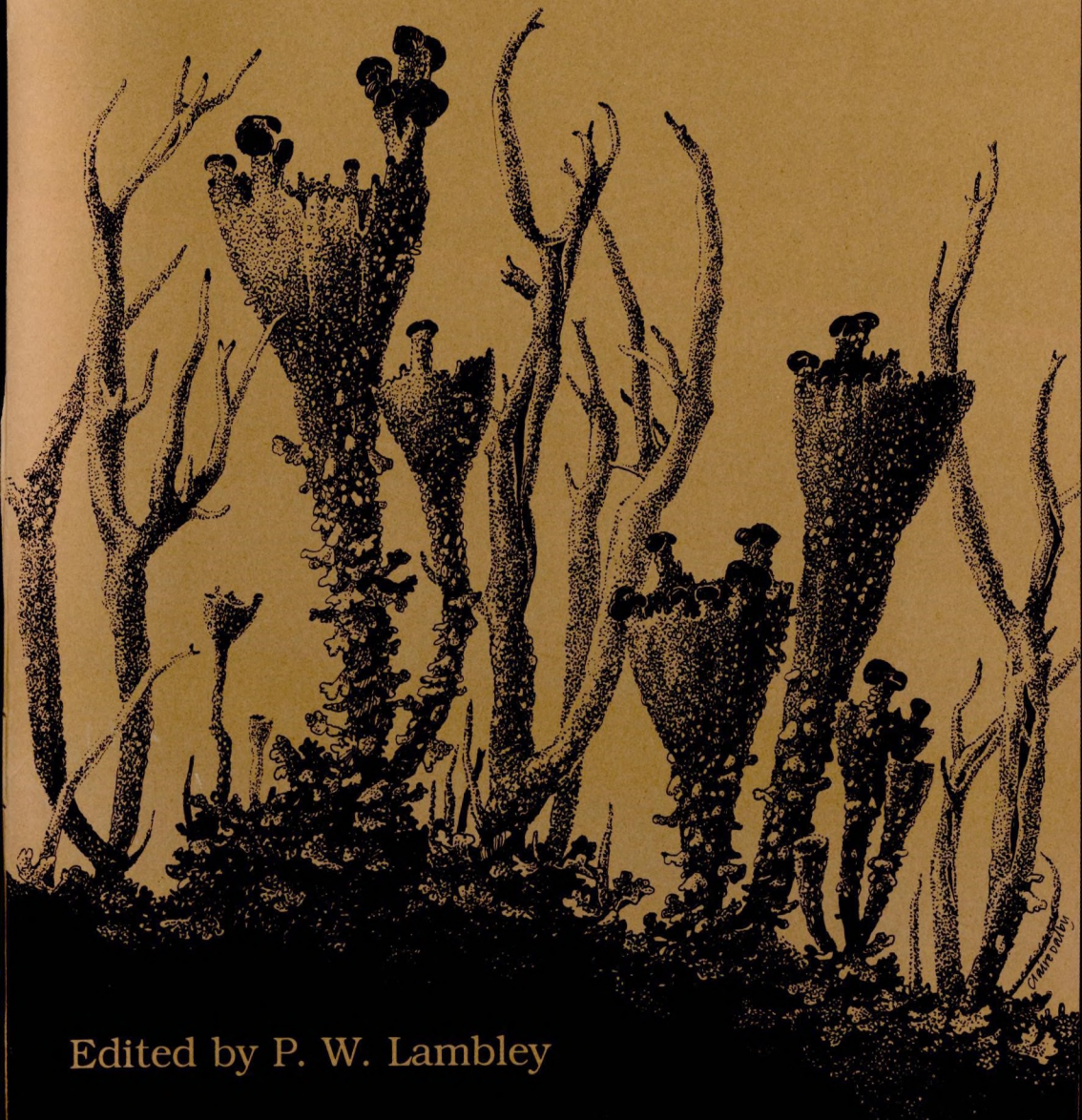
BRITISH LICHEN SOCIETY BULLETIN

No. 85 Winter 1999



Edited by P. W. Lambley

FORTHCOMING BLS MEETINGS

DOLGELLAU
Leader Peter James — 25 April - 1 May 2000
STRATHSPEY: Caledonian Pine Forests
Leader Brian Coppins — 9 July - 15 July 2000

2000 MEMBERSHIP AND SUBSCRIPTION RATES

Annual rates except where indicated (dollar rates are double the sterling rates)

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 ..... for 2000 £25.00
..... for 2000-2002 £71.50
..... for 2000-2004 £112.50

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 £270.00

Renewal membership subscriptions by sterling cheque, only payable to The British Lichen Society, **drawn on a UK bank or on a bank with a UK branch or agent** should be sent, by 1 January, to Mr J M Gray, Assistant Treasurer, British Lichen Society, Penmore, Perranuthnoe, Penzance, Cornwall, TR20 9NF, UK (tel and fax 01736 710616), e-mail: jmgray@argonet.co.uk.

US dollar renewal membership subscriptions should be sent to S R Clayden, New Brunswick Museum, 277 Douglas Avenue, Saint John, New Brunswick, E2K 1E5, Canada.

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

Changes of address should be notified to the Assistant Treasurer at least six weeks in advance.

Applications for membership should be made to The Secretary, The British Lichen Society, c/o The Natural History Museum, Cromwell Road, London, SW7 5BD, or through the Society's website at **http://www.argonet.co.uk/users/jmgray/**.

SUBMISSION DEADLINE - 22 March 2000

Cover artwork by Claire Dalby

Athelia arachnoidea killing it), *Porpidia soredizodes*, *Rinodina pityrea*, *Stereocaulon vesuvianum* var. *vesuvianum* and var. *symphycheileoides*. A *Verrucaria* species with a grey thallus and orange-buff soredia was also found. This lichen is not uncommon in East Anglia and London and is always on calcareous substrates in a sunny situation - I have no name for it.

Further along the southern wall at Vineyard Street (which is now a busy market place) a short length of wall yielded a limited number of lichen species among which were *Acrocordia salweyi*, *Lecania turicensis* and *Phaeophyscia nigricans*.

Among other types of lichens on the wall as whole, pyrenocarpous species were very common, especially *Verrucaria* species. Leprarioid species deserve particular mention. *Botryolepraria lesdainii* was present in crevices on the north wall and *Leproloma lobificans* was found on the shaded inner side of the west wall at St Mary's Church. *Lepraria incana* was always rare and present only on acidic substrates. *Leproloma vouauxii* was an abundant species both directly on calcareous substrates and on bryophytes over them, often growing with *Agonimia tristicula*. Probably one of the great attractions of the wall was a bright blue-green leprarioid lichen growing in fairly sunny situations and always on calcareous substrates. I feel it is close to *Lepraria incana* and gave it the field name '*Lepraria victricensis*' (*Victricensis* being an alternative name for *Camulodenum* the Roman name for Colchester). It was present in great quantity on all but the north wall. I have found it elsewhere in East Anglia, though mainly on vertical brick affected by lime run-off. It would certainly merit careful study and chemical examination.

The lichen flora post-cleaning and rebuilding

The cleaning of the Roman wall of Colchester, authorized by English Heritage, was drastic in the extreme. The north wall suffered the worst with high-pressure hoses being used to remove virtually all lichen thalli. As a consequence, hardly any thalli of *Protoblastenia rupestris* are now present. Elsewhere stiff brushes were used to remove the lichen cover. At the north end of the east wall the lobate species have had the upper parts of their thalli brushed off. Most of the septarian nodules of the wall were brushed clean. At the north end of the west wall large numbers of thalli of *Agonimia tristicula* and *Leproloma vouauxii* were lost due to the removal of most of the moss covering the wall.

Essential building work was carried out and the wall is now in a much better state. However, the cause of the deterioration of the wall was crumbling mortar from neglect together with cracks opened by tree roots and not due to the lichens present.

The picture is not completely a gloomy one since some small sections of the wall with important species on were left intact - we should at least be thankful for that. However, the vast majority of lichen thalli (along with all vascular plants) were removed. Septarian nodules are now mostly bare and pyrenocarpous lichens are among those that have suffered most. Very few thalli of *Verrucaria* species are now left on the wall, and if the east end of the southern wall in Priory Street is anything to go by, recolonization is going to be a very slow process.

During my resurvey of the whole of the wall in 1998, following cleaning and rebuilding, 79 of the 117 lichen and lichenicolous fungi species were refound, but now often only represented by a few thalli. I suspect recolonization will be a very slow process and then only by the more common urban species. Many of the interesting and important Essex species found prior to cleaning are now no longer there and I do not expect they will return.

Conclusions

The Roman wall had been neglected for so many years that rebuilding and repointing in some parts was absolutely necessary. However, the lichen flora was innocent of any major deterioration and should not have suffered so drastically at the hands of an over-zealous cleaning programme. The people of Colchester, as well as the world of lichenology, are the losers since the wall was beautified by the lichens and flowering plant cover - but it is now a stark, bare eyesore.

Peter Earland-Bennett
160 High Street,
Wickham Market,
Woodbridge,
Suffolk,
IP13 0QY

JANUARY MEETINGS 2000

Nominations

Nominations for Officers for 2000 and four members of Council for the period 2000-2001 should be sent in writing to the Secretary, c/o Department of Botany, The Natural History Museum, Cromwell Road, London SW7 5BD before 20 December 1999. No person may be nominated without their consent. Steve Chambers, Oliver Gilbert, Ron Lewis Smith and Will Stevens retire from Council and are not eligible for re-election as Council members.

Council Meeting

Council will meet at 14.00 on Friday 7 January 2000 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 arch]. Please let the Secretary have any items you wish Council to discuss by Friday 1 January 2000.

Dougal Swinscow Memorial Lecture and Evening Buffet

The third Dougal Swinscow Memorial lecture will be presented by Professor Pier Luigi Nimis on the topic "Bioindication with lichens: progress and problems" on Friday, 7 January at the Linnean Society at 18.00. This will be preceded by tea and coffee at 17.15, followed by an evening buffet which will cost £13.00 per head including one glass of wine. Books will be available for sale by auction.

Those wishing to attend should complete the enclosed tear-off form and send a cheque for £13 (payable to the Linnean Society of London) before 20 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 8 January 2000**. Please bring along exhibits of lichenological interest for display.

PLEASE NOTE: MEMBERS WISHING TO DISPLAY ITEMS SHOULD DISCUSS THEIR SPECIFIC REQUIREMENTS WITH MARQUITA AT THE LINNEAN SOCIETY BEFORE 20 DECEMBER 1999.

Programme

Saturday 8 January

09.45 Coffee and reception
10.30 Annual General Meeting

AGENDA

1. Apologies for absence
2. Minutes of the Annual General Meeting 9 January 1999
3. Matters arising
4. Officer's Reports
5. Meetings 1999-2000
6. Election of Officers
   President (Council's nomination) Dr A Fletcher
   Vice President (Council's nomination) A M Coppins
   4 members of Council
7. Any other business
8. Date and place of next AGM

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

Afternoon Lecture Sessions - Current research in Lichenology

14.00 - 14.30	Rod Ashwell "Phylogenetic studies on the genus *Diplotomma*"
14.30 - 15.00	Howard Griffiths "Lichen ecology: an ecophysiological perspective"
15.00 - 15.30	Peter Crittenden "Nitrogen as a factor in lichen ecology"
15.30 - 16.00	AFTERNOON TEA
16.00 - 17.00	Flora Discussion
17.00	CLOSE

POST-AGM LONDON EXCURSION: RUISLIP WOODS NNR

Sunday 9 January 2000

Meet at Ruislip Woodlands Centre, in the Water's Edge bar/restaurant complex, at 10.45 hrs. OS Landranger Sheet 176, TQ(51)/087.893. There is ample free car parking opposite. Leader: David L Hawksworth.

This is the only National Nature Reserve in London, and is the richest site for corticolous lichens in the Greater London area. Numerous species have recolonised in the last decade, and recent finds have included a range of crustose species, including *Bacidia caligans, B.laurocerasi* and *Caloplaca ulcerosa*. The *Parmelia caperata* and *P. perlata* communities are well-worth seeing!

The excursion is expected to end in the Water's Edge bar around 13.45 hrs, where food is available if required.

Current Membership of Committees

Conservation Committee

B Benfield
I Blatchley
S Chambers
T Chester
A Coppins
B Coppins
K Dalby
F Dobson
T Duke
B Edward
A Fletcher (Chair)
H Fox
J Gray
N Hodgetts
O Gilbert
P James
P Lambley
F Rose
N Sanderson
M Seaward
B Starkey
S Ward
A Waterfield
P Wolseley
R Woods

Education Committee

B Hilton (Chair)
A Allen
A Branson
T Chester
P Crittenden
F Dobson
A Fletcher
J Gray
P James
C Leigh
A Orange
W Purvis
A Waterfield
P Wolseley

Data Committee

T Chester
B Coppins
P Crittenden
F Dobson
B Edwards (Secretary)
A Fletcher (Acting Chair)
O Gilbert
J Gray
D Hawksworth
P James
D Newman
A Orange
W Purvis
F Rose
M Seaward
A Waterfield

TREASURER'S AND TRUSTEES' REPORT ON THE ACCOUNTS FOR THE PERIOD FROM 01/07/98 TO 30/06/99

This has been, financially, another successful year for the Society. Sales of the Flora and other publications have continued to be good although the sales of the *Parmelia* CD have not been as high as was hoped. Even here, the prospects look more promising as more people purchase new computers containing a CD rom drive. However, it has been decided that the next CD to be produced will be manufactured ourselves on an 'on demand' basis. The profit from these transactions is being invested in new Atlas Fascicles together with five churchyard identification sheets in colour.

Subscription levels have been maintained following the decision to keep the previous rate, for at least the first year of the next five year period. Many members have taken the opportunity of fixing this subscription rate for a longer period by paying for the next three or five years.

The worry that we had over our share of the profits of *The Lichenologist* following its being available on the internet has proved unfounded. Indeed, our share has doubled over the previous year.

The expenses of the AGM weekend in the previous year included the costs of the International Symposium. Next year we are holding another international meeting in Pembroke on 'Lichen Monitoring Strategies' and the expense of this will appear in next year's figures. Since the accounts were prepared we have paid out a number of small grants of up to £500 for research projects and to enable young overseas members to work in this country with British members. We also gave a donation of £619 to assist in the publication of a North American Lichen Flora.

BioBase is now available to members and it is probable that there will be a need to pay someone to enter existing records into the system. A start has been made with expanding the Bradford database where we paid for the records of lichenicolous fungi to be separated out from the old lichen record cards.

As always, I must thank the assistant treasurers John Sheard and Jeremy Gray. After looking after our North American members for many years John Sheard has resigned and we are very grateful for all his hard work. Stephen Clayden has kindly offered to take over the position of American Treasurer. I must also thank Brian Green and Will Stevens for their work in connection with stock and publication sales. Thanks are also due to Douglas Oliver for auditing the accounts.

F S Dobson, Hon Treasurer

Auditor's Report to the British Lichen Society

I have not checked the stock or examined the Register of Members, 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 30 June 1999.

In connection with my examination, no matter has come to my attention:

(1) which gives me reasonable cause to believe that in any material requirements

- to keep accounting records in accordance with Section 41 of the Act and
- to prepare accounts which accord with the accounting records and to comply with the accounting requirements of the Act.

have not been met: or

(2) to which, in my opinion, attention should be drawn in order to enable a proper understanding of the accounts to be reached.

D E W Oliver, FICB, 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.

BRITISH LICHEN SOCIETY

EXPENDITURE AND INCOME FOR THE YEAR 1/7/98 TO 30/6/99

1997/8	EXPENDITURE			1997/8	INCOME			
	Printing and distributing *The Lichenologist*	13,724			Subscriptions		16,426	
5,580	Less profit sharing	(13,587)	137		Add 1/5 life membership		389	
	Printing and distributing *The Bulletin*	2,731		12.818	Less refunds	(31)		
2,768	Less receipts	(255)	2,476	5,601	Paid in advance	(3,035)	(3,066)	13,749
1,674	Secretarial and committee expenses		1,634	-	Interest received			6,709
350	Depreciation		607	3,053	Donations			–
517	Printing		970	(33)	Profit on sales of stock inc. *Flora*			4,141
220	Bank charges		193	–	Profit/Loss on exchange rate			–
1,725	A.G.M.		775		Profit on book sale			–
	Grants, Seminars, Field trips etc.	1,462		£21,439			Total	£24,599
1,003	Less receipts	(465)	997					
150	Accounting and audit		175	(£7,044)	Excess income over expenditure			(£15,594)
156	Insurance		156					
236	Subscriptions paid		266					
–	Donations paid		619					
16	Miscellaneous		–					
£14,395	Total		£9,005	£14,395			Total	£9,005

BALANCE SHEET AS AT 30/6/99

	LIABILITIES				ASSETS			
5,548	Sundry creditors (inc. advance subs)		3,640	118,351	Cash at Banks			116,912
1,943	Life members		1,554	7,906	Stock and work in progress			8,632
3,307	Burnet/Wallace Memorial Fund		3,307	–	Capital equipment	£2,428		
900	Grants and funds in hand		900	789	Less depreciation	(£1,216)		1,212
	General Fund at 30/6/98	115,549		198	Debtors			13,788
115,549	Plus surplus for 12 months	15,594	131,143					
£127,247		Total	£140,544	£127,247			Total	£140,544

Signed and agreed on behalf of the British Lichen Society

President: Treasurer

FROM THE ASSISTANT TREASURER

Membership List

The list, published as a Supplement to this Bulletin, follows the same format as previous editions incorporating lists by UK counties (in preference to postcode districts, which had been considered) and overseas countries. Please let me know of any inaccuracies.

Three and Five Year Subscriptions

Subscribing for a three or five year period offers advantages to the member of a saving of £3.50 and £12.50 respectively, not having to remember to renew each year (ensuring that publications arrive without interruption) and to the overseas member the additional economy of having to suffer only one commission charge instead of three or five for conversion of payments to sterling. To the Assistant Treasurer it offers a considerably reduced workload!

Please note that the five year concessionary rate is only available for period 2000-2004 because of an anticipated subscription increase in 2005.

Since 1995 no less that 138 members have subscribed for five years, many in 1995. As this membership period ends at the end of 1999 I would urge those who are unsure of their subscription status, and have been receiving publications without paying an annual subscription in recent years, to check their subscription status (see below).

Subscription Status

Subscription renewal notices are sent to all members of the Society with the Winter Bulletin as a matter of expediency. It is not practicable to enclose them only with the Bulletins of those who have not paid for the following year. If you are unsure of your subscription status, please check your three or five year receipt of contact me (preferably by e-mail). Alternatively, if you subscribe to *The Lichenologist* and have internet access, you can follow the link from the index.htm page on the BLS website http://www.argonet.co.uk/users/jmgray to 'Subscription Status' which displays a table, extracted from the BLS membership database, showing your new Harcourt Brace six figure 'subscription number', which appears in the top left-hand box of the address label of your copy of *The Lichenologist* (thus preserving general anonymity), together with a code which indicates your subscription status.

Jeremy Gray

ANOTHER GOOD REASON FOR BUYING A LADA CAR

Towards the end of last year I was walking down a side street in Penzance when I spotted a red Lada estate some one hundred yards away disappearing round the corner. It appeared to bear a luxuriant growth of *Parmelia caperata* around its rear windscreen. I felt sure it must be local and determined to keep a good lookout for it on future visits to the town.

I was rewarded some weeks later by noticing it approaching as I drove along Wharf Road near the docks, whereupon I executed a smart U-turn and began a pursuit through the backstreets of Penzance described later in a family communication (of which the less fanciful extracts are re-printed here) by the owner of the car.

> "We were returning home from an afternoon outing when my wife, who was driving, noticed in the rear-view mirror that a car was, apparently, following us. Fearful of the driver's motive she accelerated, leaving quite a lot of rubber on the tarmac, and swerving violently into a tiny lane. A hectic chase ensued along all the the most obscure alleyways, twisting throroughfares and narrow side-streets of the town: we drifted wildly round awkward bends, turned right-angle corners on two wheels, went through red lights, crossed the pavement twice and broke every rule of decent driving. Still the mysterious car followed us. When we eventually reached home and were switching off the engine, the other car skidded to a halt behind us and a rather distinguished gentleman leapt out."

Me! I explained my motives and interest asking if I might return to take some photographs of what was clearly a most unusual substratum supporting a considerable number of species. This I did a few weeks later, noting that the lichens had established themselves, initially, on the rubber surround of the windscreens spreading on to the 'plastic' chrome, paintwork and glass.

While Frank Dobson was staying with us at Perranuthnoe over the period of the eclipse we returned to make a full list, finding no less than 21 species. These were:

Buellia aethalea, Caloplaca citrina, Candelariella xanthostigma, Evernia prunastri, Hypogymnia physodes, H. tubulosa, Lepraria lobificans, Parmelia caperata, P. glabratula, P. laciniatula, P. pastillifera, P. perlata, P. subaurifera, P. subrudecta, P. sulcata, Physcia tenella, Ramalina farinacea, Scoliciosporum umbrinum, Usnea subfloridana, Xanthoria parietina and *X. polycarpa*. A truly remarkable list. In addition to the majority of these, a VW Beetle, in the same ownership, parked nearby supported *Parmelia britannica* and *P. revoluta*.

Fig 1. Rear view of Lada Riva showing lichen growth on the rubber window seals.

Fig 2. Well developed thalli on windscreen. Left to right *Parmelia caperata, P. sulcata, P. perlata, Xanthoria polycarpa.*

Doubts remain in my mind over what to give as the grid reference on the mapping card for such a mobile site. The vehicle was moved to Penzance soon after it was purchased in Oxford 12 years ago and has not been washed for the last eight years. (Another good reason for not washing your car!) The Lada and the VW are always parked outside the owner's house and have been driven away from the area on few occasions.

Jeremy Gray

BRITISH ISLES LIST OF LICHENS

12 October 1999 update to List of 28 May 1999

Add

130 *Bacidia neosquamulosa*
130 *Baci neos*

2286 *Buellia hyperbolica*
2286 *Buellia hype*

2280 *Caloplaca ferruginea* s. lat. ##
2280 *Calo* 'ferr' ##

2283 *Diplolaeviopsis ranula* #
2283 *Diplolaev ranu* #

2285 *Fellhanera viridisorediata*
2285 *Fell viri*

2288 *Fusarium peltigerae* #
2288 *Fusar pelt* #

2287 *Lecanora dispersa* f. *zosterae* ##
2287 *Lecanora disp zos* ##

2284 *Lichenochora lecidellae* #
2284 *Lichenochora leci* #

2289 *Lichenopeltella coppinsii* #
2289 *Lichenopelt copp* #

Correct

689 *Cliostomum tenera*
689 *Lecanora tene* (should be *Clio tene*)

1741 *Ramboldia insidiosa* ## (should be 1741 *Ramboldia insidiosa*)
1741 *Rambold insi* ## (should be 1741 *Rambold insid*)

Jeremy Gray

PORTRAIT OF TWO COUNTIES:5
LEICESTERSHIRE AND RUTLAND VC55

VC55 is pretty well the heart of England, equally distant from everywhere, yet thanks to the A1 and M1, easily accessible to everyone. Consequently its lichen flora has been well-recorded even by 18th century coach travellers, but still throws up surprises. Those who came to the 1994 Oakham (Rutland) meeting were amazed. About 580 taxa have been recorded from the greater county, and 217 have been found within the Leicester City boundary since 1990.

The two counties are shaped roughly like a diamond, split down the middle by the River Soar, with ground rising to over 900ft on the west and 700ft on the east. The north-west of the county is the 'montane' Charnwood Forest of precambrian granites, slates and tuffs, with a rugged terrain, oakwoods and a flora more related to the Derbyshire Pennines. The east is completely different, of high, rolling hills on Jurassic limestones, with large open fields dominated by ridge and furrow, ash woods and occasional 'gullets' where ironstone was quarried until around 1900. Occasional patches of hard carboniferous limestone in the extreme north-west and east, soft sandstones in the west, and much exploited coal measures in the north-west complete the picture of a very varied geology. Climate too, is astoundingly varied; from the cold and moisture of the high grounds to the warmer, drier central and southern lowlands.

The varied geology is seen well in the churches. Those west of the River Soar are mostly of granite and sandstone, with worked limestone ornamentation, and tombstones which are predominantly of slate. East of the Soar, they are mostly of limestone, sometimes extremely soft and eroded, with abundant limestone tombs. Churches throughout are often roofed with local Swithland slate from Charnwood. The best have around 80 species.

The county has been graced by a more or less continuous series of excellent collectors over the years. The first lichen record was of *Bryoria fuscescens* (as *Alectoria jubata*), found for the first time in England by John Petiver in Charnwood, and listed in Ray's Synopsis 1690. Richard Pulteney, a teenage apprentice apothecary in Loughborough, recorded numerous lichens in his MS dated 1747. By 1795, his lists included the 'golden haired wiry lichen' (*Teloschistes flavicans*) from trees around Groby. However, the star of early collectors was Andrew Bloxam, resident curate of Twycross from 1830-1865. Bloxam travelled extensively around the world, paralleling the travels of Charles Darwin, but regrettably, formed no earth-shaking conclusions. Instead, his true brilliance lay in recording the local flora, especially microfungi and lichens. His collections reveal the abundant presence, on the hills of Charnwood, many cryptograms

now associated with extreme oceanic climates. Examples include all the *Lobaria, Sticta, Degelia, Sphaerophorus,* etc., to be expected in valley woodlands of North Wales. May we conclude then, that the landscape of Leicestershire once resembled that of the principality? Certainly, from looking at old prints and paintings, the modern landscape appears much drier, and we know that the water table has lowered so much that humid habitats are scarce. Maybe Rydzak's 'drought hypothesis' should be re-examined?

Lichen work continued with the Rev H P Reader and the first botanical curator of Leicester Museum, A R Horwood. The latter founded the Lichen Exchange Club (1904-1914), whose exchanges, many from VC55, can be found in herbaria throughout the UK. Horwood was especially influential in bringing younger people into botany, notably encouraging Arthur Wade and Fred Sowter into Lichenology. Sowter, continued lichen recording from about 1930 to 1972, being one of that tiny band of Lichenologists who kept the subject alive during the post-war years. He wrote an influential county lichen flora, helped to found the BLS in 1958, and encouraged a youthful D L Hawksworth with his studies. This tradition of the experienced mentor, has been crucial for continuing botanical studies in this country.

Regrettably, the history of lichen recording in VC 55 since the time of Bloxam was one of continuing decline, with every author deploring the disappearance of habitats and species. It was Horwood who first suggested, in 1907, that the disappearance of lichens might be due to atmospheric pollution resulting from industrialisation. David Hawksworth (with Francis Rose) expanded upon this, while living in Leicestershire, in the classic *Nature* (1970) paper, which every environmental studies student now quotes as reality. However, fortunately, this is now an historic document. When I came to the county in 1978, I could find *Evernia prunastri* at only 12 locations and *Usnea* had not been seen since 1940. However, in 1983, a tiny specimen of the latter was brought to me by a BTCV volunteer on a piece of lopped ash, from Ambion Wood, close to where King Richard III lost his kingdom and horse. Further records of air pollution-sensitive species came in from then on, including *Parmelia perlata, P. caperata, P. revoluta, Lecanora expallens* and so on. *Evernia* now turns up on nearly every excursion. Very recently, since about 1994, some crustose species have been increasing, the first was *Phlyctis argena* and now *Lecanora chlarotera.* The most productive sites are old willows and ash in sheltered wetlands, with luxuriant growth of commonplace macro-lichens. However, many of the upland rocks remain poorly colonised and are still black with the soot of the industrial era.

The wayside and hedgerow ash trees of the drier east of the county are important hosts for *Caliciales sensu lato,* 12 species of which have been recorded in crevices, including *Coniocybe sulphurea* on elder. *Lecanactis abietina* gives a distinctive mauve

fluorescence to sunlit tree bark in woodlands, and is thus easily recorded from a passing car, but the more inconspicuous and much rarer *L. premnea* is found in one place. Occasionally, leaning or free-standing old ash, in sheltered field corners, can have 25 lichens. Generally a 'good' tree has more than 4 crustose species. Interestingly, some golf courses have interesting trees. The City of Leicester has *Ramalina fraxinea* on a willow, surely brought in on the sapling? I suspect that of recent sightings of *Arthopyrenia punctiformis* and some *Lecanora chlarotera* are being imported too.

Lichenology is often a study of lichen comings and goings, but we find that some species were never seem to come and have never gone. A detailed survey of Burley Wood, near Oakham, in 1989, which led to its designation as an SSSI, revealed what I consider to be the finest ancient woodland in the Midlands. Massive oaks bear *Enterographa crassa* and *Arthonia vinosa,* while coppice hazel has *Graphis elegans, G. scripta* and *Thelotrema lepadinum.* All of these were thought extinct in VC55 since the early 19th century. Some parkland trees, especially walnut, have abundant lichens, including *Pertusaria flavicans, Physconia enteroxantha* and *Lecidella elaeochroma* (yes, a local rarity). Other parklands have *Parmelia tiliacea* and *P. acetabulum.* These ancient woodland and parklands seem to harbour relict lichen communities, but one has to search hard, getting deeply into the crevices and root-bases for success.

Natural siliceous rock outcrops are numerous, particularly in Charnwood. Volcanic tuffs, frost-shattered since the last ice age, have *Umbilicaria deusta, U. polyphylla, U. polyrrhiza,* and most notably, *Parmelia disjuncta.* These rocks are often abundantly covered with lichens, *Lecanora rupicola, Rhizocarpon geographicum, Lecidea lithophila* and the like. Incredibly, *Haematomma ventosum* occurs at nearly 900ft, but is unfortunately sterile and ailing, possibly responding to global warming? Some of the rocky stream beds have freshwater *Verrucaria* and the red alga *Hildenbrandia rivulosa.* Areas around volcanic and granite rocks have grass-heath, but the best heath is on disused coal tips, which have abundant *Cladonia, Coelocaulon,* etc. Can we call derelict industrial sites heath? Certainly their vegetation is similar, for example *Calluna vulgaris* is more abundant on coal tips than in 'natural' areas. Some of the county's rarest and most interesting lichens occur only in places of man-made dereliction. A woodyard revealed *Sarcosagium campestre* and *Vezdaea aestivalis*, a lorry park had *Steinea geophana,* and so on. Unfortunately with increasing affluence, even derelict sites are disappearing under shopping malls and business parks. Maybe we should now be watching these newly erected buildings and plantings to see what appears (some fungi such as morels and foreign *Coprinus* already have). Further important man-made habitats include railway and canal parapets, and pumice-like ballast stripes in railway cuttings, which often pre-date industrialisation. Here we can find *Parmelia mougeotii* (*P. incurva* is only on Charnwood rocks and walls), and

varieties of *Stereocaulon vesuvianum*.

Of course, the wildlife throughout VC55 is under great pressure. Agricultural changes mean that large areas are now affected by chemicals, turning wayside trees and rocks green with algae. Even woodland trees are affected by agricultural drift for about 100m inside the woodland perimeter. Twigs seem to concentrate pollutants, which drip on to rocks below turning them green. In these places rapidly growing lichens can thrive, such as *Parmelia saxatilis* and *P. sulcata*, but the quality indicators, which can't grow or spread fast enough, disappear. We seem also to be losing important colonies of *Umbilicaria* and other acid-loving species from upland rocks. Certainly *Hypogymnia physodes* and even *Lecanora conizaeoides* are declining in the face of this agrichemical threat.

But the most remarkable change over the 20th century has surely been the re-colonisation of house roofs and asphalt drives, with species such as *Lecanora muralis, Physcia tenella, P. caesia,* etc; a constrast to the previously bare, sooted roofs. Lichens are now common, and this is a gain.

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Anthony Fletcher

CONSERVING *CALICIUM CORYNELLUM*

Background

Calicium corynellum is a 'pin head' lichen with a distinctive powdery yellow-green thallus covered with abundant stout black fruit bodies. The only site in the UK for this crustose lichen is the Saxon tower of St Peter's Church, Bywell, South Northumberland. It was first discovered here in 1972 forming a large patch on sheltered, slightly damp, north facing stonework where it grows on both sandstone and mortar (Gilbert 1980). The species has a scattered distribution in Europe and Canada, where it occurs on siliceous rocks below overhangs in very humid habitats, but is nowhere common.

Calicium corynellum is listed as critically endangered in the Lichen Red Data Book (Church *et al.* 1996). It qualifies for this, the most threatened category, on three accounts:

A 80% population decline in the last ten years.
B Recently recorded in fewer than ten 1km x 1km squares and found in only one locality and in decline.
C Total population <50 mature individuals.

Monitoring

Since its discovery this small population has been monitored. In 1974 a black and white photograph was taken of the habitat and the extent of the colony delineated (Fig. 1). It was present on 27 stones (abundant on 10, medium amount on 6, traces on 11). After about 1980 the species started to decline until by 1992 it was only on 5 stones, by 1998 this had reduced to 2 stones carrying 5 tiny fragments that could only be detected by people who knew the species well.

The decline appeared to be associated with the removal of a stone slab from the base of the tower. Water from a high spout, visible in Fig 1, cascaded down during wet weather and the splash helped to maintain humid conditions at the base of the tower. The water then ran off into a stone ringed drain. When, around 1980 the stone was removed and replaced with a bed of gravel the humidity of the habitat dropped.

Species recovery action

In autumn 1998 negotiations were started with the vicar of St Peter's to have a stone slab replaced at the foot of the tower. This was finally achieved in mid April 1999. Fig 2 shows the base of the tower before and after this operation with the ringed stone drain in the foreground. Local lichenologists will monitor developments.

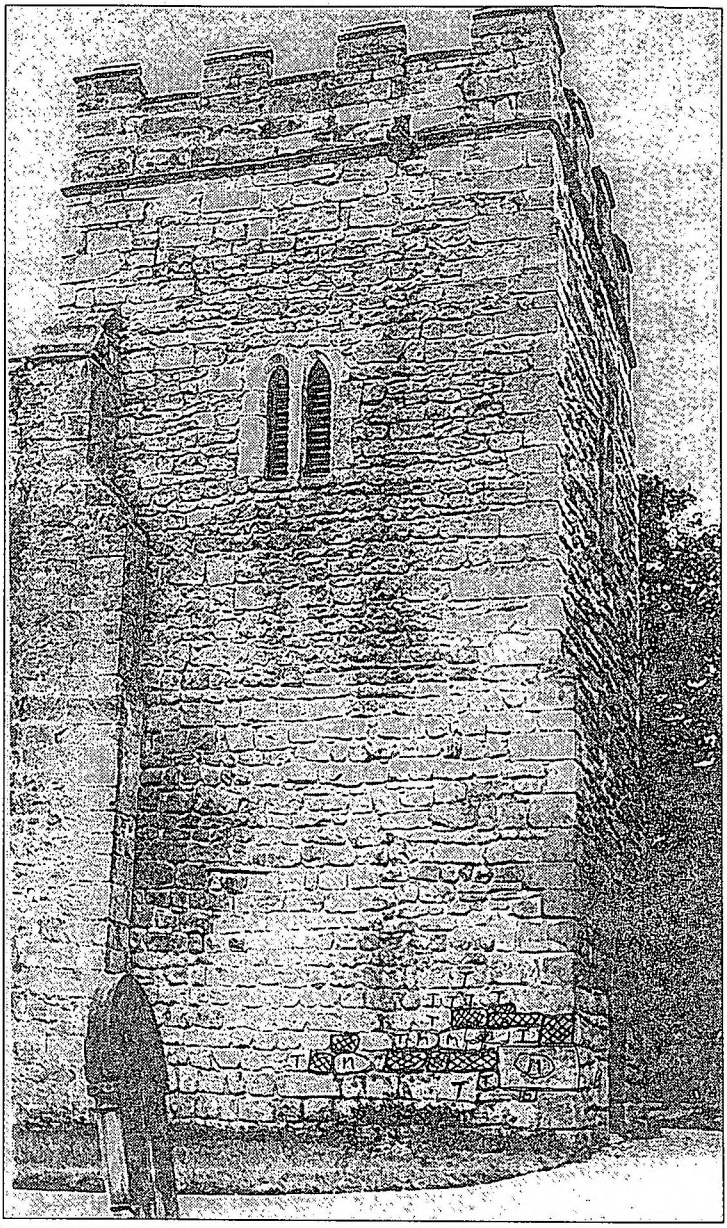

Fig. 1. The tower showing the extent of *Calicium corynellum* in 1974. Shaded stones support well developed thalli, stones marked M carry medium amounts, those marked T carry only trace amounts.

Fig. 2. The base tower before (upper) and after (lower) the replacement of the stone slab. The stone-ringed drain is visible in the foreground.

Acknowledgements
Janet Simkin is thanked for negotiating with the vicar of Bywell and for providing the photographs for Fig. 2. The Church of England is thanked for undertaking the construction work free of charge.

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Oliver Gilbert

CHURCHYARD PROJECT DECENNIAL REPORT

Every five years, the fabric of a church building is thoroughly examined to see that it is sound and capable of withstanding the rigours of time. It is fitting that the Churchyard Project should mirror this procedure. The turn of the century marks our tenth anniversary and provides the opportunity to give a second quinquennial report. The first report (*Bulletin* **75**: 28-33) showed how the lists of species together with their star-ratings had been built up both nationally and regionally, and celebrated the publication of the green leaflet 'Churchyard Lichens' and the Society's first habitat mapping card. An important landmark was the Stoneleigh Conference of 1992 leading, shortly afterwards, to the formation of the sub-committee which has met regularly ever since. The progress of the project was summarised in a table subdivided into two phases - lowland England and upland England - and four elements - recording, assessment, conservation and education. The first two elements were eventually merged into one - data. It was this thinking that was also partly instrumental in the formation of the Society's Data and Education committees.

At the end of the first report, I was bold or foolish enough to suggest five objectives hopefully to be achieved by the millennium. Two of these related, at least initially, to data collection. Our aim to survey at least one churchyard in every 10km square in lowland England will be achieved just in time. Ivan Pedley spent the first days of his retirement mopping up the final rather dismal squares in and around Birmingham, while John Skinner and others have filled in the open circles along the Essex coastline. This leaves me with the privilege of completing the last three squares - two in Gloucestershire and one in the Chilterns - which I shall do as soon as the task of writing this report is finished. I am grateful to the many who have helped to complete this considerable achievement. Of course, we recognise that one church per 10km square is a bare minimum and needs to be built upon.

The second objective - to feed all existing information into a relational database and produce species distribution maps - will not be achieved for some time but at least a start has been made. At last, after some years of deliberation, the Society has a database capable of coping with all the complex site data some of us record. The immediate need is to deal with the huge backlog as soon as possible. If anyone is out there who has already purchased or is planning to purchase BioBase and is willing to enter the species records (on a simple presence or absence basis) for an area or vice-county, please let me know. David Newman of Kent and Don Smith of Yorkshire have already amassed a considerable amount of churchyard data on their personally constructed systems and we hope that it will be possible to transfer this directly to BioBase.

It was right, I believe, as a first phase to concentrate on lowland England where there are so few naturally occurring substrates for saxicolous lichens. However, in assuming that we hadn't at the same time the human resources to take on the vast stretches of upland England, I was wrong. I hadn't reckoned with the energy and dedication of Don Smith and Ivan Pedley who, like Keith Palmer in earlier days, have achieved the distinction of surveying 1000 yards. At the rate they are going, I am wondering who will be first to the mile mark! The progress map (*Bulletin* **83**:42) bears witness to the fact that surveys have been carried out in almost every square in Northern England. At the other end of the country, Ann Allen has painstakingly updated and extended our knowledge of churchyard lichens along the south-west peninsular.

The last annual report showed that steady progress is being made in the rest of the British Isles - Scotland, Wales, Ireland, and the Channel Islands. We even have detailed information about ecclesiastical sites on such remote islands as Lundy, Sark and the Scilly Isles. Within the past month or so, the most northerly churchyard on the mainland, St Drostan's in Caithness, was surveyed by Ivan Pedley and the most southerly, St Wynwallow's in Cornwall, by Peter James. It is also good to know that this focus on churchyard lichens is being taken up by other countries. Peter tells me that this was reflected in papers presented at the recent international meeting in Zurich. I have been delighted to receive an article by Frank Bungartz on the lichens of Cologne Cathedral and Birgit Litterski's paper (translated for me into English also by Frank) Village Churches of Rugen - a contribution to the lichenological research. Some splendid work has also been carried out by Elizabeth Kneiper in the United States.

A third objective, and the first cited, was incredibly ambitious - "that every church and cemetery in the land and all persons connected .... should be made aware of the importance of lichens and their conservation". There is no way of knowing to what extent this has been achieved. Nevertheless what has gone before and what follows suggests that we may have moved a considerable way towards its realisation. It is also borne out by the number and variety of letters I receive almost daily. By way of reply, a four-page factsheet and BLS prospectus is sent to all enquirers. The factsheet is now received by all new members and is on the internet. Another way of reaching the general public is through the media and, from time to time, churchyard lichens have been featured on local radio and television, in national newspapers and magazines and journals including British Wildlife, BBC Wildlife, Yorkshire Wildlife, The New Scientist and The Field.

This third objective was given pride of place because of its emphasis on conservation. Our association with the Living Churchyards' Project at Stoneleigh resulted in 10,000 green leaflets being printed and so many have been distributed that stocks are now low.

Ishpi Blatchley, who has taken on the role of conservation officer to our sub-committee, has written to every Wildlife Trust and all 43 English diocese. We are also trying to ensure that each diocese has a BLS representative and I am grateful to Janet Simkin (Newcastle), Diana Downing (Blackburn, Manchester and Liverpool) and Martin Butler (St Alban's) for recently offering their services. Threats to churchyard lichens take many and varied forms, including grave cleaners both chemical and human. One of the more recent - ironically set-up by The Conservation Foundation - the Millennium Yew Project was featured in *Bulletin* **80**:31. Well over 4000 parishes are being provided with these trees, many of which are likely to be planted in churchyards and could ultimately shade out important lichen communities. Fortunately, our cautionary note regarding the siting of these saplings has been printed in the latest edition of Yews News which is sent to all participating parishes.

This raising of public awareness is, of course, a matter of education. A fourth objective was to provide more specific educational projects for teachers, and students of all ages and abilities. Three hundred trial packs Exploring Churchyard Lichens were distributed free of charge to schools, Watch groups and others in 1995, together with a questionnaire. Some valuable feedback resulted. Further worksheets both for young children and more advanced students have since been produced and tested, while longer-term projects continue in Brent, Hertfordshire and Rutland. To back up some of these projects, we produced a set of three colour identification leaflets which are currently being revised and extended. Unfortunately, publication has been much delayed and the sets may not now be available until the AGM.

Committee members are currently helping a number of students with individual research projects and it is especially satisfying when copies of completed studies are passed on to us and can be used to help others. In recent weeks, I have learnt a great deal about the lichens of limestone and granite churches by accompanying two PhD students (both BLS members) on their field excursions. Nick Carter of Oxford University has been setting up ingeniously constructed quadrats on Cotswold churches, while Bettina Weber of Kaiserslautern University, Germany (who received a BLS travel grant) has, as I write, just returned home after examining in minute detail some granite churches in Scotland and on Dartmoor. Bettina will be describing her findings in a future Bulletin and so all I will say at this juncture is that, with the help of Ann Allen, Barbara Benfield (and Uncle Tom Chester and all!), we found more lichens on Drewsteington and Widecombe churches than any others so far in Britain. This learning together and from one another is an essential part of the educational theme. It was the reason for creating Stone Chat an informal newsletter mainly for members (currently with a circulation of 60) and, in part, for setting up an annual weekend course at Knuston Hall in Northamptonshire.

So far, not a single lichen has been mentioned by name! The focus has, I think rightly, been on the many people who have contributed to the success of the project. After some deliberation, I decided it was better also not to mention the names of people unless they came up naturally in context. There are just too many. However, I must make exception in remembering with affection Peggy Cayton, Jeff Carrington and Brian Fox, whom we so much miss having alongside us on our churchyard visits. And it would be wrong of me not to acknowledge specifically the support, enthusiasm and hard work of the current sub-committee - Ishpi Blatchley, David Newman, Ivan Pedley, Ken Sandell, Don Smith and corresponding members, Ann Allen and Sheila Street.

The accompanying table indicates the number of full sites surveyed in each vice-county and region. A similar table for the Lowland Area was produced just prior to the quinquennial report (*Bulletin* **74**:49) and the total recorded at that time was 2402. Although considerable advances have been made, there are some curious anomalies. In some vice-counties, the totals seem either to have stood still or even declined! One possible explanation is that the original figure given to me by one or two members included brief visits where only a few species were recorded. These I have omitted. Of the 3613 lowland surveys, I currently hold almost exactly 2000 on file. The others (and most of the upland cards) are held by vice-county or regional recorders and, in some cases, the site lists are still in notebooks. Until such time as all the data is on computer, if I require any site or species information, I have either to trawl through fourteen volumes of A4 files or ring up a colleague. For this reason, it is exceedingly difficult to give definitive site information. This applies equally to species. Some hopefully accurate figures were published two years ago in *Bulletin* **80**:30. Since then the total number of taxa found in all churchyards has risen from 600 to 628 and one never quite knows what is going to turn up next. The importance of churchyards as a major habitat seems to grow almost daily. And one can hardly breathe the names of such lichens as *Caloplaca ruderum*, *Lecanactis hemisphaerica*, *Lecanora conferta*, *L. pannonica*, *L. pruinosa*, *Pertusaria lactescens*, *Psilolechia leprosa* or *Rinodina calcarea* without, at the same time, thinking of the churchyard context in which they occur. No doubt, you could add others.

It may not escaped your eagle eye that one objective has so far been quietly ignored. I hoped you wouldn't notice! I must, however, come clean and point out that it reads - "that the increasing knowledge thus gained is summarised in an article in The Lichenologist". My excuses so far for not putting pen to paper (or key to screen) are that I haven't had time, I don't know enough, or what I do know isn't sufficiently organised - all of which are true, at least in part. Kind colleagues keep spurring me on and, because of this, my own prime objective for the first two years of the new century is, if circumstances allow, to spend more time quietly writing and researching,

SUMMARY OF FULL CHURCHYARD SURVEYS FOR GREAT BRITAIN & IRELAND
CURRENT VICE-COUNTY TOTALS

PHASE 1			PHASE 2		
LOWLAND ENGLAND			**UPLAND ENGLAND**		
7	N. Wiltshire	22	**South -West**		
8	S. Wiltshire	30	1	W. Cornwall	18
9	Dorset	158	2	E. Cornwall	6
10	Isle of Wight	15	3	S. Devon	86
11	N. Hampshire	117	4	N. Devon	32
12	S. Hampshire	173	5	S. Somerset	43
13	W. Sussex	184	6	N. Somerset	37
14	E Sussex	182		**Sub-Total:**	**222**
15	E. Kent	246	**West Midlands & Welsh Borders**		
16	W. Kent	105	36	Herefordshire	39
17	Surrey	143	39	Staffordshire	80
18	S. Essex	16	40	Shropshire	18
19	N. Essex	36	57	Derbyshire	321
20	Hertfordshire	16	58	Cheshire	16
21	Middlesex	37		**Sub-Total:**	**474**
22	Berkshire	31	**Northern England**		
23	Oxfordshire	89	59	S. Lancashire	37
24	Buckinghamshire	52	60	W. Lancashire	17
25	E. Suffolk	280	62	N. E. Yorkshire	260
26	W. Suffolk	118	63	S. W. Yorkshire	200
27	E. Norfolk	77	64	Mid-W. Yorkshire	164
28	W. Norfolk	74	65	N. W. Yorkshire	107
29	Cambridge	30	66	Durham	71
30	Bedford	17	67	S. Northumberland	57
31	Huntingdonshire	36	68	N. Northumberland	31
32	Northamptonshire	292	69	Westmorland/ N. Lancs	97
33	E. Gloucestershire	51	70	Cumberland	145
34	W. Gloucestershire	20	71	Isle of Man	9
37	Worcestershire	102		**Sub-Total:**	**1195**
38	Warwickshire	66	**PHASE 3**		
53	S. Lincolnshire	58		SCOTLAND	71
54	N. Lincolnshire	158		WALES	170
55	Leicestershire	327		IRELAND	81
56	Nottinghamshire	55		CHANNEL ISLANDS	32
61	S-E Yorkshire	200		**Sub-Total:**	**354**
	Sub-Total:	**3613**		**GRAND TOTAL:**	**5858**

while, at the same time, looking again more intensively at the lichens of my home patch. One just can't return to good sites too often. I am reminded of some lines from T. S. Eliot's Four Quartets:

"We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time."

I just can't wait to finish this and get out there!

Tom Chester

BIOBASE

BioBase has been designed specifically for the Society for distribution recording of lichens of the British Isles. It is a fast and simple to use system for entering and reporting basic data, yet it also allows for more comprehensive recording which can be searched by means of MS Access.

A B.L.S. member wrote recently ...

> "I have been using BioBase seriously for a few weeks now and wanted to let you know how delighted I am with it. It is just the system I was intending to develop for myself but never got around to, and will be a great help both to general record keeping and my research."

Full details are on the B.L.S. website at http://www.argonet.co.uk/users/jmgray and list of new features of V7.0 of DMAP is at the http://www.dmap.co.uk/ website. Information about both may also be obtained from the Assistant Treasurer from whom members may order a full copy of BioBase for evaluation for a period not exceeding thirty days.

DMAP V7.0 is 32-bit and will not run under Windows 3.1. DMAP V 6.5 runs under Windows 3.1 or Windows 95/98/NT. If ordering DMAP please state which version is required. Both are available through the Society at a discount.

Jeremy Gray

SMALL ECOLOGICAL PROJECT REPORTS

A further project has been completed to a very high standard: it is reported on below. Short (half page) applications outlining costed proposals (in the range £100-£400) should be sent to Oliver Gilbert, 42 Tom Lane, Sheffield, S10 3PB.

SMALL ECOLOGICAL PROJECT REPORT:
A survey of heavy metal contaminated sites in the North Pennines

This survey aimed to identify sites of lichenological interest on the Alston Moor area of the North Pennines, including South Tynedale, and Allendale, and to update records for those already known.

This area was a major centre of lead and zinc mining from Roman times until the late nineteenth century, and large areas of abandoned mine workings and spoil can still be found. Fine waste from the ore-dressing process was carried away by the rivers and deposited in shingle beds, which have since been abandoned as the rivers deepened and moved their beds.

Both the mine spoil and the river shingles are important lichen habitats. Lichen and bryophyte communities develop as soon after they become stable, followed by metallophyte grassland dominated by *Armeria maritima*, *Cochleria pyrenaica*, *Minuartia verna*, *Thlaspi alpestre* and *Viola lutea*. This eventually gives way to woodland or acid grassland. The terricolous lichen communities persist until higher plant cover becomes dominant, and some of the heavily contaminated areas may remain open for hundreds of years.

Fifty sites were visited during 1998-9 and significant lichen communities were found at seven mines and twenty-one river shingles. Most of these communities covered no more than a few square metres, although two areas of mine spoil and five shingles were much larger. More than 200 lichen species were recorded, 80% of which (including most of the saxicolous lichens and *Cladonias*) were typical of this part of the North Pennines and can also be found on uncontaminated walls and moorland.

The remaining species were only found on the heavy metal contaminated sites. Some were widely distributed, including *Coelocaulon muricatum*, *Epilichen scabrosus*, *Bacidia bagliotteana* and *Vezdaea* spp., whilst others such as *Baeomyces placyphyllos*, *Peltigera leucophlebia* and *P. neckeri* were less common but still found in a range of habitats. A few were restricted to particular areas, for instance *Stereocaulon nanodes* and *Pannaria pezizoides* around Nenthead, but only one appeared to be restricted to one habitat, *Peltigera venosa* which has now been found on seven of the river shingles.

Several species of interest were recorded only once, including *Cetraria islandica*, *Gyalidea subscutellaris*, *Solorina spongiosa* and *Sarcosagium campestre* var. *macrosporum*.

As the survey progressed it became apparent that it would take longer than a year to complete. More sites of interest were found than expected and because terricolous crusts were an important part of the flora, each site required several visits for a full survey. Many of the terricolous crusts appeared to be highly seasonal, for instance the macroconidial morph of *Micarea cinerea* was found for only a few weeks in the autumn and spring. Additional problems followed heavy rain, when surface water several times stripped off the surface layer of soil, together with the lichens, and redeposited it some distance away.

Comparison with earlier records suggests that many of the river shingle communities in this area have been degraded in recent years, and at least six have been lost. Grazing by rabbits or sheep appears to be vital to reduce competition from higher plants, and lack of grazing on some sites has led to rapid succession from grassland to woodland. This could perhaps be reversed, but a more serious problem is the lack of appreciation of the conservation interest of the most contaminated sites. The bare, easily drained shingles are sometimes seen as an appropriate site for feeding cattle, and considerable damage is done by the heavy trampling and manuring which takes place around bales of silage held in metal clamps.

Full details of the survey are available from the author, and species lists for each site are being loaded into Biobase for inclusion in the BLS database. I should like to thank the BLS for supporting this survey, and Dr Oliver Gilbert and Dr Alan Fryday for their encouragement and help in verifying the identification of specimens.

Janet Simkin
41 North Road
Ponteland
Northumberland
NE20 9UN

KINDROGAN 1998

In July 1998 the Society held its 8th taxonomic workshop, this time at the Scottish Field Studies Association centre at Kindrogan, Perthshire. Ably tutored by Peter James, it was enthusiastically supported by a wide range of participants, from beginner to experienced lichenologist. It was particularly pleasing to receive strong support from continental Europe, with 9 of the 25 participants coming from Sweden, Italy and Germany.

A field visit had been planned for the first day, but as rain had firmly set in the group stuck to the lab. This proved very useful in ensuring that we had a good introduction to *Lecanora* before we ventured out into the beautiful and lichen-rich countryside.

Four lectures were given, with the first day, last afternoon and every evening in the lab studying specimens. These comprised both *Lecanora* herbarium material and general collections from our various excursions into the field. Herbarium material included all *Lecanora* species covered by the workshop and was well used by people eager to compare their notes with the real thing. The Society once again owes a deep debt of gratitude to the Natural History Museum who loaned the specimens and to Peter James for bringing them and taking responsibility for them. Thanks also to Brian Coppins at the Royal Botanic Gardens Edinburgh and to Tom Chester for filling several important gaps in the material.

Lecanora is currently in a considerable state of flux, with many species likely to be transferred to new genera, as has already happened with *Lecidea*. Indeed it may be that the genus name *Lecanora* will eventually be used only for the *L. subfusca* group (*L. chlarotera* etc). For the purposes of the workshop, those species that are to poorly understood were excluded and the remaining 67 were divided into smaller groups (either on taxonomic or on convenience grounds). These groups were then covered in lectures, first with an overview and then more fully. An article based on these lectures is planned for a future bulletin.

The workshop was combined with general field excursions which all proved very rewarding, not least on the *Lecanora* front. The total list for *Lecanora* included no less than 25 of the 67 species included in the workshop. Our field excursions took in the following locations.

Old Struan (27/809654)
This is a marvellous site comprising an old parish kirk at the confluence of two rivers, with rich streamside rocks and trees outside the kirkyard. Despite spending most of the day here it was felt that the area still had considerable extra potential. Rocks

outside the church included the rare *Protoparmelia atriseda*, *Arthrorhaphis citrinella*, and *Cetraria hepatizon*. Yellow *Rhizocarpon* species included not only *R. geographicum* but also the more scattered areoles of *R. lecanorinum* with their centrally placed fruits and the parasitic *R. viridiatrum* on *Aspicillia caesiocinerea*. A candidate for *Pyrrhospora rubiginans* was located from a dry crevice whilst damp rocks near the stream yielded *Ephebe hispidula* and *Polychidium muscicola*. *Massalongia carnosa* occurred amongst moss. On the ground amongst the rocks we were also able to compare *Coelocaulon aculeatum* and *C. muricatum* growing side by side. Rocks in the stream yielded *Collema glebulentum*.

Amongst the trees ash was particularly interesting and included wound track species such as *Gyalecta truncigena*, *G. derivata*, *Opegrapha rufescens*, *Collema occultatum*, *Caloplaca cerina* and *Candelariella xanthostigma*. *Peltigera collina* and *P. horizontalis* occurred on the mossy trunks. *Caliciales* included *Calicium viride*, *Chaenotheca brachypoda*, *C. brunneola* and *C. trichialis*.

The churchyard was rich, but the biggest puzzle turned out to be most interesting. Scurfy-white patches on a window sill did not display the expected chemistry and were later found to be *Pertusaria lactescens*. This has since been found to be more widespread than previously thought, with several records for mid-Wales, Scilly Isles and so on. *Cetraria sepincola* was not uncommon on worked lignum.

Twenty-one species of *Lecanora* were recorded, including *L. concerta* (a c+ *L. dispersa*), *L. swartzii* (a sessile fruited *L. rupicola*) and *L. hageni*.

Crathie (37/264947)

The visit to Crathie was centred around the new church and old kirkyard, with interesting stone walls and old pine fence posts between. Due to interest in these sites we did not manage to visit the grounds of Balmoral as originally planned but did search the elms and other trees in the car park for the rare *Pachyphiale fagicola*, this being one of its few previously recorded sites. Unfortunately changes have occurred, with expansion of the car parks, and the species was not refound.

Crathie Church dates from the 19th Century and as such was not very rich in species. This contrasted markedly with the old kirkyard and ruined kirk some distance away on the banks of the Dee. In the older part of the yard John Brown's grave was located but any lichenological interest was restricted to a comparison of his immaculately cleaned memorial with that of his brother, whose hoary stone stands immediately adjacent.

The stone wall immediately outside the information centre yielded a good range of metaliferous species, allowing comparison of such favourites as *Acarospora sinopica*, *Tremolecia atrata*, *Rhizocarpon oederi*.

Also on route from church to kirkyard, considerable time was spent on the old fence posts. These enabled close comparison in the field of such species as *Lecanora varia*, *L. conizaeoides*, *L. saligna* and *L. expallens*. Other fence post species included *Cetraria hepatizon*, *Hypocenomyce scalaris*, *H. caradocensis* and *Protoparmelia ochrococca*. *Strangospora moriformis* was fairly frequent on the posts and also occurred within the kirkyard.

Schiehallion (27/714572)

Schiehallion pavement proved to be another rewarding site. After searching the small roadside quarry *Solorina spongiosa* was eventually found, along with a very well developed colony of *Sarcosagium campestre*.

Above the quarry is an area of limestone pavement sitting on a bed of siliceous rock which gives an interesting mix of exposures. Siliceous species included *Ochrolechia frigida* and *Pilophorus strumaticus*, with *Omphalina griseopallida* on soil. Once again the siliceous rocks proved somewhat metalliferous.

On the pavement, *Solorina saccata* proved surprisingly rare with only one small patch located. It was interesting to contrast *Ionaspis epulotica* on damp shady areas of the pavement with the *Hymenelia provostii* seen on the lower limestone outcrops. Another useful contrast was between *Gyalecta jenensis* and *G. geoica*, the latter again on the lower limestone outcrops.

Doire Bhraghad, Forest of Mar (37/07-90-)

This site forms part of the Mar Lodge estate, recently purchased by the National Trust for Scotland. The estate extends from the high tops of the Cairngorm plateau down to the Linn of Dee and westwards to the adjacent Athol Forest. The purchase of this estate was of immense conservation importance, complementing the RSPB's Abernethy Forest reserve to the north. It was decided to visit an area of pinewoods in order to give a preliminary indication to the Trust of the estates' lichenological value.

The area visited was a wide expanse of wooded (and deforested) slopes above the Dee and just east of Glen Lui. Our NTS guide, Julie Watson, apologised for the first section, which had been clear-felled by Canadian troops over 50 years previous. In fact the high stumps they left were still very much intact and formed a very rich habitat for *Cladonia* species and other lichens of terricolous/lignicolous habitats. The wooded slopes were a mixture of birch, pine and alder and included a good scattering

of 'bones' (the fallen carcasses of old pines). These were very rich and would merit further detailed study.

The pine stumps and 'bones' yielded 26 species of *Cladonia* including *C. cariosa*, *C. cenotea*, *C. phyllophora* and *C. pleurota*. Other interesting species included *Hypocenomyce friesii*, *H. caradocensis*, *Lecidea hypopta*, *Protoparmelia ochrococca*, *P. oleagina*, *Xylographa abietina* and *X. vitiligo*.

Caliciales were widespread on the bones and on living bark, with *Microcalicium disseminatum* and *Sclerophora peronella* being of special note. *Strangospora moriformis* was notable for forming an extensive sheet of several square metres over the still standing 10 foot high broken trunk of a large dead pine.

The standing pines were interesting for comparison of their flora with that of our acidified oaks and other trees in other parts of Britain. The same community of *Evernia*, *Hypogymnia*, *Parmelia* and *Ramalina* species is evident, but enriched with an abundance of such species as *Parmeliopsis hyperoptera*, *Imshaugia aleurites*, *Bryoria fuscescens* and *Mycoblastus sanguinarius*, the latter scratching blood red.

Alder proved to be the richer of the living trees, with species more usually associated with less acidic barks further south. These typically included the likes of *Arthopyrenia lapponina*, *Arthonia vinosa*, *Calicium viride* and *Thelotrema lepadinum*.

Plans for this estate are essentially non-intervention, with no large-scale tree planting. However, deer will have to be culled to approximately 50% of their current population in order to allow natural regeneration within the forests and also hopefully within previously forested areas.

Kindrogan

The grounds of the field studies centre were surveyed on the last morning as well as during odd moments throughout the week. A strict embargo was placed on collecting due to the limited size of the site and its use for teaching, with annual lichen courses. With the large number of visiting lichenologists on this workshop and on other courses the interesting species could be rapidly depleted. This was supported by most participants.

Particularly interesting were the *Xanthoria ullophylodes*, *Scleropora peronella* and *Stenocybe tremulicola*. All four species of *Physconia* (*P. distorta*, *P. enteroxantha*, *P. grisea* and *P. perisidiosa*) were seen in good quantity.

A good list was also obtained from the track and river-sides to the west of the centre's grounds.

This account would be incomplete without thanking Alison Gimmingham, Ros Bromley and other field centre staff for their assistance both before and during the workshop. Kindrogan lived up to its good reputation for its laboratory and domestic facilities and the in-house bar proved a particularly valued asset. To finish on a note of humour, toward the end of the week one lady from a walking group staying at the centre did enquire with some deep concern about the strange and possibly unhealthy obsession some of our participants had with very close examination of walls and trees! Long may this obsession continue!

Trevor Duke

LICHEN MONITORING

An international workshop to be held at Orielton Field Centre, Pembroke, Pembrokeshire, West Wales between 16-22 August 2000.

This workshop follows the BLS Habitats Management Workshop in Bangor 1997, and the LICONS symposium in Switzerland this year where international concerns over issues for lichen conservation were discussed.

The workshop aims to:

Discuss and evaluate lichen monitoring strategies.
Produce a Handbook of Lichen Monitoring methods that can be used by field workers, conservation bodies, and environmental consultants.

Background

Lichens have been widely used as indicators of environmental changes from air pollution to ecological continuity of old growth forests and more recently to climate change. The introduction of monitoring techniques is taking place for a wide range of objectives from assessing growth or loss of a population for Species Action Plans to the monitoring of lichen communities in extensive forests in the Pacific North-west, where forest management has been altered to accommodate epiphytic lichens. Information gathered from monitoring projects has contributed to our understanding of population dynamics and changes in lichen communities, and to assessing environmental, conservation and management issues, on both a local and a wider scale.

Maritime habitats are an important part of our natural heritage and support a large proportion of the lichen flora on Atlantic shores. The oil spill from the Sea Empress in 1996 damaged a large area of littoral shores in Pembrokeshire yet few monitoring sites were in place, and a wider monitoring initiative needs to be addressed.

In other parts of the world, where lichen-rich habitats are threatened, there is an urgent need for collecting and interpreting data at a very basic level. This workshop will allow an exchange of methodology and ideas to support and establish appropriate monitoring.

Topics

It is hoped that participants will contribute projects on all aspects and levels of lichen monitoring, surveillance and data interpretation for inclusion in the handbook, either as posters or as papers. Topics that will have special relevance include: analysis of growth and loss in individuals and in populations, community dynamics; relationship between bryophytes and lichens, Biodiversity Action Plans for Species (BAPS) and for habitats (HAPS). Use of indicator species for evaluating biodiversity and ecological continuity in a range of habitats including maritime. Monitoring for air pollution and environmental change. Practical problems in long term monitoring. The programme will be based on workshops with presentations that are relevant to each topic; site visits and on-site discussions in a range of habitats where monitoring is going on.

Location

The workshop will be held in Pembrokeshire where lichen communities are both diverse and well known, and where monitoring projects have been established in a range of habitats. Orielton was the home of the Oil Pollution Research Unit from 1963-1987 and still continues research on maritime shores. Field trips will include visits to Stackpole NNR and Skomer Island, Tycanol NNR, and shorter visits to Lawrenny and Angle Bay (oil pollution site), will be made during the week.

The workshop will run from Wednesday evening 16 August (arrive for evening meal) until Tuesday 22 August (accommodation includes leaving early on 23).

Organising Committee: Pat Wolseley (Scientific Associate NHM), Brian Coppins (RBGE), Christoph Scheidegger (WSL Switzerland) with assistance from Peter James, Frank Dobson and Tony Fletcher.

For further details and registration forms contact: Pat Wolseley, Botany Department, The Natural History Museum, Cromwell Rd, London SW7 5BD. E-mail patw@nhm.ac.uk. Fax: 0207 942 5529. Tel.: 0207 942 5617. Please return registration forms before December 30 1999.

LICHEN COMINGS AND GOINGS

Declining species

The Conservation Committee has received a number of reports in the last two or three years of lichens which are rapidly becoming scarce but do not appear as threatened or endangered in the Lichens Red Data Book of 1997. One method of short-listing species for a Red Data Book is to count the number of 10km squares in which a species has been found since a certain date, often 1960. However, the species of recent concern have been declining after this date, most likely since the early 1980s or even later.

Some species such as *Anaptychia ciliaris* may have declined to such an extent that they would now qualify for RDB status. It means therefore, that some mechanism for updating the RDB is needed. A rapid method would be to publish supplements in the BLS Bulletin? It does mean, however, that a re-survey of 10km squares is needed for those species of concern.

The reasons for these relative sudden declines are speculative. Some appear to be declining nationally while others exhibit local declines. Most observers would probably cite agricultural chemicals as the prime culprit, though hard experimental evidence for this is lacking at present. The dramatic lowering of atmospheric sulphur dioxide levels since the 1980s, while welcome for most species, seems to be causing a dramatic decline in those which are tolerant of it.

Species which are known to be of concern include:

Anaptychia ciliaris sub sp. *ciliaris*. Reported recently from only a handful of sites in Wales, Scotland and northern-middle England, but still locally frequent in Dorset and Devon.

Hypogymnia physodes. This is becoming very scarce in the Midlands, especially in cities where it was once frequent on trees and fences. It is now found mainly on acid oak bark and oak fencing.

Lecanora conizaeoides. This is becoming hard to find in good fertile condition, especially in cities where it is usually heavily parasitised. In Leicestershire it is now virtually restricted to acid lignum, sandstone, slate, and granite, or wind-exposed trees.

Parmelia acetabulum. This species is also reported as becoming scarce throughout England and Scotland.

Physcia clementei. This seems to be suffering a decline which is comparable to that of *Anaptychia ciliaris*.

Umbilicaria polyphylla and perhaps others in the genus. A series of very hot summers has desiccated rocks in the Charnwood Forest on which these lichens were occasionally found.

Usnea florida is also reported as becoming scarce.

Cladonia section *Cladina* is known to be declining from lowland heathland. This is partly due to loss of habitat, however, it is also disappearing from sites which remain. This may be due to collecting for craft purposes or from misguided habitat management practices.

It would be helpful if members could report their similar observations and concerns in the *Bulletin*, preferably with some kind of quantatitive documentation such as numbers of sites from which the species has disappeared.

Lichens reappearing

It is also noticeable that some lichens are reappearing in areas from which they were previously absent. These are not merely new discoveries since many of these were apparently extinct in these areas, especially the Midlands. The reappearance of lichens in urban areas since the early 1980s has been well reported. The first example in the Midlands was *Usnea subfloridana*, thought extinct for many years, followed by *Evernia prunastri*. The latter was known to me in 1978 from only 12 sites in VC 55, is now visible practically every time I leave the house, and is on trees in the very centre of Leicester. *Parmelia caperata*, *P. perlata*, *P. revoluta*, *Lecanora expallens*, *Phylctis argena* and *Chaenotheca ferruginea* have also become much more common. Most workers seem to suggest that these plants, bearing isidia or soredia which can be dispersed by air, have found it easy to recolonise former areas.

However, over the past two years, crustose species which lack asexual propagules have re-appeared. *Lecanora chlarotera* is now becoming visible on ash, always on young whips and plantings from 1cm to 15cm diameter, but not on old bark. Sometimes, field maple (*Acer campestre*) and even very young oak (*Quercus*) have *L. chlarotera*. In one case, the woodland had been planteed with trees of apparently native provenance. But as *L. chlarotera* was absent from west Leicestershire up to that time the source of the tree whips was investigated and proved to be the Forest of Dean. The seed was thought to have been collected in Leicestershire though. We appear to have an example of translocation of *L. chlarotera* from the borders of South Wales.

Other species now appearing on very young saplings include *Arthopyrenia punctiformis* and *Lecanora pulicaris*. I strongly suspect that *Cliostomum griffithii* is also increasing, formerly being found only in ancient woodland in the area. Certainly some of these lichens have been translocated as described above, but others certainly have not and are dispersing by other means.

Finally it is noteworthy that only very young trees are showing this effect. Might it be possible that the non-appearance of these species on older tree bark might be due to a residue of pollutants still remaining there?

Anthony Fletcher

Editors note
The difference in the rates of colonisation between urban and rural areas, especially in the intensively arable eastern counties where there are few signs of improvement, is very striking. Members' observations are particularly welcomed on this.

THIRD INTERNATIONAL CONGRESS ON SYMBIOSIS
August 13-19, 2000 in Marburg, Germany

The Third International Congress on Symbiosis (TICS) will be held from August 13 - 19 in Marburg, Germany. The programme includes a session on 'Lichen symbiosis and parasymbionts'.

For further details see *www/Internet* http://staff-www.uni-marburg.de/-b-morpho/symbio.html

You can also e-mail Dr Hans Christian Weber (the Congress Chair) on weberh@mailer.uni-marburg.de

Aino Hennsen
Fachbereich Biologie
Botanik
Lahnberge
Der Phillipps-Universitat Marburg
D-35032
MARBURG/LAHN

A COUNTRY DIARY: STONEHENGE, WILTSHIRE 200 YEARS AGO

7th June 1799

While Mr Sowerby was engaged in making his sketch of this wonderful pile I amused myself in observing the lichens on the stones amongst the most conspicuous of which were *L. parellus*, *coccineus*, *tartareus*, *pilularis*, *obscurus*, *farinacea*, *parietinus*, *olivaceus* and *sulphureus*. I satisfied myself at the same time by separate observations that the *Lichen haematomma* (E.B. fig) is bonafide a distinct species from *L. coccineus*. Upon the plain near Stone Henge we found *Spiraea filipendula*, *Anthyllis vulneraria*, and *Poterium sanguisorba*. Besides many other rare plants all of which seemed to indicate a chalky soil. The small stones about produced in great abundance *L. niger*, *fusco-ater*, *muralis*, *parellus*, *perlatus*, *pertusus*, and *caperatus*. It was so late when we left Stone Henge that we were obliged to give up all thoughts of visiting Wilton a sacrifice that neither of us regretted as we had seen many fine houses before and our objective was to observe the works of nature rather than that of art. We took the straight road to Salisbury which led us chiefly over sheep-walks but sometimes through fields where the promised harvest seemed that it would barely repay the expense of cultivation. We were however appraised that this was far from being the case for these fields yielded very abundant crops. As soon as we dined we set off to visit the cathedral.

Extract from the manuscript diary of Dawson Turner (1775 - 1858). It is entitled '*Journal of the first ten days of a tour made by Dawson Turner Esq in the company of James Sowerby Esq Author of British Fungi to the Lands End in the months of June and July 1799*'.

This manuscript is held at the Castle Museum, Norwich.

Some explanatory notes

Since Dawson Turner penned his diary entry there has been 200 years' worth of taxonomic study and consequent nomenclatural change, so that some explanation of the names he used is required. At the time there was a very simple generic concept - all lichens (recognised as such at the time) were included in the genus *Lichen*!

caperatus = *Parmelia caperata*.
coccineus = *Haematomma ochroleucum*.
farinaceus = *Ramalina farinacea* (although *R. subfarinacea* would have been included in this concept).
fusco-ater = *Lecidea fuscoatra*.
haematomma = *Ophioparma ventosum*.

muralis = *Lecanora muralis*.
niger = *Placynthium nigrum*.
obscurus = *Anaptychia runcinata*. This is presuming that Turner was referring to *L. obscurus* With. Alternatively, but less likely he could have been referring to *L. obscurus* Ehrh. (= *Phaeophyscia orbicularis*).
olivaceus = a brown *Parmelia*; most likely one or more of *P. glabratula* subsp. *fuliginosa*, *P. loxodes*, or *P. verruculifera*. Application of the name *Lichen olivaceus* has a long and involved history, but is now applied to the non-British *P. olivacea*.
parellus = *Ochrolechia parella*.
parietinus = *Xanthoria parietina*.
perlatus = *Parmelia perlata*.
pertusus = *Pertusaria pertusa*. Turner was ccertainly referring to *Lichen pertusus* L. and not to *Lichen pertusus* Schrank (= *Menegazzia terebrata*).
pilularis = see below.
tartareus = *Ochrolechia tartarea*, although Turner is more likely to have been referring to the sorediate *O. androgyna*, which was not distinguished at that time.
sulphureus = *Lecanora sulphurea*.

Some discussion is required for the enigmatic name *Lichen pilularis*. This name is attributable to the Rev. Hugh Davies in 1793 (*Trans Linn. Soc. London* **2**: 283, tab. 28, fig. 1), but was later overlooked (or ignored!) by the compilers of British lichen floras, such as Hooker, Mudd, Leighton, Crombie and Smith. The type description, "L. crustaceus cinereo-albidus, tuberculis pilulaeformis nigris. *Pill lichen*", and the accompanying illustration are scarcely illuminating, and could refer to any one of a large number of crustose lichens with a whitish thallus and black apothecia. Although Davies gave the type locality as "Bodowen Park, Anglesea" he did not directly mention the substratum. Fortunately we know that it occurred on acid rock, as in the prologue for the next species in his paper (*Lichen simplex* = *Polysporina simplex*) he mentioned that it occurred with the previous species.

Even though *Lichen pilularis* does not appear in the subsequent British literature, it was picked up by Zahlbruckner in the compilation of his *Catalogus*, and he included it in the synonymy of *Lecidea confluens*. Unfortunately this is not very helpful, as *L. confluens*, until recent times, has been a 'dustbin' name for several saxicolous lichens, especially those belonging to *Lecidea* s. str. and *Porpidia*. The true identity of *Lichen pilularis* Dav. depends on the rediscovery of the type specimen, which may possibly be hidden away amongst the vast collections of the Natural History Museum (BM). Even with this done, we can then only guess at what Turner meant in his use of the name - it could be one of several species of *Buellia*, *Lecidea* or *Porpidia* - and perhaps others we have not thought of!

Finally it is very curious that Turner did not mention *Lichen scopulorum* or *L. siliquosus*, the names then used for *Ramalia siliquosa*, which today is abundant on the sarsen stones of Stonehenge.

Brian Coppins & Peter Lambley

LICHEN COURSES AT KINGCOMBE, DORSET

Introduction to Lichens - Their Natural history and Ecology
Friday 17 - Sunday 19 March 2000
Tutor: Joy Fildes.

This course is intended as an introduction for beginners but more experienced naturalists are welcome too. It will be of particular interest to teachers hoping to use lichens in their teaching of the National Curriculum. There will be visits to a woodland and a churchyard as well as fieldwork in the Kingcombe area, aiming to see as wide a range of lichens as possible. Joy Fildes did an MSc thesis in churchyard lichens.

Lichens of Woodland and Parkland
Friday 1- Sunday 3 September 2000
Tutors: Peter James and Bryan Edwards

An opportunity for countryside professionals and enthusiastic amateurs to improve their knowledge of the natural history and ecology of lichens (and bryophytes) and to increase their understanding of the importance of lichens as indicators in plant communities. Site visits will include the ancient park at Melbury nearby and several other areas of woodland and parkland.

For details of these and other courses at The Kingcombe Centre in the year 2000, please send for a brochure from The Kingcombe Centre, Toller Porcorum, Dorchester, Dorset DT2 0EQ. Tel: 01300.320684. Fax 01300.321409. E-mail: nspring@kingcombe-centre.demon.co.uk

LITERATURE PERTAINING TO BRITISH LICHENS - 26

Lichenologist **31**(2) was published on 22 March 1999, **31**(3) on 27 April 1999, **31**(4) on 10 July 1999.

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

N.B. Authors of articles on British and Irish lichens, especially those including records and ecological observations, are requested to send or lend me a copy so that it can be listed here. This is particularly important for articles in local journals and newsletters, and magazines.

BLATCHLEY, I 1999. Lichen report 1998/1999. *Orpington Field Club Annual Report* **39:** 34–37. Includes an overview of the lichens of the London Borough of Bromley.

COPPINS, B J, THOR, G & NORDIN, A 1994. The genus *Ramonia* in Sweden. *Graphis Scripta* **6:** 89–92. Material previously identified from the British Isles as *Ramonia luteola* is described as a new species, *R. interjecta* Coppins. The ascospores of this species lack the distinct perispore of *R. luteola* and are illustrated in the *Flora* (fig. 24c - right).

CHRISTIAN, R 1996. *Well Dressing in Derbyshire.* Derby: Derbyshire Countryside Ltd. ISBN 0-85100-121-1. Pp 36 (including end covers). Numerous colour illustrations of well-dressings from various villages. The use of lichens is mentioned, but unfortunately without details of the species involved.

KOHLMEYER, J & VOLKMANN-KOHLMEYER, B 1998. *Mycophycias*, a new genus for the mycobionts of *Apophlaea*, *Ascophyllum* and *Pelvetia*. *Systema Ascomycetum* **16:** 1–7. *Mycosphaerella ascophylli* Cotton is treated as the type of the new genus *Mycophycias* Kohlm. & Volk.-Kohlm., and becomes *Mycophycias ascophylli* (Cotton) Kohlm. & Volk.-Kohlm.; it is considered a member of the Verrucariales. [NB: not to be confused with *Pyrenocollema pelvetiae* - see *Flora* p. 518.].

PALMER, K 1999. Lichen report 1998. *Bull. Kent Field Club* **44**: 60-63. Includes report of rapid increasing incidence of lichens on town trees, and many other 'tit-bits'.

PALMER, K 1999. "In reports of outdoor meetings 1998". *Bull. Kent Field Club* **44**: 11-40: Nonington & Chillenden churchyards (pp 11 - 12): Doddington churchyard (pp

36 - 37).

TIBELL, L 1999. Caliciales. *Nordic Lichen Flora* **1:** 20–94. This detailed treatment of the Caliciales comprises the bulk of the first volume of the new Nordic Flora. All species (that include most to be found the British Isles) have full descriptions, including much updated information on chemistry, and most are illustrated with colour photographs.

TIBELL, L 1999. Two new species of *Calicium* from Europe. *Mycotaxon* **70:** 431–443. Includes a key to the 17 known European species.

WOODS, R G & ORANGE, A 1999. *A Census Catalogue of Welsh Lichens* [Catalog Cyfrifiad cen Cymreig]. Cardiff: National Museums and Galleries of Wales. ISBN 0-7200-0466-7. The first checklist of Welsh lichens, which enumerates 1163 lichenized species, together with 121 non-lichenized lichenicolous fungi and 21 allied fungi. For each species, its occurrence in the 13 Welsh vice-counties is listed, with an indication given for the time period when the last record was made. Furthermore, each species is assigned a threat category. Additional information includes a table of species used in the calculation of indices of ecological continuity (RIEC and NIEC), and notes on some problematical species. The text is in both English and Welsh languages.

Brian Coppins

CENSUS CATALOGUE ON WELSH LICHENS

The distribution of lichens and lichenicolous fungi in Wales is summarized in a recently published booklet, *Catalog Cyfrifiad Cen Cymreig/A Census Catalogue of Welsh Lichens*, by Ray Woods and Alan Orange. A total of 1305 species are listed according to their occurrence in the 13 Welsh vice-counties. The conservation status of each lichenized species is indicated by the assignment of one of eight threat categories. The introduction features the RIEC and NIEC species (for the whole of Britain) combined into a single table, with nomenclature updated to the 1993 Checklist. Copies available from Alan Orange, Department of Biodiversity and Systematic Biology, National Museum and Gallery, Cardiff, CF1 3NP. Cost £3.50 + 50p postage and packing (payable to the National Museums and Galleries of Wales).

NEW, RARE AND INTERESTING BRITISH LICHEN AND LICHENICOLOUS FUNGUS RECORDS

Contributions to this section are always welcome. Please submit entries to Chris Hitch, Orchella Lodge, 14, Hawthorn Close, Knodishall, Saxmundham, Suffolk, IP17 1XW, in the form of species, habitat, locality, VC no, VC name [from 1997, nomenclature to follow that given in the Appendix, see *Bulletin* 79, 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 (alt), where applicable, in metres (m), date, comments and recorder. An authority with date after species is only indicated when the record is new to the British Isles. *In the interest 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. Records of lichens listed in the *RDB* are particularly welcome, even from previously known localities.

Absconditella sphagnorum: abundant on cushions of *Sphagnum imbricatum* and *S. magellanicum*, Dogden Moss, northwest of Greenlaw, VC 81, Berwickshire, GR 36/67(-8)-49-, alt *c*210 m, May 1999. New to south-east Scotland.

B J Coppins & D G Long

Absconditella trivialis: on rotting piece of wood on ground in sandpit, Ferrier's Barn Bures, VC 19, North Essex, GR 52/89-34-, March 1999.

P M Earland-Bennett, J F Skinner & T Pyner

Acrocordia conoidea: on calcareous chest tomb in churchyard, Mottistone, VC 10, Isle of Wight, GR 40/40-83-, February 1998. Also present *Toninia episema* - transferred from *Catillaria episema*, both new to the island.

F Rose

Anaptychia ciliaris subsp. *mamillata*: on low andesitic outcrops just above seashore in sheltered bay, St Abb's Head, VC 81, Berwickshire, GR 39/91-68-, March 1999. Previously recorded from this site as "*Anaptychia ciliaris*" (*Lichenologist* **11**:99, 1979), without distinguising the subspecies.

B J Coppins

Arthonia ligniariella: on moribund cushions of *Sphagnum*, Dogden Moss, northwest of Greenlaw, VC 81, Berwickshire, GR 36/67(-8)-49-, alt *c*210 m, May 1999. New to the Scottish Borders.

B J Coppins & D G Long

Arthonia phaeophysciae: on *Phaeophyscia orbicularis* on *Sambucus* in deep shade of coppice, Chase Nature Reserve (London Wildlife Trust) Dagenham, VC 18, South Essex, GR 51/51-85-, April 1999.

P M Earland-Bennett, C J B Hitch & J F Skinner

Bacidia incompta: extensive patches seen on lignum of wounded base of a *Fagus* trunk in parkland, Arlington Court, VC 4, North Devon, GR 21/610-0-, June 1999. A good example of a population of this species surviving on a host other than elm.

A M & B J Coppins

Biatora chrysantha: one small patch at base of large *Quercus*, at edge of wood, Cae'r Meirch, Pontrhydygroes, VC 46, Cardiganshire, GR 22/73-73-, alt 280 m, July 1999. New to Cardiganshire. Syn *Lecidea gyrophorica*. For a description of this species, see under *Biatora epixanthoidiza* in the *Flora*.

S P Chambers

Buellia arnoldii: on twigs of *Juniperus communis* in native pinewood, Eilean Dubh na Sròine, Loch Maree, VC 105, West Ross, GR 18/91-72-, May 1999. Fourth British record. Recorded during our survey of the Loch Maree islands also on Eilean Subhain and Eilean Loisgte, the latter on *Pinus* lignum.

B J Coppins & V J Giavarini

Buellia sequax: on a coastal underhang, Gara Rock, South Hams, VC 3, South Devon, GR 20/74-37-, October 1998. Confirmed by A Orange. New to Devon. For details, see under *B. meiosperma*.

B Benfield

Buellia violaceofusca: in dry bark crevices of *Quercus* trunk by river, Gatecleugh, near Gladswood, on east side of River Tweed, VC 81, Berwickshire, GR 36/59-34-. alt *c*100 m, April 1999. New to Berwickshire, and second record for Southern Scotland.

B J Coppins

Caloplaca approximata: on thin protruding ridges on top of small outcrop of calcareous schist, in small col behind the cliffs of the Lion's Face, Braemar, VC 92, South Aberdeenshire, GR 37/16-91-, alt *c* 450 m, April 1999. Fifth British record.

B J & A M Coppins

Caloplaca caesiorufella (Nyl.) Zahlbr. (1930): on fence post in small valley between Hamnavoe and Whal Wick, Esha Ness, Northmavine, Mainland, VC 112, Shetland, GR 41/24-80-, August 1992. Collected by C & D H Dalby (specimen in E).

Identification confirmed by Ulrik Søchting. New to the British Isles. A boreal to arctic lignicolous species, which in the field is apt to be mistaken for a *Lecanora*. The thallus is endoxylic, but gives the wood a whitish appearance. The apothecia are often crowded, 0.2-0.6(-0.8) mm diam, and each has a flat to slightly convex red-brown disc surrounded by a concolorous to slightly paler margin. Important microscopical characters are the small spores (9.5-13 x 5-5.5 μm) with a septum that is *c* 4-4.5 μm wide (although appearing much narrower in under-ripe spores), and the branched apices to the paraphyses, 2.5-3.5(-5) μm wide.

B J Coppins

Caloplaca chlorina: on base of ancient *Fraxinus* pollard, Hackwood Park, Basingstoke, VC 12, North Hampshire, GR 41/65-50-, February 1998. Determined by B J Coppins. This is now a rare species in Southern England, especially when fertile, as was this population; with *Anaptychia ciliaris, Physcia aipolia* etc. It is hoped that Hampshire County Council will be able to conserve this remarkable site.

F Rose

Caloplaca crenulatella: (i) locally abundant on disused tarmac path, between old army barracks, DERA Aberporth, VC 46, Cardiganshire, 22/24-51-, alt 125 m; (ii) edge of tarmac landing strip, Blaenannerch, VC 46, Cardiganshire, GR 22/24-49-, alt 140 m, both July 1999. New to Wales.

O L Gilbert & S P Chambers

Caloplaca dalmatica: on south wall of church, Nedenham, VC 24, Buckinghamshire, GR 41/80-94-, May 1998. New to VC 24, and far inland for this largely south and south-east coastal zone species.

F Rose

Caloplaca luteoalba: for details see under *Rinodina pityrea*.

R C Munrow

Caloplaca polycarpa (A. Massal.) Zahlbr. (1919): (i) on limestone boulder in scree, below south-west-facing cliffs, Rock of Dunamase, Stradbally, VC H14, Laois, GR 21/52-98-, April 1996; (ii) on limestone near lake, O'Donohoe's Spy Glass, Muckross Peninsula, Killarney National Park, VC H2, North Kerry, GR 00/95-86-, May 1996; (iii) on limestone in clearing in bushy karst, Corranellistrum, Oughterard, VC H16, West Galway, GR 12/19-40-, May 1998, see Fox, British Lichen Society *Bulletin*, 86:50; (iv) on limestone caher, Cathair, Ghreallain, Carran, The Burren, VC H9, Clare, GR 11/25-98-, May 1999.

H Fox

(v) on south-facing limestone above beach, Barafundle Bay, Stackpole, VC 45, Pembrokeshire, GR11/99-95-, July 1997; (vi) on boulder of Great Scar limestone, below Ponderledge Scar, North of Carperby, Wensleydale, VC 65, North-west Yorkshire, GR 44/00-90-, alt 250 m, May 1999.

S P Chambers

New to the British Isles. Confirmed by P L Nimis. This widespread mediterranean to sub-mediterranean species (Nimis, *The Lichens of Italy*, 1993 and McCarthy and Mitchell, *Lichens of the Burren Hills and Aran Islands*, 1988), forms small 5-20 mm diameter neat circular thalli over the host, with tiny 0.2-0.3 mm diameter orange apothecia. It is lichenicolous on *Verrucaria baldensis* and possibly other Verrucariacae, sometimes with *Opegrapha rupestris*, on open limestone surfaces. It has apparently been overlooked in Ireland for *Caloplaca vitellinula*, and in Britain probably referred to the *C. holocarpa* agg dustbin!

H Fox & S P Chambers

Catapyrenium daedaleum: on soil over foliated schist, with *Protoblastenia siebenhariana*, *c* 0.5 km west of Craig Maskeldie, Glen Lee, VC 90, Angus, GR 37/38-79-, May 1999. First record outside the Breadalbane Mountains. Confirmed by C J B Hitch.

R C Munro

Catapyrenium rufescens: on top of limestone chest tomb in churchyard, Mottistone, VC 10, Isle of Wight, GR 40/40-83-, February 1998. Determined by O L Gilbert. *Collema fuscovirens* was epiphytic on the *Catapyrenium* sp. Both are new to VC 10.

F Rose

Cladonia caespiticia: on sandy soil at entrance to rabbit burrow in bank under *Crataegus*, Chase Nature Reserve (London Wildlife Trust) Dagenham, VC 18, South Essex, GR 51/51-85-, April 1999. Determined by C J B Hitch.

J K Skinner, C J B Hitch & P M Earland-Bennett

Cladonia metacorallifera: in lichen heath on flat top of east-facing outcrop, upper slope of valley of Allt na Claise Moire, Creag Clunie, Braemar, VC 92, South Aberdeenshire, GR 37/17-90-, alt *c* 500 m, April 1999.

B J & A M Coppins

Cladonia norvegica: on lignum, north end of Coille Mhór, Moine Mhór NNR, VC 98, Argyll Main, GR 16/83-92-, October 1991. New to Scotland.

B J & A M Coppins

Collema limosum: on damp soil, between limestone chippings, compacted by vehicles in disused railway cutting, Gilfach (Radnorshire Wildlife Trust Reserve), VC 43, Radnorshire, GR 22/96-71-, alt 250 m, May 1998. Confirmed by A Orange. New to Radnorshire.

S P Chambers

Cresporhaphis wienkampii (Lahm ex Hazsl.) Aguirre (1991): (i) on *Salix fragilis*, Eastern Plain, Bookham Common, VC 17, Surrey, November 1995, collected B Aguirre-Hudson; (ii) on large *Salix* by river, Stichill Bridge, VC 80, Roxburghshire, GR 36/69-36-, alt 80 m, April 1999, collected by B J Coppins. New to the British Isles. This species was once included in the broad concept of *Leptorhaphis*. It is recognised by its sessile black perithecia, 0.15-0.3 mm diameter, which are often laterally collapsed when dry, uniformly thin walled, ±cylindrical asci, and simple (rarely 1- or 3-septate) ascospores measuring *c* 23-30 x 3-3.5 μm. Although its thallus is not apparant, the perithecia do seem to be regularly associated with a chlorococcoid alga with small cells (4-7 μm diameter). In the Stichill Bridge collection, *Trentepohlia* filaments are also present. For a detailed description and illustrations see the monograph by Aguirre-Hudson in *Bull. Br. Mus. Nat. Hist. (Bot.)* **21**:85-192 (1991).

B Aguirre-Hudson & B J Coppins

Dactylospora amydalariae: on thallus of *Amygdalaria consentiens*. Second British record. For further details see under *Hymenelia obtecta*.

B J & A M Coppins

Fusarium peltigerae Westend. & Wallys (1849): on *Peltigera didactyla* in sandpit, Ferrier's Barn, Bures, VC 19, North Essex, 52/89-34-, March 1999. New to the British Isles.

J F Skinner, P M Earland-Bennett & T Pyner

Gyalecta jenensis: on string course on north wall of church, Brandeston, VC 25, East Suffolk, GR 62/24-60-, May 1999.

P M Earland-Bennett & C J B Hitch

Gyalecta ulmi: three thalli on calcareous conglomerate of an overhung cliff, by River Ericht, Craighall, Blairgowrie, VC 89, East Perthshire, GR 37/17-48-, September 1999.

B J & A M Coppins

Gyalidea subscutellaris: on lead mine spoil, Tynebottom Mine near Garrigill, VC70, Cumberland, GR 35/73-41-, March 1998. Confirmed by O L Gilbert. First record outside Wales.

J M Simkin

Halecania viridescens: (i) on sheltered young *Fraxinus* in former kitchen garden, Hafod estate, on Afon Ystwyth, VC 46, Cardiganshire, GR 22/75-73-, alt 140 m, October 1998. Confirmed by B J Coppins; (ii) sparsely fertile on old *Ulex* on shingle-heath, Afon Rheidol, Dolcniw, Capel Bangor, VC 46, Cardiganshire, GR 22/64-80-, alt 15 m, August 1999. First Cardiganshire records.

S P Chambers

Hymenelia obtecta (Vain) Poelt & Vezda (1981): on vertical rocks of northeast-facing cliff, with *Amygdalaria consentiens* southeast of Charter's Chest, Craig Clunie, Braemar, VC 92, South Aberdeenshire, GR 37/17-91-, alt *c*470 m, April 1999. New to the British Isles. Distinguished from *H. lacustris* by its rust-red thallus and prominent apothecia (that eventually become constricted at the base) with a dark margin. In the field it is most resembles *Tremolecia atrata*, but its apothecia have a pale reddish rather than a black disc.

B J & A M Coppins

Hypocenomyce sorophora: (i) on hard lignum of standing decorticate or partly decorticate, isolated pines, or on pines in native pinewood, valley of Allt na Claise Moire, east side of Craig Clunie, Braemar, VC 92, South Aberdeenshire, GR 37/17-90-, alt 420-470 m, April 1999. Third British record.

B J & A M Coppins

(ii) on exposed hard lignum of decorticate *Pinus* - see *Lecidea porphyrospoda* for details. Fourth British record.

B J Coppins & V J Giavarini

Lauderlindsaya acroglypta: on mossy boles of two *Fraxinus*, growing through an understorey of *Alnus*, Glen Prosen, VC 90, Angus, GR 37/36-61-, June 1999. Determined by B J Coppins.

R C Munro

Lecanactis amylacea: in bark crevices at base of three old *Quercus* on steep slope, Gatecleugh, near Gladswood, on east side of River Tweed, VC 81, Berwickshire, GR 36/59-34-. alt *c*100 m, April 1999. Second record for Berwickshire.

S P Chambers

Lecania cyrtellina: on *Fraxinus* in riparian woodland, with *Porina borreri*, Afon Ystwyth, Llanfarian, VC 46, Cardiganshire, GR 22/59-77-, alt 20 m, March 1999. New to Cardiganshire.

S P Chambers

Lecanora atrosulphurea: on vertical rockface, cliffs to southeast of Charter's Chest, Creag Clunie, Braemar, VC 92, South Aberdeenshire, GR 37/17-91-, alt *c* 470 m, April 1999. Seventh British record.

Lecidea porphyrospoda (Anzi) Th. Fr. (1873): on exposed, hard lignum of decorticate *Pinus* branch in native pinewood, Eilean Subhainn, Loch Maree, VC 105, West Ross, GR 18/92-72-, June 1999. New to the British Isles. This sterile crustose lichen is very similar to *Hypocenomyce sorophora* (which also occurred on this site), but is browner in colour, and is PD- rather than PD+ yellow (alectorialic acid) as in the latter.

B J Coppins & V J Giavarini

Leptogium corniculatum: two small colonies on southeast-facing slope of calcareous grassland (with *Dianthus deltoides*) over Silurian shale, Clarilaw, 1 km east of Midlem, VC 80, Roxburghshire, GR 36/53-27-, alt *c*185 m, July 1999. Second record for south-east Scotland.

B J & A M Coppins and M Smith

Lichenopeltella ramalinae Etayo & Diederich (1997): on blackened thalli of *Ramalina farinacea*, Greenfield, south side of Loch Garry, VC 97, Westerness, GR 28/20-00-, alt 90 m, January 1999. New to the British Isles. Confirmed by P Diederich.

B J & A M Coppins

Lobaria pulmonaria: on trunk of fallen *Populus tremula* and on trunk of old *Sorbus*, on cliffs to south-east of Charter's Chest, Braemar, VC 92, South Aberdeenshire, GR 37/17-91-, alt *c* 390 m, April 1999. Not recorded from Deeside since the nineteenth century.

B J & A M Coppins

Menegazzia terebrata: on *Alnus*, west side of River Yeo, south of Tuckers Bridge, Arlington, VC 4, North Devon, GR 21/60-39-, June 1999. Seen on two trees in a small area of old alderwood where, in addition, *Ochrolechia inversa* and *Parmelia endochlora* were locally abundant.

A M & B J Coppins

Moelleropsis nebulosa: on small vertical outcrops of Silurian shale, partly shaded by turf above, in calcareous grassland on a southeast-facing, 40° slope, Selkirk Common, VC 79, Selkirk, GR 36/47-27-, alt 250 m, July 1999. New to south-east Scotland.

B J & A M Coppins and M Smith

Nephroma laevigatum: on trunk of fallen *Populus tremula* and on trunk of old *Sorbus*, on cliffs to south-east of Charter's Chest, Braemar, VC 92, South Aberdeenshire, GR 37/17-91-, Alt *c*390 m, April 1999. Not recorded from Deeside since the nineteenth century.

B J & A M Coppins

Nephroma parile: at base of cliff, cliffs to south-east of Charter's Chest, Braemar, VC 92, South Aberdeenshire, GR 37/17-91-, alt *c*400 m, April 1999. Not recorded from Deeside since the nineteenth century.

B J & A M Coppins

Ochrolechia inversa: for details see under *Menegazzia terebrata*.

A M & B J Coppins

Opegrapha cesareensis: on vertical, slightly underhung basaltic rocks in narrow, north-facing gully, Burnmouth Harbour, St Abb's Head, VC 81, Berwickshire, GR 39/91-68-, April 1999. First record for the coast of south-east Scotland.

B J Coppins & A Fletcher

Opegrapha vermicellifera: directly saxicolous (sterile) on shaded and sheltered igneous crags in old woodland, closely associated in places with *Enterographa hutchinsiae*, Bailey Einon, east of Llandrindod Wells, VC 43, Radnorshire, GR 32/08-61-, alt 220 m, May 1998. Confirmed by B J Coppins.

S P Chambers

Pachyphiale fagicola: on *Quercus* by river, Gatecleugh, near Gladswood, on east side of River Tweed, VC 81, Berwickshire, GR 36/59-34-, alt *c*100 m, April 1999. New to southern Scotland.

B J Coppins

Parmelia endochlora: for details see under *Menegazzia terebrata*.

A M & B J Coppins

Parmelia exasperatula: on branch of *Salix* on open hillside, Calhame Bridge, southeast of Dungiven, VC H40, Londonderry, GR 24/72-05-, alt 200 m, October 1997. New vice-county record and one of very few for Ireland.

M J Simms

Parmelia horrescens: a vigorous plant with two apothecia on *Betula*, Cwm Einion, VC 46, Cardiganshire, GR 22/69-94-, alt 80 m, June 1999.

S P Chambers

Parmelia pastillifera: (i) on branches of mature *Acer pseudoplatanus* adjacent to derelict farm buildings, Barons Court Farm, near Omagh, VC H36, Tyrone, GR 23/37-81-, alt 200 m, September 1997; (ii) common on branches of *Fagus sylvatica* in parkland, Clonalis House, Castlerea, VC H25, Roscommon, GR 12/66-81-, alt 80 m, April 1998. Only one previous record from northern half of Ireland.

M J Simms

Parmelia pulla: occasional on greywacke exposed on upper shore of Horse Island National Trust Reserve, Strangford Lough, VC H38, Down, GR 33/59-60-, alt 6 m, August 1998. First recent record for Northern Ireland.

M J Simms

Parmelia soredians: locally common on south facing greywacke crags on Light House Island, east of Belfast Lough, VC H38, Down, GR 33/59-85-, alt 10 m, May 1998. New vice-county record and only the second for Northern Ireland.

M J Simms

Parmeliella triptophylla: on trunk of fallen *Populus tremula*, on cliffs to southeast of Charter's Chest, Braemar, VC 92, South Aberdeenshire, GR 37/17-91-, alt *c*390 m, April 1999. Not recorded from Deeside since the nineteenth century.

B J & A M Coppins

Parmeliopsis ambigua: several abundantly fertile thalli on conifer stump, Creag an Fhitich, Inverey, near Braemar, VC 90, Grampian, GR 37/09-89-, alt 400 m, April 1997. Very rarely found fertile.

M J Simms

Peltigera neckeri: (i) on lead contaminated ground and spoil, Slitt Mine, Westgate, VC 66, Durham, GR 35/90-39-, July 1998. New to Durham; (ii) on metal contaminated river shingle, Leadgate; on mine spoil, Nenthead; on lead contaminated soil of roadside verge, Killhope Moor, VC 70, Cumberland, GR 35/71-43- and 35/7(8-9)-43, June/July 1999.

J M Simkin

Peltigera praetextata: on base of mossy pollard *Fraxinus* in open clearing, Wolves Wood Nature Reserve, VC 25, East Suffolk, 62/05-43-, June 1999. Second extant Suffolk record.

P M Earland-Bennett & C J B Hitch

Peltigera venosa: on heavy metal contaminated river shingles, (i) Skydes near Garrifill, VC 70, Cumberland, 35/73-42-, March 1998; (ii) Alston, VC 70, Cumberland, GR 35/71-45-, March 1998 (washed away by a cloudburst a few days later, but several patches found nearby), April 1999; (iii) Bellister near Haltwhistle, VC 67, South Northumberland, 35/69-62-, June 1998; (iv) Leadgate, VC 70, Cumberland, GR 35/71-43-, September 1998; (v) Allenheads, VC 67, South Northumberland, GR 35/85-46-, June 1999.

J M Simkin

Pertusaria flavida: with *Pertusaria coccodes* on trunk of *Fraxinus* in grazed former parkland, Gillhall, west of Dromore, Down, VC H38, GR 33/16-53-, alt 65 m, May 1998. Very few records for Ireland.

M J Simms

Physcia sciastra: (i) on old tarmac path by former army barracks, with *Caloplaca crenulatella*, DERA Aberforth, VC 46, Cardiganshire, GR 22/24-51-, alt 125 m: (ii) on edge of tarmac landing strip, mixed with *P. orbicularis*, Blaenannerch, VC 46, Cardiganshire, GR 22/24-49-, alt 140 m, both July 1999. New to Wales.

O L Gilbert & S P Chambers

(iii) on old disused wartime airfield concrete runway, Martlesham, VC 25, East Suffolk, GR 62/23-44-, August 1999. New to Suffolk and East Anglia. Determined by O L Gilbert.

C J B Hitch & O L Gilbert

Polysporina cyclocarpa: on top of small outcrop of calcareous schist, southeast of the Lion's Face, Braemar, VC 92, South Aberdeenshire, GR 37/16-91-, alt *c* 420 m, April 1999. Fourth British site, but also known from within the same 10km grid square, from Craig Leek.

B J & A M Coppins

Porina borreri: for details, see under *Lecania cyrtellina*.

Porina interjungens: on vertical damp seepages in sheltered underhang, mixed with *P. lectissima*, Yr Wyloer, Gilfach, VC 43, Radnorshire, GR 22/95-71-, alt 340 m, September 1998. Confirmed by A Orange. New to Radnorshire.

S P Chambers

Porpidia superba: on flushed, vertical, slightly basic, north-facing volcanic rocks, 300 m south-east of Llyn Arran, Cadair Idris, VC 48, Merionethshire, GR 23/73-13-, alt 550 m, August 1999. New to Merionethshire.

S P Chambers & J B Grasse

Psilolechia leprosa: with apothecia, on wall of adit to copper mine, Elba, Abbey St Bathans, VC 81, Berwickshire, GR 36/78-60-, alt *c* 150 m, May 1999. New to Berwickshire.

B J Coppins

Rimularia intercedens: on south-facing igneous crag, *c*0.5 km southeast of Mynydd Moel, Cadair Idris, VC 48, Merionethshire, GR 23/73-13-, alt 570 m, August 1999. New to Merionethshire. For details, see under *Mosigia intercedens* and The Genus *Rimularia* Nylander in the British Isles, Fryday, A, *British Lichen Society Bulletin* 84, 1999.

S P Chambers & J B Grasse

Rinodina pityrea: on *Acer platanoides* with *Caloplaca luteoalba*, Loch of Kinnordy, Kirriemuir, VC 90, Angus, GR 37/36-54-, April 1999. Confirmed by C J B Hitch.

R C Munro

Sagiolechia protuberans: locally abundant in several places, on low, weathered outcrops and small stones of Dalradian limestone, Rassal Ashwood, Kishorn, VC 105, West Ross, GR 18/84-43-, alt 30-120 m. Unusually low altitudes for this rare montane species.

B J & A M Coppins and V J Giavarini

Sarcogyne privigna: on rock outcrop by river, Gatecleugh, near Gladswood, on east side of River Tweed, VC 81, Berwickshire, GR 36/59-34-, alt *c* 100 m, April 1999. New to southern Scotland.

B J Coppins

Sarcopyrenia cylindrica: killing *Candelariella vitellina* on sandstone chest tomb in churchyard, Brandeston, VC 25, East Suffolk, GR 62/24-60-, May 1999. Third British record and all from East Suffolk.

P M Earland-Bennett & C J B Hitch

Sclerophyton circumscriptum: on vertical, slightly underhung basaltic rocks in narrow, north-facing gully, Burnmouth Harbour, St Abb's Head, VC 81, Berwickshire, GR 39/91-68-, March 1999. Second record for the east coast of Britain.

B J Coppins

Scutula krempelhuberi: on thallus of *Solorina saccata*, in small col behind the cliffs of the Lion's Face, Braemar, VC 92, South Aberdeenshire, GR 37/16-91-, alt *c* 450 m, April 1999. The host thallus was also infected by *Stigmidium solorinarium*.

B J & A M Coppins

Skyttea gregaria: (i) on moribund *Mycoblastus sterilis*, on trunk of *Betula*, at edge of Afon Marteg, Gilfach, VC 43, Radnorshire, GR 22/96-71-. alt 240 m, May 1998. Confirmed by B J Coppins; (ii) on *M. sterilis* on young *Quercus*, Lower Tyncoed Wood, south of Llandrindod Wells, VC 43, Radnorshire, GR 32/03-55-, alt 170 m, February 1999. New to Wales.

S P Chambers

Stereocaulon condensatum: on lead mine spoil, Killhope Moor above Nenthead, VC 70, Cumberland, GR 35/79-43-, alt 570 m, November 1998.

J M Simkin

Thelocarpon lichenicola: for details see under *Vezdaea cobria*.

S P Chambers

Thelopsis isiaca: in sheltered mortar of north wall of church, with *Dirina massiliensis* f. *sorediata, Diploicia canescens* and *Diplotomma alboatra*, Thurlestone, VC 3, South Devon, GR 20/67-42-, November 1998; (ii) on sheltered wall of north side of church, Boscastle, VC 2, East Cornwall, GR 20/09-90-, April 1999. Second and third British records.

B Benfield

Toninia episema: (i) on churchyard wall on *Aspicilia calcarea*, Beaulieu, VC 11, South Hampshire, GR 41/38-02-, 1996. New to mainland Hampshire; (ii) Mottistone, for details, see under *Acrocordia conoidea*.

F Rose

Trapelia mooreana: on iron-rich rocks on north-facing hillside, *c* 4.0 km north-west of Betws-y-Coed, Snowdonia National Park, VC 49, Caernavonshire, GR 23/76-59-, alt 259 m, July 1999. Confirmed by O L Gilbert.

C J B Hitch

Umbilicaria hirsuta: on vertical rocks of north-east-facing cliff, south-east of Charter's Chest, Craig Clunie, Braemar, VC 92, South Aberdeenshire, GR 37/17-91-, alt *c*470 m, April 1999. New to Deeside; fourth Scottish record.

B J & A M Coppins

Verrucaria pachyderma: on well lit submerged rocks, Afon Marteg, Gilfach (Radnorshire Wildlife Trust Reserve), VC 43, Radnorshire, GR 22/96-71-, September 1998. Determined by A Orange. New to Radnorshire. Distinguished by its dull grey-green to greenish black, subgelatinous, uncracked thallus with perithecia ¾ to totally immersed. Spores 16-22 x 6.5-8.5 μm.

S P Chambers

Vezdaea cobria: very abundant over about two square metres on damp soil bank in old woodland by stream, intimately mixed in places with *Thelocarpon lichenicola*, Coed Nant Llolwyn, Llanfarian, VC 46, Cardiganshire, GR 22/58-76-, alt 50 m, March 1999. Clearly a species of wider ecological amplitude than its initial finds indicated, and not restricted to metal contaminated ground.

S P Chambers

FOR THE YEAR 2000: SPREADING THE WORD ABOUT LICHENS

Three new publications by members of the committee will spread the word about lichens in time for the millennium:

Silent Witness of Air Quality	**(William Purvis)**	**Available Now**
Understanding Lichens	**(George Baron)**	**Available December 1999**
NHM LIFE series: lichen book	**(William Purvis)**	**In preparation**

Frank Dobson and Jeremy Gray are assisting George Baron in the publication of his introductory book, which includes line drawings by Ewart Thomas. William Purvis has the backing of Texaco for his air quality leaflet and the Natural History Museum for his lichen book. All are attractively illustrated and aim to capture the interest of the beginner.

Additional publications to look forward to:

Lichens: An Illustrated Guide to the British and Irish Species **Fourth Edition**	**(Frank Dobson)**	**Available Spring 2000**
Lichens	**(Oliver Gilbert)**	**In preparation**

To be published in Collins New Naturalists Series with cover photograph by Tom Chester.

Display Materials

The society has professionally produced display boards, available for use at courses and conferences. If you are contributing to an event where display is encouraged, please contact either Ceri Leigh or Amanda Waterfield at the British Museum of Natural History (020 7938 9123) to discuss the free loan and use of BLS materials.

Let us know about projects involving young people

Lichens provide a rich source of opportunities for project work with young people, from infants to sixth formers and college students. Almost ubiquitous, lichens lend themselves to projects which interest and involve students in finding and classifying, and noting trends. Planning and recording projects can involve literacy, numeracy and computing skills. Interest develops further across the curriculum, for example through investigating localities, the passage of time, the use of reference materials, and as a stimulus for art work. Tom Chester has prepared project packs and illustrated leaflets

on the identification of churchyard lichens and Pat Wolseley has generated interest in studying lichens on twigs and lichen succesion. We are organising a list of ideas for school-based projects and should be interested to know of any initiative involving 5-18 year olds.

Barbara Hilton, for the Education and Promotions Committee
(Contact at: Beauregard, 5 Alscott Gardens, Alverdiscott, BARNSTAPLE, Devon, EX31 3PT. E-mail: bphilton@eclipse.co.uk.)

BULLETIN 57 SUPPLEMENT

Bulletin 57, published in 1985, included a supplement by F J White and P W James, 'A new guide to microchemical techniques for the identification of lichen substances'. It deals with chemical tests, the use of polarized light, UV fluorescence and thin-layer chromotography. Unfortunately, stocks are now exhausted, although requests for it continue to come in.

In order to give members another chance to buy this valuable publication, I am arranging to have a limited number of photocopies made. They will be functional, not beautiful, and will be stapled, not bound. The price will depend on various factors, including the number of orders received, but it is not expected to exceed £5, or $10 US, including postage and packing.

Please note that Supplement 57 is *not* returning permanently to the list of BLS publications - so order now if you want a copy. I'll take orders at the AGM in January 2000, and will be arranging for despatch of the photocopies before the end of that month.

If you're not attending the AGM, please write to me at 29 Limerick Road, Redland, Bristol, BS6 7DY, or (preferably) e-mail me: wstevens@cix.co.uk. I shall let you know the cost in due course, so don't send money at this stage - but please be sure to let me have your order before the end of the year.

Will Stevens

NOTES ON BLS PUBLICATIONS

At the next AGM in January 2000, there will be the usual stall selling BLS publications. However, problems with transport and space make it difficult to bring stocks large enough to meet all possible demands, so members are sometimes disappointed. So, if you require any item in quantity, can you please let me know your requirements beforehand, and no later than 1 January 2000? I can then reserve the items for you and make up your order in advance. As a rough guide, please let me know if you require more than two copies of one item, or five copies in the case of mapping cards or the free leaflets. In particular, I shall not be bringing any back numbers of the Bulletin or copies of the Flora, unless they are ordered in advance.

I can be contacted by post at 29 Limerick Road, Redland, Bristol, BS6 7DY, or (preferably) by e-mail: wstevens@cix.co.uk.

New members might like to note that, in most cases, buying 'over the counter' at the AGM is significantly cheaper than buying by post at the prices advertised in the Bulletin - discounts can be as large as 33%.

Incidentally, recently a set of the first eight issues of "*The Lichenologist*" (1958-1964) came on to the market and sold for £160. Members who still possess early copies will be gratified to learn this - indeed, they may wish to let their heirs know the value of this asset!

Will Stevens

PUBLICATIONS FOR SALE

(Subject to availability)

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Please would intending contributors to the Spring 2000 issue of the *Bulletin* submit their copy to the Editor by 22 March 2000. It would be helpful, 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 MS.DOS, Word Perfect or any format from an Apple Mackintosh. Alternatively it can be sent by e-mail to plambley@aol.com.

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