vain e.g. failure to find *Cladonia stellaris* on the Hill of Ardoe, a simple "nil return" will not suffice. Indications as to the likely ability of the site to support the species would normally be expected at least in the form of a current site management and vegetation description.

Members in receipt of a grant may also be encouraged to report their findings in the *Lichenologist* or *Bulletin*.

Natural and seminatural saxicolous/terricolous habitats on the Jurassic Limestone scarp. (£400)

Back edge of salt marshes, including lignicolous habitats. (£300)

The ground under pylons. (£100)

The Cheviot Hills. (£300)

The high-level furoid beds north of Loch Maree. (£200)

The margins of freshwater lakes, particularly a comparison of natural margins with ones affected by abstraction. (£400)

A detailed study of a castle. (£150)

Salted road verges. (£100)

Search of the Hill of Ardoe area for *Cladonia stellaris*. (£75)

Search of cliffs east of Hastings for *Tornabea scutellifera*. (£50)

Search of the Start Point area for *Teloschistes chrysopthalmus*. (£50)

Search of the Rothiemurchus area for *Cetraria juniperina*. (£75)

Oliver Gilbert
Ray Woods

**TREASURER'S REPORT ON THE ACCOUNTS
FOR THE PERIOD FROM 1/7/95 TO 30/6/96**

This has been another financially successful year for the Society. Current subscription income is running at a similar level to last year and it is noticeable from the amount of advance subscriptions received that the members find this method of payment very useful.

The profit derived from the sale of the *Flora* is reduced this year as we are now over the early rush of orders. Sales appear to have settled down to just over 100 a year and on this basis we have four to five years' stock in hand. We have sold sufficient copies to have recovered the capital invested and to be able to utilise the future profits to aid the objects of the Society. Since the balance sheet date some of this money has been spent in software and hardware to enable us to produce the interactive CD-ROMS to complement the hard copy edition of the *Atlas*.

Increased costs of production have reduced the profits received this year from Academic Press for *The Lichenologist*. Our journal, together with all the others published by Academic Press, has been put on the Internet and access may be obtained by means of a licence agreement from the publishers. Hard copies will still be produced and we have the written assurance of the publishers that this new arrangement will not reduce our share of the profits and that it will increase in line with the subscription rate for *The Lichenologist*.

The costs of the *Bulletin* have also risen owing mainly to the additional costs of printing and distributing the 1995 Membership List but also because of increased production expenses. It is felt by the Council that this publication is very important to most members of the Society. Therefore, whilst costs must be contained, it is essential that the high standards of editing and production are maintained.

I must thank the assistant treasurers John Sheard and Jeremy Gray for their very valuable help during the year and also Douglas Oliver for auditing the accounts.

F S Dobson
Hon. Treasurer

BRITISH LICHEN SOCIETY
EXPENDITURE AND INCOME FOR THE YEAR 1/7/95 TO 30/6/96

1994/5	EXPENDITURE			1994/5	INCOME		
	Printing and distributing				Subscriptions		21,372
	<i>The Lichenologist</i>	10,761			Add 1/5 life membership		553
5,738	Less profit sharing	(4060)	6,701		Less refunds (238)		
	Printing and distributing			14,408	Paid in advance (7,896)	(8,134)	13,791
	<i>The Bulletin</i>	3,372		4,013	Interest received		4,853
1,977	Less receipts	(482)	2,890	74	Donations		45
1,236	Secretarial and committee expenses		1,081	4,064	Profit on sales of stock inc. <i>Flora</i>		1,504
1,014	Printing		1,108	(112)	Profit/Loss on exchange rate		(146)
293	Bank charges		284	56	Profit on book sale		-
	A.G.M. and buffet	636					
283	Less receipts	(0)	636	£22,503		Total	£20,047
	Grants, Seminars Field trips etc.	296					
-	Less receipts	(190)	106	(10,297)	Excess income over expenditure		(£6,342)
758	Churchyard project		92				
150	Accounting and audit		150				
103	Insurance		103				
82	Subscriptions paid		254				
-	Drawings for Dawyck display		300				
572	Miscellaneous		-				
£12,206		Total	£13,705	£12,206		Total	£13,705

BALANCE SHEET AS AT 30/6/96

	LIABILITIES				ASSETS		
5,309	Sundry creditors (inc. advance subs)		7,896	98,154	Cash at Banks		109,998
1,764	Life members		2,211	11,483	Stock inc. <i>Flora</i>		9,015
3,307	Burnet/Wallace Memorial Fund		3,307	-	Debtors		-
900	Grants and funds in hand		900				
	General Fund at 30/6/95	98,357					
98,357	Plus surplus for 12 months	6,342	104,699				
£109,637		Total	£119,013	£109,637		Total	£119,013

AUDITOR'S REPORT TO THE BRITISH LICHEN SOCIETY

I have not checked the stock but, in my opinion, the attached accounts prepared under the historical cost convention 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 30th June 1996.

D E W Oliver FCIB, ATII.

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 1997 FIELD MEETING AT HEADLEY HEATH

As usual a field meeting will be held on the Sunday (12 January 1997) after the Society's AGM. This year we will visit Headley Heath in Surrey. This is a very interesting area with a variety of habitats including acid heathland, woods and chalk downland. There is a nearby pub (The Cock) where we can have lunch. Just behind the pub is Headley church with a fair sized churchyard which should produce a good list of species.

We will meet in the car park opposite the cricket ground (GR 51/205538) at 10.30 am. For those coming by train we will have transport for you at Box Hill (also known as Box Hill and West Humble) station at 9.54 am to meet the 9.06 from Victoria to Dorking. This is a faster train than last year but we are meeting two stations further down the line. If the train time is changed, we will meet the first train to Box Hill that leaves Victoria after 9.00 am.

Frank Dobson

FROM THE ASSISTANT TREASURER

Publications

The price of publications has remained unchanged for many years but I regret that, owing to escalating postal costs, it has now become necessary to make increases. Prices (which do not include postage) for publications sold at meetings and at the AGM remain unchanged. Please let me know if there are particular items which you wish to purchase at the AGM as I will bring only limited stocks.

Three and Five Year Membership

Please note that the Society's subscription rates are usually set for a five-year period, currently 1995-1999, therefore during this period the 5 year membership rate of £112.50 is no longer available and 1997 will be the last opportunity of subscribing at the 3 year rate.

Standing Order Mandate

If you wish to pay your subscription by this method, thus ensuring that you receive the first part of each volume as soon as it is published in the New Year (and saving you the trouble of remembering to pay your subscription each year!), then please ensure that the form is received by your bank well before the 1st January.

Counties

The BLS Membership Lists, which are published every four years or so, show UK members' names arranged by counties. With the recent reorganisation of county boundaries and the dropping of the requirement of the Post Office that a county should appear in an address, I am at a loss to know how to show, in coherent form, who lives near whom! Suggestions would be welcome.

BLS Membership List (Winter 1995)

I would be pleased to send a copy to members who have joined the Society since September 1995 and who may not have received one with their "New Members" pack.

BLS Web Page

The Society now has a presence on the Internet. You may visit us at <http://argonet.co.uk/users/jmgray/>.

Jeremy Gray

PARMELIA AND RAMALINA WORKSHOP

Slapton Ley Field Centre, 26 July to 2 August 1996

Peter James and Frank Dobson led a highly successful workshop devoted to the study of *Parmelia* and *Ramalina*. Slapton Ley is an ideal venue for such a study as many of the species are to be found within a relatively short distance from the centre itself. Eighteen students attended the sessions and were joined on two of the days by a Dutch cryptogamic group which was holding a meeting in South Devon at the same time.

At an introductory lecture on *Parmelia* on the Saturday morning, Peter James gave an overview of the genera, basing them on the thirteen groups currently used by some European authors but not yet fully accepted world-wide. Samples of all the species were on display and available for detailed study. In addition to the lectures, Jeremy Gray brought an impressive set of *Parmelia* photographs covering all the species discussed as well as his early, and very successful, attempts to put these onto CD-ROM together with the scanned distribution maps. These clearly point the way to the future development of this field and he was given every encouragement to pursue this medium.

Trevor Duke ran thin-layer chromatograms of *Parmelia* and *Ramalina* species, illustrating well the power of this technique in supporting the taxonomic separation of species in both genera.

All sites visited during the workshop were in vice county 3.

Slapton Ley Nature Reserve (20/82-44-)

Behind the laboratory, on the fence rails, we were able to compare *Parmelia caperata* and *P. soredians* directly. Alongside the wooden raised path over the causeway on a variety of trees we recorded *Parmelia glabratula*, *P. subrudecta*, *Ramalina calicaris*, *R. farinacea*, *R. fastigiata*, and *R. canariensis*. Alongside the nature trail, *Parmelia reddenda* and *P. quercina* were observed on a fallen *Salix* and on *Fraxinus*, together with *P. pastillifera*. On a young oak tree, *Phaeographis lyelli* was also seen. *Cryptolechia carneolutes* occurred on *Fraxinus*, together with *Wadeana dendrographa* and *Rinodina roboris*, and *Gyalecta truncigena* occurred on some old oak trees.

The walls of the village were rich in a number of species. Here both *Solenopsora vulturicensis* and *S. holophaea* were recorded as well as extensive patches of the overlooked species, *Caloplaca dalmatica*.

Yarner Wood (20/78-78-)

This delightful old woodland site was visited briefly. Six *Parmelia* species were seen, the most outstanding of which was *Parmelia horrescens* flourishing near the car park itself. Within the wood the following old woodland indicator species were recorded: *Parmeliella triptophylla*, *Pannaria conoplea*, *Micarea alabastrites*, *Nephroma laevigatum*, *N. parile*, and *Arthroproyrenia antecellans*. *Rhizocarpon hochstetteri* was noted on rocks at the side of the road. Whilst lunching at this site during a short shower, we were entertained by some fine silver-washed fritillary and white admiral butterflies flying amongst the trees or visiting bramble flowers, especially during the brief, intermittent bursts of sunshine.

Saddle Tor (20/75-76-)

This fine saddle-shaped tor set in Dartmoor was a rich site for several saxicolous species. Of particular note were the fine colonies of *Lasallia pustulata* growing on the eastern facing edges of the tor. Other species noted included *Stereocaulon vesuvianum*, *S. evolutum*, *Aspicilia caesiocinerea* and *Parmelia conspersa* in nutrient-enriched tracks, and *Fuscidea kochiana*, *F. cyathoides*, *F. praeruptorum* (the first record for Devon) and *F. lygaea*. Other *Parmelias* included *Parmelia exasperatula*, *P. glabratula* ssp. *fuliginosa*, *P. loxodes*, *P. mougeotii*, *P. omphalodes*, *P. saxatilis* and *P. verruculifera*. Other interesting species of note included *Lecidea pycnocarpa*, *Porpidia contraponenda*, *P. cinereoatra*, *Rhizocarpon lecanorinum*, and *Rinodina atrocinerea*.

Start Point (20/82-37-)

This is a rocky promontory at the base of Start Bay which also accommodates the local lighthouse. On a very warm and sunny day, it was possible to investigate the nooks and crevices of these numerous rocks in detail and in comfort. Of particular note were some fine colonies of *Teloschistes flavicans*, and in three crevices, colonies of *Rocella fuciformis* and *R. phycopsis* were found. The rock outcrops and the ground supported many examples of *Parmelia*, including *P. britannicum*, *P. caperata*, *P. conspersa*, *P. crinita*, *P. glabratula* ssp. *fuliginosa*, *P. omphalodes*, *P. perlata*, *P. pulla*, *P. reddenda*, *P. reticulata*, *P. revoluta*, *P. saxatilis*, *P. subrudecta* and *P. verruculifera*. Another first for Devon, *Arthonia atlantica*, was found in dry sheltered rock underhangs at this site. Other species included *Rhizocarpon richardii*, *Caloplaca ceracea* and *Lecanora praepostera*.

Widdicombe House (20/81-41-)

At the rear of this house there was a row of isolated, somewhat windswept sycamores which were unusually rich in lichens. Most conspicuous of these were the many fine colonies of *Teloschistes flavicans*. The *Parmelias* included *Parmelia caperata*, *P. glabratula* ssp. *glabratula*, *P. pastillifera*, *P. perlata*, *P. reddenda*,

P. reticulata, *P. soledians*, *P. subaurifera*, *P. subrudecta* and *P. sulcata*. Alongside these species were *Hyperphyscia adglutinata*, *Physcia clementei*, *P. semipinnata*, *P. tribacioides* and *Pertusaria coccodes*, the last much more common in the eastern counties. Other species of note were *Opegrapha corticola*, *Ochrolechia subviridis*, *Gyalecta derivata*, *Rinodina roboris*, *Usnea cornuta* and *Caloplaca citrina* f. *phlogina*. Four Ramalinas were present, *R. calicaris*, *R. canariensis*, *R. farinacea* and *R. fastigiata*.

On a nearby wall, *Sticta fuliginosa* and a large colony of *Nephroma laevigatum* were observed; in a more shaded corner, *Lecania hutchinsiae* was abundant.

Shaugh Bridge (20/534637)

This was a rich old woodland site with a stream containing large partially submerged granite boulders. One hundred and thirty species were recorded at this site, the most striking lichen being *Herteliana taylorii*, an old woodland indicator forming extensive pale green patches on boulders and apparently able to inhibit the growth of encroaching mosses; although often devoid of apothecia due to browsing molluscs, some fine fruiting specimens were present. Within the vicinity of the car park, old ash trees supported some fine specimens of *Parmelia horrescens*, although *Lobaria pulmonaria*, seen on previous visits, was not refound on this occasion.

Up stream, on boulders, both *Parmelia endochlora* and *P. laevigata* were recorded. Other species included *P. taylorensis* (on granite boulders and alder), *Ochrolechia inversa* (on oak), *Micarea stipitata* and *Lecidea doliiformis*. Both *Arthonia arthonioides* and *A. astroidestra* were observed on ancient holly: this was the second Devon record for the former species. *Usnea ceratina* with its "rosa unterhosen elastische" medulla was well illustrated. *Usnea cornuta*, *U. flammea*, *U. rubicunda* and *U. fragilesceus* were also present. Amongst other species recorded were *Arthonia vinosa*, *Bacidia viridifarinoso*, *Pachyphiale carneola*, *Pannaria conoplea*, *Sticta fuliginosa*, *S. limbata*, and *Zamenhofia coralloidea*.

Bickleigh Village (20/52-62-)

Three or four lime and oak trees on the green in front of the church at Bickleigh supported a number of interesting twig species of *Parmelia*. Thirteen were recorded: *Parmelia caperata*, *P. exasperata*, *P. exasperatula*, *P. glabratula*, *P. laciniatula*, *P. perlata*, *P. reticulata*, *P. reddenda*, *P. saxatilis*, *P. soledians*, *P. subaurifera*, *P. subrudecta*, and *P. sulcata*.

Bolt Head (20/725361)

Enjoying a superb morning, with dodder in bloom over the gorse, we explored the lichen-rich coastline. Fifteen species of *Parmelia* were seen at this site

including the first Devon record this century for *P. minarum*. Other species included *P. britannicum*, *P. caperata*, *P. conspersa*, *P. delisei*; *P. glabratula* ssp. *fuliginosa*, *P. loxodes*, *P. omphalodes*, *P. perlata*, *P. revoluta*, *P. saxatilis*, *P. soledians*, *P. sulcata* and *P. verruculifera*.

A total of seventy species were recorded for this site including *Aspicilia epiglypta*, *Caloplaca ceracea*, *Lecanora praepostera*, *Porpidia platycarpoides*, *Solenopsora vulturiensis*, *Trapeliopsis wallrothii*, *Verrucaria fusconigrescens*, *Acarospora impressula* as well as *Lecanora subcarnea*. Brian Coppins informs us that material of *L. subcarnea* from SW England appears to all contain norstic acid, and is referable to *L. ochroidea* (Ach.) Nyl. (the first vice county record for this species). A more detailed note will appear in the next *Bulletin*.

Dartmeet (20/67-73-)

This is a popular and very attractive woodland on the borders of the boulder-filled Dart river. It has some large old trees as well as riverside willows and alders which support many twig species. It was here that both *Japewia carrollii* and *Lecanora jamesii* occurred together on willow twigs, a tribute to Peter. Along the roadside some very shaded outcrops of local rock supported an interesting flora of *Enterographa zonata*, *Opegrapha gyrocarpa*, *Polysporina simplex*, *Porina lectissima* and *Psilolechia lucida*. *Massalongia carnosa* and *Leptogium cyanescens* were also noted. Among the Parmelias seen at this site were *P. caperata*, *P. conspersa*, *Pexasperata*, *Pexasperatula*, *P. laciniatula*, *P. pastillifera*, *P. perlata*, *P. revoluta*, *P. subaurifera* and *P. sulcata*. On the boulders in the river there were some fine examples of *Dermatocarpon luridum*, *Porpidia hydrophila*, *Hymenelia lacustris*, and *Polychidium muscicola* as well as *Endocarpon adscendens*, an extremely rare lichen in Britain and an exciting discovery.

Sharp Tor (20/686729)

The last site visited was another of the many granite outcrops which stand proud over Dartmoor. Passing through a dry marsh, which nevertheless supported *Drosera rotundifolia*, *Nartheceum ossifragum*, *Wahlenbergia hederacea* and *Hypericum elodes* in bloom, we reached the Tor. Some fifty four species were recorded on this short visit including eight Parmelias: *Parmelia conspersa*, *P. glabratula* ssp. *fuliginosa*, *P. incurva*, *P. loxodes*, *P. mougeotii*, *P. omphalodes*, *P. saxatilis* and *P. sulcata*.

Of particular interest was the clear distinction between *Fuscidea cyathoides* and *F. lygeae* which grew abundantly on these rocks. Especially striking were the large colonies of *Lasallia pustulata*. Other interesting species encountered were *Ramalina siliquosa*, *R. subfarinacea*, *Stereocaulon evolutum*, *Umbilicaria polyrrhiza* and *U. polyphylla*.

Churchyard records

During the course of the workshop seven sites were visited, five of them relatively briefly. In total, 170 taxa were recorded: a high figure compared with other recent workshops and field meetings. Slapton churchyard was visited every day by some members of the course and 125 lichens were found, including three species of *Ramalina* and no less than fourteen saxicolous *Parmelia* species. Among these were *P. borreri* and *P. britannica*. The church walls were largely composed of Devonian slate and the most distinctive lichen on them was *Solenopsora vulturiensis*. While the rest of the party visited a local woodland, a small group spent around three hours in Bickleigh churchyard and recorded 95 species. *Anaptychia runcinata* was abundant on a north-facing window sill and calcareous chippings were well covered with *Leptogium plicatile*. Using the tlc facilities on the course, the first confirmed churchyard record of *Pyrrhospora querneae* was also found on a slate headstone. It is much more coarsely granular than the saxicolous form of *Lecanora expallens* which occasionally can have a similar fawn tint (cf *Lichen Flora* p 523). The whole party called in at Dodbrooke churchyard on the outskirts of Kingsbridge to see *Moelleropsis nebulosa* and *Leptogium cyanescens* which had been previously recorded among mosses on the churchyard wall. While there the team scored probably the fastest century ever, recording 103 species in 27 minutes! These included the first churchyard record of *Diploschistes gypsaceus*.

Other saxicolous species not generally found in lowland churches away from the coast included *Aspicilia grisea*, *Caloplaca ceracea*, *Lecanora fugiens*, *L. gangaleoides*, *Lecidella asema*, *Physcia clementei*, *Porpidia platycarpoides*, *Rhizocarpon richardii* and *Solenopsora holophaea*. On the other hand, some common lowland species were conspicuously diminished in numbers, such as *Caloplaca aurantia*, *C. saxicola*, *C. teicholyta*, *Candelariella medians*, *Lecanora conizaeoides*, *L. crenulata*, *L. muralis*, *Leproplaca chrysodeta*, *Physcia dubia*, *Psilolechia lucida*, *Scoliciosporum umbrinum*, *Trapelia placodioides*, *Verrucaria viridula*, and *Xanthoria candelaria*. The low figure for *Verrucaria viridula* may reflect some confusion with *V. macrostoma* and *V. nigrescens* which requires more careful resolution.

General aspects of the Meeting.

Apart from the lichen work at the meeting, two visits were arranged in the late evening: one to observe a glow-worm colony, which was preceded by an excellent review of these creatures by Frank Dobson, and the other to a badger sett where two young and the dam were seen at very close quarters. Evening visits to the Tower and the Queen's Arms were also much appreciated by some members!

Brian Fox

CHURCHYARD NATURAL HISTORY

On a recent outing with a group surveying churchyards in Lincolnshire, one of the members asked me if I knew of a fly that walked sideways. I realised that he was referring to *Medetera*, one of the tiny predatory members of the Dolichopodidae. During July and August they occupy vertical surfaces countrywide including church walls and headstones, always facing upwards and with body tilted at an angle. They feed on a variety of minute insects and I have seen them manipulating and masticating thrips (Thysanoptera or thunder-bugs) in the exceptionally large labella. Having written thus far, I went outdoors to catch some and they turned out to be *M. truncorum*.

That initial query made me realise that though BLS members are obviously specialists most of us also have an interest in Natural History in general. The following observations may therefore serve to unravel other mysteries.

Another phenomenon around July time is the appearance of countless billions of tiny red mites referred to in childhood as "blood-suckers"! These are not red spider mites and the BM could only quote the genus *Balaustium*. Their random and frantic search patterns with constant stops apparently to inspect the surface makes me suspect that they are foraging for spores or pollen grains.

One tiny creature that seems to be especially associated with lichens is the hairy millipede, *Polyxenus lagurus*, 3mm long when fully grown. Though it does occur in litter and under bark, I have only encountered it in churchyards on lichen covered stone. It is usually solitary but I found hundreds traversing the church wall at Allerthorpe in Yorkshire. With its lateral hair tufts and two caudal plumes it distinctly resembles an elongated carpet beetle larva, *Anthrenus*.

The soil below grassed areas of the churchyard is the province of leather-jackets, the larvae of craneflies or daddy longlegs. Identification is not easy but there is one that can be named by anyone. In October, adult *Tipula pagana* emerge and hang about on vertical surfaces during the day, one in every five being a wingless female. One rarely sees wingless tipulids but at St. Michaels, Brough in Westmorland, they adorned the church masonry and most of the headstones.

Grasshoppers in churchyards can be identified unseen, just like birds. The most usual species is the common field grasshopper, *Chorthippus brunneus*, but the common green, *Omocestus viridulus* may also be present. The songs of all eleven species are unique. *Chorthippus* produces up to eight short chirps

of half a second duration at two second intervals. *Omocestus*, on the other hand, chirps in an unbroken stridulation for about fifteen seconds, slowly increasing in volume for the first five or six seconds.

Many solitary wasps in various livery may be noted hovering near or on church masonry. Some have their cousins' black and yellow stripes while others, much smaller, will be black or bronzy. One hymenopteran is very distinctive and only noted when actually on the church wall. This is the black spider-hunting wasp, *Dipogon variegatus* whose female can reach 9mm in length. The forewing has a preapical sooty transverse band and when wings are folded flat over the abdomen the hyaline tip shows as a tiny white circle. The wings constantly quiver, the antennae restlessly tap the substratum and the wasp walks jerkily, and stiff-legged: a perfect example of hyperactivity. She is often seen with prey, the light brown crab spider, *Xysticus cristatus*. The wasp has been observed rapidly excavating a burrow in soft mortar using its robust mandibles.

The grassed area in many yards becomes a blue carpet in Spring with the flowering of germander speedwell, *Veronica chamaedrys*. Some readers may have noticed that the tip of the plant develops a hairy, whitish swelling. This is due to the gall midge, *Jaapiella veronicae*, ovipositing into a growing bud. This causes the two terminal leaves to unite and swell outwards. The gall is multilarval and the mature larvae pupate within.

Those lichenologists surveying corticolous species may have noticed another small fly on the trunk, also with the ability to run swiftly sideways but, unlike *Medetera*, rarely taking to wing. Similarly sized, about 3mm long with dusky-streaked wings folded flat over the abdomen and front tibia strongly dilated and darkened, this fly is a predatory empid, *Tachypeza nubila*.

The one situation that unites both disciplines concerns those invertebrates which browse on lichens. Leaving aside mites, molluscs and psocids, the rarest herbivores are the case-bearing larvae of the Psychidae. These micro-moth larvae conceal themselves in spun silk tubes often adorned with lichen fragments. At St. Oswald's church, Collingham below Wetherby, I collected a number of larvae in grey cases, tastefully ringed with sores of *Caloplaca citrina*, at the end of June, 1993. They had decimated *Physconia grisea* on a marble headstone. These hatched out as *Luffia ferchaultella*, new to Yorkshire. Only today (13 August) I found larval tubes of a different kind at Earsden church, near Newcastle, whose occupants were on granite, dining on *Lecanora conizaeoides*. Anyone finding these cases is urged to send samples to H. Beaumont, 37 Melton Green, West Melton, Rotherham, S.Yorks S63 6AA.

With around 300 BLS members looking, the range of this very rare family of moths could be considerably extended, provided that you always remember to pack a couple of tubes along with the lichen impedimenta.

Don Smith

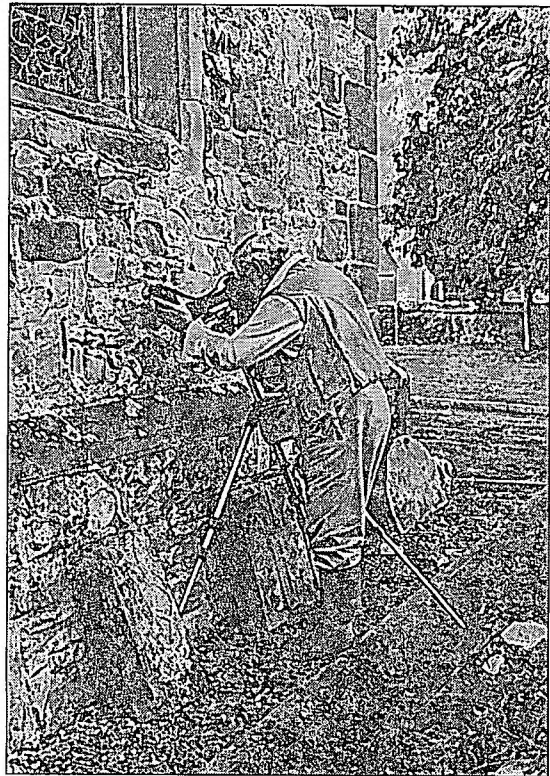
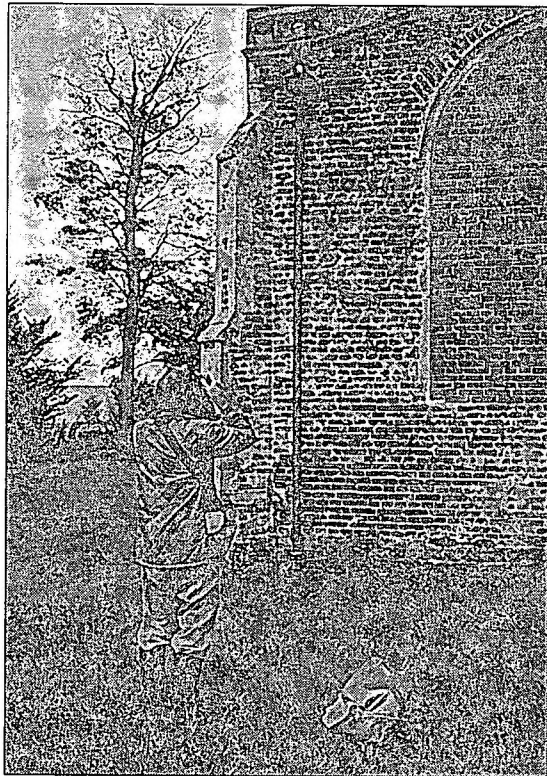
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DAVID HAWKSWORTH HONOURED

David Hawksworth has been appointed by the Secretary of State for the Environment to the Council of English Nature commencing 1 August 1996. In October he was awarded the honorary degree of Doctor of Philosophy by the University of Umeå. As many readers will know already, David was also appointed a Commander of the British Empire (CBE) in 1995.

Ed



The fascination of churchyards! Left: Chris Hitch photographing an old brick church tower with sheets of *Lecanora pannonica* (on brick and mortar), near Sudbury, Suffolk, 1994 (photo Peter Earland-Bennett). Right: Jeremy Gray photographing *Lecanora conferta* at St Dyfong Church, Llanraedr-Yng-Nghinmeirch, during the Clwyd meeting in 1995 (photo Brian Fox).

URSULA DUNCAN IN THE NORTHERN ISLES

Ursula Duncan's field work on the remote island of Fair Isle is known to many of us through her paper in *The Lichenologist* 2: 171-8, 1963. Her visits to Orkney and Shetland Mainland in June 1959, and another to Shetland in 1961 are much less familiar because it seems that she published nothing on Orkney and no more than one very short paper on Shetland (*Lichenologist* 1: 267-8, 1961), perhaps in keeping with her reticence "about her many achievements" as noted by Peter James in his obituary for Ursula in *The Lichenologist* 18, 383-385, 1986.

Ursula Duncan's lichen herbarium

Her Orkney and Shetland lichen packets only very rarely give more than the month and year of collection, so it is not possible to reconstruct the order in which she visited her collecting sites. She also seemed more concerned to assemble sets of voucher material in the form of one packet per species from each island group, so we find few specimens to support additional records or to provide information on intra-specific variation. Site data is mostly scanty with no grid references and is usually of little help in locating precisely her collecting sites. In contrast her habitat descriptions, though brief, are in no way deficient in comparison with those of the majority of subsequent collectors in the Northern Isles. She was collecting and recording almost as a pioneer in what were, at the time, virtually unexplored territories (lichenologically speaking), and her approach consequently lacked some of the refinements now regarded as commonplace. See the *British Lichen Society Bulletin* 51: 11-13 (1982) for her own modest comments on "The Lean Years".

I was fortunate on one visit to the Edinburgh Botanic Garden to be able to go through her entire lichen collection bequeathed to E before the packets were incorporated into the general lichen herbarium. The following summaries are partially derived from this examination though, of course, I may have missed some specimens already received from her prior to that visit. Her handwriting is distinctive (especially her rendering of lower case "d") and her uniformly tidily prepared packets (many from mainland Scotland and elsewhere in Britain) are usually quite easy to pick out.

In addition, the Orkney Field Club were kind enough to permit me to borrow their lichen herbarium. I have searched through it for any Orkney specimens collected by her but it appears to contain none.

Ursula Duncan's lichen records from Orkney and Shetland

I have so far traced 30 species collected by Ursula from Orkney in E and 53 in

BM, whilst there are 34 species from Shetland in E and 42 in BM. Including records reported in the two publications cited above, she found a total of 74 species in Orkney and 150 species in Shetland (with Fair Isles), compared with the present standing totals (August 1996) of 255 and 447 respectively.

Collections of each of the following species are present in both BM and E (O: specimens from Orkney, S: from Shetland):

<i>Caloplaca cerina</i> O	<i>L. symmicta</i> O
<i>Hypogymnia physodes</i> S	<i>Pertusaria chiodectonoides</i> S
<i>Lecania cyrtella</i> O	<i>Protoblastenia rupestris</i> O
<i>Lecanora carpinea</i> S	<i>Pycnothelia papillaria</i> O
<i>L. rupicola</i> O	<i>Umbilicaria torrefacta</i> O

I see no pattern in the species listed; they vary from very abundant to quite rare. Duplicates sometimes followed from material being sent for verification to other lichenologists.

Orkney 1959

According to herbarium labels, she visited Orkney in June 1959, and (as most botanical visitors do) she crossed to Hoy, where she climbed Ward Hill, the highest point in Orkney. A few packets with this name lack confirmation that this site was in fact in Orkney (Ward Hill, or variants thereof, is a common place name in both Orkney and Shetland), but there can be little doubt that the specimens in question did originate in Hoy. On Orkney Mainland she collected from the following sites (in alphabetical order, with approximate 4-figure grid references):

Aiker Ness HY 3826	Mid Hill HY 3324
Bay of Skaill HY 2319	Ravie Hill HY 2525
Binscarth HY 3414	Ring of Brodgar HY 2913
Costa Hill HY 3129	Wasdale HY 3414
Hill of Midland HY 3204	Yesnaby HY 2215

I have not located the Mill Dam, Loch of Stenness with certainty, but I suspect it to be at HY 1021 (less likely, HY 2811).

Among her more interesting records are *Parmeliella jamesii*, *Porpidia flavicunda* (surely an error), and *Sarcogyne regularis*. Several very common shoreline species (and also *Parmelia saxatilis*) are lacking but most of her localities were away from the coast and she did not make any claim to comprehensiveness in such a short visit.

Shetland 1961

Herbarium labels show that she made a second visit to Shetland, albeit a brief one, in September 1961. This was noteworthy for her finding *Pertusaria chiodectonoides*, new to Shetland. Twelve of her gatherings come from Dunrossness, all from within 1 to 2 km walking distance (yes, *pace* PWJ), even in wellington boots; surely the best footwear for Shetland) of the Spiggie Hotel (GR HU 377172) where she presumably stayed; this was handy for the Fair Isles boat from Grutness, some 7 km away. A thirteenth collection (of *Lecanora varia*) is labelled as Island of Noss, 1961, but I think this must be a subsequent confusion of that island (where she had been in 1959) with a hill of the same name near Spiggie (which she certainly visited in 1961).

Shetland problem sites

A few of her 1959 sites have in fact proved either difficult or impossible to identify. "Flemington" proves to be an earlier name for the large house now known as Kergord House (GR HU 3954), and noteworthy for its extensive (by Shetland standards) tree plantations, including numerous exotics. Several Shetland rarities (*Dimerella*, *Normandina*, *Physconia*) occur in the Kergord estate, although she appears not to have seen them. More puzzling is "Crossgerd near Fladdabister". Walter Scott (a resident botanist with vast local knowledge) can say little more than pointing to an area with this name (GR HU 4226) about 6 km south of Fladdabister - though it is unlikely that anyone would link this place to Fladdabister when the settlements of Cunningsburgh and Mail lie much nearer.

Kery Dalby

GREAT WOOD, KESWICK : EPIPHYTIC LICHEN SURVEY

4-5 February 1996

Introduction

This survey was made in response to a request from the National Trust to assess the current status of the *Lobaria pulmonariae* in Great Wood, as serious concern has recently been expressed about the condition and viability of this ancient forest lichen community at this important woodland site (Hawksworth, 1995). In an account of a one day visit to the site in 1994, David Hawksworth described a marked decline in the community since 1969 when he witnessed, with Francis Rose and Brian Coppins "the best *Lobaria* communities we had seen anywhere in the British Isles or Brittany" (Rose *et al*, 1970).

Rose *et al*'s critical 1969 survey was the first systematic modern search for lichens at the site, but important early records of members of the *Lobaria*

were made by 19th century botanists. These records when compared with recent surveys, indicate that the woodland's lichen flora was declining well before the modern period (Winch, 1833; Johnson, 1881). These early workers noted a number of macro-lichens at Great Wood belonging to the *Lobarion* which have not been seen there this century; namely *Lobaria scrobiculata*, *Pannaria rubiginosa*, *Degelia plumbea*, *Leptogium burgessii*, *Collema furfuraceum* and *Collema subflaccidum*. With the exception of *L. scrobiculata* and *P. rubiginosa*, which both now appear to be extinct in Lakeland, all of these cyano-lichens still occur in other Borrowdale woodlands, where they are restricted to a small number of ancient trees. (For a more detailed review of historical lichen records at Great Wood and other Borrowdale woodlands see Day (1985)).

In 1969, seventy-seven corticolous lichens were noted at Great Wood in a one-day survey (Rose *et al*, 1970). In 1985, I re-surveyed the woodland over a period of 3 days for English Nature and found all of the taxa listed by Rose *et al* (with the exception of *Buellia disciformis*, but this has been re-discovered during the present survey). By concentrating on a detailed search for easily overlooked crustose micro-species, I was able to add another 63 taxa to Rose's list and Brian and Sandy Coppins added a further 12 during a visit in 1990, thus making a total number for the site of 152 corticolous and lignicolous taxa (Day, 1985). A full list of lichens found since 1969 are listed in the appendix to this report.

During the course of this 1985 survey I noted that the *Lobarion* was still an important and conspicuous element in the site's epi-flora, although the general health of *L. pulmonaria* in particular gave cause for concern: many thalli had abraded cortices with the white of the medulla showing through, particularly on the surface ridges, almost certainly the result of slug damage. Many thalli of this taxon also had black necrotic patches on the cortex and some thalli were dropping off the trees altogether through bark shedding, a problem almost certainly caused by the activities of tree creepers! *Lobaria amplissima* and *L. virens* at this time were in good condition on most trees with *L. amplissima* bearing cephalodia on all three trees on which it occurred; on one it was abundantly fertile with 17 ascocarps on one thallus. A more dramatic decline of *Sticta* spp. was noted and although *S. sylvatica*, *S. fuliginosa* and *S. limbata* survived in 1985, they were present as tiny (c 10 mm) thalli on only two trees.

In 1986, a number of trees in Great Wood were chosen as sites for permanent quadrat frames in an attempt to temporally quantify the decline of the *Lobarion*. These studies were made as part of a national survey of the effects of acidification on lichens (Looney & James, 1989). Over a four year period it was found that low relative growth rates of *Lobaria* spp. at Great Wood were related to declining bark pH, indicating that the epiphytic lichen flora was

possibly being modified by a mechanism such as acid rain (Looney & James, 1989; James & Wolseley, 1992).

In 1992 I noticed that three mature wych elm southwest of the car park were showing signs of Dutch elm disease. Two of these supported remarkable colonies of *Lobaria virens*, *Leptogium lichenoides*, *Gyalecta truncigena*, *G. flotowii*, *Acrocordia gemmata*, *Biatora epixanthoides* and *Opegrapha herbarum*. The *L. virens* ascended to c 35 metres into the canopy of the elms in a luxuriant closed matt of contiguous thalli that left little room for other epiphytes. Two young diseased elms nearby supported small colonies of *L. pulmonaria*. By 1994 all the elms were shedding large sheets of bark and it was obvious that the *Lobarion* communities on these trees were doomed. At this time, the National Trust had no choice but to fell the diseased trees on public safety grounds because of their close proximity to a footpath. As a result of the demise of these trees there has been a loss of a small number of lichens which, at this site, are specific to *Ulmus*, such as *Biatora epixanthoides*, *Gyalecta flotowii* and *Opegrapha herbarum* (Watson *et al*, 1988).

Lichen translocations

In 1994 I was approached by the Trust to carry out transplants of lichen material from the moribund elm trees to other suitable phorophytes. Material of *L. virens* and *L. pulmonaria* was translocated to 2 *Quercus petraea* and 4 *Fraxinus excelsior* individuals in other parts of the site by attaching lobe fragments c 20 mm diam. under small squares of translucent nylon net, which were stapled to the bark.

At the time of this report, 16 out of the original 19 transplants have attached themselves securely to the substratum and the nylon covers have been removed. All surviving transplants show varying but positive rates of growth. Two transplants of *L. virens* have more or less doubled in size and have produced apothecia (all original transplants consisted of sterile marginal lobes only). The 3 failed transplants were on the 2 oak trees; lichen material transplanted to ash has had a 100% success rate. Now that these transplants have become securely attached, it will be possible to monitor their growth rates both photographically and by annually tracing the margins of the thalli.

Due to the high success rate of these translocations it is suggested that a number of others be attempted onto suitable host trees. A reasonable amount of healthy *L. virens* that could be used for this purpose still survives on the stump of one of the felled elms and an unfelled but doomed elm supports viable *L. pulmonaria* that would make excellent translocation material when broken up into fragments. A number of well-illuminated young ash trees in the vicinity of the lost elm grove could be used to host additional transplants of this

material in order to further increase the chances of the survival of *Lobaria* spp. at Great Wood into the next millenium. Several oak trees which support *Pachyphiale carneola* are also likely to be good host trees as the presence of this sensitive crustose taxon indicates the optimum bark conditions for the survival of *Lobarion* macro-lichens.

Aims of the Survey

The aims of the survey were:

1. To locate and map all trees in Great Wood that support the *Lobarion pulmonariae*.
2. To critically assess the current status of this community in the woodland.
3. To suggest any remedial action that might improve the chances of the community surviving into the future.

Because of the limited time available, it was decided to search only for trees which support macro-species of the *Lobarion pulmonariae* alliance rather than to conduct an exhaustive survey of all phorophytes and lignum for all lichen epiphytes; this was done thoroughly in 1985 (Day 1985) and a species list appears below. Trees bearing epiphytic macro-lichens of the *Lobarion* were tagged with Latschbacher tree labels and their positions marked on an ordnance survey map. Such trees were found only in the lower parts of the woodland below 120 m above sea level. Thirty three trees were labelled (27 oak, 2 elm and 4 ash); *Lobaria Pulmonaria* and *L. virens* were each found on 19 and 7 trees respectively. The only *Sticta* species located during this survey was *S. fuliginosa* on the bole of a pollarded *Fraxinus*, just outside the boundary of the National Trust-owned woodland in a paddock on Calfclose Bay.

Conclusion

Minor alterations in the status of the *Lobarion pulmonariae* in Great Wood have occurred since 1969, but they are fortunately not as drastic as the changes suggested by Hawksworth (1994). *Lobaria amplissima* still occurs on the same 3 trees on which it was first seen in 1969 (F Rose, pers. comm.). Hawksworth also mentions his failure to locate a number of trees, "close to the edge of Derwentwater itself" at Calfclose Bay, that once bore such luxuriant communities of *L. pulmonaria* that material was removed for transplant experiments in other parts of the country (Hawksworth, 1995). He concludes that the presence of tree stumps in this vicinity indicates that the trees in question may have been felled. The author has been regularly visiting the site since 1978 and cannot recollect any trees on the shore of Calfclose Bay that supported luxuriant *L. pulmonaria*, but there are a good number just inland which still have excellent stands of this lichen. Rose (pers. comm.) also agrees that all the *L. pulmonaria*-bearing trees located in 1969 and 1971 (Rose *et al*,

1970; Rose, 1971) were slightly inland from the shore of Calfclose Bay.

I have worked closely with the National Trust biologist and forester at the site over the past 12 years and have always been consulted over any felling of trees in the woodland. There are no records of trees bearing important lichen communities being felled either in the Calfclose Bay area in the past 20 years or at any other location at the site, other than the diseased *Ulmus* grove mentioned above. National Trust staff have been aware of the lichenological importance of this woodland since Rose's early reports to English Nature in the 1970s (eg Rose, 1971), and have managed the conservation of the site with care and sensitivity. David Hawksworth, on what was a very short site visit, unfortunately must have missed many of the good trees.

There has been a definite loss of some important *Lobarion* community taxa from the site since 1985, but most of these were becoming marginalised at that time and have never been abundant at the site in modern times. The following were not found during the present survey: *Pannaria conoplea*, *Parmeliella triptophyla*, *Nephroma laevigatum*, *Sticta sylvatica* and *S. limbata*.

Epiphytic lichens in Great Wood, Borrowdale 1969 - 1996

(Asterisks denote taxa not seen since 1985)

<i>Acrocordia gemmata</i>	<i>Buellia disciformis</i>
<i>Anisomeridium biforme</i>	<i>B. griseovirens</i>
<i>A. nyssaegenum</i>	<i>Calicium glaucellum</i>
<i>Arthonia didyma</i>	<i>C. viride</i>
<i>A. elegans</i>	<i>Candelariella xanthostigma</i>
<i>A. punctiformis</i>	<i>Catillaria pulverea</i>
<i>A. radiata</i>	<i>Catinarina atropurpurea</i>
<i>A. spadicea</i>	<i>Celothelium ischnobelum</i>
<i>A. vinosa</i>	<i>Cetraria chlorophylla</i>
<i>Arthopyrenia antecellans</i>	<i>Cetrelia olivetorum*</i>
<i>A. lapponina</i>	<i>Chrysothrix candelaris</i>
<i>A. punctiformis</i>	<i>Cladonia caespiticia*</i>
<i>A. ranunculospora</i>	<i>C. chlorophaea</i>
<i>Arthothelium ruanum</i>	<i>C. coccifera</i> agg.
<i>Bacidia absistens</i>	<i>C. coniocraea</i>
<i>B. arnoldiana</i>	<i>C. digitata</i>
<i>B. biatorina*</i>	<i>C. fimbriata</i>
<i>B. incompta</i>	<i>C. macilenta</i>
<i>B. rubella*</i>	<i>C. polydactyla</i>
<i>B. sabuletorum</i>	<i>C. squamosa</i>
<i>B. vezdae</i>	<i>Cliostomum griffithii</i>
<i>Biatora epixanthoides*</i>	<i>Dimerella lutea*</i>
<i>B. sphaeroides</i>	<i>D. pineti</i>
<i>Bryoria fuscescens</i>	<i>Enterographa zonata</i>
<i>B. subcana</i>	<i>Eopyrenula avellunae*</i>

E. grandicula
Evernia prunastri
Fuscidea lightfootii
Graphis elegans
G. scripta
*Gyalecta flotowii**
G. truncigena
*Gyalideopsis anastomosans**
Hypocenomyce scalaris
Hypogymnia physodes
H. tubulosa
Lecanactis abietina
Lecanora chlorotera
L. conizaoides
L. expallens
*L. intumescens**
*L. jamesii**
*L. saligna**
*L. quercicola**
Lecidella elaeochroma
Lepraria incana
Leproloma membranaceum
*Leptogium lichenoides** (seen on
 bryophytes on a wall, but not
 as an epiphyte)
*L. teretiusculum**
Leptorhaphis epidermidis
Lobaria amplissima
L. pulmonaria
L. virens
Loxospora elatina
Micarea bauschiana
M. lignaria
M. melaena
M. prasina
Mycoblastus sanguinarius
Mycoporum quercus
*Nephroma laevigatum**
Normandina pulchella
Ochrolechia androgyna
O. inversa
*O. subviridis**
O. turneri
Opegrapha atra
O. herbarum
O. niveoatra
*O. ochrocheila**
O. rufescens
O. sorediifera
O. varia
O. vermicellifera
O. vulgata
Pachyphiale carneola
*Pannaria conoplea**
Parmelia caperata
P. crinita
*P. exasperata**
P. glabratula
*P. laevigata**
P. perlata
*P. reddenda**
P. revoluta
P. saxatilis
P. subaurifera
P. subrudecta
P. sulcata
*Parmeliella triptophylla**
*Peltigera collina**
P. horizontalis
P. hymenina
P. membranacea
P. praetextata
Pertusaria albescens
P. amara
P. hemisphaerica
P. hymenea
P. leioplaca
P. pertusa
P. pupillaris
Phlyctis argena
*Phyllopsora rosei**
Placynthiella icmalea
Platismatia glauca
Porina aenea
*P. coralloidea**
P. leptalea
Pseudevernia furfuracea
Pyrrhospora quercea
Ramalina farinacea
Schismatomma decolorans
S. quercicola
Scoliciosporum chlorococcum
Sphaerophorus globosus
Stenocybe pullatula
S. septata
Sticta fuliginosa
*S. limbata**
*S. sylvatica**
Thelopsis rubella
Thelotrema lepadinum
Tomasellia gelatinosa
Trapelia corticola
Trapeliopsis pseudogranulosa
Usnea subfloridana

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Ivan Day

Postscript: I am pleased that Ivan Day has been able to examine Great Wood in more detail, and that he found that most of the species recorded in the past are still present. It is evident that: (a) the decline which has taken place in the *Lobarion* in this site is **quantitative** rather than **qualitative**, and that it is now a matter of searching for "the best trees" rather than being unable to escape good ones (!); (b) there may have been a loss of up to 27 species in the period of recording (the species asterisked in his list); (c) there had been a decline in the *Lobarion* before 1985, when Ivan's study noted that some of the *Lobaria* thalli were showing signs of damage; and (d) the decline accelerated with the death of many of the elms into 1994. It would be of interest to see the results of resurveys at the three other sites I mentioned. I should add that the specimens of *Lobaria pulmonaria* I collected at Calfclose Bay were on **different** trees from those used as a transplant source by Francis Rose (see my 1971 paper; trees directly by the River Dove were used to mirror the situation by the edge of Derwentwater) and may never have been notified as of lichenological interest. On a positive note, I was gratified to learn that the transplants mentioned in my report were still doing well in 1996, and that cooperation with the National Trust was ongoing. Careful positive management, combining transplants and including interplanting with trees that can provide new substrata (as also used at Buckland-in-the-Moor in Devon) is clearly going to be the key to conserving *Lobarion* in the longterm in many parts of England.

David Hawksworth

CHURCHYARD PROJECT: ANNUAL REPORT 1995-6

Recording

The committee met three times during the year. The summer meeting in mid-July was followed by our now customary "works outing", this time to the Boston area of Lincolnshire. Mark Seaward joined us and 17 sites were surveyed: one in Cambridgeshire (VC29), eight in South Lincs (VC 53), and nine in North Lincs (VC54). This resulted in a total of 136 taxa being recorded. Just inside the border, at Tydd St Mary, on a north-facing buttress, we found a single thallus of *Lecanora pruinoso*. This is easily the most northerly and easterly British record for this species and also the first record for Lincolnshire. The richest site was Tattersall with 82 species. The west end of this spectacular church was slightly shaded by trees and our attention was drawn by Mark to the patina of *Dirina massiliensis* f. *sorediata* which covered parts of the limestone ashlar. This species was particularly well developed at a number of sites. In order to explore a totally unworked 10km square close to the Wash, we visited two tiny Victorian brick churches at Holbeach St Matthew and Dawsmere. At the first, we were somewhat surprised to find what appeared to be a mosaic of *Enterographa zonata* on the north wall. In 1991, Birgit Litterski wrote a paper on the ancient brick churches of the island of Rugen off the north German coast and recorded this species at a number of sites. However, this species was later confirmed as *Opegrapha gyrocarpa*. At Dawsmere, we found two colour-forms of *Lecanora expallens* side by side on a sandstone headstone. Both were C+ orange but, whereas one was typically pale green, the other was fawn fooling us into thinking we had discovered saxicolous *Pyrrhospora querneae*. Subsequent tlc analysis showed them to be chemically identical (see p16). After the others had returned home, Don Smith and I drove up the coast towards Skegness and called in at Croft where the church is built mainly of highly siliceous "greenstone" (see account of BLS field meeting at Louth in *Lichenologist* 10:111) and carried *Lecanora pannonica* and *Ramalina pollinaria*.

In all, during the visit, we carried out surveys in ten new squares and, as far as churchyards are concerned, this leaves only 62 totally uncharted in the whole lowland area. Many of these are in a swathe extending from the Essex coast across the home counties to the north of London as far as the western edge of large grid square 52 (TL). Before becoming too self-satisfied, we need to remind ourselves that this operation, when complete, only provides a minimal base line. Some 10 km squares may have a dozen or more churches within them. It is re-assuring, however, to hear from Francis Rose that virtually every ancient establishment in Hampshire has received at least one visit from Ivan Pedley and that 100 Leicestershire yards were surveyed in 1995. I have also received a good many lists for Dorset from Humphrey Bowen and, only

a year after joining the Society, Joy Ricketts has already tackled a number of sites in Worcestershire and Herefordshire. Apart from brief sorties into neighbouring counties, I have contented myself with re-visiting some of the potentially rich sites in Northamptonshire. As a result 14 churchyards have now topped the hundred mark. *Dermatocarpon minutum* (a new county record) and more *Lecanora pruinosa* were both found on the church at Kings Sutton just three miles from home. They had both been overlooked on at least three visits in the past!

Over the winter months, it will be necessary to enter a huge backlog of data onto the Access 2 database. Thanks to the programming skills of David Newman, the means of doing this is continually being improved. The mapping card can now be reproduced onscreen and species lists entered quickly using the mouse. As a built in check against making errors, the selected species even give an instant mouse+ red colour reaction!

As far as upland surveys are concerned, the Denbigh and Aberystwyth field meetings and the Slapton workshop have provided additional opportunities, some of which have been reported elsewhere in this and the previous *Bulletin*. Four sites were visited in the environs of Aberystwyth. Steve Chambers and I found two new churchyard species near to the coast at Aberarth. *Leptogium britannicum* was abundant in short turf, while a sterile pycnidiate crust on shaded granite fragments between two chest tombs was later identified by Alan Fryday as *Bacidia trachona*. At Slapton I was delighted to meet up with Birgit Litterski who wrote the article mentioned above on the churchyards of Rugen and to renew acquaintance with Frank Bungartz who kindly translated Birgit's article into English for me.

The lichen surveys of Florence and Norman Hammond were featured in the July edition of the *Cumbria & Lake District Magazine*, while Don Smith works no less tirelessly on the east side of the Pennines. He tells me that he was recently summoned to the archbishop's palace to sing the praises of lichen conservation.

It is also good to know that much is going on even further afield. Bridget Ozanne from Guernsey was sufficiently inspired by the Slapton course to survey nine churchyards when she returned home. An intensive study of a single site over a long period of time is no less valuable than more extensive fieldwork and I have been delighted to receive the fruits of such labours from Stella Thrower. Stella has visited Santan churchyard on the Isle of Man 44 times since October 1992 and has systematically examined every one of the 476 tombstones. To date, 93 species have been recorded including *Bacidia*

subfuscula, *Collema cristatum*, *C. flaccidum*, *Lecidea diducens*, *L. plana*, *Pertusaria excludens* and *Rhizocarpon hochstetteri*. Dr Thrower is now in the early stages of writing a book on *The Ecology of Manx Churchyards*.

Conservation

Our committee is regularly sent copies of the *MAB Bulletin* (the newspaper for memorial masons) and we have been pleased to see that it has become noticeably greener in outlook since the new editor, Michael Dewar, took over. However, we have also been made aware of a disturbing new trend. Because space is at a premium in many graveyards, a movement is afoot to change the regulations so that older plots can be re-used. Clearly, if this gathers momentum and involves the removal of the more ancient headstones, it is a considerable threat to lichen communities. Ishpi Blatchley expressed our views in a letter published in the June edition.

Promotion & education

In this regard it has been a mixed year. Ivan Pedley and I put in much preparation for two workshops we were asked to run at Warwick University on 15 July. In the event, we had only three takers but this was three more than the workshop on Locusts! The deadline for responses to the pack *Exploring Churchyard Lichens* was 21 July. Again, much cost and effort went into producing and distributing the 300 packs and, unquestionably, an immense amount of interest has been generated in a variety of interest groups over a wide range of age (i.e. 5-65!) in all parts of Britain. On the other hand, in numerical terms, feedback has been poor. I have had only 16 replies: five from schools, five from Wildlife Watch groups, one from the Girl Guide movement, and five from other establishments catering mainly for incoming school parties or more mature students. Norman Hammond mentioned the pack in a local radio broadcast and sent me impressions gathered from showing it to numerous people and groups in Cumbria and SW Scotland. Most responders were sufficiently enthused to produce their own materials and to send examples of project work. I am especially grateful to Liz Sheffield of the School of Biological Sciences at Manchester University who set three plant science honours students to work on the pack and sent me the resulting projects, one about an inch thick, providing much food for thought and, who knows, three eventual members of the Society. A more detailed analysis will be presented to the Education Committee. The next step is to produce a revised version either in pack or book form and find an interested publisher. Even at this late stage, further thoughts, ideas or comments from members would be much valued.

In last year's *Winter Bulletin* I mentioned a series of books on churchyards written by Hilary Lees, each of which incorporates some brief relevant

information about local lichens. Three have now been published: *Hallowed Ground, Churchyards of Gloucestershire & the Cotswolds* (Thornhill Press 1993), *Cornwall's Churchyard Heritage* (Twelveheads Press, Truro 1996) and *Hallowed Ground, The Churchyards of Wiltshire* (Picton Publishing, Chippenham 1996).

Another talepiece

Having recently purchased a metal arch for my garden from Cannock Gates Ltd of Staffordshire, I now receive their regular mailings. I have just been sent a leaflet advertising a Tombstone Restorer (price £6.99). The blurb goes as follows: "Spray this highly effective formula onto the tombstone or stonework to remove lichen and stains caused by weather or pollution. Works within minutes. After a quick scrub or wipe, even badly affected stonework will regain its original condition.....". Just as it were to rub salt into the wounds, it goes on to describe the liquid as "environmentally friendly"!

Tom Chester

LICHEN ATLAS OF THE BRITISH ISLES

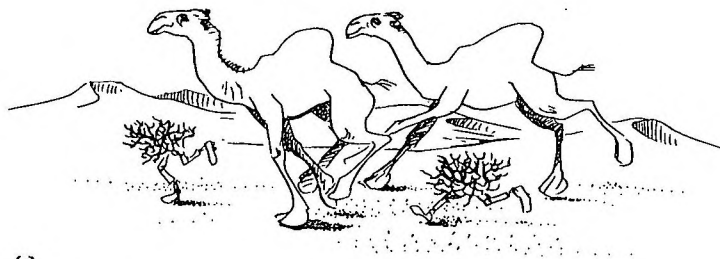
It is hoped that the second *Atlas* fascicle of *Cladonia* distribution maps will be available early in the New Year. Good progress is being made with selection of *Parmelia* photographs and the wording of accompanying text for the first fascicle of the *Atlas*. The photographs will be available as a CD-ROM with between two and four images of each species illustrating the diagnostic features and with descriptive text. Included in the CD-ROM will be a species key, the annotated distribution maps from the *Atlas*, comprehensive information on chemical reactions, names of similar species and a habitat table. Links will be provided between the various sections of the CD similar to those on an internet web page. The photographs will also be produced as double-sided hard copy with accompanying text, chemical reactions and names of similar species.

Availability and prices will be published on the Society's Web Page (see p11) and, of course, in the Summer 1997 *Bulletin*. In the interim, if you do not have access to the internet and cannot wait until publication of the Summer *Bulletin*, then I will be happy to answer telephone or postal enquiries during 1997.

Jeremy Gray

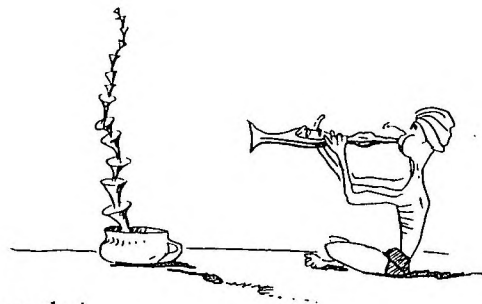
ICONES LICHENUM UNIVERSALIS: SPECIERUM NOVARUM FIGURAE

By Jolanta Miądlikowska & Michał Skakuj

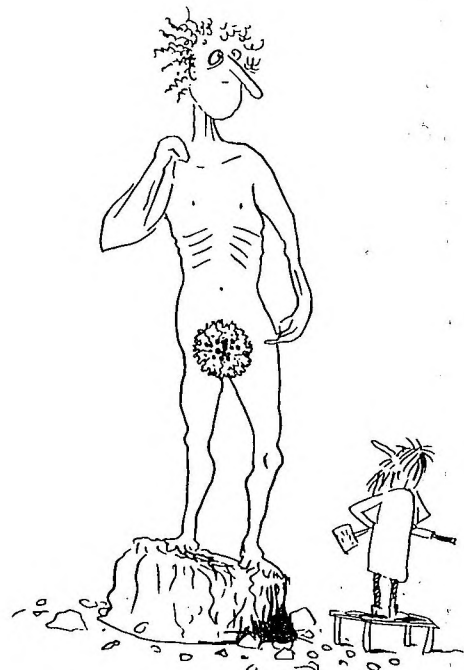


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Coelocaulon cameliformae
ASIA: Mongolia



Cladonia ssssnakei
ASIA: India



Caloplaca michael-angeli
EUROPE: Italy

CONVERSION OF A CAMCORDER TO A LOW-POWER MOVIE MICROSCOPE

Formerly, I only took a passing interest in video-camera recorders, generally known as "camcorders", but I did wonder if they could be adapted, in the same way as with still photography, to give a degree of enlargement greater than that of the 'macro' mode. It struck me that it might be possible to achieve this by utilising the telephoto function of the instrument.

I worked out that it was, but I did not feel like lashing out almost a thousand pounds on a camcorder to find out. However, our local John Lewis store had working camcorders on display, so I requested that I might be allowed to place another lens in front of the main lens and, focusing on an object, observe whether or not my reasoning was valid - it was! The result was that the video-camera-recording-microscope was born thanks to the John Lewis store. On the spot I bought the same Sony model (TR7SE) as displayed. This was literally the first time I held a camcorder in my hands.

With a bit of mechanical manipulation, and some sticky tape, I managed to insert my lens in the accessory ring at the front of the main lens. This worked perfectly with the camcorder in the vertical position, but there was a snag. It was obvious that the f1.5 50 mm camera lens which I was using, reversed, was far too heavy for the delicate automatic focusing mechanism of the camcorder. Therefore I looked for a lighter 50 mm lens and found it in the form of a simple, cheap enlarging lens. Surprisingly, this gave just as good resolution as the multi-component camera lens. It has in fact proved most satisfactory.

The magnification achieved is seven times the diameter, or fifty times the area obtained by the "macro" facility at its maximum. Also, to obtain the maximum magnification using "macro" the working distance from lens to object is about one centimetre, making lighting difficult, whereas with the adapted camcorder the working distance is increased to four centimetres, and totally eliminates lighting problems due to this cause. A camera lens must be used in the reverse position in order to obtain a flat field image. This is not necessary with an enlarger lens. One unforeseen benefit of the system is that the zoom facility of the instrument is retained in the microscopic range of magnification. This allows one to pin-point part of an object at relatively low magnification and then bring it closer by zooming up to a high magnification. As far as I am aware, this facility is unknown in other microscopic techniques.

All that is required is a small photographic enlarger lens of the size used in 35

mm photography. I used a Japanese "Autocrat" enlarger lens, f3.5; focal length 50 mm, supplied by the large UK dealers, Dixons. With a little mechanical adjustment this can be fixed in the accessory ring supplied with the camcorder, and mounted in front of the camcorder lens set in the 'telescopic' position. Suitably mounted, for example on a tripod, the camcorder can then be positioned at approximately four centimetres from the subject and moved backwards and forwards until the image in the viewfinder or TV screen comes into focus.

Arthur Lloyd

[The author will be demonstrating this equipment after the AGM in January-Ed]

BEN LAWERS NATIONAL NATURE RESERVE

The Ben Lawers NNR in Perthshire is an area of international importance and, arguably, the most important site for lichens in the British Isles. Over 500 species have been recorded from the reserve including around 20 "Red Data Book" species, of which about a dozen are known from nowhere else in the British Isles, eg *Biatorrella hemisphaerica*, *Caloplaca nivalis*, *Psora globifera* and *P. rubiformis*. The National Trust for Scotland own a large part of the reserve and have recently been given the opportunity to purchase another section, the southern side of the Meall nan Tarmachan range. The original asking price of £300,000 has been increased to £400,000 but, crucially, this now includes all sporting and grazing rights.

The NTS is asking for donations to assist them in this purchase. In view of the extremely important nature of this site the BLS Council has decided to donate £500 of Society funds to the appeal but I would urge all members to consider contributing personally as well. Donations should be sent to "The Tarmachan Appeal", The National Trust for Scotland, 5 Charlotte Square, EDINBURGH EH2 4DU. Anyone wishing for further information can contact me on Tel/ Fax 01325 484595.

Alan Fryday

A NATIONAL STRATEGY FOR SYSTEMATIC BIOLOGY RESEARCH The UK Systematics Forum

In January of this year, the UK Systematics Forum secured additional funding to December 1998 from the Office of Science and Technology, with the principal aim of developing a national strategy for **systematic biology research**.

The Forum was initially set up in February 1994 to promote communication and coordination within the systematics community. Since then, the group has established a number of initiatives (see below) aimed at developing a network of UK systematists in order to improve coordination of the Nation's collections and associated expertise. These activities will provide the basis for carrying out the Forum's second phase of work: to develop a strategy for UK research in systematic biology.

A national strategy for systematics research will be developed with consensus from the wider systematics community. It will aim to identify priorities for the UK's expertise and resources in systematics by assessing scientific and user needs. The strategy should help to promote the best possible use of available resources by enhancing co-operation and collaboration between institutions, and to strengthen the case for funding of systematic biology.

Commitment to the strategy has already been expressed by the Directors of the leading UK collections-holding institutions at a meeting held in April 1996. This meeting was convened by the Forum to initiate discussion on content of the strategy and to build commitment to the initiative. The next phase will involve a survey of collections-holding institutions to gather base-line information on their current policies for systematics collections and research, and surveys of scientific and user needs for systematic biology research. Once a preliminary strategy has been developed, the Forum will carry out a wider consultation process to ensure that the final document has wide support.

Development of the national strategy will take place alongside the Forum's on-going activities in its role of promoting coordination: developing a database of UK systematics expertise, and supporting meetings of specialist groups of collection managers. Information from the database of expertise is available from a searchable directory, accessible from the Forum's Home Page (<http://www.nhm.ac.uk/uksf>). Certain information in the directory, such as the spread of expertise across taxonomic groups, will be used in developing the national strategy. UK systematists not currently included on the database are therefore urged to complete and submit a questionnaire — available either on-line or from the Secretary.

Further information is available from: The Secretary, UK Systematics Forum, c/o The Natural History Museum, Cromwell Rd, London, SW7 5BD. Tel: 0171 938 9522, fax: 0171 938 9531, e-mail: ew@nhm.ac.uk.

Emma Watson

NEW, RARE AND INTERESTING BRITISH LICHEN AND LICHENICOLOUS FUNGUS 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 [from 1997, nomenclature to follow that given in the Appendix which is based on the Biological Records Centre, Instructions for Recorders, ITE, Monks Wood Experimental Station, Abbots Ripton Huntingdon, PE17 2LS, 1974], Grid Reference (GR), altitude, where applicable, in metres (m), date, comments and recorder. An authority with date after species is only included when the record is new to the British Isles. *In the interests of accuracy, typescript is much appreciated. Please use only one side of the paper. Copy should reach the subeditor at least a fortnight before the deadline for the Bulletin.*

Arthonia elegans: on twigs of *Corylus* with *Mycoporum quercus*, Glevering, VC 25, East Suffolk, GR 62/29-56-, April 1996. First record for East Anglia.

P M Earland-Bennett

Arthonia epiphyscia: ascomata of this taxon (themselves parasitised by *Bispora christiansenii*) on soralia and thallus of *Physcia caesia* on marble cross in churchyard, Saxmundham, VC 25, East Suffolk, GR 62/38-62-, August 1996.

P M Earland-Bennett

Arthopyrenia subcerasi: on *Ilex*, woodland below Tom na Cathaig, Glen Shira, Inverary, VC 98, Main Argyll, GR 27/13-14-, alt c 60m, March 1996. New to western Scotland.

B J & A M Coppins

Arthrorhaphis vacillans Th. Fr. & Almq. ex Th. Fr. (1867): over bryophytes on limestone (although vegetation is relatively calcifuge), Cnoc Eilid Mhathain, Inchnadamph NNR, VC 108, West Sutherland, GR 29/27-18-, alt 450m, August 1996. New to the British Isles. Distinguished from all other members of the

genus by its 3-septate spores.

A M Fryday

Bacidia egenula: on trunk of *Acer pseudoplatanus* beside River Deben, Glevering, VC 25, East Suffolk, GR 62/29-57-, April 1996. Determined B J Coppins.

P M Earland-Bennett

Buellia badia: on slate roof with *Lichenothelia convexa*, Darsham, VC 25, East Suffolk, GR 62/42-69-, September 1996.

P M Earland-Bennett

Caloplaca lucifuga: on trunk of large *Quercus*, valley of East Lynn River, Watersmeet, near Lynton, VC 4, North Devon, GR 21/74-48-, alt 120m, April 1996. Apparently new to SW England.

B J & A M Coppins & B Benfield.

Caloplaca obliterans: in small amount on shaded rock face at edge of woodland, Hafod, VC 46, Cardigan, GR 22/76-73-, alt 150m, 1995. New to the vice county.

S P Chambers

Caloplaca teicholyta: fertile on soft mortar between "crazy paving", open aspect, on walk-way of harbour, by sea-front, Aberystwyth, GR 22/58-81-, VC 46, Cardigan, 1996. An unusual West Coast record, likely to have been introduced in building materials during reconstruction of part of the harbour in 1985.

S P Chambers & T W Chester.

Celothelium ischnobelum: on *Corylus*, Sheppath Glen, East Lammermuir Deans NR, VC 82, East Lothian, GR 36/70-70-, alt 200-250m, August 1996. New to the Lothians.

B J Coppins and N Homchantara

Chaenotheca stemonea: in dry bark crevices of ancient, contorted *Quercus* in scree slope, north of Watersmeet House, near Lynton, VC 4, North Devon, GR 21/74-48-, alt 130m, April 1996.

B J Coppins, B Benfield & J Robbins

Chaenothecopsis savonica: in dry bark crevices of ancient, contorted *Quercus* in scree slope, north of Watersmeet House, near Lynton, VC 4, North Devon, GR 21/74-48-, alt 130m, April 1996.

B J Coppins, B Benfield & J Robbins

Clauzadeana macula: on south-facing crag below summit, Moelyllyn, VC 46, Cardigan, GR 22/71-91-, alt 460m, 1995. New to Cardigan. Confirmed A M Fryday.

SP Chambers

Collema glebulentum, *Poroscyphus coccodes* and *Pyrenopsis grumulifera*: locally abundant on sloping, flushed, north-facing, basaltic slabs, Traprain Law, VC 82, East Lothian, GR 36/5—7—, alt c 135m, August 1996. All new to southeast Scotland.

BJ Coppins & O L Gilbert

Dactylospora athallina: on *Baeomyces rufus* on rocks in a quarry by Tullybaccart near Lundie, VC 90, Forfar, GR 37/26-36-. Donated to Herb. Hitch May 1996. Determined P M Earland-Bennett.

RC Munro & C J B Hitch

Degelia plumbea: abundant on two streamside *Fraxinus*, Cwm Llyfnant, VC 46, Cardigan, GR 22/71-97-, alt 20m, 1996. First record since before 1959.

SP Chambers

Ephebe hispidula: on north-face of river boulder, Afon Ystwyth, Hafod, VC 46, Cardigan, GR 22/76-72-, July 1996. Only c 4km downstream of the first vice county record at Cwmystwyth mine in 1992.

SP Chambers

Epigloea medioincrassata: over decayed algal crusts on boulder at edge of riverside woodland, Hafod, VC 46, Cardigan, GR 22/76-73-, alt 120m, 1996. New to Cardigan.

SP Chambers

Everniicola flexispora: on *Usnea subfloridana*, side valley to Kilblaen Ravine, Glen Shira, Inverary, VC 98, Main Argyll, GR 27/13-13-, March 1996. Apparently a new host; originally reported on *Evernia prunastri*.

BJ & AM Coppins

Gelatinopsis ericetorum: on *Dibaeis baeomyces* on metal-polluted river shingle, Afon Ystwyth, Grogwynion, VC 46, Cardigan, GR 22/69-71-, alt 80m, March 1996. Determined by A M Fryday. New to Cardigan.

BLS Meeting

Gyalidea diaphana: on Torridonian sandstone rocks in headwater of Allt a' Ghlas-thuill, Coire na Caime, Liathach, Torridon, VC 105, West Ross, GR 18/91-57-,

alt 625m, August 1995. Also on quartzite rocks in headwater of River Traligill, Inchnadamph Forest, West Sutherland, VC 108, GR 29/29-20-, alt 700m, August 1995. First British records outside northeast Scotland.

A M Fryday

Lecania cyrtellina: on branch of *Sambucus* with *Bacidia friesiana* and *Hyperphyscia adglutinata*, Glevering, VC 25, East Suffolk, GR 62/29-56-, March 1996. Determined B J Coppins.

P M Earland-Bennett

Lecanora subaurea: with juvenile apothecia (no mature asci), Cwm Rheidol Mine, VC 46, Cardigan, GR 22/73-78-, alt 230m, March 1996.

S P Chambers

Lecidea endomelaena: on vertical sheltered sandstone cliff with *Rhizocarpon furfurosum*, on the south side of the River Ashop, Snake Pass, VC 57, Derby, GR 43/10-90-, April 1996. Not a heavy metal site, but the sandstone is highly ferruginous. New to England.

O L Gilbert

Lecidea haerjedalica H. Magn. (1948): on open slate surface, Birnham Quarry, Dunkeld, VC 88, Mid-Perth, GR 37/03-40-, alt 300m, August 1991. New to the British Isles. Thallus similar to *L. fuscoatra* but with negative thallus reactions except I+ blue medulla. Determined A Fryday. Confirmed H Hertel.

M Senior

Lecidea mucosa Stirton (1879): on rotting wood, opposite Ben Doran [Beinn Dòrain], near Tyndrum, VC 98, Main Argyll, GR 27/3—3—, July 1878, collected J Stirton. Specimen (holotype) in BM. Examination of the holotype has shown this not to be a synonym of *L. turgidula*. In the *Flora* it would key out to *L. paraclitica*, but it differs from that species in having convex, immarginate apothecia, thinner paraphyses (1-1.8 μm) with only a few having dark apical caps (only to 3.7 μm wide) and colourless, narrower hyphae (c 1.5-2 μm wide) in the outer exciple. Also, the outer exciple is surrounded by a hyaline gelatinous zone c 4-5 μm wide. In the British material of *L. paraclitica* the hyphae of the outer exciple are dark brown and 2.5-3 μm wide, with swollen end cells (to 5 μm), and there is no outer gelatinous zone around the exciple.

B J Coppins & C Printzen

Lecidea plana: on gritty shale around summit cairn, Moellyllyn, VC 46, Cardigan, GR 22/71-91-, alt 500m, 1995. New to Cardigan. Determined A M Fryday.

S P Chambers

Lecidea promiscens Nyl.(1872): on Torridonian sandstone boulder, Ruadh-stac Mor, Beinn Eighe, VC 105, West Ross, GR 18/95-60-, alt 900m, July 1990. New to the British Isles. Also from Cul Mor, VC 105, West Ross, GR 29/15-12- and Creagan Dubh, northern Cairngorms, VC 96, East Ross, GR 38/01-07-. Similar to *L. auriculata* but with different exciple structure.

A M Fryday

Lecidea promiscua Nyl.(1874): on granite boulder, Coire an Lochan, northern Cairngorms, VC 96, Easternness, GR 28/98-02-, alt 1050m, August 1995. New to the British Isles. Also on small pebble on nearby ridge. Characterised by its thick white thallus and distinctive chemistry (2'-O- methylperlatolic acid by tlc).

A M Fryday & S P Chambers

Lecidea syncarpa Zahlbr. (1918): on top of granite boulder, Sron a' Cha-no, northern Cairngorms, VC 96, Easternness, GR 38/01-06-, alt 1000m, June 1994. New to the British Isles. Also on northern ridge of Aonach Mor, VC 97, Westernness, GR 27/18-74-. Similar to *L. paupercula*, but with norstictic acid in place of stictic acid and larger spores. British collections also appear to have a slightly thicker thallus.

A M Fryday & O L Gilbert

Leptogium saturninum: on *Sambucus* by forestry gate and on large *Acer pseudoplatanus* in a garden, Ellerig More, Glen Shira, Inverary, VC 98, Main Argyll, GR 27/13-15-, alt 20m, March 1996.

A M & B J Coppins

Lichenodium sirosiphoideum: associated with mosses and *Cladonia* spp. on boulder in rough pasture, north of Ellerig More, Glen Shira, Inverary, VC 98, Main Argyll, GR 27/13-15-, alt 20m, March 1996. New to western Scotland.

B J & A M Coppins

Lopadium disciforme: fertile on *Fraxinus* and sterile on *Quercus*, Hafod, VC 46, Cardigan, Gr 22/77-73-, alt 230m, 1996. New to the vice county.

S P Chambers

Macentina abscondita: on inside of dead bark of *Ulmus* on ground, Snape, VC 25, East Suffolk, GR 62/38-59-, September 1996. Fourth record for East Suffolk.

P M Earland-Bennett

Melaspilea amota: on trunk of mature *Quercus*, valley of East Lynn River, Watersmeet, near Lynton, VC 4, North Devon, GR 21/74-48-, alt 120m, April

1996. Second record for Devon. This is probably an overlooked species of unpolluted, old oakwoods in southern Britain.

BJ & AM Coppins & B Benfield

Melaspilea granitophila and *Porina guentheri*: rare on north-facing, basaltic rocks, Traprain Law, VC 82, East Lothian, GR 36/5—7—, alt 135m, August 1996. Both new to southeast Scotland:

BJ Coppins & O L Gilbert

Micarea intrusa: with *Rhizocarpon geographicum* and *R. lecanorinum* etc, on exposed, siliceous rocks near summit of Kindrogan Hill, Strathardle, VC 89, East Perth GR 37/04-62-, alt 490m, August 1996. Its discovery in this unexceptional locality, suggests that this species has been overlooked, at least in the eastern Scottish Highlands; it is easily mistaken in the field for *Scoliciosporum umbrinum*.

BJ Coppins & S Street

Micarea marginata: locally frequent with abundant apothecia on rocks and pebbles around areas of prolonged snow-lie in the Scottish Highlands. Recorded from Beinn a' Bhuid, VC 92, South Aberdeen, GR 38/09-00-; Craeg Meagaidh, VC 97, Westernness, GR 27/40-87-; Aonach Mor, VC 97, Westernness, GR 27/19-27-; Bidean nam Bian, VC 98, Main Argyll, GR 27/14-54-; Beinn Dearg, VC 105, West Ross, GR 28/25-81-.

AM Fryday

Micarea ternaria: on pebbles, together with *Porpidia soledizodes* and *Rhizocarpon reductum*, in car parking area, Rora Moss, VC 93, North Aberdeen, GR 48/04-52-, alt 50m, May 1996. First report from Britain outside the mountain regions or the Outer Hebrides. *Micarea erratica* and *M. lithinella* were also present on pebbles at this site.

BJ & AM Coppins

Microcalicium arenarium: on *Psilolechia clavulifera* on thin roots in hollow under a tree, Kindrogan Hill, Strathardle, VC 89, East Perth, GR 37/05-62-, alt c 300m, August 1996.

BJ & AM Coppins

Nephroma parile: rare on northwest-facing, basalt outcrop, lower slopes of Traprain Law, VC 82, East Lothian, GR 36/6—7—, August 1996. New to the Lothians.

AM & BJ Coppins

Opegrapha multipuncta: on tops of boulders of coastal wall, Plas Tanybwllch, Aberystwyth, VC 46, Cardigan, GR 22/58-79-, 1996. New to Cardigan. Also on coastal rocks by Llanbadrig church, Cemmaes, VC 52, Anglesey, GR 23/37-94-, alt 40m, 1995. Confirmed A M Fryday.

S P Chambers

Parmelia endochlora: with *P. horrescens* and *P. laevigata* on base of small *Betula* in open gorge woodland, Cwm Einion, VC 46, Cardigan, GR 22/69-94-, alt 80m, 1996. First verified vice county record.

S P Chambers

Parmelia exasperatula: very fertile plants on *Fagus sylvatica* and *Picea engelmannii*. Also directly foliicolous with young lobules establishing on spruce needles, Pwllpeiran near Hafod, VC 46, Cardigan, GR 22/77-74-, alt 200m, 1996.

S P Chambers

Parmelia soredians: on trunk of *Populus* in pasture, Wickham Market, VC 25, East Suffolk, GR 62/30-56-, April 1996. Also on branch of *Quercus* in wood, Campsea Ash, VC 25, East Suffolk, GR 62/31-55-, July 1996. Only one previous record for this species in East Anglia.

P M Earland-Bennett

Parmelia tinctoria: refound flourishing on slate roof of Norton Court, Norton Fitzwarren, VC 5, Somerset, GR 31/19-25-, August 1996. One of only three sites in the British Isles for this species and first recorded here by Walter Watson as *P. conspersa* var. *isidiata* in "The Lichens of Somerset", 1930. Confirmed B J Coppins.

J M Gray

Phaeophyscia endococcina: on tops of rocks at the edge of a lochan, Loch Coire na Caime, Liathach, Torridon, VC 105, West Ross, GR 18/92-58-, alt 525m, June 1994. Also in a similar habitat in numerous other lochans and pools in northwest Scotland. Other locations: Beinn Dearg NNR, VC 105, West Ross, GR 28/2—8—; Inchnadamph Forest, VC 108, West Sutherland, GR 29/2—2—; Ben More Assynt NNR, VC 108, West Sutherland, GR 29/3—1—. All records August 1995.

A M Fryday

Phylliscum demangeonii (Moug. & Mont.) Nyl. (1855): on quartzite boulder below waterfall. Allt Lagan Mhuirich, Inchnadamph Forest, VC 108, West Sutherland, GR 29/28-22, alt 600m, August 1996. New to the British Isles. Excellent photograph in Wirth (1995) *Die Flechten Baden-Württembergs; Tiel 2*.

Determined B J Coppins.

A M Fryday

Placynthiella hyporhoda: with *Veздаea cobria*, *V. rheocarpa* and *Baeomyces placophyllus* on metal-rich turf at Cwmystwyth mine, VC 46, Cardigan, GR 22/80-74-, alt 220m, and abundant on the eroding banks of river-edge shingle, with *Veздаea acicularis* and *Mniacea jungermanniae*, Afon Ystwyth, Grogwynion, VC 46, Cardigan, GR 22/69-71-, alt 70m, March 1996 (BLS Meeting). At the latter site this species also occurred on shingle heath on the vertical sides of deep ruts created by motor vehicles.

S P Chambers

Placynthium subradiatum: on hard metamorphic limestone outcrop in a *Juncus/Nardus/Sphagnum/Trichophorum* moorland on hill slope west of Loch of Strom, Whiteness, Mainland, VC 112, Shetland, GR N41/39-49-, July 1996. New to Shetland.

D H Dalby

Polyblastia cruenta: rare on flushed north-facing, basaltic rocks, Traprain Law, VC 82, East Lothian, GR 36/5—7—, August 1996. New to southeast Scotland.

O L Gilbert & B J Coppins.

Polyblastia theleodes: on shaded, calcareous Old Red Sandstone conglomerate cliff, Sheeppath Glen, East Lammermuir Deans NR, VC 82, East Lothian, GR 36/69-70-, alt 230m, August 1996. New to the Lothians. Associated species included *Gyalecta jenensis*, *Lepraria eburnea* and *Toninia lobulata*.

B J Coppins & N Homchantara

Polycoccum microsticticum: on *Acarospora fuscata* on southwest-facing basalt outcrop, Traprain Law, VC 82, East Lothian, GR 36/57-74-, alt 125m, March 1996.

B J Coppins & A M Fryday

Porina ahlesiana: on rocks by East Lyn River, Watersmeet, near Lynton, VC 4, North Devon, GR 21/74-48-, alt 110 m, April 1996.

B J Coppins, B Benfield & J Robbins

Porina guentheri: for details see under *Melaspilea granitophila*.

B J Coppins & O L Gilbert

Poroscyphus coccodes: for details see under *Collema glebulentum*.

B J Coppins & O L Gilbert

Protoparmelia ochrococca: on fence posts along boundary fence on hillside, Nibon, Northmavine, Mainland, VC 112, Shetland, GR N41/30-73-, July 1989. Confirmed BJ Coppins: "a significant extension of its range". New to Shetland.
D H Dalby

Pseudephebe minuscula (Nyl. ex Arnold) Brodo & D. Hawksw. (1977): on top of granite boulder, Sron a Cha-no, northern Cairngorms, VC 96, Easternness, GR 38/01-06-, alt 950m, August 1995. New to British Isles. Also on adjacent Creagan Dubh. Similar to *P. pubescens* but with flattened branches, especially near point of attachment where it appears almost foliose, resembling a *Parmelia* (*Melanelia*) species. Confirmed J W Thomson.

A M Fryday & S Chambers

Pyrenopsis grumulifera: for details see under *Collema glebulentum*.

B J Coppins & O L Gilbert

Pyrrhospora rubiginans (Nyl.) P. James and Poelt (1981): fertile on a south-facing underhang of a small boulder amongst *Calluna* on southeast-facing hillside, Nether Craig, Blacklunans, VC 90, Forfar, GR 37/17-61-, alt 380m, May 1996. New to the British Isles. Sterile material is also known from southeast-facing acidic dry underhangs at the following localities: Bruntshields, Glen Prosen, VC 90, Forfar, GR 37/27-68-, alt 450 m, 1995; Nether Craig, Blacklunans, VC 90, Forfar, GR 37/16-60-, alt 400m, July 1995; Wester Eggie, Glen Clova, VC 90, Forfar, GR 37/34-70-, alt 360m, July 1995; Glen Mark, VC 90, Forfar, GR 37/42-81-, alt 450m, June 1996; Mount Blair (3km NNE from Nether Craig), VC 90, Forfar, GR 37/17-64-, alt 350m, June 1996; Coire na Berran, Glen Lethnot, VC 90, Forfar, GR 37/44-72-, 500m, July 1996. Confirmed B J Coppins.

R C Munro & C J B Hitch

Pyrrhospora rubiginans: sterile on vertical or slightly underhung faces of basalt outcrops, Hume Castle, VC 81, Berwickshire, GR 36/70-41-, alt 200m, June 1996. New to southern Scotland.

B J & A M Coppins & N Homchantara

Ramalina polymorpha: on southeast-facing basalt outcrops below summit of North Berwick Law, VC 82, East Lothian, GR 36/55-84-, alt c 145m, August 1996. New to the Lothians.

O L Gilbert & B J Coppins

Ramonia chrysophaea: on trunk of mature *Quercus*, valley of East Lynn River, Watersmeet, near Lynton, VC 4, North Devon, GR 21/74-48-, alt 120m, April 1996.

B J & A M Coppins & B Benfield

Rinodina flavosoralifera: on *Salix* in carr, side valley to north of Kilblaán Ravine, Glen Shira, Inverary, VC 98, Main Argyll, GR 27/13-13-, alt 40m, March 1996. New to western Scotland.

BJ & AM Coppins

Sarcopyrenia gibba: killing thallus of *Lecidella scabra* on coping of brick wall, Debach, VC 25, East Suffolk, GR 62/24-55-, July 1996.

CJ B Hitch & P M Earland-Bennett

Schismatomma decolorans: fertile material (with no spores but typical *Schismatomma* asci staining I+ blue on south-facing side of bole of giant old *Fraxinus* beside River Deben growing with *Gyalecta truncigena*. Glevering, VC 25, East Suffolk, GR 62/30-56-, June 1996. First fertile record for the British Isles. Confirmed BJ Coppins.

P M Earland-Bennett

Sclerophora peronella: on *Ulmus* by Raxton Burn, Raxton Wood, Haddo House, VC 93, North Aberdeen, GR 38/87-33-, alt 45m, May 1996.

BJ & AM Coppins

Stenocybe bryophila: on hepatics on *Alnus*, woods to northeast of Drimlee, Glen Shira, Inverary, VC 98, Main Argyll, GR 27/14-16-, alt 50-80m, March 1996.

AM & BJ Coppins

Strigula jamesii: plentiful on tree roots in ditch beside wood, Hacheston, VC 25, East Suffolk, GR 62/31-57-, April 1996. Determined BJ Coppins.

P M Earland-Bennett

Thelidium decipiens: with *Diplotomma epipolium* on a small limestone headstone, Llanaeron church, VC 46, Cardigan, GR 22/47-60-, alt 35m, March 1996. Both first vice county records and welcome additions to an area devoid of natural chalk or limestone.

SP Chambers & TW Chester

Trapeliopsis glaucolepidea: frequent on eroding edges of peat hags in open moorland, Bryn Garw, VC 46, Cardigan, GR 22/80-77-, alt 570m, and fertile on Banc Nant Rhys, VC 46, Cardigan, GR 22/82-79-, alt 560m, April 1996. First records for Cardigan.

SP Chambers

APPENDIX

THE VICE-COUNTY NUMBERS AND CORRESPONDING VICE-COUNTIES

ENGLAND AND WALES

1. West Cornwall (with Scilly)
2. East Cornwall
3. South Devon
4. North Devon
5. South Somerset
6. North Somerset
7. North Wiltshire
8. South Wiltshire
9. Dorset
10. Isle of Wight
11. South Hampshire
12. North Hampshire
13. West Sussex
14. East Sussex
15. East Kent
16. West Kent
17. Surrey
18. South Essex
19. North Essex
20. Hertfordshire
21. Middlesex
22. Berkshire
23. Oxfordshire
24. Buckinghamshire
25. East Suffolk
26. West Suffolk
27. East Norfolk
28. West Norfolk
29. Cambridgeshire
30. Bedfordshire
31. Huntingdonshire
32. Northamptonshire
33. East Gloucestershire
34. West Gloucestershire
35. Monmouthshire
36. Herefordshire
37. Worcestershire
38. Warwickshire
39. Staffordshire
40. Shropshire (Salop)

41. Glamorgan
42. Breconshire
43. Radnorshire
44. Carmarthenshire
45. Pembrokeshire
46. Cardiganshire
47. Montgomeryshire
48. Merionethshire
49. Caernarvonshire
50. Denbighshire
51. Flintshire
52. Anglesey
53. South Lincolnshire
54. North Lincolnshire
55. Leicestershire (with Rutland)
56. Nottinghamshire
57. Derbyshire
58. Cheshire
59. South Lancashire
60. West Lancashire
61. South-east Yorkshire
62. North-east Yorkshire
63. South-west Yorkshire
64. Mid-west Yorkshire
65. North-west Yorkshire
66. Durham
67. South Northumberland
68. North Northumberland (Cheviot)
69. Westmorland with North Lancashire
70. Cumberland
71. Isle of Man
113. Channel Isles

SCOTLAND

72. Dumfriesshire
73. Kirkcudbrightshire
74. Wigtownshire
75. Ayrshire
76. Renfrewshire
77. Lanarkshire
78. Peebleshire
79. Selkirkshire
80. Roxburghshire
81. Berwickshire
82. East Lothian (Haddington)
83. Midlothian (Edinburgh)
84. West Lothian (Linlithgow)
85. Fifeshire (with Kinross)
86. Stirlingshire
87. West Perthshire (with Clackmannan)
88. Mid Perthshire
89. East Perthshire
90. Angus (Forfar)
91. Kincardineshire
92. South Aberdeenshire
93. North Aberdeenshire
94. Banffshire
95. Moray (Elgin)
96. East Inverness-shire (with Nairn)
97. West Inverness-shire
98. Argyll Main
99. Dunbartonshire
100. Clyde Isles
101. Kintyre
102. South Ebudes
103. Mid Ebudes
104. North Ebudes
105. West Ross
106. East Ross
107. East Sutherland
108. West Sutherland
109. Caithness
110. Outer Hebrides
111. Orkney Islands
112. Shetland Islands (Zetland)

IRELAND

- H.1. South Kerry
- H.2. North Kerry
- H.3. West Cork
- H.4. Mid Cork
- H.5. East Cork
- H.6. Waterford
- H.7. South Tipperary
- H.8. Limerick
- H.9. Clare
- H.10. North Tipperary
- H.11. Kilkenny
- H.12. Wexford
- H.13. Carlow
- H.14. Leix (Queen's County)
- H.15. South-east Galway
- H.16. West Galway
- H.17. North-east Galway
- H.18. Offaly (King's County)
- H.19. Kildare
- H.20. Wicklow
- H.21. Dublin
- H.22. Meath
- H.23. West Meath
- H.24. Longford
- H.25. Roscommon
- H.26. East Mayo
- H.27. West Mayo
- H.28. Sligo
- H.29. Leitrim
- H.30. Cavan
- H.31. Louth
- H.32. Monaghan
- H.33. Fermanagh
- H.34. East Donegal
- H.35. West Donegal
- H.36. Tyrone
- H.37. Armagh
- H.38. Down
- H.39. Antrim
- H.40. Londonderry

LITERATURE PERTAINING TO BRITISH LICHENS - 20

Lichenologist 28(3) was published on 10 May 1996, 28(4) on 15 July and 28(5) on 5 October 1996.

Taxa prefixed by * are additions to the checklists of lichens and lichenicolous fungi for Britain and Ireland. Aside comments in square brackets are mine.

BENFIELD, B 1993-94. Report on Botany: Lichens. *Rep. Trans. Devon Ass. Advmt Sci.* 125: 240-241 (1993); 126: 261-263 (1994); 127: 311-313 (1995). Further annual updates of the Devon checklist published in vol. 122 of the same journal.

DIEDERICH, P 1996. The lichenicolous heterobasidiomycetes. *Bibliotheca Lichenologica* 61: 1-198. Fifty-four species of lichenicolous heterobasidiomycetes are currently known, of which 41 are newly described in this volume, and 6 not yet formally named. British taxa cited and treated are *Biatoropsis* Räsänen, *B. usnearum* Räsänen, **Syzygospora* Martin (1937), **S. bachmannii* Diederich & M.S. Christ. (on podetia of *Cladonia* spp, including *C. furcata* and *C. rangiformis*), **S. physciacearum* Diederich (on Physciaceae, including *Physcia aipolia* and *P. tenella*), *Tremella* Pers., **T. cetrariicola* Diederich & Coppins (on *Cetraria chlorophylla*), *T. coppinsii* Diederich & Marson, **T. hypogymniae* Diederich & M.S. Christ. (on *Hypogymnia physodes*), *T. lichenicola* Diederich, **T. normandinae* Diederich (on *Normandina pulchella*), **T. pertusariae* Diederich (on *Pertusaria* spp., especially on apothecia of *P. hymenea*), **T. phaeographidis* Diederich, Coppins & Bandoni (on *Phaeographis dendritica* and *P. smithii*), **T. phaeophysciae* Diederich & M.S. Christ. (on *Phaeophyscia orbicularis*), **T. protoparmeliae* Diederich & Coppins (in hymenium of *Protoparmelia badia*), *Tremella* sp. 1 (in hymenium of *Caloplaca arnoldii* and *C. saxicola*). Also treated is the genus *Chionosphaera* Cox (1976). [Two collections from Scotland, on *Lecidella elaeochroma* and *Parmelia glabratula*, await confirmed identification, but probably refer to *C. cf. apobasidialis* as treated by Diederich. Several more of the treated species are likely to be present in the British Isles, as well as some not yet discovered].

EDMONDSON, J 1995. *James Bolton of Halifax*. Liverpool: National Museums & Galleries on Mersey side. Pp. 72, 42 figs. A small book prepared in conjunction with an exhibit of the works of the Yorkshire naturalist and artist, James Bolton (1735-1799). A major discovery while researching for the book was three volumes of lichen drawings by Bolton, each with 40 plates, entitled "*Figures of British Lichens taken from the Plants*", and dated 1792, 1793 and 1794. The origins of the subjects are usually given, including *Lichen plumbeus* [*Degelia plumbea*] from near Burnley in Lancashire! Three of the drawings are

reproduced in this book. These unique volumes are housed in the Library at Knowsley Hall, near Prescot, Merseyside. Other references to lichens include the transcript of a letter from Bolton to Revd. John Lightfoot.

EKMAN, S & TØNSBERG, T 1996. A new species of *Megalaria* from the North American West Coast, and notes on the generic circumscription. *Bryologist* 99: 34-40. The broader circumscription of *Megalaria* adopted here includes six species, of which *M. grossa*, *M. laureri* (Th.Fr.) Hafellner (1993 [in *Nimis' Lichens of Italy*]) (syn. *Catillaria laureri*), and *M. pulverea* (Borrer) Hafellner & E. Schreiner (1992) (syn. *Catillaria pulverea*) occur in the British Isles.

ETAYO, J & DIEDERICH, P 1996. Lichenicolous fungi from the western Pyrenees, France and Spain. III. Species on *Lobaria pulmonaria*. *Bull. Soc. Nat. Luxemb.* 97: 93-118. Includes a key to the lichenicolous fungi occurring on *L. pulmonaria* in the Pyrenees, and a record of the newly described **Monodictya fuliginosa* Etayo from Scotland.

HAFELLNER, J 1995. Bemerkenswerte Funde von Flechten und lichenicolen Pilzen auf makaronesischen Inseln II. Einige bisher übersehene arthoniale Arten. *Herzogia* 11: 133-142. **Arthonia diploicae* Calatayud & Diederich (1995), a host-specific parasite of *Diploicia canescens*, is illustrated and reported from Ireland.

HENDERSON, D M & DICKSON, J H (eds) 1994. *A Naturalist in the Highlands. James Robertson, his life and travels in Scotland, 1767-1771*. Edinburgh: Scottish Academic Press. Pp 255. [ISBN 07073 0734 1. Price £15, hardback]. Transcripts of the journals and other manuscript materials pertaining to the travels of James Robertson (d. 1796), together with many additional notes by the editors. Records of lichens are found on pages 219, 220 and 240. There is also reference to the use of lichens in dyeing on pages 35 (in E Sutherland) and 98 (on Skye). On p. 88 is a report of 'pyxidatus' [*Cladonia*] being found in the stomachs of deer.

HYVÄRINEN, M & CRITTENDEN, P D 1996. Cation ratios in *Cladonia portentosa* as indices of precipitation acidity in the British Isles. *New Phytologist* 132: 521-532. A nation-wide study of the relationship between rainfall chemistry and the concentration of K^+ , Ca^{2+} and Mg^{2+} in the apices of *C. portentosa*.

LUMBSCH, H T & FEIGE, G B 1996. Comments on the Exciccat "Lecanoroid Lichens" III. *Mycotaxon* 58: 259-267. *Lecanora albella* (Pers.) Ach. is accepted as the correct name for *L. pallida* (Schreb.) Rabenh. non Chevall. *Lecanora praepostera* Nyl. is shown to have priority over *L. schistina* (Nyl.) Arnold.

ROSE, F 1995. *The Habitats and Vegetation of Sussex*. Brighton: Booth Museum of Natural History [ISBN 0 948723 24 6]. This is the excellent introduction to Sussex habitats and vegetation that originally appeared in the 1991 *Atlas of Sussex Mosses, Liverworts and Lichens*; see *Bulletin* 70: 73, 1992. [It has been reformatted, and a few unfortunate errors have crept into the species lists; e.g. on p. 7, the notes appended to *Caloplaca lactea* actually refer to *C. luteoalba*, which has been missed out!]

SCHREINER, E & HAFELLNER, J 1992. Sorediöse, corticole Krustenflechten im Ostalpenraum. I. Die Flechtenstoffe und die gesicherte Verbreitung der besser bekannten Arten. *Bibliotheca Lichenologica* 45: 1-291. A treatment of 60 sorediate corticolous crustose lichens from the Eastern Alps. *Catillaria pulverea* is referred to *Megalaria* as *M. pulverea* (Borrer) Hafellner & E. Schreiner.

WIRTH, V 1996. *Flechtenflora. Bestimmung und ökologische Kennzeichnung der Flechten Südwestdeutschlands und angrenzender Gebiete*. 2. Auflage. Stuttgart: Ulmer. Pp. 661. ISBN 3 8252 1062 6. This is a fully revised, second edition of Volkmar Wirth's excellent field manual ["Little Red Book" to many of us]. Two new combinations are made: *Miriquidica griseoatra* is reduced in status to *M. leucophaea* var. *griseoatra* (Flot.) V. Wirth, and *Lauderlindsaya acroglypta* is considered to be a *Normandina*, as *N. acroglypta* (Norman) Aptroot.

Brian Coppins

WEEKEND RESIDENTIAL COURSE ON CHURCHYARD LICHENS

An introductory course on churchyard lichens will take place at Knuston Hall near Wellingborough, Northamptonshire on the weekend of 11-13 July, 1997. The course will include field visits. The estimated cost is about £90. For further information contact me on 01280 702918.

Tom Chester

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Please would intending contributors to the Summer 1997 issue of the
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but by no means essential, for authors of longer articles prepared on a word
processor to supply a copy on a 3.5" floppy disc, in addition to the hard
copy. This can be in MS.DOS, Word, Word Perfect or any format from an
Apple Macintosh.

Notes

Notes

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