Bulletin No. 98

British Lichen Society Bulletin

Number 98 Spring 2006

Edited by P W Lambley

BRITISH LICHEN SOCIETY - 2006 MEMBERSHIP DETAILS

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 Web site: http://www.theBLS.org.uk

Queries on membership matters and subscription payments should be sent to: The Secretary, Dr S LaGreca Department of Botany, The Natural History Museum, Cromwell Road, London, SW7 5BD.
Changes of address should be notified to the Secretary at least six weeks in advance.

CATEGORIES OF MEMBERSHIP AND SUBSCRIPTION RATES
Ordinary Membership for individuals (not available to institutions) who have signed the Application Form and paid the subscription. Ordinary Members are entitled to all publications and facilities of the Society.
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All three categories of **Associate Member** listed below are entitled to all the facilities of the Society, including the *Bulletin*, but excluding *The Lichenologist*.
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Sterling cheques, drawn on a UK bank, or on a bank with a UK branch or agent, should be made payable to *The British Lichen Society*. Payment by **Standing Order** is especially welcome; the Assistant Treasurer can supply a draft mandate.

Internet payments using PayPal: Please see the Society's website for the full details: http://www.theBLS.org.uk/

Euro payments: Members in Germany may pay by bank transfer to: **Kontonummer 1802239444, Bankleitzahl 860 555 92, Sparkasse Leipzig Kontoinhaber; 'P. Scholz im Auftrag British Lichen Society'.**
Members in other countries may pay in Euros by bank transfer to:
International Bank Account No: DE92 8605 5592 1802 2394 44. The BIC (Bank Identifier Code) is WELADE8LXX, Sparkasse Leipzig, 'Peter Scholz on behalf of the British Lichen Society'.

US dollar payments should be sent to: **Dr James W. Hinds, 254 Forest Ave., Orono, ME 04473-3202, USA.**
Overseas members may also pay by direct transfer into the Society's UK bank account. However, please contact the Assistant Treasurer if you wish to pay in this way, ***and before you make any payment***. His contact details are given above.

Cover art work *Cladonia cariosa* by Alan Orange

LETTER FROM THE NEW PRESIDENT

Dear Members

It is a great honour to be president of the BLS but it is also a big responsibility, and I don't think I realised this at the time I accepted to be president! I have been Secretary for 5 years now and it came as a shock to realise that I was in a very different role now, both in terms of responsibilities and because it is a critical time for specialist societies, and we are one of the smaller societies that have an international membership of both amateur and highly skilled professional people.

There are big changes afoot following the cuts in biodiversity research across the country, both by NERC closures of 4 out of eight centres and by the transfer from English Nature to Natural England. It appears that more and more of the job of recording and monitoring of changes in our flora and fauna will lie with specialist societies which still hold a major part of the expertise among their members. This means building up and facilitating our capacity for data holding and data transfer. This was brought home to me during my first month in office when I became involved with the Scottish Project which has been masterminded by Sandy and Brian Coppins, and largely involved BLS members as recorders and data enterers. The huge amount of data that this project generated is now being transformed by Janet Simkin into a database that will become available to everyone on the National Biodiversity Network (NBN). So what is the NBN and how will it benefit members of the society? This network will allow unrivalled access to data via the web, but there are a few decisions to be made that are now common to all providers of specialist data e.g. what level of detail should be available to everyone. But the next problem for small societies which have always depended on voluntary labour is the problem of upkeep and management of a database. So the computer age is upon us and will alter the way we record and use data, but this should provide opportunities for members as well as technical and practical obstacles!

Much of the way that information has always been available in the BLS is through expert tuition on field meetings. These friendly get-togethers have always been at the heart of the society, providing opportunities for beginners and professionals to get to know each other. However it is not easy for everyone to attend week-long courses and we probably have to think of creating more local groups like the Sussex group organised by Jacqui Middleton, or weekend courses. I am interested to know what members think about this or whether you have other suggestions that would improve the facilities that the society offers to members, or perhaps you have special skills? When we lost Will Stevens, our very efficient membership secretary, in January there was somewhat of a hiatus while Scott and I tried to cope. I wrote to members around

London asking for help and was delighted to get 3 offers. When Don Chapman appeared with IT skills, sorted out the membership database, altered the letter headings and got the new members packs together we were very grateful and look forward to him coming to help us on a regular basis. If you have skills that could be useful in the society please get in touch.

What else are we doing? The Flora is now sold out and the 2nd edition is well on its way. Oliver Gilbert's loss was a great blow to this project, but now Tony Fletcher has taken over as chair of the Flora Committee and together with Peter James and Clifford Smith they plan to get the Flora out for the 50th anniversary of the BLS in 2008. This is a very large job with c. 140 extra species to include and many revisions following changes in taxonomic literature in the 14 years since the Flora was published. This year there are going to be 3 opportunities to join contributors in trialling the keys. So check the *Bulletin* (see p 76) or the BLS website for the places and times and I hope that you will be able to come and join us in making sure these keys are user friendly!

For the 50th anniversary we also plan to hold a special international symposium coinciding with the AGM in 2008, which we hope will allow many of our members abroad to join us. We are also planning to revisit some of the sites of early field meetings in the near future. Although many lichens are indicators of habitat continuity, loss of veteran trees and changes in habitat structure can result in species loss and rapid changes in the lichen communities, so we shall be trying to check up on the health of valuable lichen sites. Maybe you can suggest some places that we should plan to revisit?

I look forward to meeting up with members during the next two years.

Pat Wolseley
The Natural History Museum,
Cromwell Rd,
London SW7 5BD
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JANUARY MEETINGS 2006

For the second time in the history of the Society the meetings were held outside London this time at the National Museum of Wales, Cardiff. This proved to be a very good venue and and the whole meeting ran smoothly thanks to the efforts of Alan Orange who acted as local organiser. The displays were particularly good this year. A feature was the impressive photographs of lichens and the habitats which were exhibited by a number of members. There was an evening talk by Professor Nimis on modern methods of developing keys (see text below) followed by a sumptious buffet. The final event was an auction of books many owned by the late Oliver Gilbert. The money raised going to The Burnet- Wallace -Gilbert bequest fund.

Evening Lecture

Identification and classification from Gutenberg to internet

Professor P L Nimmis
University of Trieste

After the invention of the printing press by Johann Gutenberg (1400-1468), information useful for identifying organisms was printed on paper, as in any classical Flora. The constraints of a paper-printed text have forced most authors to organise information according to the hierarchical scheme of biological classification. Classical keys first lead to families, then to genera, and finally - if everything works - to species. Supraspecific taxa often need "difficult" characters. Many of the easy-to-look-at characters, such as the colour of the thallus, and those referring to ecology and distribution, are alien to the hierarchical-taxonomic scheme. There is an abysmal difference between the amount of information requested by a classical flora, and that which would be enough for giving a name to an organism. Odd options may be encountered, such as the distinction between two species that never had the pleasure to meet with each other, having completely different ecology and distribution, or the distinction between two lichens, one with a yellow, the other with a black thallus, using the character: "ascus *Porpidia*-type". Classification and identification - albeit related - belong to two different operational processes. Classification is the job of taxonomists; identification can be fun for anybody. The great American lichenologist Mason Hale was aware of this fact when he produced the classical "booklet" *How to know the lichens* (Hale 1969, 1979). Nowadays, information can fly on wings much stronger and elastic than sheets of printed paper. Computer-based programs can utilise, in a multi-dimensional way, a wealth of morphological-anatomical data, plus the distributional-ecological information usually hidden in the large ocean of scientific literature. A revolution!

Traditional floras had several drawbacks:

1) Being printed on paper, their content is "frozen". Nomenclatural-taxonomic changes, progress in floristic exploration, the discovery of new species, often render a flora outdated within a few decades. Computerised systems, on the contrary, can be updated and corrected in real time.

2) The larger a flora (or a taxon) is, the more difficult it is for the user to identify an organism. Computerised tools permit to reduce the set of organisms using different combinations of morphological, ecological, distributional characters.

3) Traditional keys are "rigid". They contain a huge amount of information which is frozen into the format and the logical structure selected by the author. Computerised floras, being "elastic", can generate products which would have required a huge amount of work in the past. Some examples: a) regional-local floras (e.g. of a biotope, a natural park, a province); b) keys for "virtual habitats", by combining distributional data with ecological indicator values, c) keys for special users.

In Italy, lichens are widely used in educational projects at all levels, from the ground school to the university. An original program written by S. Martellos and patented by the University of Trieste (FRIDA) not only permits to construct keys for the area in which the school is located, but also to adapt the language to the educational level of schoolchildren. Some characters can be automatically downscored in the keys (e.g. the use of Paraphenylenediamine for colour tests, which, being carcinogenic, is not appropriate for children).

4) Databases are "accumulative". A small database (e.g. limited to a taxonomic group, or to a local flora) can be the starting point for future expansions. For example, the production of a key of terricolous lichens known from Slovenia has required the addition of 17 species only to the Italian database.

5) Outputs can be edited in several different formats, from simple texts to illustrated books (see Nimis & Martellos, 2003). Any user can now produce her/his "personalised books", *à la carte*, on-line.

Partial on-line access to keys produced by FRIDA is available since May 2003 through *ITALIC* (http:/dbiodbs.univ.trieste.it), limited to terricolous lichens (Nimis & Martellos 2003). Interactive keys for vascular plants are available at: http://dbiodbs.univ.trieste.it/dryades/tools/tools.html.

BRITISH LICHEN SOCIETY
ANNUAL GENERAL MEETING – 13th January2006.

The Annual General meeting for 2006 was held at the National Museum of Wales, Cathays Park Cardiff at 10.30 am. Present; David Hill (President in the chair) and 52 members of the Society.

1. Apologies for absence; Eileen Aldworth, Peter Crittenden, Joy Files, David Hawksworth, Gill Stevens.

2. Minutes of the Annual General meeting 2005. proposed as correct David Hill seconded by Simon Davey. Carried.

3. Matters arising: none

4. Presidents address (p. 18 this *Bulletin*) David Hill reviewed the activities of the last 2 years and recognised the amount still to be done.

David Hill then led one minutes silence for members to remember Oliver Gilbert. David Richardson announced that the Book Auction of Oliver Gilbert's and other books at the buffet on Friday had raised £650. Mark Seaward suggested that it would be most appropriate to add this to the Burnet-Wallace fund for attendance at field meetings and Ivan Pedley suggested that all small funds were incorporated into this fund. This was proposed by Mary Hickmott and seconded by Brian Coppins.

5. Officers and Committee chair reports
Secretary Following the report in the winter *Bulletin*, Pat Wolseley felt that David Hill had given an overview of what had been happening since the report in the winter Bulletin 2005 and had nothing to add.

Treasurer: Bob Hodgson pointed out that there was a change in the format of the accounts included as a flyer in the winter *Bulletin*, identifying restricted and unrestricted terms and payments to trustees. Following the move to Cambridge University Press there was a loss of income but this was made up for by an increase in sales, interest, and subscriptions. In addition there was a considerable increase in income through members taking part in GiftAid. As a result BLS reserves are still healthy.

Bob Hodgson reminded members about the Burnet-Wallace fund to be used for impecunious members to attend field meetings. It was suggested that this was made obvious on the website. Jack Laundon's query about reasons for moving the

Lichenologist from Elsevier to Cambridge University Press, when Elsevier operated an online service, resulted in an outline of the problems for smaller societies being part of a gigantic system and resulting in considerable problems for the editor. Treasurer's report proposed by Don Palmer and seconded by Jack Laundon.

Assistant Treasurer. Following submission of Will Stevens report he had sent in his resignation. There were no questions and David Hill agreed to write and thank Will Stevens for all his contributions and improvements to financial management of BLS.

The Website manager Clifford Smith reported that the website was used regularly and received on average 71 hits per day. A redesign of the website pages was being undertaken and accounts and keys for the new flora would shortly be available on the website for members to use, and trial and comment on. Jeremy Gray requested that the recent updates page be reinstated.

Senior Editor Peter Crittenden was unable to be present as he was in Antarctica.

Bulletin Editor Peter Lambley thanked all contributors to the Bulletin especially Chris Hitch for his major contribution of the New Rare and Interesting section of the Bulletin. He would be investigating the possibility of giving the *Bulletin* a new look with a new cover and format during the year.

Flora Committee Tony Fletcher accounted for his three responsibilities for the BLS; he was honoured to chair the Flora Committee and was pleased to report that 89% of generic accounts and 85% of species accounts were received and it was hoped to publish the Flora to coincide with the 50th anniversary of the BLS in 2008.

Librarian Tony Fletcher as keeper of the library said that he had only received 18 loan requests during the year, but there was still a lot of work to be done in sorting out reprints and making a catalogue available on the website to encourage use of the library. As the BLS representative on the Biosciences Federation he noted that there had been 12 responses to government consultations in which BLS is acknowledged as one of 38 societies. Stephen Ward suggested that the closure of four NERC funded Centre for Ecology and Hydrology research centres should be brought to the attention of the BSF for action. BLS representation on BSF committees also included education where Barbara Hilton and Ishpi Blatchley had attended, and David Hill on the Sustainability and Environment committee. Tony Fletcher remained the first point of contact for members wishing to raise issues of concern. David Hill suggested that BLS needed a Scientific Policy Officer in BLS and that we continue with applying pressure through a press officer.

Herbarium Richard Brinklow wished to encourage members to use the herbarium, especially young and new lichenologists. He also asked for additional species and it was suggested that a list on the website would encourage members to send specimens. Ray Woods asked that the conservation evaluation of species should be included in the list.

Conservation Officer Bryan Edwards thanked committee members and the agencies for their support in the work of the Conservation Committee.

Data Committee chairman Frank Dobson outlined the present state of data acquisition and the plan for the integration of large amounts of records to the National Biodiversity Network.

Mapping recorder Mark Seaward said that he would be continuing in post for another three years at Bradford University, and that he would continue to keep up the Mapping scheme. The data includes species distribution across the UK and has provided maps for 43 years. He would also continue to keep the BLS archive and welcomed members photographs of BLS events and people, but suggested that it should eventually be incorporated into the library.

6. Report of the working party on the revision of the constitution Frank Dobson explained that changes to the Constitution and Rules of the Society, drawn up in 1992, are now required to comply with the Charity Commission and the Inland Revenue. At present BLS is a charitable trust but in the near future it will be possible to become a Charitable Incorporated Organisation (CIO). This will get over the restriction on payment to trustees of the society. However this can also be overcome by including a specific clause in the constitution. Officers of the society are elected every year at the AGM but trustees including the president and 8 elected members sit on Council for 2 years. It was suggested that members be elected for three years, to allow more involvement with the society's business, resulting in an increase to 9 members with election of 3 every AGM. However the presidents term should remain at 2 years, as in practice he or she is in office for five years, 2 as vice president and one following his/her presidency. It is proposed that the vice president be an ex-officio member of all subcommittees. Some restructuring of Council was proposed to simplify the number of committees reporting to Council. It was also proposed that honorary membership be restricted to 2.5% of members of the Society.

A small committee had been set up to revise the Rules and Constitution of the Society with Peter Lambley as chairman. Frank Dobson expressed his thanks to Jack Laundon for his suggestions following the first draft. The next draft would be circulated to the Charities Commission and the independent examiner for their comments and approval

and the final version is printed in the Summer Bulletin, in order to obtain members approval at the next AGM.

A query from Maria Cullen concerning the use of British in the title of the Society to include Ireland, as it is not part of the British Isles, was discussed. However it was felt that the BLS is an International Society whose foreign members comprise more than 50% of the membership.

7. Ursula Duncan award. Tony Fletcher's surprised response 'good grief' to Peter James accolade and announcement that he had been nominated to receive the Ursula Duncan award (*Bulletin* p 20), was followed by his thanks to many people who had encouraged his lichenological interests including Peter, Sir David Smith and Ivan Jones, the algologist who first suggested that he study lichens for his PhD. The warm applause acknowledged Tony's long term commitment to the society.

8. Field meetings. Simon Davey thanked the leaders of the field meetings, Peter James for his enormously popular workshop on species with cyanobacterial photobionts at Kingcombe and Pat Wolseley for the field meeting at Orielton FSC. Peter has agreed to another workshop in 2006 on *Ramalina* and Alan Orange to run a workshop on pyrenocarpous lichens on rocks at Blencathra. There were already 20 people booked on the Guaderrama field meeting. Other suggestions for field meetings in 2007 included an invitation to Guernsey from Bridget Ozanne, Charnwood forest and a joint meeting in East Anglia with Dutch lichenologists. An Irish Field meeting had been proposed by Damian McFarran and there were outstanding invitations to visit Italy and Sweden from Pier Luigi Nimis and Lars Borg. In addition there was the meeting in Newfoundland in September 2007 organised by David Richardson and Stephen Clayden for the Tuckerman society. John Skinner suggested that although foreign meetings should be advertised on the website and in the Bulletin that these should not replace meetings in the UK. He also suggested that the programme should include one day and weekend meetings in sites of interest that would be accessible to more members of the society. These could include churchyard meetings in Gloucestershire and a reinstatement of the annual New Forest meeting. As part of the fiftieth anniversary celebrations it was proposed to revisit the site of the first BLS field meeting at Chagford in Devon.

9. Election of New members of Council. Sandy Coppins proposed John Douglass, Brian Coppins proposed Chris Ellis, Pat Wolseley proposed Peter James, Frank Dobson proposed Don Palmer and Scott LaGreca proposed William Purvis. Members voted in favour of these proposals. Ivan Pedley proposed Bob Hodgson as Treasurer and Peter Crittenden as Senior Editor and they were seconded by Ray Woods. Pat Wolseley proposed Scott LaGreca as Secretary of the BLS and was seconded by David

Hill. Peter Lambley was proposed as vice-president by David Hill and seconded by Bryan Edwards. Pat Wolseley was proposed as President and seconded by Clifford Smith. All were in favour. Jeremy Gray pointed out that there was a vacancy for the post of Assistant Treasurer which urgently required filling. This job required some computer familiarity including the use of the ACCESS membership database. David Hill proposed and Brian Coppins seconded the co-option of such a person when found. Jeremy Gray reminded members that a special general meeting had been called to elect him as Membership Secretary in 1989.

10. Any other business. Stephen Ward drew attention to the SNH publication of Oliver Gilbert's useful book on Lichens for £4, and that this was available on-line. He also pointed out that English names were used in this publication and suggested that existing English names should be included on the BLS website. Mark Seaward had started to do this with Oliver Gilbert, and offered to retrieve this list from Oliver's effects. The British Bryological Society had already done this and Brian Coppins had completed this for the Scottish project. Clifford Smith had discussed this with Oliver as some lichens have c. 4 names. It was agreed that as a first step Mark Seaward would locate Oliver's list. Damian McFerran reminded members of the need for lichen surveys in Eire and asked interested members to contact him.

11. The 2007 AGM. The 2008 AGM would be the 50th anniversary of the Society and would be held at the Natural History Museum in London. In the absence of other suggestions for 2007 Mark Seaward proposed that the next 2 meetings should be at the NHM in London. Bob Hodgson seconded the proposal. The response from members was mixed as it had been agreed that AGM's should be held in other places and that London was an expensive option for members. However despite considerable discussion the motion was carried by a majority. The next AGM will be held at the Natural History Museum on Saturday 13th January 2007.

Afternoon session

The members were welcomed at the start of the afternoon session by Dr Graham Oliver, Head of the Department of Biodiversity and Systematic Biology at the National Museum of Wales. This then followed by four talks on the theme of Lichen communities

Saxicolous Communities in Upland Britain
Alan Orange

The description of lichen- and bryophyte-dominated communities using phytosociological methods has not been popular in Britain. British lichen communities

were reviewed by James *et al.* (1977), but upland rock communities were poorly covered and some of those included are difficult to understand. The National Vegetation Classification of Great Britain (NVC) (Rodwell 1991-2000) does not cover cryptogam-dominated communities on rock or bark.

Vegetation is a continuum, but it is easier to understand and communicate the complexity of vegetation if it is divided into communities or 'noda', reference points in the continuum. This is the system used in the NVC.

In the study the phytosociological methods used were subjective, but they allowed a fairly rapid description of the vegetation. In the field, a 'homogeneous' area (that is, an area without obvious vegetation boundaries within it) was selected, and the abundance of each species of lichen and bryophyte was estimated. Usually a sample of 25 × 25 cm was used for stands dominated by crustose lichens, and a sample of 50 × 50 cm used for macrolichens and bryophytes.

In the laboratory, samples were sorted using TWINSPAN, which classifies samples according to the similarity of their species composition, producing an ordered table of samples against species. The results of TWINSPAN could not be used directly as the basis of a classification of vegetation, as it is possible to choose a set of parameters for each analysis, each choice producing a slightly different classification. Also, it is clear from inspection of the table that samples with little in common can often be classified together. The TWINSPAN table was valuable in providing insights into the relationships between samples, but further manual sorting was used to define the noda.

In a preliminary analysis of part of the data, 32 provisional noda were recognized in the Lake District and North Pennines together, 19 dominated by lichens, or mixed lichens and bryophytes, and 13 dominated by bryophytes. All of these noda would be readily recognised and understood by a cryptogamist in the field. They include familiar communities such as the crustose lichen community of well-drained exposed rocks with *Fuscidea lygaea*, *Rhizocarpon geographicum*, and *Tremolechia atrata*, or the community of steep, nutrient-poor faces with *Fuscidea intercincta* and *F. kochiana*. Fine screes in the Lake District are dominated by common species including *Porpidia tuberculosa* and *Lecanora soralifera*, but less common species including *Micarea paratropa* and *Rhizocarpon anaperum* are often present. Common bryophyte-dominated communities include the black streaks formed by *Andreaea rothii* on flushed rocks, and the mossy green tops of small boulders dominated by the green *Racomitrium sudeticum*. However, it is essential to include both lichens and bryophytes in any study of communities, as they very frequently occur together. It was not possible to record algae in a consistent way, but occasionally they were a

conspicuous component of the vegetation. The orange-red alga *Trentepohlia iolithus* was remarkably abundant on the summit of Cross Fell, out-competing lichens on block scree and forming a reddish band visible from at least 2.5 km away.

Approximately 1400 quadrat samples were recorded during the study, and these will be used as the basis of a preliminary new classification of rock communities in upland Britain. However, these samples represent only a small amount of the variation in upland vegetation, and the production of a 'rock NVC' is still something for the future.

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Lichen communities in relation to bryophyte communities and the National Vegetation Classification
Ben Averis

Vegetation can be divided into two broad groups, based on habitat.

1. Large-scale terrestrial communities

Most of Britain is covered with mixtures of vascular plants, bryophytes and lichens, growing together in communities which have been described by various authors and most comprehensively by the National Vegetation Classification or NVC (Rodwell 1991 *et seq.*). Some of these communities are dominated by bryophytes or lichens, but even these show more floristic affinity to other terrestrial communities than to bryophyte and lichen communities on rock and bark.

Some NVC communities are distinguished by abundant terrestrial lichens. The most consistently lichen-rich communities are the *Calluna-Cladonia* heaths H13, the *Vaccinium-Cladonia* heaths H19 and the *Carex-Cornicularia* sand dunes SD11, but lichens can also be very common in some forms of dry heath, wet heath, blanket bog and grassland. They proliferate in one type of the montane *Juncus trifidus-Racomitrium* rush heath U9, and there are also montane lichen heaths which are not described in the NVC. Most of these lichen-rich communities occur in acid habitats in the colder, drier, eastern parts of Great Britain. The most conspicuous species are

Cladonia arbuscula, C. portentosa, C. uncialis, C. ciliata, C. furcata, C. gracilis, C. rangiferina, Cetraria islandica and *Coelocaulon aculeatum.* These, like the moss *Racomitrium lanuginosum,* tend to grow on firm, dry to moist soil or peat surfaces in exposed situations. On deeper, richer soils or in more sheltered places they are replaced by large 'hypnoid' mosses, and on wet peats by *Sphagnum* mosses.

2. Small-scale bryophyte and lichen communities on rock, bark and rotting wood

These are not covered by the NVC but have been classified, for example by Richards (1938), Barkman (1958), James *et al.* (1977), Fryday (1997), Orange & Fryday (1998) and Averis *et al.* (2004). None of these classifications are as comprehensive as the NVC and there is scope for further work.

Bryophyte and lichen communities have often been described as separate entities, but since their habitats overlap so much, mixed bryophyte and lichen communities are also common. These mixtures show the inter-relationships between the two groups. For example, there is a continuous gradation from lichen-dominated examples of the *Lobarion pulmonariae* to bryophyte communities dominated by *Homalothecium sericeum* and *Frullania dilatata,* including examples with equal amounts of the lichens and bryophytes. All occupy the same habitat of neutral to basic bark or rock. This suggests that the Lobarion community has more in common with the *Homalothecium-Frullania* bryophyte assemblage than it does with the *Parmelion laevigatae* lichen community, which is a community of acid bark or rock and which has affinities to the bryophyte assemblage of *Isothecium myosuroides, Frullania tamarisci* and *Scapania gracilis.*

A more comprehensive classification of these communities would be useful, and in my opinion should combine bryophytes and lichens where appropriate, combine rock and bark habitats where appropriate, and have a structure based on important floristic and ecological gradients of variation related to wetness, acidity, shade, shelter and succession. We should make the best use of available data such as quadrat samples, but from my work on vegetation both at small and large scales I feel that the structure of such a classification should be based on subjective but intelligent assessments of ecological and floristic relationships rather than on the results of mathematical analyses.

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Lichen communities on Stonehenge and their use in monitoring.
David Hill

Stonehenge is well-known for its lichens. Of the 70-80 species present on the stones, several of them are rare and many of them are unusual in that they are normally restricted to coastal habitats and occur at this inland site for reasons that are not yet clear. *Ramalina siliquosa* and *Buellia subdisciformis* cover the stones as though they were on a seashore and the rare maritime species *Rinodina confragosa* and *R. orculariopsis* are scattered over most of the stone surfaces. Some other species are characteristic of sarson stones themselves such as *Buellia saxorum.* The species listed in reports in 1973, 1994 and 2003 have revealed many changes. The last (Giavarini and James 2003) being the most detailed; recording 77 species and several communities (identified according to James *et al.* 1977). Giavarini and James also assess the site conservation value of the site as of international importance. The richness of the flora and the stability of the stones are features that make the site particularly suitable for monitoring. The monitoring data from Stonehenge can inform us of environmental changes and trends that can help us plan for the future. As a

World Heritage Site, it would be nice if this could be part of an international network of similarly monitored sites.

The aims of this paper were to make a rigorous approach that would provide sound data about the species present and the communities that could be used as a baseline in monitoring into the future. The main aspects that had to be considered were a) sampling methodology, b) experimental design and c) data analysis. The sampling of the lichen communities was tested by using 0.5 x 0.5 m quadrats divided into 25 squares 10 x 10 cm. These were held on to the vertical and horizontal surfaces with blu-tak and the cover of each species was recorded within each 10 x 10 cm square. To test whether th2 0.5 x 0.5 m quadrat was sufficiently large, accumulated means of number of species and percentage cover (and their standard deviations) from 2 to 25 of the 10 x 10 cm squares were calculated. The values for these parameters were approximately constant when 10-15 or more squares were included in the mean. This indicated that the 0.5 x 0.5 m quadrat with 25 such squares was more than large enough to adequately sample the communities. The other aspects of sampling were the numbers of quadrats and the choice of their location. As a sample standard deviation approximates the true population standard deviation when the sample size approaches about 30, this was regarded as a reasonable number on which to base replication. There is a never-ending argument about the advantages and disadvantages of random vs. selected quadrat positions. Therefore 30 quadrats were located at random and 30 placed by eye to sample vertical and horizontal surfaces and the various communities. Each quadrat position was recorded so that it could be relocated in future years. Each quadrat comprised 25 separate estimates of species presence and cover. Therefore, parametric, as well as non-parametric, statistical analysis could be performed between years on an individual quadrat basis and on all the quadrats together whether selected and random or positioned by eye.

The quadrats were recorded in Dec 2001-Jan 2002, Sept 2003 and Sept 2004. Percentage cover estimates within the quadrats were subject to logarithmic transformation so that the data could be used in parametric calculations. Data analysis showed that there was a slight increase in the number of species per quadrat which was almost certainly due to a well known artefact: improved recording due to familiarisation with the species and communities in the field by the recorder. There were no other changes of note over the period of this baseline period.

The data (species and percentage cover converted to Domin scale) from all 60 quadrats were analysed together using TWINSPAN. This analysis progressively and dichotomously divides the quadrats into groups with similar species characteristics using qualitative and quantitative data. The species and cover from groups of similar quadrats created by this analysis were tabulated and compared with description of

communities in James et al 1977. These communities closely matched those found by Giavarini and James 2004. The rare species found at Stonehenge do not seem to form unusual communities and fit into the existing communities normally seen on the seashore and coastal rocks.
It is hoped that this project will provide the basis for further monitoring of the lichens at Stonehenge using the same sampling procedure and hence comparable data that will help to monitor the lichen flora as it responds to environmental change in Salisbury Plain, southern Britain and Western Europe.

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Upland lichen biodiversity and the contribution made by big boulders
Vince Giavarini

After the tea interval Vince Giavarini spoke on the **Contribution of big boulders to lichen biodiversity,** with particular reference to upland areas. Boulders are highly challenging, time consuming habitats so are easily neglected, rarely featuring at the top of the habitats list in surveys. Vince explained that since the 1920's all rock fragments have been grouped according to the particle size scales drawn up by different authorities. The Wentworth Scale is most widely accepted as the International Standard. It defines a boulder very precisely, as any sedimentary fragment greater than 25.6 cm. Smaller rocks are cobbles and so on down the scale. Beyond 25.6 cm lies an entire glossary, meaning that big boulders may be variously described as huge, massive, bulky, immense, mighty, colossal or giant. Vince illustrated his talk with examples of famous boulders such as the Bowder Stone in Borrowdale in the English Lake District and warned of the threat to unsurveyed boulders posed by bouldering (low-level rock-climbing), one of the world's fastest growing outdoor activities. It appears anyone can give a boulder any name they like as long as it is published in a guidebook.

He explained that all categories of rock fragments conform to what is known as 'scale invariance' that is to say that all big boulders are merely scaled-up versions of smaller

ones, so there is never a typical or average boulder. In fact, one of the most characteristic features of boulders lies in their infinite variability even among those which originate from the same rock face. It is interesting that while the conservation value of large stones or 'megaliths' used to construct prehistoric monuments are readily referenced in the lichen literature, information on the lichen ecology of big boulders - their naturally-occurring counterparts - is virtually absent. Why this should be is baffling, but is most probably because boulders themselves have never been a priority habitat for field workers.

The importance of exploring boulders within the overall saxicolous habitat remit has been known about for many years but has never been championed. Fieldwork at Britain's classic high-level locations has regularly drawn attention to notable species on boulders. Yet in spite of this, conspicuous boulder strewn areas, regularly invaded by boulderers, still avoid even preliminary survey for lichens

Some are significant habitats for montane lichens including a number of species that are currently Red listed. Given suitable conditions many normally high altitude specialists are able to grow at much lower levels. We known that stress factors such as low pH associated with areas of metal contamination, can bring in plants that usually thrive at much higher altitudes, but boulders can also do this. Lichens such as Ben Nevis favourites *Catolechia wahlenbergii*, *Pertusaria melanochlora* and the moss cushion species *Belonia incarnata*, *Catillaria contristans*, *Toninia thiospora, Massalongia carnosa* and *Toninia squalescens* thrive on boulders. None of the moss cushion lichen communities on boulders have been properly described and there are probably new species out there waiting to be discovered should we dare to look. Few lichens are solely confined to the boulder habitat, but some such as *Buellia insignis, Hypogymnia intestiniformis*, *Lecanora frustulosa, Lecidella wulfenii, Miriquidica nigroleprosa* and *Pertusaria melanochlora* find the conditions provided by boulders irresistible. This may be because certain boulders can, independently of the broader habitat, be extraordinarily specialised habitats. In addition, a little time spent exploring the boulder flora of an unfamiliar area can be a handy guide to the overall quality of the wider habitat. This can save hours of unnecessary reconnaissance work.

Anyone who has spent time examining a boulder in sufficient detail will tell you that the mineralogical composition of the rock is generally the main determinant of the overall lichen flora. While boulders containing minerals very high in silica content (such as quartzite and sandstone) may be poor for crustose lichens generally, granite and schist can both contribute outstanding boulder habitats, the former because of its textural qualities, and the latter because of its unpredictable weathering properties and variability, especially at base-rich sites.

Understandably, boulders differ in other ways. One of the most important of these **is in their physical contact points**. Monitoring along a line of boulders on a hillside can often throw up two or three, and sometimes four of these categories.

1. The first of these and the most common category are boulders with **SOFT CONTACTS**. These are embedded in the soil as if they have taken root in the landscape Peeling back the turf at the base will usually reveal a surprise or two as the habitat here remains moist and shaded. Especially fond of such sites are the *Porina* species, *P. lectissima* and *P. chlorotica*, *Opegrapha's* and lichens of the *Bacidia arnoldiana* group.

2. The second category is boulders with **HARD CONTACTS**. These are more familiar sights at the higher altitudes where there is a good deal of exposed bedrock. On platforms of hard rock they are nearly always accompanied by cushion-forming mosses making a characteristic halo around the base where water drips from the surface. On more friable rocks surfaces such as in the Cairngorm 'wave *Callunetum*' these boulders act as lichen propagule traps so the undersurfaces contact areas are always a great place to look for *Alectoria*, and *Cetraria* species.

3. The third category is boulders with **MULTIPLE CONTACTS**. Those of you familiar with scree habitats will know all about multiple contacts. Here the surface factors of the rock are strongly contrasting. Upper exposed faces contrast with deeply shaded undersides that that are more moist and humid than single contact boulders. Shade loving genera such as *Micarea, Enterographa, Lepraria, Arthonia and Leproplaca* can all occur here.

4. A further category is boulders with **UNEVEN CONTACTS.** Here access to the base of the boulder often means scrambling underneath on your back to explore the roof of the underhangs. This provides cool, dry niches for lichens such as *Gyalecta ulmi* or in limestone country, for species such as *Arthonia endlicheri*.

Boulders can make excellent monitoring material and have several advantages over, for example trees, trees:

- Easier to relocate
- Because boulders provide a compact envelope of different habitats the <u>full content</u> of the flora can be assessed – there's no wondering what may have been missed in the canopy or deep inside a bark hollow

- Because they are not growing organisms there are no complications due to bark expansion and change, alterations in the pattern of water flow with age or confusing shade factors etc. to consider
- There are usually fewer sterile species to tackle

Stable boulders also have several advantages over rock outcrops:

- Because they are essentially rock islands they are never flushed from above by seepage or modified by rock falls
- The largest boulders have tops inaccessible to grazing animals and usually also avoid severe fire damage

Other than the geological variation between boulders the habitat has a multitude of surfaces of differing aspects, with their tops like market stalls, laid out with lichen produce. It is the scale advantage of these tops of boulders that allows lichens such as *Teloschistes flavicans* to escape fire at maritime sites. While screes for example, are prone to slippage and movement, and outcrops seepage, big boulders or boulder stacks can provide an oasis of shelter and permanence which favours many lichens in the late-succession stage.

Sunday 15 January
Field visit to Atlantic College, St Donat's

For an account of the meeting see p 48.

PRESIDENT'S ADDRESS: DAVID HILL

The Society has done an enormous amount of work in the last two years. Members of the Society may not always be aware of the paddling that goes on beneath the surface in keeping the Society moving forward. The officers, and others members helping, have worked very hard and I want on behalf of everyone in the Society to thank them very much. Without this work the Society would not be the active and progressive Society that it is; but there remains, as always, much still to do. To illustrate what the Society has been doing, here are some examples of the projects that have been started or which have been in progress.

1. Review of strategy for getting new members (now actively part of the work of the Promotions and Publicity Committee

2. We have been an active member of BioSciences Federation (in addition to being Affiliates of the Institute of Biology) representing all the biosciences in UK and trying to influence government. We have been pressing for better support for taxonomy and systematics.
3. Review of the Constitution and Rules. Ongoing and hope to have draft in the Summer *Bulletin* (p63) for approval (hopefully) at the AGM 2007.
4. Computerised membership lists and PayPal
5. Review of Website: We have approved expenditure or the redesign of the www.thebls.org.uk site
6. We are in the process of replacing BioBase with another software (AditSite) for data inputting and using Recorder6 for our main database which can interface with the National Biodiversity Network.
7. The new Surveying and Report Writing Guidelines publication is at proof reading stage and will soon go to be printed. Hopefully will have something of interest for every one including a full guide to lichen identification.
8. The new Flora is making steady progress and despite the very sad loss of Oliver Gilbert is going to be out on time.
9. We have officers' roles, procedures etc on file now.
10. Introduction of grant for students from abroad to study in a UK University
11. Prize for student project.
12. Review of the threaten lichen database.

There are so many exciting developments now happening in lichenology where the BLS is involved as can be seen by reading *The Lichenologist* and *Bulletin*. Not least, is the new edition of the *Flora*. The old one has been used throughout the world as anyone looking at literature from overseas will discover. Its generic keys have been enormously useful across the world and, as always, getting generic concepts in place is the key to getting to know any group of organisms wherever, and on whatever level, one finds oneself.

It is very sad that Will Stevens has resigned from being Assistant Treasurer. Will did a wonderful job in putting the membership on a computer data base (in Access) and thanks to his insistence we have included PayPal as a method for overseas people to pay their subscriptions making it much more cost effective in collecting the money. I would like to thank him for all he has done. The work in running this society is spread among many people who put a lot of time and effort but, looking back it has been, as President, very pleasurable working with them. They have made what could be a terrible job into an enjoyable one. Often we hear of other societies looking to see what the BLS is doing and we seem at times to be brand leaders. But there are also many things we can learn form other societies too.

As I hand over the reigns to Pat Wolseley as the new President, I cannot say that I have seen all the projects completed that I was involved in starting during my term of office completed. Indeed, I fear that there are more in progress now than I inherited. I also started with the need for an Assistant Treasurer and I am afraid, once again we are in need of one. This is latter job a really rewarding one and provides an excellent opportunity for the person doing it to be in touch with other lichenologists in the country and worldwide.

Thank you for voting me to have the totally unjustified honour of being your President for these last 2 years. I now look forward to having more time to my own lichenology, getting into the field and looking down my microscope! And working on tropical lichens from Pacific and SEAsia that I collected 40 years ago!

URSULA DUNCAN AWARD 2006

ANTHONY FLETCHER

The nominee for the Ursula Duncan Award 2006 is well known for his knowledge of maritime lichens yet now lives and works about as far from the sea as one can get in Britain.

He is based in Leicestershire, where he curates the biology collections and gives lectures and field trips on lichens, fungi and algae, as part of his role as Keeper of Natural History with Leicestershire Museums Service. He helps to run several loyal groups of local naturalists in the county. Since 1971 he has led many field trips for the Society, most recently to Rutland (1994), Helmsdale (1999), Bangor (1999 and 2004) and Nottinghamshire (2004).

But Anthony Fletcher remains the national expert on seashore lichens. He gained his doctorate in marine and maritime lichens in 1972, supervised by Peter James and W. Eifion Jones. At that time he was based at the Marine Science Laboratories in the University College of North Wales where he also befriended Geoffrey and Elizabeth Dobbs. His research involved detailed studies of taxonomy and eco-physiology of seashore lichens and entailed piloting novel methods of computer data-analysis which have since become very widely used (1973 a,b). He published his keys to marine and maritime lichens in 1975 (1975 a, b). A quote from those keys is still relevant today: "It often transpires that 'rare' species can benefit by the publicity given to them in an exhaustive key, and subsequently prove not to be rare but merely overlooked". He says that his key was produced "in response to the often voiced complaint by marine

biologists that 'we would work on lichens if only we could discover their names'". In 2004, he led the Society's Maritime Workshop where he presented up-dated versions of these keys.

He has continued his seashore lichen work in North Wales, and especially on Bardsey Island National Nature Reserve since 1977, with a special interest in lichen habitat management. He is a member of the scientific committee which advises on the management of this important island nature reserve.

Since arriving in Leicester in 1978, Tony has worked intensively on the Midlands Lichen Flora and its conservation and has contributed numerous records to the National Flora. He has contributed to several B.L.S. Map Fascicles, and co-authored, with Brian Coppins, the 'Distribution Maps for the genus *Caloplaca*', one of the many genera he is revising for the forthcoming Lichen Flora. In October 2004, Tony accepted the invitation to replace the Late Dr Oliver Gilbert as Chair of the forthcoming Lichen Flora which is expected in 2007.

Tony first assumed the role of Conservation Officer for the Society in 1981, relinquishing it during his 3-year stay in the United States (where he worked with the late Mason E. Hale), but once more taking on the mantle in 1992 (from Kery Dalby), until retiring in (2003). During these times he chaired the Woodland Working Party, a body of BLS members responsible for drawing together information on the epiphytic lichen habitats of woodlands and parklands throughout the British Isles. This culminated in the report by Fletcher *et al* (1982), revised in 1993 and currently being further revised. This was followed in 1984 by a comparable report listing and assessing lichen-rich lowland heathland habitats. These two reports were groundbreaking in their time, and remain unique in their overall scope amongst other cryptogamic groups. Although produced over 20 years ago (and long due to be updated), they provide the background by which comparison between widely separated epiphytic and heathland sites can be made. They were tremendously influential in raising awareness of lichens within Government conservation bodies and put the conservation of lichen habitats on a strategic footing yet to be matched by other plant learned societies. More recently Tony was responsible for organising a workshop on Habitat Management for Lichens and editing the Proceedings (Fletcher 2001).

As Librarian for the Society, Tony arranged for the BLS Library to be housed with Leicestershire County Council Heritage Services Dept. He has worked tirelessly with a small group of members to sort and catalogue the Library which had fallen somewhat into disarray in recent years. It is once more in a state where members can make good use of it.

For 10 years Tony has represented the BLS on the Institute of Biology (Environment Committee) and the newly formed Biosciences Federation, which have been influential in raising the profile of lichens in decision-making at Government level and maintaining lichens in the forefront of conservation planning and legislation.

A council member since 1972 and a past President of the Society (2000-2002), Tony is quiet, unassuming and gentle; serious and dedicated, not one to seek the limelight, but has great tenacity of purpose. Whilst rarely outspoken, he is a stalwart of the Society whose wise counsel is greatly valued.

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Peter James

PYRENULA HIBERNICA AT CEUNANT LLENNYRCH, MEIRIONNYDD

In 2005 I was contracted by Countryside Council for Wales (CCW) to carry out lichen survey and monitoring within part of Ceunant Llennyrch SAC (Special Area of Conservation) (Sanderson, 2006). This is within a huge, roughly east to west draining, ravine cutting down from Llyn Trasfynydd to the Vale of Ffestiniog. It has been known to lichenologists as a site of interest since at least the visit of Francis Rose in 1976 (Rose, 1976) (under the name Coed Felinrhyd, the western most wood in the complex). It is, however, more famous as an oceanic bryophyte site. The woods within Ceunant Llennyrch are partly owned by the Woodland Trust and CCW and partly private. The site is an SSSI (Site of Special Scientific Interest) and an SAC and part is a National Nature Reserve (NNR).

This wooded ravine consists of an intermittent inner rocky gorge, topped by steep slopes, some times broken by bands of cliffs, the whole ravine stretching up for up to 150m above the river. More open sections occur where the intermittent inner rocky gorge gives out. The depths of the inner gorges, where the richest bryophyte communities are found, are too shaded for rich epiphytic lichen habitats to occur. The epiphytic interest starts on the upper rims of the rocky gorges and can extend to edge of the ravine. In the sections between the inner gorges the interest reaches right to the river.

The majority of the lichen rich habitat is in more accessible areas and has been much more effected by past land use than the depths of the inner gorges. Most recently, in the mid 20th century, large areas were converted to conifer plantation but much of the previous broadleaved woodland survived unplanted or partly planted. The majority of pure conifer stands were planted on areas of rough grazing. Many partly planted areas, however, were very densely planted with conifers, resulting in the loss of lichen cover on the retained broadleaves. The surviving broadleaves and old maps give some indication of the history of the site prior to conifer planting. There are areas of even aged Oak of late 19th origin in the more accessible areas – the oak plantations that many regard as characteristic of hyperoceanic woodlands in western Britain – although from a lichenologists view, these can be monotonous replacements for the pervious more varied native woodlands. A feature of Ceunant Llennyrch, however, are areas of more mixed woodland with much older trees, including oaks of up to 5.52m in girth. On the predominantly acid soils, birch is often dominant over Oak, while flushed areas support Hazel dominated stands with emergent Ash and Oak. Old maps indicate that the ravine slopes to have been within the fridd (areas of enclosed rough grazing, occasional cultivation and woodland, equivalent to the English outby). The ravine sides have numerous walls dividing up the slopes, but these did not systematically separate open land from woodland. The 1891 6" OS map shows all the enclosures

supporting both woodland and rough grazing. Those enclosures shown with a high proportion of rough grazing over woodland tend to be those with the best areas of undisturbed woodland. Those with small areas of rough grazing tended to have large areas of oak plantation.

A provisional synthesis of this information would be that in the early modern period much of the woodland within the ravine was simply an integral part of the pastoral farming within the fridd. The enclosures with woodland were used both to produce wood, timber and grazing. The result would be inefficiently managed woodland with many old trees, glades and denser patches; pasture woodland in the wide sense. Woodland management would have been most intensive in the most accessible areas. Increasing commercialisation of woodland management will have lead to timber production becoming more important than sheltered grazing. The 19th century Oak plantations represent this intensification. The survival of rich epiphytic lichen floras probably depended on pockets of older pastoral woodland surviving this intensification.

The epiphytic flora is exceptionally rich; the four surveys carried out since 1997 (Davey, 2001, Orange, 1997 & 2003 & Sanderson, 2006) have collectively recorded 49 NIEC Lowland Ancient Woodland Indicators and 22 EUOCIEC Pluvial Ancient Woodland Indicators (Coppins & Coppins, 2002). Red Data Book (RDB) species included two Vulnerable RDB species (VU), 12 Near Threatened RDB species (NT). In addition a further 54 non RDB species that are Nationally Rare (NR), Nationally Scarce (NS) or International Responsibility (IR) species have been recorded. The above include 11 NR and 37 NS and 46 IR species (Woods & Coppins, 2003). These are very high totals that are only substantially bettered by the richest western Scottish woods. The floras of base rich bark on veteran trees (*Lobarion*) and acid bark on old trees in high rainfall areas (*Parmelion laevigatae*) are the equals of other high quality Welsh Woods. The former habitat has NT species such as *Agonimia octospora*, *Fuscopannaria sampaiana*, *Porina hibernica*, *Porina rosei*, *Ramonia chrysophaea* and *Rinodina isidioides*. Dry bark on the sunnier veteran *Lobarion* Oaks support ancient dry bark communities (*Lecanactidetum premneae*) include *Arthonia anombrophila*, *Cresponea premnea*, *Lecanactis subabietina* and *Opegrapha xerica*. The acid bark habitat supports species such as the VU and BAP Priority species *Graphina pauciloculata* parasitizing *Graphina ruiziana* and the NT species *Melaspilea amota*, an abundance of *Parmelinopsis horrescens* and *Arthonia invadens* (new to Wales), the later parasitizing *Schismatomma quercicola*. Other significant species include *Opegrapha fumosa*, *Micarea alabastrites*, *Micarea stipitata*, *Micarea synotheoides*, *Micarea xanthonica* and *Hypotrachyna sinuosa*. One species seen worth looking out for in this habitat is *Stenocybe bryophila*, this specialises in parasitizing cushions of the liverwort *Plagiochila punctata*. It is usually immersed within the liverwort with

only the top of the head showing. It is probably being missed by lichenologists as this niche is more of a bryologist's haunt. Associated with the acid trees are dry bark communities (*Lecanactidetum abietinae*) with *Calicium lenticulare* and possibly the largest population of *Arthonia leucopellaea* outside of Scotland, while rare standing lignum habitats (*Calicietum abietini & Cladonietum coniocraeae*) supported the NT *Chaenothecopsis savonica* (new to Wales) along with *Calicium glaucellum Chaenotheca brunneola* and *Cladonia incrassata.*

Even these habitats were eclipsed, however, by the communities developed on smooth bark (*Graphidion*). This survey was able to penetrate areas previously made difficult to access by now cleared Rhododendron invasion and found a remarkable range of smooth bark communities. These included, in localised areas, communities rich in regionally and nationally rare hyperoceanic species. In fringing areas to the richest core sites, Hazel and Rowan supported the typical combination of pioneer communities dominated *Eopyrenula grandicula* (an undescribed ancient woodland variant of the *Arthpyrenietum punctiformis*?) passing into *Graphidetum scriptae* on older branches. This community also occurred on Holly. This is a mainly southern community with southern oceanic species present, including the Vulnerable BAP Priority species *Graphina pauciloculata* parasitizing *Graphina ruiziana*, the NT species *Arthonia astroidestera* along with *Arthothelium ruanum*, *Phaeographis inusta* and *Phaeographis smithii*. Other species of interest included the more northern *Arthonia stellaris* and *Arthonia ilicina*. As the inner recesses of the ravine were penetrated a remarkable collection of hyperoceanic specialists began to accumulate, mainly on hazel but also on Rowan and Holly. These including both species that were rare in Wales along with several new to Wales or southern Britain. The former included *Pyrenula laevigata*, *Pyrenula occidentalis* and *Mycomicrothelia confusa* and the new species to Wales were *Arthopyrenia carneobrunneola*, *Mycomicrothelia atlantica*, *Opegrapha thelotrematis* and *Arthonia thelotrematis*, the latter two as parasites of *Thelotrema lepadinum*. Most remarkable of all was the VU and Schedule 8 species *Pyrenula hibernica*; the first record outside of Scotland in the UK.

Pyrenula hibernica (*Parmentaria chilensis* auct. europ.) is an internationally rare species being recorded previously from three sites in the West Highlands, three 10km squares in county Kerry, a few sites in the Pyrenees and from the Azores. In Scotland it has been found on old Hazel bushes in ravine sites. The Ceunant Llennyrch site is a similar habitat. *Pyrenula hibernica* was recorded on 14 Hazel bushes deep in a difficult to access steeply sloping ledge high on the side of a gorge, but deep within in the ravine. The ledge appeared only just well enough lit to support a rich lichen flora. The bushes in this area often supported large colonies of *Pyrenula hibernica* enveloping whole branches. It also found on two more Hazels in a more accessible area to the east of the ledge, with small single thalli on each bush. The latter have

every appearance of having colonised fairly recently from the larger site to the west. The bushes supported a succession of stems from old and dead stems to new young sun shoots. One bush had arisen by a collapsing stem layering. The Hazels had clearly not been disturbed for a very long time, if ever. The larger western site is probably a refuge that has long escaped coppicing. This is the fourth British record and is a major discovery of international significance.

The *Pyrenula hibernica* at Ceunant Llennyrch was all a fairly dark olive brown colour with all the fruit fully immersed in the thalli. This contrasts with the paler and more yellow material with some fruits visible that gives the species its nickname 'blackberries in custard'. As a result the species was recorded as sterile *Pyrenula macrospora*, when first encountered in a monitoring quadrat, but when then found in colonies enveloping whole branches; a sample was taken exposing the large immersed fruits. The fruit were amazing in the field, with the asci clearly visible with a hand lens, poking out of cut perithecia. Back in the hotel, with microscopic examination, the massive murifome spores soon confirmed the identity. For a report on my excitement over finding this species see Coppins (2006)

Ceunant Llennyrch appears to support the best examples of the undescribed form the hyper-oceanic form of *Graphidion* outside of Scotland in the UK (perhaps this could be referred to as the *Pyrenula laevigata – Pyrenula occidentalis* nodum). Some characteristic widespread species of this community in western Scotland, such as *Thelotrema petractoides* and *Thelotrema macrosporum*, however are missing.

The occurrence of such a disjunct example of this *Pyrenula laevigata – Pyrenula occidentalis* nodum is of considerable biogeography interest. A possibility is that some species colonised up the west coast of Ireland and then into Scotland in early post glacial times and that they never occurred in England and Wales. This may be true of species such as *Thelotrema petractoides*, but *Pyrenula hibernica* clearly can not be one of these species. The discovery in Ceunant Llennyrch of additional species characteristic of hyperoceanic *Graphidion* suggests, that the majority may have simply been lost from much, or all, of their former distribution because of the greater intensity of woodland management in the hyperoceanic areas of England and Wales compared to Scotland. In particular intensive coppicing of Hazel is likely to have been much more widespread in England and Wales. Refuges with little or lightly managed Hazel, like the Ceunant Llennyrch ravine, appear very rare. This contrasts with Scotland (Coppins et al, 2002 & Smout et al, 2005) where such Hazel stands are widespread.

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Neil Sanderson

PERTUSARIA ALBESCENS VAR CORALLINA AS A TEMPORARILY DOMINANT EPIPHYTIC LICHEN IN MID WALES.

Unseasonably warm dry weather over Easter the year before last forced me into unaccustomed gardening activity. Desperate for an excuse to rest from spring digging I staggered over to contemplate the numerous more or less circular white crusts colonizing the sides of near horizontal Hazel (*Corylus avellana*) trunks just over the garden hedge. They were set at a convenient height to rest a back which had mastered the physical requirements of a computer keyboard over the winter but not, as yet, a spade.

The two common white crusts proved to be *Pertusaria albescens var corallina* and *Phlyctis argena*. The former had created mostly circular colonies on account of the fact that it appeared to be capable of engulfing and growing over practically everything it encountered in its path. Its fellow crustose neighbours, here mostly *Graphis scripta Mycoblastis sterilis* and *Lecanora chlarotera* were smoothly overgrown. Bryophytes appeared to be easily overwhelmed. The liverwort *Fullaria dilatata* was overgrown, the pinkish leaves being visible under the surface of the *Pertusaria* thallus for about 1cm from its edge. *Metzgeria furcata* was similarly buried whilst the larger stems of the moss *Hypnum andoi* first became bleached white and were then undercut or swamped by lichen thallus. Of the four species of foliose lichen it had encountered all were overgrown. Thus *Physcia tenella, Parmelia sulcata* and *Melanelia glabratula* were all incorporated and buried by *Pertusaria* thallus. Most surprisingly it also engulfed the lower parts of *Platismatia glauca* and grew up the bases of its upright lobes, the *Pertusaria* thereby loosing contact with the bark. Could anything resist the advances of this "army ant" of the lichen world? Surprisingly it met its match in a thin and inoffensive looking neighbouring white crust – that of *Phlyctis argena*. It stopped the *Pertusaria* dead in its tracks yet was itself not apparently able to repel foliicolous lichens since in places it was being overgrown by *M. glabratula* and *Physcia tenella*.

Given that only *Phlyctis* could stop the *Pertusaria* why had the latter not taken over Mid Wales? I resolved to photograph the branches and record its progress. In spring 2005 I was back with the photos to check on the all but unstoppable *Pertusaria*. Life is never simple. It should have been easy checking the two stems I had photographed. After a lot of head scratching it became clear that one branch had collapsed and been shifted some distance by farm stock. The *Pertusaria* on it, along with all its associates were mud spattered and dying. The surviving branch with 4 original colonies was intact and the three upper colonies had grown nearly a centimetre in diameter. The fourth, lower and most shaded one had started to disintegrate. No new colonies had appeared despite prolific soredia production. World domination looked slightly less

likely than I had suspected. A further disastrous and entirely unpredictable event in 2006 further checked its spread. The branch became a wonderful back scratcher for cows. The consequent nutrient enrichment has left the lichen enveloped in dung, cow hair and algae. World domination had been temporarily put on hold by ruminants and I was left to ruminate on the uncertain world of the epiphytic lichen whilst catching my breath in yet another round of spring digging.

Ray Woods

CLIOSTOMUM FLAVIDULUM HAF. & KALB., YET ANOTHER YELLOW SOREDIATE CRUST

In recent years various, usually sterile, C – yellow sorediate epiphytic crusts have emerged from hiding among the common C + orange *Lecanora expallens* and *Pyrrhospora quernea*. Species such as *Lecanora compallens* and *Lecanora barkmaniana* have come to attention through work in the Netherlands and are not species associated with high quality habitats. These are all Pd – species, but there is an apparent ancient woodland species with C –, Pd + yellow rapidly turning deep red-orange and K ± faint yellow reactions (fumarprotocetraric acid + atranorin), *Cliostomum flavidulum*, that is proving to be quite widespread. There is a danger of this species being overlooked, or misidentified, due the limited use of Pd in the field.

This species is normally sterile but fruiting occurs rarely; the fruits resemble those of *Cliostomum griffithii*, but are yellowish or often darkening with gray mottles to nearly black (McCune, 2004). The thallus is initially a pale white-grey, cracked areolate crust, which is sometimes, but not always, still visible at the edge of the thallus. The areoles, however, rapidly break down into fine farinose bright yellow-green soralia 16 – 60µ diameter forming a confluent sorediate crust. The yellow-green colour is much brighter than the dull yellow-green of *Pyrrhospora quernea* or the pale yellow of *Lecanora expallens* or *Lecanora compallens* and, with experience, is very distinctive. In the sites seen by the author, it frequently grew with *Pyrrhospora quernea* but never with *Lecanora expallens*, although Coppins & O'Dare (1993) recorded *Cliostomum flavidulum* with growing with the latter species. When growing together with *Pyrrhospora quernea*, the much finer nature of the soralia of *Cliostomum flavidulum*, compared the course granules of *Pyrrhospora quernea* is easily seen. The thalli are, as described by Coppins & O'Dare (1993), mostly less than 1cm diameter, but can sometimes extend up to 10cm across.

The species was first described by Hafellner & Kalb (1992) from Madeira, growing on bark of the introduced conifer *Cryptomeria* but the synonym *Lecanora navarrensis* (Etayo, 1993) was described from *Prunus lusitanica* in Spain. In the Pacific NW of America it is recorded as common on conifers in the western Cascade Range (McCune, 2004). An internet search indicates it also been recorded from *Quercus* in Estonia, *Quercus*, *Picea* and *Tsuga* in Sweden and *Carpinus* in France. In Britain the author has found *Cliostomum flavidulum* to be characteristic of acidic lower trunks on mature broad leaved trees including Oak *Quercus robur & Q. petraea*, Beech *Fagus sylvatica*, Alder *Alnus glutinosa* and Sweet Chestnut *Castanea sativa*. It has also been recorded once from shrubby Sallow *Salix cinerea*. It is largely absent from the most strongly acidic communities (*Parmelion laevigatae & Pseudevernion furfuraceae*) and is most frequent in acidic variants of the *Pertusarietum amarae* on shaded trees, the *Parmelietum revolutae* on better lit trees and also spreads into the *Lecanactidetum abietinae* on the drier sides of trees. Sample quadrats are given in Table 1. In the north of its range, in the south western Highlands, *Cliostomum flavidulum* appears to be more frequent in dry bark (*Lecanactidetum abietinae*); here both the *Pertusarietum amarae* and the *Parmelietum revolutae* associations tend to be displaced by moss dominated communities on the trunks of woodland trees. It has also occasionally been found on oak lignum, both natural and on fence rails. It has been found on moderately shaded trees in open woodland through to well lit woodland edge or glade trees. Coppins & O'Dare (1993) recorded it from parkland oaks and it has also been recorded from fencing rails in a deer park.

So far *Cliostomum flavidulum* has only been found in ancient woodland or old parklands but it is not an old growth dependant species (old growth defined as stands over 200 years old (Alexander et al, 2002)). It can be quite frequent in disturbed mature stands dating from the early 19th century in the New Forest and has been found in heavily disturbed stands with a few ancient trees elsewhere in southern England. As an old woodland species, it appears to have a similar tolerance to disturbance as *Arthonia vinosa*, although this is a species of somewhat less acidic bark. Like *Arthonia vinosa*, *Cliostomum flavidulum* may become more restricted to old growth stands to the north of its range.

This species is likely to be quite widespread but to date it has confirmed records from the following 10km national grid squares:

H/32, Crom Castle, VC H33 Fermanagh, lower trunks of parkland oaks, B J Coppins & A. M. O'Dare, 1993. **RBG**.

16/71, Balnabraid Glen, VC101 Kintyre, on sallow in wet woodland in pasture woodland habitat, N A Sanderson 2004.

16/75, Gleann Dudh, Ardpatrick Point, West Loch Tarbert, VC101 Kintyre, dry bark on old *Quercus* exposed coastal *Quercus – Betula* pasture woodland, N A Sanderson 2004.

16/77, Ardnafrain & Abhainn Mhor, Ellary, VC101 Kintyre, on dry bark on old Alnus in *Corylus– Fraxinus* pasture woodland & open *Alnus – Fraxinus – Betula – Corylus* pasture woodland, both in valley bottoms, N A Sanderson 2004. Includes fertile material. Herb. Sanderson 667 & 832.

20/77, Holne Chase Wood, Dartmoor, VC S. Devon, *Quercus & Tilia*, V Giavarini, 2000. **RBG**.

31/74, Great Bradley Wood, Longleat meta-site, VC8 S. Wilts, mesic bark of post mature *Quercus* in high forest derived from coppice, N A Sanderson, 2004. Herb. Sanderson 657.

37/49, Dinnet Oakwood NNR, VC92 South Aberdeen, on *Quercus* at edge of *Alnus* area, Coppins, O'Dare & Kantvilas, 20/11/1994, Coppins 16571 **RBG**.

40/29, Avon Water, New Forest, VC11 S. Hants, *Quercus* in ancient flood plain pasture woodland, absent from adjacent recent woodland, N A Sanderson, 2006.

41/10, Red Shoot & Pinnick Wood, New Forest, VC11 S. Hampshire, *Quercus* in pasture woodland, N A Sanderson & B Edwards, 2005.

41/20, nine woods in the New Forest, VC11 S. Hants, *Fagus & Quercus* bark & *Quercus* lignum in pasture woodland and oak plantations reverting to pasture woodland, N A Sanderson, A M Cross, B Edwards & K Sandell, 2003 – 2005. Herb. Sanderson 614 & 655.

41/21, seven woods in the New Forest, VC11 S. Hants, *Fagus & Quercus* bark, pasture woodland, N A Sanderson, 2004 – 2006.

41/30, ten woods in the New Forest, VC11 S. Hants, *Fagus & Quercus* bark & *Quercus* lignum, pasture woodland, N A Sanderson & A M Cross, 2003 – 2006. Fertile at Gritnam Wood. Herb Sanderson 514 & 654.

41/31, Busketts Wood, New Forest, VC11 S. Hants, *Quercus*, pasture woodland, N A Sanderson, 2004.

41/63, Plash Wood, Rotherfield Park, VC12 N. Hants, old *Quercus* standard in neglected coppice within old deer park, N A Sanderson, 2004. Herb Sanderson 662.

41/71, Pads Wood, Up Park, VC13 W. Sussex, old acid *Quercus* at edge of wood & one sweet chestnut, old over stood coppice adjacent to old deer park, N A Sanderson, 2005.

41/83, Holly Hills, Woolmer Forest, VC13 W. Sussex (modern Hampshire), old *Quercus* on edge of *Quercus – Ilex* pasture woodland on common, N A Sanderson, 2006.

51/01, Parham Park, VC13 W. Sussex, on lignum on species rich post and rail fencing, old deer park, N A Sanderson & Sussex Lichen Recording Group, 2003. Herb. S Davey.

Cliostomum flavidulum has not been seen, when looked for by the author, in lichen rich woods in Scotland north and east of Ellary, in Knapdale, which were in very high rainfall areas or were high altitude woods; woods in very high rainfall areas about the Rhinogs, North Wales and numerous old field trees and disturbed young growth woodlands in Hampshire. Together with the positive discoveries, this suggests *Cliostomum flavidulum* is likely to be widespread in lowland woods in oceanic and sub-oceanic areas. The occurrence in Dinnet Wood, Aberdeenshire reflects discoveries of this species in Sweden and Estonia, which show that this is not a strongly oceanic species.

In Woods & Coppins (2003) it was listed as a Data Deficient Red Data Book species and as Nationally Rare. While writing this article, the sixteenth British 10km national grid square record was made; so the species is now Nationally Scarce. Its shear abundance in the New Forest, and its occurrence in maturing young growth stands elsewhere in southern England, suggests that this species is not under threat and it is recommended it is removed from the Red Data Book in the next revision.

Table 1, Quadrats from a range of habitats with *Cliostomum flavidulum*, all 2004

Species	BW	WW	DN1	DN3	QB1	E12	DN2
Lichens							
Abrothallus microspermus	2						
Anisomeridium ranunculosporum			1		1		
Arthonia spadicea			2	2			
Arthonia vinosa			1	1			
Chrysothrix candelaris			1	1			

Cladonia species	3						
Cliostomum flavidulum	4	6	6	3	6	4	2
Cliostomum griffithii	2		4			3	
Enterographa crassa			1	1			
Flavoparmelia caperata	6						
Graphis elegans		2					
Lecanactis abietina			1	6	5	6	
Lecanora compallens							2
Lecanora pulicaris							1
Lepraria species	2			1	4	5	
Loxospora elatina				2			
Melanelia fuliginosa glabratula	2						
Mycoblastus fucatus							5
Mycoporum antecellens		1					
Ochrolechia subviridis							2
Parmelia saxatilis	4					4	
Parmotrema reticulatum	5						
Pertusaria hymenea		2		4			
Pertusaria pertusa			2				
Phaeographis dendritica			2				
Phlyctis argena	2			4			
Pyrrhospora quernea		2	3	3	2		
Schismatomma decolorans							2
Schismatomma niveum	5	6	7	5	7		
Skyttea nitschkei		2					
Thelotrema lepadinum	2	5			1		
Trapeliopsis flexuosa						1	
Usnea cornuta	1						
Mosses							
Hypnum andoi		5				5	
Hypnum resupinatum			1				
Number of species	13	9	13	12	7	7	6
Community	Pam	Pert	Pert	Pert /Lec	Lec	Lec	Dead

Quadrat BW
Community *Parmelietum revolutae* (Parm)
Location Busketts Wood, New Forest
Grid Ref SU31037 11188 ±9
Substrate Shedding *Quercus* bark
Habitat *Quercus* on edge of large glade in pasture woodland
Girth (m)

Quadrat size (cm)	30 x 30
Quadrat	WW
Community	*Pertusarietum amarae* (Pert)
Location	Whitley Wood, New Forest
Grid Ref	SU29746 05256 ±9m
Substrate	Water shedding *Fagus* bark
Habitat	Old *Fagus* in PW
Girth (m)	2.42
Quadrat size (cm)	30 x 30
Quadrat	DN1
Community	*Pertusarietum amarae* (Pert)
Location	Drivers Nursery, New Forest
Grid Ref	SU28744 04993 ±13m
Substrate	Water shedding *Quercus* bark
Habitat	Old *Quercus* in plantation reverting to pasture woodland
Girth (m)	2.48
Quadrat size (cm)	30 x 30
Quadrat	DN3
Community	*Pertusarietum amarae/Lecanactidetum abietinae* (Pert/Lec)
Location	Drivers Nursery, New Forest
Grid Ref	SU28693 05007 ±7m
Substrate	Edge of dry bark on *Quercus*
Habitat	Old *Quercus* in plantation reverting to pasture woodland
Girth (m)	3.02
Quadrat size (cm)	30 x 30
Quadrat	QB1
Community	*Lecanactidetum abietinae* (Lec)
Location	Queens Bower, New Forest
Grid Ref	SU28684 04469 ±11m
Substrate	Dry *Quercus* bark
Habitat	Old *Quercus* in pasture woodland
Girth (m)	2.07
Quadrat size (cm)	20 x 40
Quadrat	E12
Community	*Lecanactidetum abietinae* (Lec)
Location	Ellary, Knapdale

Grid Ref	NR73125 75330 ±19m
Substrate	Dry side of old *Alnus*
Habitat	*Corylus – Fraxinus* pasture woodland in valley bottom
Quadrat size (cm)	20 x20

Quadrat	DN2
Community	Dead wood (Dead)
Location	Drivers Nursery, New Forest
Grid Ref	SU28716 04890 ±9m
Substrate	Horizontal *Quercus* lignum
Habitat	Fallen *Quercus* limb
Quadrat size (cm)	30 x 30

Acknowledgements

Thanks are due to Brian Coppins for first identifying *Cliostomum flavidulum* for me and for providing details of his records of this species and to Mark Seaward for providing 10km grid square distribution data

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Kalb, K. & Hafellner, J. (1992) Bemerkenswerte Flechten und lichenicole Pilze von der Insel Madeira. *Herzogia* **9**: 45-102.

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ROCK POROSITY AND LICHEN GROWTH

During an investigation of lichens growing on rock shelters at Bhimbetka World Heritage Zone in Central India, the porosity of sandstone rocks was determined using a water absorption technique. Rock samples were dried and weighed, immersed in water, left for a specific time and weighed again. The process was repeated until a constant weight was reached. The water uptake capacity of rocks was correlated with the type of lichen growth. Leprose *Lepraria* and *Cryptothecia* lichen species with a thin medullary crust spreading over rocks had the lowest water uptake capacity ranging from 100-160 ml. Uptake capacity in crustose *Buellia, Rinodina* and *Staurothele* species ranged from 160-220 ml. In squamulose *Caloplaca, Endocarpon, Peltula* and *Phylliscum* taxa with a thick medulla, uptake capacity ranged from 180-250 ml. Porosity ranged from 170-275 ml in foliose *Collema* and *Dirinaria* species with thin thalli growing on rocks and from 260-320 ml in thick *Parmotrema* and *Pyxine* species growing on rocks.

Porosity, together with roughness, moisture and the chemical composition of the substratum plays an important role in colonization of the flora. Total effective pore volume and pore size distribution are the two major aspects of porosity controlling the amount of water that can be held by a rock. Non-porous rocks have hardly any water holding capacity. Rocks with relatively large pores do absorb water to a greater degree, but are poor retainers as gravitational flow and the faster evaporation rate due to the greater exposure of water film to air rapidly removes the water. Rocks with smaller pores are more efficient retainers because of the effective capillary action and lesser surface exposure of water to air, and hence lower evaporation rate.

Acknowledgements

Grateful thanks to William Purvis for commenting on an earlier version of this manuscript.

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LITERATURE PERTAINING TO BRITISH LICHENS - 38

Lichenologist **37**(5) was published on 21 September 2005, **37**(6) on 7 November 2005, and **38**(1) on 9 January 2006.

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

NB. 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.

ARUP, U 2006. A new taxonomy of the *Caloplaca citrina* group in the Nordic countries, except Iceland. *Lichenologist* **38:** 1–20. **Caloplaca arcis* (Poelt & Vězda) Arup [*Caloplaca* "sp. A" of British lichenologists] and the newly described *C. dichroa* Arup [see 'New, rare & interesting lichens' in this issue] are both known from Britain. Descriptions are also provided for *C. citrina* s.str. and *C. phlogina*, and a key to *Caloplaca* species with yellow or orange soredia includes all such [described!] sorediate British species. [NB: at least some of the material referred to *C. britannica* by Aptroot & van Herk (*Lichenologist* **36:** 261–263, 2004) probably belongs to *C. arcis*;, unfortunately, comparisons with *C. britannica* were not discussed by Arup.]

BRODO, I M & APTROOT, A 2005. Corticolous species of *Protoparmelia* (lichenized Ascomycotina) in North America. *Canadian Journal of Botany* 83: 1075–1081. Includes descriptions, illustrations and a key for three species, all of which occur in Europe, although *P. hypotremella* has yet to be found in the British Isles. Hyaline appendages on the ends of the ascospores of *P. hypotremella* and *P. ochrococca* are reported, but fertile material of *P. oleagina* was not studied. [The key is misleading in saying that *P. oleagina* is "not parasitized by *Sphinctrina* [*anglica*]" – this is true for North America, but not for Europe, where it is found on both *P. hypotremella* and *P. oleagina* (cf. p 1080.]

COPPINS, A M 2005. Wildlife reports: Lichens. *British Wildlife* **17:** 136–138. Continuations of the thrice yearly column on the latest discoveries and developments in British lichenology; includes photos of *Enterographa pitardii*, *Pyrenula hibernica*, and some 'Lichen apprentices' in action. There are also new reports, such as, for Britain of *Acrocordia subglobosa*, *Enterographa pitardii* and *Strigula muscicola*, for

the Cairngorms of *Catolechia wahlenbergii* and *Stereocaulon spathuliferum*, and for Wales of *Mycomicrothelia atlantica* and *Pyrenula hibernica*.

COSGROVE, P., AMPHLETT, A, ELLIOT, A, ELLIS, C, EMMETT, E, PRESCOTT, T & WATSON FEATHERSTONE, A 2005. Aspen: Britain's missing link with the boreal forest. *British Wildlife* **17:** 107–115. Includes a section on lichens [pp 111-112, by Chris Ellis] and photos of *Candelariella superdistans* and *Schismatomma graphidioides*.

CZARNOTA, P & COPPINS, B J 2005. A second *Micarea* with a hypothecial K+ violet pigment. *Lichenologist* **37:** 477–479. A new species, *Micarea hypoviolascens* Czarnota & Coppins, is described from Argyll, where it grew on the lignum of a stump.

DARTMOOR NATIONAL PARK AUTHORITY 2005. *Mosses & Lichens*. Dartmoor Pocket Guides. Yelverton: Dartmoor National Park Authority. A 6-sided, fold-out, laminated, illustrated guide to 18 bryophytes and 19 lichens, with colour illustrations by Carol Mullin. For further inforamation contact the DNPA at High Moorland Visitor Centre, Old Duchy Hotel, Princetown, Yelverton, Devon, PL20 6QF; tel. 01822 890414; or visit www.dartmoor-npa.gov.uk.

ELLIS, C J, CRITTENDEN, P D, SCRIMGEOUR, C M & ASHCROFT, C J 2005. Translocation of ^{15}N indicates nitrogen recycling in the mat-forming lichen *Cladonia portentosa*. *New Phytologist* **168:** 423–434. This study, carried out on blanket mire in Caithness, supports the postulation that internal N recycling explains the ecological success of mat-forming lichens.

ENVIRONMENT AGENCY WALES. *The River Jelly Lichen*. Cardiff: Environment Agency Wales. A 6-sided (folded A4), colour leaflet on *Collema dichotomum*.

ERTZ, D, CHRISTNACH, C, WEDIN, M & DIEDERICH, P 2005. A world monograph of the genus *Plectocarpon* (*Roccellaceae*, Arthoniales). *Bibliotheca Lichenologica* **91:** 1–155. Of the 32 accepted species, which are all provided with full descriptions, illustrations and world distribution maps, two occur in the British Isles: *Plectocarpon lichenum*, on *Lobaria pulmonaria*, and *P. scrobiculatae*, on *L. scrobiculata*. *Plectocarpon sampaianae* is transferred to *Arthonia* as *A. sampaianae* (Diederich & Etayo) Ertz & Diederich.

ERTZ, D & DIEDERICH, P 2004. Revision of *Trimmatothele* (Verrucariaceae), and a description of *Oevstedalia* for *Trimmatotheliopsis antarctica*, a new lichen genus with

true ascoconidia. *Mycological Progress* **3:** 229–236. *Trimmatothele perquisita* is considered to be a *Verrucaria* with multi-spored asci, and is transferred to that genus as *V. perquisita* (Norman) Ertz & Diederich. Photographs, line drawings and a world distribution map are included, as well as a full description. Two British specimens are cited.

GIAVARINI, V J 2005. Wildlife reports: Lichens – Oliver Gilbert 1936–2005. *British Wildlife* **16:** 442. A personal tribute to Oliver Gilbert, including a portrait photo taken at Stonehenge.

GILBERT, O L 2004–2005. Wildlife reports: Lichens. *British Wildlife* **16:** 139–140 (2004) [previously erroneously cited by me as vol 15]; **16:** 288 (2005). The first is a continuation of the thrice yearly column on the latest discoveries and developments in British lichenology; the latter, owing to the author's illness, is an extract from his book *The Lichen Hunters*, entitled 'The six stages of Lichenology'. [See also Coppins, A M 2005 and Giavarini 2005, above.]

HAFELLNER, J 2006. Lecideoid lecanoralean ascomycetes invading *Rhizocarpon* subgen. *Rhizocarpon* taxa, with special emphasis on cryptothalline species. *Fritschiana* **52:** 31-48. The key includes five species known from the British Isles, including the recently discovered *Miriquidica intrudens*.

LONG, D & WARD, S 2005. *Strategy for the Conservation of Lower Plants and Fungi in Scotland.* Stirling: Plantlife International on behalf of Plantlife Link Scotland. ISBN 1-904749-17-8. Pp 20. The strategy outlines 10 targets with 37 actions to carry forward the conservation of cryptogams in Scotland [and elsewhere for that matter]. In addition, this booklet is attractively produced with several colour photos of lichens and lichenologists in action.

MASSON, D 2005. Taxinomie, écologie et chorologie des espèces françaises des genres *Hypotrachyna* et *Parmelinopsis* (Acomycota lichénisés, Parmeliaceae. *Cryptogamie, Mycologie* **26:** 205–263. This detailed treatment includes a key to the 12 species of *Hypotrachyna* (9) and *Parmelinopsis* (3) known from Europe. All species are illustrated with black and white photos. The problematic generic status of *H. britannica* and *H. revoluta* is emphasized. Similarly, the problems of confusion between *H. revoluta* and *P. afrorevoluta*, with comment that the latter is certain to occur in the British Isles.

NORDIN, A & TIBELL, L 2005. Additional species in *Tetramelas*. *Lichenologist* **37:** 491–498. The lichenicolous lichen *Buellia pulverulenta* is transferred to *Tetramelas* as *T. pulverulentus* (Anzi) A. Nordin & Tribell.

OTTE, V, ESSLINGER, T L & LITTERSKI, B 2005. Global distribution of the European species of the lichen genus *Melanelia* Essl. *Journal of Biogeography* **32:** 1221–1241. A phytogeographical study of European species of *Melanelia* s.lat. (incl. species of *Melanelixia* and *Melanohalea*), giving global distribution maps for all species. [Unfortunately the maps are not complete: the erroneous early report of *M. glabra* from Scotland has been perpetuated, and there are no dots for *M. commixta* and *M. hepatizon* in the British Isles, even though both species are reported from England and Wales as well as being locally common in the Scottish Highlands!]

PLANTLIFE 2001. *Churchyard Lecanactis: old walls can harbour secrets*. Back from the Brink Management Series. London: Plantlife. A 4-sided (folded A4), colour leaflet on the importance and management of the walls of old buildings (especially churches) with respect to rare lichens.

RANDLANE, T & SAAG, A 2005. Distribution patterns of primary and secondary species in the genus *Vulpicida*. *Folia Cryptogamica Estonica* **41:** 89–96. Includes world distribution maps of *V. juniperinus* and *V. pinastri*.

SEAWARD, M R D 2005. Lichens. In CRAWLEY, M J (ed.) *The Flora of Berkshire:* 1241–1255. Harpenden: Brambleby Book. This chapter supplements the lichen flora of the county (VC 22) detailed by Bowen (*Lichenologist* **12:** 199–237), updating distributional data, and indicating major changes in the status and ecology of particular species. The updating also includes much additional historical information, especially that gleaned from study of the lichens at the Oxford University Herbarium (OXF). The total of lichen taxa recorded from the county is 361, with 346 recorded in recent years.

SEAWARD, M R D 2005. Mosses, liverworts and lichens. *Trans. Lincs. Nat. Un.* **26:** 110–112. Additional records for Lincolnshire (VCs 53 & 54). Some environmental improvement is shown by the increasing occurrence of *Lecanora chlarotera* and *Lecidella elaeochroma* on young trees throughout the county.

SEAWARD, M R D, HENDERSON, A & HITCH, C J B 2005. Lichen flora of the West Yorkshire conurbation – supplement VII (1999–2004). *The Naturalist* **130:** 93–97. This brings the total lichen list for the conurbation to 373 taxa, 260 having been recorded in the present survey (1967–2004). A marked improvement in the epiphytic lichen flora is noted, and exemplified by Sarah Dalrymple's undergraduate study of

trees in south-western Bradford, where she found 28 lichen species, compared to just the two known in the same area in 1967.

SÉRUSIAUX, E, BERGER, F, COPPINS, B J & ROUX, C 2005. A further new species of *Strigula* from Europe. *Lichenologist* **37:** 481–483. **Strigula muscicola* F. Berger, Coppins, Cl. Roux & Sérus. is desribed from Austria, Norway and Scotland (South Aberdeenshire).

SPALDING, A 2005. The nature-conservation value of abandoned metalliferous mine sites in Cornwall. *British Wildlife* **16:** 175–183. Includes (pp 180–181) a short section on lichens, listing some of the notable species to be found.

THELL, A, HERBER, B, APTROOT, A, ADLER, M T, FEUERER & KÄRNEFELT, I 2005. A preliminary phylogeographic study of *Flavopunctelia* and *Punctelia* inferred from rDNA ITS-sequences. *Folia Cryptogamica Estonica* **41:** 115–122. Includes further confirmation that *Punctelia subrudecta* and *P. ulophylla* are distinct species.

VAN DEN BOOM, P P G & BRAND, A M 2005. *Lecania fructigena* Zahlbr., a coastal saxicolous lichen, new for Europe, with notes on related species. *Lichenologist* **37:** 277–283. **Lecania fructigena* Zahlbr. (1914) is newly reported from the British Isles (Cornwall), but has been confused with *L. aipospila* [and so may be much more widely occurring on the coast of Britain and Ireland]. A key to coastal *Lecania* species is provided.

WATERFIELD, A 2005. Lichens in London, 2004. *The London Naturalist* **84:** 217–218. A look back at a year's lichenology in London, including brief reports of the so far unpublished studies by Linda Davies and René Larsen on epiphytic lichens in relation to air quality.

ZHURBENKO, M P & TRIEBEL, D 2005. *Lasiosphaeriopsis pilophori* sp. nov. (Sordariales) and other lichenicolous fungi on *Pilophorus*. *Mycological Progress* **4:** 317–323. A table of diagnostic characters within *Lasiosphaeriopsis* includes the two British species, *L. salisburyi* and *L. supersparsa*. It is suggested that *Cercidospora decorella* and *C. punctillata* (Nyl.) R. Sant. (syn. *C. lichenicola*) maybe conspecific, in which case the latter name would have precedence.

Brian Coppins

ASPECT PREFERENCES OF A *TELOSCHISTES CHRYSOPHTHALMUS* POPULATION GROWING ON CEMENT PLASTER IN THE URBAN ENVIRONMENT OF LA PLATA (BUENOS AIRES PROVINCE, ARGENTINA).

Teloschistes chrysophthalmus (L.) Th. Fr., is a well-known widespread fruticose lichen in warm temperate areas. In a recent study it was found growing on the cement plaster of the top of the wall of the terrace of a private house in La Plata (Buenos Aires Province, Argentina), and determined by keys (Ferraro, 1979, Osorio, 1977, Poelt, 1970, Scutari & Teinhardt, 2001)

The house which was built in 1954, is located in the centre of the town, by a busy street, and is orientated in a north-south direction. This orientation provides an opportunity to investigate preferences to exposure on different aspects of the walls, taking into account fertile and sterile specimens.

TABLE 1- Distribution pattern and percentage of *Teloschistes chrysophthalmus* growing on a terrace wall of La Plata., Argentina.

	Fertile	**Sterile**	**Total**	**Density IND/m**	**%fertile specimens (in sector)**
N	16	50	66	11	24.2
S	3	16	15	2,14	20
E	15	18	33	3,3	45
W	26	5	31	5,1	83
TOTAL	**60**	**89**	**145**	**5**	**41**

The highest number of individuals and density were found on the wall with a north-facing aspect. This indicates that *T. chrysophthalmus* is a thermophilous, photophilous species, although the number and percentage of fertile specimens is greatest on the wall with the west aspect.

But the most striking fact is that these specimens have been found in an urban area on a cement plaster substratum, because, according to Poelt 1979, the only *Teloschistes* species that can also grow on rocks is *T. exilis* (Michaux) Vainio, but it is round in section and so is different from *T. chrysophthalmus*, which has flat laciniae. According to the British Lichen Checklist, *Teloschistes flavicans* is also present in England.This species grows on maritime rocks (P. Lambley *pers. com.*)

T. chrysophthalmus is a corticolous species (Ferraro 1978, Osorio1977, Poelt 1979) and the literature and Internet searches to find records of this lichen on man made substrata had no results (Recent Literature on Lichens database). Recently, it has been found growing on painted metal from a road bridge in a rural area (Rosato, 2003). However in this case it was found in the centre of the town. It is probable that the higher pH of the substratum acts as a buffer, allowing the lichen to tolerate the polluted environment.

Acknowledgements

This work was partially funded by CONICET by Res. 1101/04.

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Osorio, H..S. 1977. Apuntes de liquenología y clave para los géneros de líquenes delso alrededores de Buenos Aires. *Notas botánicas, Sociedad Argentina de Botánica.!:* 1-40

Poelt, J., 1969- *Bestimmingschlüssel der europäischer Flechten.* (Cramer, Lehre).

Rosato, V. G., 2003- Lichens found on "La Postrera" Bridge across Salado River, Chascomús (Buenos Aires Province). IN: *"Microbial Impact on Building Materials." Proceedings of the International RILEM Conference, 8-9 September 2003, Lisbon, Portugal.* (M. Ribas Silva, Ed.): 77-83Scutari N.C., Teinhardt N.I. 2001- Identification of urban lichens in the field: a case study for Buenos Aires city (Argentina). *Mycotaxon* 80:227-445.

http://www.thebls.org.uk/checklist.html
http://www.nhm.uio.no/botanisk/lav/RLL/RLL.HTM (Recent Literature on Lichens Database)

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'SHETLAND LICHENS' PUBLISHED
A REVIEW

This is the latest county/regional Flora to be published and as such covers an area of particular biogeographical interest - the northern-most islands of the British Isles. Islands are always an attraction to lichenologists and now we have good accounts from both extremes - the Scilly Islands and the Shetlands, plus many which lie in between.

Although as stated in the introduction this account is aimed primarily at Shetland residents and visitors, it is intended to be equally suitable as a not-too-heavy introduction for beginners in many other parts of the British Isles. The overall emphasis is directed to assisting interested, though not yet knowledgeable students of lichenology. This is a different emphasis from most Floras, where it is assumed that readers are well aquainted with lichens.

The first half of the book (to page 61) provides the essential background to structure, morphology and reproduction, with short but informative and well illustrated outlines of the main lichen habitats in Shetland. The latter differ somewhat from those dominant in southern Britain, especially of course through the relative scarcity of trees. In compensation there is a wonderfully varied coastline - about 1500 km in length, and ranging from sheltered voe heads to some of the most wave-exposed shorelines to be seen in Britain. Habitat photographs are used to illustrate zonation, on coastal rocks and to highlight competition between crustose lichen thalli, as seen for example on sandstone gravestones, which illustrate this so well. The authors also note that the varied geology of the Shetlands with sandstone, serpentine and other metamorphic rocks provides opportunities for students and others to investigate the relationship between species diversity and the mineralogical composition of the various outcrops. Biogeography and biodiversity is discussed from a Shetland viewpoint, with a section on conservation and collecting. There is also a useful account of the history of the study of lichenology in the islands.

A core part of the book is to provide the beginner with the basic information on lichens and their structures. There are no keys but they do outline how a beginner may start to name his lichens with a selection of useful introductory books (pp 21 - 22). For those who are already familiar with Claire Dalby's work on the two Natural History Museum wall charts and elsewhere, it is not surprising that illustrations are a highlight of this book. Her fine line drawings and paintings are used to illustrate anatomy and in some cases whole specimens like that of *Anaptychia runciata* and differences between two species eg *Ramalina siliquosa* and *R. cuspidata*. They portray shapes and form so much more efficiently than ever detailed descriptions do. The photographs are of a high standard and include less often pictured species such as

Belonia nidarosienis, Lecanora farinaria and *L. zosterae*.

The second part of the book contains summaries of all the species understood to have been recorded from the islands at the time of writing. There is a list of the islands where they are found and an indication of the habitats. Distribution is based on the islands where the species occur, rather than 10 km squares. For those not familiar with the islands it would have been helpful here if there had been a map with the islands named and the main place names given. There is useful information on status and where appropriate the authors make it clear that some records are dubious and some are wrong. Because of the geographical position of the islands and the lack of some substrates, species sometimes occur on unusual surfaces. In this context it is good to see that habitat information is based on the authors observations rather than taking accounts from standard works. Species nomenclature throughout the book follows the standard British Lichen Flora (Purvis et al., 1992) but include synonyms given by Coppins (2002.

It is often said that a flora is out of date the day it is published but in this case the authors are aware of the gaps and make the point that there is great scope for more fieldwork here and the map on p. 56 helps to identify understudied areas.

This is an attractive publication which is well bound. It fills a much needed gap in the development of county and regional floras. However, perhaps its greatest achievement will be to encourage many more lichenologists to make that trek north to extend our knowledge of these fascinating islands. Perhaps even more importantly it should encourage home grown talent. The authors are to be congratulated on producing a book which attempts to do this in such an attractive and informative way.

"Shetland Lichens" by Kery (Dr D.H.) Dalby and Claire Dalby, can be obtained by ordering from the Shetland Biological Records Centre, Shetland Amenity Trust, Garthspool, Lerwick, Shetland ZE1 0NY, price £15 (p&p within the UK included).

References

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Purvis, O.W., Coppins,B.J., Hawksworth, D.L., James, P.W.. and Moore, D.M. (1992). The Lichen Flora of Great Britain and Ireland. Natural History Museum and British Lichen Society.

Peter Lambley

MENNEGAZZIA SUBSIMILIS (H. MAGN.) R. SANT. NEW TO THE BRITISH ISLES

Menegazzia subsimilis is recorded here from Ireland, Scotland, Wales and England. This species has elevated lacerate, funnel-shaped soralia with flange-like margins (Bjerke, 2003), which distinguishes it from *M. terebrata* (Hoffm) A. Massal. *Menegazzia subsimilis* was originally described from Hawaii, but recent studies have shown that it is a widespread species, having a preference for humid, lush sites. These new records from the British Isles fill a gap in its European distribution. In western Europe it is known from Portugal (both mainland and the Azores) to south-western Norway, see also Clerc (2004). Only old collections were found from Wales and south-west England. It should be searched for at the England and Wales sites listed above to see if it still occurs there. Its conservation status in the British Isles is not yet settled, but it may very well be that it should be included in the forthcoming red lists for Great Britain and Ireland. In the most recently updated red list of threatened species from Sweden, *M. subsimilis* is in the category *'Regionally extinct'*. I thank P Wolseley for assistance in interpreting the locality names on the old handwritten labels. My visit to the BM was financially supported by SYNTHESYS, EU's programme for taxonomic research.

The following collections are all in Herb BM: (i), On shaded rocks, Minnamore, Dingle, VC H1, South Kerry, February 1965, PW James; (ii) On *Betula*, Upper Druimfin, Tobermory, Mull, VC 103, Mid Ebudes, GR 17/52-53-, May 1968, P W James s.n.; (iii) Aros, Tobermory, Mull, VC 103, Mid Ebudes, GR 17/507.547, May 1968, P W James s.n.; (iv) On *Fraxinus*, Aros Woods, Tobermory, Mull, VC 103, Mid Ebudes, June 1958, U K Duncan; (v) near Rubha an Daimh, northern side of Loch Sunart, VC 97, Westerness, GR17/747.617, July 1966, L Kendrick s.n.; (vi) near Rubha an Daimh, northern side of Loch Sunart, VC 97, Westerness, GR17/747.617, July 1966, P W James s.n.; (vii) Salen, Ardnamurchan Peninsula, VC 97, Westerness GR 17/689.647, July 1966, P W James s.n.; (viii) Port na h-Uamha, Sunart, VC 97, Westerness, GR17/735.632, July 1966, P W James s.n.; (ix) Barmouth, VC 48, Merionethshire, Sine annuum. H B Holol s.n. (ex herb. W Joshua); (x) Foot of Snowdon, VC 49, Caernarvonshire, 1849. Sine coll. (ex Ed Forster's herbarium); (xi) Near Hendre, Mynach, Barmouth, VC 48, Merionethshire, H B Holl s.n.; (xii) rosemadris Cliff, near Penzance, VC 1, West Cornwall, May 1872, W Curnow s.n.; (xiii) Cushenden, Antrim, Ireland. Sine annuum. D Moore s.n. (ex herb I Carroll); (xiv) Kein-an-Eigh, Cork Ireland, 1874, I Carroll s.n. **BLS No 2447.**

References

Bjerke, J W (2003), *Mennegazzia subsimilis*, a wide-spread sorediate lichen. *Lichenologist* **35**: 393-396

Clerc, P (2004) *Meylania* **29**: 11-19

Jarle Werner Bjerke

LICHENS IN LITERATURE: 12

"*I could have written a book about every grass in the meadows, every moss in the woods, every lichen covering the rocks and I did not want to leave even one blade of grass or atom of vegetation without a full and detailed description*"
Jean-Jacques Rousseau, "**Reveries of the Solitary Walker**", Walk Five, 1776

We used to picnic where the thrift
Grew deep and tufted to the edge;
We saw the yellow foam flakes drift
In trembling sponges on the ledge
Below us, till the wind would lift
Them up the cliff and o'er the hedge.
Sand in the sandwiches, wasps in the tea,
Sun on our bathing dresses heavy with the wet,
Squelch of the bladder-wrack waiting for the sea,
Fleas round the tamarisk, an early cigarette.

From where the coastguard houses stood
One used to see below the hill,
The lichened branches of a wood
In summer silver cool and still;
And there the Shade of Evil could
Stretch out at us from Shilla Mill.
Thick with sloe and blackberry, uneven in the light,
Lonely round the hedge, the heavy meadow was remote,
The oldest part of Cornwall was the wood as black as night,
And the pheasant and the rabbit lay torn open at the throat.

John Betjeman **Trebetherick** - First two verses

Contributed by Peter Lambley

FIELD VISIT TO ATLANTIC COLLEGE, ST DONAT'S
Sunday 15 January

On the dry, cold morning of 15 January 2006, about 17 people met in the grounds of Atlantic College in the Vale of Glamorgan, 30 km west of Cardiff. Atlantic College is an international sixth form college; Dr James Mendelssohn, Head of Biology, kindly arranged access for us and accompanied us around the grounds. The college has a stunning location, centred on the medieval St Donat's Castle, and descending by terraced gardens to the Bristol Channel. Habitats studied include the walls of the castle, isolated trees, an apple orchard, a wooded valley, and St Donat's church. We recorded 121 lichens and 2 lichenicolous fungi. This is a respectable total for Glamorgan (V.C. 41), and notable records included *Caloplaca cirrochroa* on a wall, the large pycnidia of *Opegrapha areniseda* growing on the sandstone of the church doorway, and *Strigula taylorii* on ash in the wooded valley. Brian Coppins pointed out the tiny perithecia of an undescribed species of *Phylloblastia*, growing on the leaves of cherry laurel.

The only earlier lichen records for the site were made during a project by student Tunde Morakinyo in 1983; Tunde recorded *Ramalina fraxinea* (from sycamore) and *Thelotrema lepadinum* (on beech). Both these species are rare in Glamorgan. The records are supported by specimens in the National Museum of Wales, but these species were not refound on our visit. Some large trees have been lost since 1983, and one large beech is now covered with ivy; possibly *Thelotrema* grew here.

Alan Orange

Species recorded at Atlantic College, St. Donat's, by the British Lichen Society. Grid ref. 31/96; 15 January 2006.	
Acrocordia conoidea	walls
Agonimia tristicula	church
Amandinea punctata	*Malus,*
Anisomeridium polypori	*Fraxinus, Sambucus, Salix* in woodland
Arthonia punctiformis	*Malus,*
Arthonia radiata	*Fraxinus* in woodland
Arthonia spadicea	*Fraxinus* in woodland
Aspicilia calcarea	walls, church

Aspicilia contorta subsp. contorta	walls
Bacidia chloroticula	church: on bitumen paint of iron railing on boundary wall
Bacidia laurocerasi	*Fraxinus* in woodland
Belonia nidarosiensis	wall
Botryolepraria lesdainii	wall
Buellia aethalea	church
Caloplaca aurantia	walls
Caloplaca cirrochroa	walls, church
Caloplaca citrina	walls, church
Caloplaca crenularia	walls, church
Caloplaca dalmatica	walls, church
Caloplaca flavescens	walls, church
Caloplaca flavocitrina	walls, church
Caloplaca lenticularis	church
Caloplaca saxicola	church
Candelariella aurella	walls, church
Candelariella reflexa	*Salix*
Catillaria atomarioides	church
Catillaria lenticularis	walls
Cliostomum griffithii	*Malus, Fagus, Fraxinus*
Collema crispum	walls
Collema tenax	walls
Diploica canescens	walls, church (fertile)
Diploschistes scruposus	walls
Diplotomma alboatrum	walls, church
Dirina massiliensis f. sorediata	walls, church
Enterographa crassa	*Fagus, Acer pseudoplatanus, Fraxinus*, in woodland and near barracks
Evernia prunastri	*Malus, Sambucus, Salix*
Fellhaneropsis vezdae	*Salix*
Flavoparmelia caperata	*Fraxinus*
Fuscidea lightfootii	bark
Gyalecta truncigena	*Fraxinus*
Gyalideopsis anastomosans	*Acer pseudoplatanus, Salix* in woodland
Hypogymnia physodes	*Malus,*

Hypogymnia tubulosa	*Malus,*
Hypotrachyna revoluta	*Salix*
Lecania erysibe	church
Lecania rabenhorstii	church
Lecania turicensis	church
Lecanora albescens	walls, church
Lecanora argentata	*Malus,*
Lecanora campestris subsp. campestris	church
Lecanora chlarotera	*Malus,Fagus,*, ash
Lecanora confusa	*Malus,*
Lecanora crenulata	walls, church
Lecanora dispersa	walls, church
Lecanora expallens	sandstone on church; *Fagus*, in woodland
Lecanora gangaleoides	church
Lecanora muralis	paving slabs in terraced gardens
Lecanora polytropa	church
Lecidella elaeochroma f. elaeochroma	*Malus, Fagus,*
Lecidella scabra	church
Lecidella stigmatea	walls
Lepraria incana s. str.	sandstone on church; *Fagus*
Lepraria lobificans	walls, *Fraxinus*, *Salix*
Leproplaca chrysodeta	walls, church
Leproplaca xantholyta	church
Leptogium plicatile	church
Macentina stigonemoides	*Sambucus* in woodland
Melanelia fuliginosa subsp. glabratula	*Malus,*
Melanelia subaurifera	*Acer pseuodoplatanus*, *Salix* in woodland
Ochrolechia parella	walls, church
Opegrapha areniseda	church: sandstone of doorway on north wall
Opegrapha calcarea	walls, church
Opegrapha mougeotii	church: north wall
Opegrapha varia	*Sambucus* in woodland
Opegrapha vermicellifera	*Fraxinus* in woodland
Opegrapha vulgata	*Fraxinus* in woodland
Parmelia sulcata	*Malus, Fagus,*

Parmotrema perlatum	*Fagus*,
Pertusaria albescens var. corallina	*Fagus*,
Pertusaria amara f. amara	church, *Fagus*,
Pertusaria hymenea	*Fraxinus* in woodland
Pertusaria leioplaca	*Fagus*,
Pertusaria pertusa	*Fagus*,
Phlyctis argena	*Salix*
Phylloblastia sp.	leaves of *Prunus laurocerasus* near church
Physcia adscendens	*Malus*; walls, church
Physcia aipolia	*Malus, Fagus, Salix*
Physcia tenella subsp. tenella	*Malus, Fagus, Salix*
Porina aenea	*Acer pseudoplatanus* and *Fraxinus* in woodland
Porina borreri var. borreri	*Fraxinus* and *Hedera* in woodland
Porina linearis	walls
Porpidia platycarpoides	sandstone on church
Porpidia tuberculosa	church
Protoblastenia rupestris	church
Psilolechia lucida	church
Punctelia subrudecta s.str.	*Malus, Salix*
Punctelia ulophylla	*Malus*,
Pyrenula chlorospila	*Fraxinus* in woodland
Pyrenula macrospora	Isolated *Fagus*, and *Fraxinus* in woodland
Pyrrhospora quernea	*Fagus*
Ramalina canariensis	*Malus*,
Ramalina farinacea	*Malus, Fagus, Salix*
Ramalina fastigiata	*Malus, Fagus*, Salix
Rhizocarpon reductum	church
Strigula taylorii	quite common on *Fraxinus* in valley woodland
Telogalla olivieri	on *Xanthoria parietina* (lichenicolous fungus)
Tephromela atra	walls, church
Usnea cornuta	*Salix*
Usnea subfloridana	*Salix*
Verrucaria baldensis	church
Verrucaria calciseda	walls

Verrucaria elaeina	walls
Verrucaria fuscella	walls
Verrucaria hochstetteri	walls, church
Verrucaria macrostoma f. furfuracea	walls
Verrucaria macrostoma f. macrostoma	walls
Verrucaria muralis	walls, church
Verrucaria muralis	walls
Verrucaria nigrescens	walls, church
Verrucaria polysticta	church
Verrucaria viridula	walls
Weddellomyces epicallopisma	on *Caloplaca flavescens* (lichenicolous fungus)
Xanthoria parietina	walls, *Fagus*, *Salix*

NEW, RARE AND INTERESTING LICHENS

Contributions to this section are always welcome. Submit entries to Chris Hitch, Orchella Lodge, 14, Hawthorn Close, Knodishall, Saxmundham, Suffolk, IP17 1QY, in the form of species, habitat, locality, VC no, VC name, (from 1997, nomenclature to follow that given in the appendix, see BLS *Bulletin* **79**, which is based on the Biological Record Centre for instructions for Recorders, ITE, Monks Wood Experimental Station, Abbots Ripton, PE17 2LS, 1974). Grid Ref (GR) (please add letters for the 100km squares to aid BioBase and Recorder 2000 users), altitude (alt), where applicable in metres (m), date (month and year). NRI records should now include details of what the entry represents, eg specimen in Herb. E, Hitch etc., with accession number where applicable, field record or photograph, to allow for future verification if necessary or to aid paper/report writing. Determined/confirmed by, Comments, New to/the, finally Recorder. An authority with date after species is only required when the species is new to the British Isles. Records of lichens listed in the RDB are particularly welcome, even from previously known localities. In the interests of accuracy, the data should be on disc, with hard copy, or if not, then typescript. Copy should reach the subeditor at least a fortnight before the deadline for the *Bulletin* *Please read these instructions carefully as the order of entry has been slightly altered.*

New to the British Isles

Intralichen lichenicola (M. S. Christ. & D. Hawks.) D. Hawks. & M. S. Cole (2002): in ascomata of *Scoliciosporum umbrinum* on shard of slate in low tomb in cemetery,

Burrs Road, Clacton-on-Sea, VC 19, North Essex, GR 62(TM)/185.168, June 1994. Herb. P M Earland-Bennett. Confirmed by D L Hawksworth. See also under other records. Conidia arise as elongated chains of cells, 18-25 x 6-12 μ m. For full details see Hawksworth, D. L. & Cole, M. S. (2002) *Fungal Diversity* **11**: 87 – 97. **BLS No 2448**

P M Earland-Bennett

Mennegazzia subsimilis (H. Magn.) R. Sant. **BLS No 2447**. See account on p 46.

Other Records

Agonimia octospora: (i) on base rich bark of old *Quercus* in open woodland at the entrance to Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48 Merionethshire, GR 23(SH)/65-39-, September 2005. Herb. Sanderson 904; (ii) on base-rich bark of old *Quercus* on south slope of ravine, threatened by *Hedera* as wood recently fenced off from grazing, Coed Ganllwyd, VC 48 Merionethshire, GR 23(SH)/72-24-. New site records for this Near Threatened species. N A Sanderson

Anisomeridium viridescens: on old *Corylus* stem, in overstood *Corylus* coppice, Pads Wood, Up Park, VC 13, West Sussex, GR 41(SU)/78-16-, March 2005. Herb. Sanderson 851. New to Sussex. N A Sanderson

Arthonia astroidestera: on two suppressed young *Sorbus aucuparia* within ravine in *Betula – Quercus* woodland, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48 Merionethshire, GR 23(SH)/65-39-, September 2005. Herb. Sanderson 881. New to Merionethshire for this Near Threatened species. N A Sanderson

Arthonia invadens: parasitising *Schismatomma quercicola* on two *Betula*, one fallen, and probably dead, and one a suppressed young tree and an ancient *Ilex* within ravine in *Betula – Quercus* woodland, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48 Merionethshire, GR 23(SH)/65-39-, September 2005. Herb. Sanderson 888. First record for Wales for this Near Threatened species. N A Sanderson

Arthonia thelotrematis: parasitising *Thelotrema lepadinum* on an ancient *Ilex* with oceanic woodland in ravine, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48 Merionethshire, GR 23(SH)/66-38-, September 2005. First record for Wales for this little recorded parasite. N A Sanderson

Arthopyrenia analepta: with *Arthonia punctiformis* and *Cyrtidula quercus* on small twig of *Quercus* in wood, Campsey Ash, VC 25, East Suffolk, GR 62(TM)/317.552, January 2005. Herb. Hitch. Determined by B J Coppins. New to East Anglia.

P M Earland-Bennett

Arthopyrenia carneobrunneola: on a few old *Corylus* bushes in *Corylus – Fraxinus* ravine woodland, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48 Merionethshire, GR 23(SH)/66-39-, September 2005. Herb. Sanderson 896.1. First record for Wales for this highly oceanic species. N A Sanderson

Aspicila tuberculosa: on flint pebble in chalk grassland, with *Porpidia tuberculosa, Lecanora rupicola* and *Verrucaria nigrescens*. Butser Hill, Petersfield, VC 11 South Hampshire, GR 71(SU)/71-99-, alt 270m., April 1991, British Lichen Society Field Meeting. Herb. LSR B18.2000. Confirmed by B J Coppins. First record since *c.* 1830. A Fletcher

Bacidia circumspecta: on rain track of old *Fagus*, in *Fagus* - *Quercus* pasture woodland, Pound Hill, Mark Ash Wood, New Forest, VC 11, South Hampshire, GR 41(SU)/24-07-, March 2005. Herb. Sanderson 849. First record from the New Forest for several decades. N A Sanderson & A M Cross

Bacidia incompta: on two wound tracks on *Acer campestre* & *Aesculus* and inside a hollow *Acer campestre*, also a sterile thallus inside another hollow *Acer*, in former medieval deer park, Hurstbourne Park, VC 12, North Hampshire, GR 41(SU)/44-48-, & 41(SU)/44-47-, October 2005. Herb. Sanderson 915. First post Dutch Elm Disease record for North Hampshire, and one of the larger surviving populations known outside the New Forest. N A Sanderson

Bacidia saxenii: on top of softwood fence post beside dusty track by stone quarry, Alltgoch, Cwrtnewydd, VC 46, Cardiganshire, GR22(SN)/491.483, alt 170m, January 2005. Herb. SPC Confirmed by B J Coppins. New to the vice county.
S P Chambers

Bacidia subturgidula: on lignum inside hollow *Ilex*, in *Fagus – Quercus – Ilex* Pasture woodland, Pond Hill, Mark Ash Wood, New Forest, South Hampshire VC 11, GR 41(SU)/24-07-, January 2006. Herb Sanderson 949. The second modern, and fourth ever record, of this enigmatic species. This time it was found inside a shaded hollow *Ilex*, the first modern record was, in contrast, from decorticate sunny *Ilex* lignum. In the shade the thallus was greenish, rather than white as in other specimens. Like the first modern locality the lignum appeared acidic, with *Micarea viridileprosa* nearby.
A M Cross, N A Sanderson & B Edwards

Baeomyces carneus: on siliceous stones in fine scree, Llyn Cau, Cadir Idris, VC 48, Merionethshire, GR 23(SH)/7120.6206, alt 590m, July 2003. Herb. A Orange 14603 in

NMW. Very small thalli with schizidia. First confirmed record for Wales.

A Orange

Buellia hyperbolica: on acid bark of ancient *Quercus* in open *Quercus – Betula* pasture woodland, Rowbarrow, New Forest, VC 11, South Hampshire, GR 41(SU)/35-04-, May 200. Herb. Sanderson 862. First record for Hampshire and the New Forest

N A Sanderson & A M Cross

Caloplaca ferruginea: on base of ancient *Quercus* in glade in pasture woodland, Frame Wood, New Forest, VC 11, South. Hampshire, GR 41(SU)/36-02-, March 2006. N A Sanderson & A M Cross. A new 10km record for a species that is now very rare in England.

N A Sanderson & A M Cross

Caloplaca lucifuga: on a sheltered *Quercus* in former medieval deer park, Hurstbourne Park, VC 12, North Hampshire, GR 41(SU)/44-46-, October 2005. Herb. Sanderson 922. New to Hampshire.

N A Sanderson

Candelariella reflexa: on ledge of broken down dry stone wall in field, with *Placynthiella dasaea* and *Trapelia globulosa*, Brown's Knoll Meadows, near Huddersfield, VC 63, South-west Yorkshire, GR 44(SE)/181.110-1, March 2005. The *Placynthiella* and the *Trqpelia* was determined by B J Coppins. This unusual habitat, for this species – normally corticolous – was noted during a Yorkshire Naturalists' Union meeting in 2004, by A Henderson.

C J B Hitch

Catillaria nigroclavata: on *Populus alba*, in former medieval deer park, Hurstbourne Park, VC 12, North Hampshire, GR 41(SU)/44-47-, October 2005. Herb Sanderson 920. Confirms that this aspen specialist should be looked for on *Populus alba* as well as *Populus tremula*. New to North Hampshire.

N A Sanderson

Chaenothecopsis nigra: on exposed lignum of live ancient *Quercus* pollard, in former medieval deer park, Hurstbourne Park, North Hampshire, VC 12, GR 41(SU)/44-48-, October 2005. New to North Hampshire.

N A Sanderson

Chaenothecopsis nigra: on decorticate lignum of dead tall stump of *Quercus* in ravine woodland Coed Ganllwyd, VC 48, Merionethshire, GR 23(SH)/72-24-, October 2005. Herb. Sanderson 932. New to Merionethshire.

N A Sanderson

Chaenothecopsis savonica: on decorticate lignum of a single standing dead *Quercus* in *Quercus* dominated woodland on gorge slope above the Rhaeadr Du. Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48 Merionethshire, GR 23(SH)/66-38-, alt

14m, September 2005. Herb. Sanderson 899. First record for Wales for this Near Threatened species. N A Sanderson

Cladonia asahinae: on peaty soil by track in *Picea sitchensis* plantation near Cray, Glen Shee, VC 89, East Perthshire, GR 37(NO)/1414.6206, alt 340m, May 2005. Herb A Orange 15846 in NMW. The long squamuluose stalks of the podetia suggested this chemotype in the field, which was later confirmed by TLC. Second record for Scotland. A Orange

Cladonia cariosa: on sandy bank in working sand quarry, where the sand was slightly base enriched, Frithend Quarry, Kingsley, VC 12, North Hampshire, GR 41(SU)/81-39-, July 2005. Herb. Sanderson 875. Thallus Pd+ pale yellow; the first record of the norstistic acid containing form from North Hampshire. N A Sanderson

Enterographa hutchinsiae: on rain tracks on the trunks of veteran *Fagus* and *Ilex* in old growth pasture woodland, recorded from 15 woods in the New Forest, VC South Hampshire, (i) at GR 41(SU)/2--0-- (5 woods from 2004 to 2006); (ii) at 41(SU)/2—1--, (6 woods from 1994 to 2005) (iii) at 41(SU)/3—0-- (3 woods from 2004 to 2006); (iv) at 41(SU)/3-- 1-- (1 wood, 1994). Herb. Sanderson 33, 580, 630. This is typically a form with a quite pale thallus and narrow elongate and forked lirellae found growing up to at least 3m up trunks, but always in strong rain tracks, usually in mosaics with *E. crassa*. The name *E. vinosa* (Pers.) A. Massal, has been used for this habitat form, but the spores are identical to those of *E. hutchinsiae*. In addition, at Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48, Merionethshire, a transition has been observed from typical *E. hutchinsiae* with a dark thallus and comma like lirellae on overhanging bark at the base of an ancient *Quercus* by a river, to the rain track form, where a rain track flowed down the trunk onto the dark over hanging bark. This species should be looked for in other old growth lowland woods, where it is likely to be a rare relic. N A Sanderson, B J Coppins & A M Cross

Eopyrenula grandicula: on old *Corylus* stem, in overstood *Corylus* coppice, Pads Wood, Up Park, VC 13, West Sussex, GR 41(SU)/79-16-, March 2005. Herb. Sanderson 854. New to Sussex. N A Sanderson

Eopyrenula grandicula: on *Corylus* and *Sorbus aucuparia* in *Betula – Quercus* and *Corylus – Fraxinus* ravine woodland, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48, Merionethshire, GR 23(SH)/65-39- and 23(SH)/66-38, September 2005. Herb. Sanderson 884 & 893. New to Merionethshire. N A Sanderson

Graphina pauciloculata: parasitizing *Graphina ruiziana* on two old *Ilex*, a suppressed young *Betula* and 3 old *Corylus* bushes in *Betula – Quercus* and *Corylus – Fraxinus* ravine woodland, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48, Merionethshire, GR 23(SH)/65-39- and 23(SH)/66-38, September 2005. Herb. Sanderson 889. A new site for this BAP Priority species. N A Sanderson

Intralichen lichenicola: (i) in thallus of *Physcia caesia* with *Polycoccum pulvinatum*, on marble tomb in cemetery, Burrs Road, Clacton-on-Sea, VC 19, North Essex, GR 62(TM)/184.168, August 1994. Herb. P M Earland-Bennett; (ii) in ascomata of *Caloplaca flavocitrina* on broken tiles of old wall, Thorpe Hall, Thorpe-le-Soken, VC 19, North Essex, GR 62(TM)/182.217, February 2005, Herb. J F Skinner in STD. Determined by P M Earland-Bennett; (iii) on thallus of *Psilolechia lucida* on side of sandstone headstone, Leigh Cemetery, Leigh-on-Sea, VC 18, South Essex, GR 51(TQ)/847.861, September 2005. Herb. P M Earland-Bennett. New to Essex.
P M Earland-Bennett

Intralichen lichenicola: (i) on *Psilolechia lucida* on east face of sandstone headstone, Wickham Market Cemetery, VC 25, East Suffolk, GR 62(TM)/29-55-, July 1989. Herb. Hitch. C J B Hitch, P M Earland-Bennett & P N Cayton; (ii) on *Psilolechia lucida* on east face of sandstone headstone in churchyard, Bucklesham, VC 25, East Suffolk, GR 62(TM)/64-42-, January 1999. Determined by P M Earland-Bennett. New to Suffolk. C J B Hitch

Lauderlindsaya borreri: on *Normandina pulchella* on *Acer campestre* in *Fraxinus – Acer – Quercus* floodplain woodland, Dames Slough Inclosure, New Forest, VC 11, South Hampshire, GR 41(SU)/25-05-, November 2005. Herb. Sanderson 940. New to Hampshire. N A Sanderson

Lecania fructigena: on small sunny cliff of coastal rocks, Helford Passage, VC 1, West Cornwall, GR 10(SW)/764-7.267-8, June 2005. Confirmed by P P G van dem Boom. Third British record and new to Cornwall. C J B Hitch & P W Lambley

Lecanora horiza: on veteran *Quercus*, in former medieval deer park, Hurstbourne Park, VC 12, North Hampshire, GR 41(SU)/44-46-. October 2005. Herb Sanderson 919. New to North Hampshire. N A Sanderson

Lecidea doliiformis: on two veteran *Quercus* and a *Cedrus*, in former medieval deer park, Hurstbourne Park, VC 12, North Hampshire, GR 41(SU)/45-47- &41(SU)/44-47-, October 2005. New to North Hampshire. N A Sanderson

Lecidea erythrophaea: on fallen twig, probably *Fraxinus*, from canopy of mixed deciduous woodland in marshy valley, on the outskirts of Mawnan Smith, VC 1, West Cornwall, GR 10(SW)/78-29-, June 2005. Herb. Hitch F5. Determined by B J Coppins. Second record in southwest Britain for this rare species of eastern England and Scotland

C J B Hitch & P W Lambley

Lecidea exigua: on trunk of *Quercus* near Cadsonbury Fort, Lynher Valley, VC 2, East Cornwall, GR 20(SX)/344.677, alt 75m, November 2005. Determined by B Benfield. Confirmed by B J Coppins. The specimen is being sent to the herbarium at BM.

R M Hodgson

Lecidea turgidula: on lignum of fallen large *Quercus* trunk in *Quercus - Ilex* pasture woodland, Matley Wood, New Forest, VC 11, South Hampshire, GR 41(SU)/33-07-, February 2006. Herb. Sanderson 951. Last recorded in Hampshire in 1972

N A Sanderson

Leptogium subtile: on debris at base of knot hole on *Fagus* root, *Fagus - Quercus - Ilex* pasture woodland, Ashurst Wood, New Forest, VC 11, South Hampshire, GR 41(SU)/33-09-, February 2006. Herb. Sanderson 950. New to Hampshire.

N A Sanderson

Lichenoconiun usneae: on *Cladonia fimbriata* at edge of bank of old tip, Hadleigh Marsh, Hadleigh, VC 18, South Essex, GR 51(TQ)/822.856, May 2005. Confirmed by D L Hawksworth. New to East Anglia

P M Earland-Bennett

Marchandiomyces aurantiacus: (i) on *Xanthoria parietina* on fallen *Acer pseudoplatanus*, Falcon Mobile Homes Road, Martlesham, VC 25, East Suffolk, GR 62(TM)/248.458, November 2004; (ii) on *Xanthoria polycarpa, X. parietina, Physcia tenella* and *P. adscendens*, Needham Lake, Needham Market, VC 25, East Suffolk, GR 62/095-6.547-8, November 2004; (iii) on *Physcia adscendens* and *Xanthoria parietina* on trunk of inclined *Populus* at top of road to Toys–Я-Us, Ipswich, VC 25, East Suffolk, GR 62(TM)/126.422, January 2006. Determined by D L Hawksworth. New to East Anglia.

P M Earland-Bennett & C J B Hitch

Megalaria laureri: 6 thalli in rain track on ancient *Fagus* in *Fagus – Ilex* pasture woodland, Fair Cross, Rushpole Wood, New Forest, VC 11, South Hampshire, GR 41(SU)/30-09-, December 2005. A new tree in a new part of Rushpole Wood for this very rare species.

N A Sanderson

Melaspilea amota: (i) on bark of older *Quercus* in ravine woodland, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48 Merionethshire, GR 23(SH)/66-38-, September 2005. Herb. Sanderson 890; (ii) in same habitat, Coed Ganllwyd, VC 48, Merionethshire, GR 23(SH)/72-24-, October 2005. New sites for this Near Threatened bark fungus. N A Sanderson

Micarea coppinsii: on acidic *Ilex* in *Alnus – Betula – Ilex* bog woodland, Ringwood Ford Bottom, New Forest, VC 11 South Hampsire, GR 41(SU)/26-10-, December 2005. Herb. Sanderson 941. Determined by B J Coppins. Appears to be the first record for South Hampshire. N A Sanderson

Micarea marginata: on siliceous stones in fine scree, Lyn y Gadair, Cadir Idris, VC 48, Merionethshire, GR 23(SH)/7095.1346, alt 580m, July 2003. Herb. A Orange 14600 in NMW. Sterile with pycnidia. New to Wales. A Orange

Micarea viridileprosa: on decorticated *Quercus* stump in *Salix* carr, Hinderclay Fen, VC 25, East Suffolk, GR 63(TM)/025.788, April 2003. Herb. Hitch I26/B. Determined by B J Coppins. New to East Anglia, otherwise only known from south and southwest Britain, Wales and Scotland.. C J B Hitch

Micarea viridileprosa: on acidic old *Quercus petraea* in *Quercus petraea - Ilex* pasture woodland, Redshoot Wood, New Forest, VC 11, South Hampshire, GR 41(SU)/19-08-, December 2005. Herb. Sanderson 944. Determined by B J Coppins. Appears to be the first record for South Hampshire, and has since been seen in several places in the New Forest in 41(SU)/2—0-- N A Sanderson & B Edwards

Micarea xanthonica: on moss and algal crust with *Micarea viridileprosa*, on west-facing buttress on north-facing sandrock outcrop in woodland, Carroty Wood, Nymans, VC 14, East Sussex, GR 51(TQ)/27-29-, December 2005. Herb Sanderson 942. Determined by B J Coppins. First record of this oceanic species for lowland England, and another oceanic specialist added to the Wealden sandrock flora.
N A Sanderson

Microcalicium ahlneri: on exposed lignum of live ancient *Quercus* pollard, in former medieval deer park, Hurstbourne Park, VC 12, North Hampshire, GR 41(SU)/44-48-, October 2005. New to North Hampshire. N A Sanderson

Mycomicrothelia atlantica: on branch of a suppressed young *Betula* within a *Corylus* dominated stand, in ravine woodland, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48, Merionethshire, GR 23(SH)/66-38-, September 2005. Herb. Sanderson 911.

Previously recorded only from *Corylus*, but the lack of a conspicuous basal fringe around the 0.2 – 0.3mm circular perithecia, ruled out *M. wallrothii*. *Mycomicrothelia atlantica* is likely to have also occurred on the surrounding *Corylus* that were suppressing the young *Betula*. N A Sanderson

Mycomicrothelia confusa, widespread on *Sorbus aucuparia* within ravine woodland, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48, Merionethshire, GR 23(SH)/65-39-, 23(SH)/66-39- and 23(SH)/66-38-, September 2005. Herb. Sanderson 885. A new record for the vice county, of a species which is rare in Wales.

N A Sanderson

Mycoporum lacteum: on dry bark of old *Quercus* in *Fagus – Quercus – Crataegus* Pasture woodland, Round Hill, New Forest, VC11, South Hampshire, GR41(SU)32-01-, May 2005, Herb. Sanderson 861. A new substrate for Britain.

N A Sanderson

Opegrapha xerica: on ancient *Quercus*, in former medieval deer park, Hurstbourne Park, VC 12, North Hampshire, GR 41(SU)/44-46, October 2005. Herb. Sanderson 921. N A Sanderson

Opegrapha thelotrematis: parasitic on *Thelotrema lepadinum* on old *Corylus* bushes in *Corylus – Fraxinus* ravine woodland, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48, Merionethshire, GR 23(SH)/66-38-, September 2005. Herb. Sanderson 912. First record from Wales of this strongly oceanic parasite. N A Sanderson

Polyblasta agraria: on mildly saline soil on bank above saline lagoon in grazing marsh Verner Common, Hayling Island, VC 11, South Hampshire, GR 41(SU)/73-01-, August 2005. Herb. Sanderson 879. First record from southern England.

N A Sanderson & A M Cross

Polycoccum squamarioides: forming galls on *Placopsis lambii* on well-lit mine spoil tip, Cwmystwyth mine, VC 46, Cardiganshire, GR 22(SN)/808.748, alt 300m, March 2005. Determined by B J Coppins. Herb. SPC. New to Cardiganshire.

A Orange, R G Woods & Welsh Lichen Group

Porina coralloidea: on a single base rich old *Quercus* in ravine woodland, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48, Merionethshire, GR 23(SH)/65-39-, September 2005. A new site for a species with few Welsh records. N A Sanderson

Porina hibernica: on a single base rich old *Quercus* in open pony grazed woodland below Coed Camlyn, Ceunant Llennyrch complex, Vale of Ffestiniog, VC 48,

Merionethshire, GR 23(SH)/65-39-, September 2005. Herb. Sanderson 910. A new site for this Near Threatened species that is very rare in Wales. N A Sanderson

Porina rosei: (i) on base rich bark of *Fraxinus*, growing on cliff, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48, Merionethshire, GR 23(SH)/65564.39275, alt 13m, September 2005; (ii) on base rich bark of old *Quercus* above waterfall, Coed Ganllwyd, VC 48, Merionethshire, GR 23(SH)/72190.24415, alt 8m. September 2005. New site records for this near threatened species. N A Sanderson

Phaeosphaerobolus usneae: on indeterminate yellow sorediate thallus on trunk of *Quercus*, Westleton Common, Westleton, VC 25, East Suffolk, GR 62(TM)/442.689, May 2005. Confirmed by D L Hawksworth. New to East Anglia.

P M Earland-Bennett

Pyrenula hibernica: on 14 *Corylus* bushes on a difficult to reach ledge on the side of a gorge deep in a ravine, with small thalli on two further bushes to the east in *Corylus* dominated ravine woodland, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48, Merionethshire, GR 23(SH)/66-39-, September 2005. Herb. Sanderson 908. New to Wales and fourth UK record of this Vulnerable and Schedule 8 species. See article on p.23 for further information N A Sanderson

Pyrenula laevigata: frequent on old *Corylus* bushes and *Sorbus aucuparia*, in small areas of ravine woodland, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48, Merionethshire, GR 23(SH)/66-39- and 23(SH)/66-38-, September 2005. Herb. Sanderson 892. A new site for an oceanic species that appears rare in Wales.

N A Sanderson

Ramonia chrysophaea: on two base-rich old *Quercus* in ravine woodland, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48 Merionethshire, GR 23(SH)/65-39-, September 2005. Herb. Sanderson 906. A new site for a Near Threatened species with very few Welsh records. N A Sanderson

Ramonia dictyospora: on spongy bark of old *Fraxinus*, in relic area of native woodland in conifer plantation, west of Loch Dhu, Loch Ard Forest, VC 87, West Perthshire, 27(NN)/42-04-, July 2004. Appears to be new to Perthshire.

N A Sanderson

Ramonia dictyospora: on spongy bark on *Ulmus glabra* and *Quercus*, in ravine woodland Coed Ganllwyd, VC 48, Merionethshire, GR 23(SH)/72-24-, October 2005. Herb Sanderson 932. New to Merionethshire. N A Sandserson

Schaereria corticola: on rough bark of mature *Betula* in old woodland, Coed Cymerau NNR, Vale of Ffestiniog, VC 48, Merionethshire, GR 23(SH)/687.425, alt 80m, September 2005. Confirmed by B J Coppins. Herb. SPC. New to Wales.

S P Chambers

Stenocybe bryophila: (i) parasitising the liverwort *Plagiochila punctata* on two *Betula*, in ravine woodland, Ceunant Llennyrch ravine, Vale of Ffestiniog, VC 48, Merionethshire, GR 23(SH)/66-38-, September 2005. Herb Sanderson 913; (ii) very locally frequent, in the same habitat, Coed Ganllwyd, VC 48 Merionethshire, GR 23(SH)/72-24-, October 2005. First reported modern records for Wales (although previously recorded recently by Bryan Edwards near the second site, pers. com.). An often miss-recorded species, confused in the past with *Stenocybe septata* on unusual hosts such as *Betula*. Strongly associated with, and parasitising, liverwort species, particularly *Plagiochila punctata*, and should be looked for deeply buried in liverwort cushions.

N A Sanderson

Strigula taylorii: on rain tracks of old *Fagus* and *Acer campestre*, in overstood *Corylus* coppice, Pads Wood, Up Park, VC 13, West Sussex, GR 41(SU)78-16- and 41(SU)/79-16-, March 2005 . Herb. Sanderson 852 & 853.

N A Sanderson

Strigula thelopsidoides: on damp bark on trunk of mature *Quercus petraea* in old woodland, Coed Cymerau NNR, Vale of Ffestiniog, VC 48, Merionethshire, GR 23(SH)/687.425, alt 80m, September 2005. Confirmed by B J Coppins. Herb. SPC. New to Wales.

S P Chambers & S R Davey

Verrucaria aquatilis: on flints at the base of a delta formed by storm flows washing into a large sinkhole formed in acidic drift over the chalk, Dorney Wood, by Burnham Beeches, VC 24, Buckinghamshire GR 41(SU)/94-86-, April 2005. Herb. Sanderson 860. An outlying lowland record for a mainly upland species.

N A Sanderson & A M Cross

Verrucaria polysticta: on kerb set memorial of oolitic limestone in partially mown area, Framlingham Cemetery, VC 25, East Suffolk, GR 62(TM)/286-8.632. April 2005. New to East Suffolk and second churchyard record.

C J B Hitch

SOCIETY BUSINESS

PROPOSED NEW RULES FOR THE BRITISH LICHEN SOCIETY

Members of the working party: Will Stevens (during 2005), Frank Dobson, David Hill, Bob Hodgson, Peter Lambley and with assistance from Stephen Ward

The current rules were last revised in 1992 and are now in need of updating. Since that date there have been changes in Charity law and also the existing rules make no mention of the Trustees or the need for an 'independent examiner' rather than an 'auditor' to review the accounts. The Charity Commissioners have suggested that we should include a clause specifically to allow trustees to be allowed payment for professional services to the Society. We have also updated the objects of the Society and made a number of other changes. This includes changing the name from 'rules' to 'constitution' as it is considered that this more reflects their purpose. A number of other changes are proposed and will be explained in the following notes.

A. Current situation with the revision of the Constitution

The working party and Council have carefully considered the existing rules and also those changes which were discussed at the last AGM. **Members now have until 30th June to make suggestions after which the constitution will be submitted to the Charity Commissioners for their comments.** This should produce a version for approval of the Council at the October meeting. A final version will be published to members in the winter *Bulletin* and they will have to vote on it at the January 2007 AGM. Please note that no changes will be possible at this AGM as members have to receive notice of any changes proposed before the meeting. If the members vote at that meeting for any changes, implementation will have to be delayed until the next AGM unless a Special General Meeting is called.

B. Name of the Society

It has been suggested that the name of the Society and the objects do not properly indicate that the BLS has no brief to function in Eire. Most of those members to whom we have spoken consider that the present name and object are correct and that the originators of the Society chose the wording carefully to reflect the true situation. We are The British Lichen Society i.e. we are not including Eire in the name of the society. However, the objects say '.....the study of lichens especially in relation to those of the British Isles'. This is exactly what we do with, for example, the Flora and the map fascicles. At the AGM Maria Cullen, and later an email from Stephen Ward, said that Eire being a separate country, the BLS has no brief to function there. We have been invited to do a survey in Eire in 2006 and the Irish wish to make use of our data from Ireland, both map fascicles and the *Flora* include the whole of Ireland so we

must assume that 'function' does not mean visit and gather lichen records. As it is fundamental to the Society, it decided to raise this matter at Council who considered that the name should not be changed. The Oxford Dictionary defines the words as follows:

British - of or relating to Great Britain or the United Kingdom

Great Britain or more correctly the **United Kingdom of Great Britain and Northern Ireland** - A country of western Europe consisting of England, Wales, Scotland and Northern Ireland.

British Isles – a group of islands lying off the coast of NW Europe. They include Britain, Ireland, the Isle of Man, the Hebrides, the Orkney Islands, the Shetland Islands, the Scilly Isles. and the Channel Islands.

C. Membership

Following the death of Oliver Gilbert we now have 13 Honorary Members. 2% of the membership is about 12.2, Council therefore suggests that we make this 2.5%, as this would allow 15 Honorary members if the measure is taken as the total membership of the Society. It is considered important by the Council that we restrict the number of Honorary Members so as not to undermine the value of the award.

Council considered abolishing life membership as it is proving expensive for the Society but decided instead to increase the starting age to 65.

D. Officers

It has been agreed that the Assistant Treasurer and the Bulletin Editor should be officers but the Webmaster should report through the new proposed General Services Manager.

It is proposed that there should be a new position of Members' Services Manager who would co-ordinate the work of the Archivist, Curator, Librarian and Webmaster. It is also suggested that this co-ordinator should be titled Chair of General Services Committee to line up with the other subcommittees even though they may seldom meet as a committee.

Some years ago Council agreed that no one person may hold the position of more than one of the 3 main offices at any one time.

E. Election of officers

Council consider that the President and Vice-president both serve two years and the Vice President should also be ex-officio on sub-committees and take a larger role in the running of the Society to give them wider experience before they are elected President.

We have included a special General Meeting to have the power to elect officers as this has happened in the past.

F. Council
Members at the AGM agreed that we have 9 elected members each serving for 3 years.

G. Duties of Council and Officers

This includes the change from 'certified' to 'reviewed' that was agreed at the AGM.

H. Trustees
This is a new clause defining who are the Trustees of the Society.

I. Meetings
The two final sentences were suggested by members. It is considered that we should have a quorum so that a meeting cannot be taken over by a small group.

If you wish to comment on this draft please write to Frank Dobson or email him at franks@dobson57.freeserve.co.uk as soon as possible and before 7th July 2006. Please note that it will not be possible to incorporate further changes before the next AGM after this date.

DRAFT CONSTITUTION

The current rules are shown in italics after each proposed rule.

BRITISH LICHEN SOCIETY

CONSTITUTION

1. Name

The name of the society shall be the British Lichen Society

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The name of the society shall be the British Lichen Society.

2. Objects
To promote and advance all branches of the study of lichens especially in relation to those of the British Isles. Actively to encourage and support the conservation of the lichen flora.

In furtherance of these objects but not otherwise to:

(a) Publish results of investigations and other relevant work in the Society's publications or elsewhere, to the extent that the Council of the Society and the Editors deem to be suitable; such publications to be available for sale to the public.

(b) Facilitate the exchange of information among lichenologists by organising field meetings, workshops, conferences, lectures, exhibitions, and by other means.

(c) To promote education and awareness of lichens and to support the training of lichenologists.

(d) Aid in the maintenance of adequate representative collections of British lichens in the national and other public herbaria. Establish and maintain a collection of lichens for the use of members and others.

(e) Develop and maintain databases of information on the distribution and conservation status of lichen species in the British Isles.

(f) Maintain a library of books and lichenological journals. These to be made available to non-members at the discretion of the Librarian who shall be responsible to the Council.

(g) Raise money by membership fees or by any other means, at the discretion of Council, and within the rules set by the Charity Commissioners.

(h) To establish, own and maintain conservation areas and to aid in the establishment and maintenance of conservation areas.

(i) To promote the views of the Society on matters relating to lichens at a local and national level.

2. Objects

To promote and advance all branches of the study of lichens especially in relation to those of the British Isles. To encourage and actively support the conservation of the lichen flora.

In furtherance of these objects but not otherwise to:

(a) Publish results of investigations and other relevant work in the Society's publications to the extent that the Council of the Society and Editor deem to be suitable; such publications to be available for sale to the public.

(b) Facilitate the exchange of information among lichenologists by organising field meetings, conferences, lectures, exhibitions, and by other means.

(c) Aid in the maintenance of adequate representative collections of British lichens in the national and other public herbaria.

(d) Maintain a library of books and lichenological journals. These to be made available to non-members at the discretion of the Librarian who shall be responsible to the Council.

(e) Raise money by any other means provided that the Society shall not undertake any permanent trading activities for the purpose of raising funds.

(f) To establish, own and maintain conservation areas.

3. Membership

The Society shall have honorary members, ordinary members, associate, senior associate, junior associate and family members. Honorary members shall be distinguished lichenologists and / or persons who have rendered valuable service to the Society. Election of an Honorary Member should not increase their number beyond 2.5% of the total membership at that time, They shall be nominated by the Council and elected on a majority vote of those present and voting at a General Meeting of the Society. They shall enjoy the same benefits as ordinary members but shall pay no subscription. Ordinary members shall be persons who have signed the form of membership and paid the subscription. Associate members, of all categories, shall be entitled to membership (or removed from it, see below) in the same way as ordinary members but shall pay such smaller subscription as the Society may determine in accordance with Rule 5. Associate members, of all categories, shall enjoy the benefits of ordinary members, except that they shall not receive The Lichenologist. Junior Associate membership shall be open to full-time students and to persons under the age of 18. Senior Associate membership shall be open to persons over 65. Family membership is available to persons living in the same household as a member in some other category. Family members receive no publications and have no voting rights. Members under the age of 18 are not eligible to vote at a General Meeting or serve on Council. Ordinary members aged 65 or over may pay a life subscription. Other discounted subscriptions for more than one calendar year may be offered to members, at rates determined by the Society in accordance with Rule 5.

3. Membership

The Society shall have honorary members, ordinary members, associate and family members. Honorary members shall be distinguished lichenologists and / or persons who have rendered valuable service to the Society. They shall be nominated by the Council and elected on a majority vote of those present and voting at a general meeting of the Society. They shall enjoy the same benefits as ordinary members but shall pay no subscription. Ordinary members shall be persons who have signed the form of membership and paid the subscription. Ordinary members aged 60 or over may pay a life subscription of ten times the current annual subscription. Associate members shall be entitled to membership (or removed from it, see below) in the same way as ordinary members but shall pay such smaller subscription as the Society may determine in accordance with Rule 5. Associate members shall enjoy the benefits of ordinary members, except that they shall not receive the Lichenologist. Junior Associate membership shall be open to either full-time students or persons under the age of 18, and Senior Associate membership for persons over 60. Family members

receive no publications and have no voting rights. Members under the age of 18 are not eligible to vote at a General Meeting or serve on council.

4. Removal from membership for misconduct

Any member whose conduct, in the opinion of the Council, is prejudicial to the interests of the Society may be removed from membership by a two-thirds majority vote of those present at a meeting of the Council, on the agenda of which the words "Removal of a member" shall have appeared; provided no member may be so removed unless due notice of 28 days has been sent to the member of the intention of the Council to proceed under this Rule. In such a case, the nature of the charges made shall be stated, and the member concerned shall be afforded the opportunity to answer such charges, either by means of a written statement to be circulated to Council members at least 7 days before the meeting, or by means of a verbal reply at the meeting, or both. A member so removed shall forfeit any claim upon the Society.

4. Removal from membership

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

5. Subscriptions

Subscription rates shall be determined, as and when necessary, at a General Meeting of the Society by a majority vote of those present and voting. Subscriptions shall relate to one or more calendar years, and shall be payable in advance on or before 1st January each year. A person joining the Society who has signed the form of membership and paid a subscription shall be entitled to receive those of the Society's publications which are appropriate to his or her category of membership, and which are issued during the calendar year(s) for which the subscription is paid. Members who have not paid a current subscription will not receive publications, and the Council has the power to remove them from membership.

5.Subscriptions

The rate of the ordinary and associate subscriptions shall be determined, as and when necessary, at a general meeting of the Society by a majority vote of those present and voting. Subscriptions shall be payable in advance on 1st January each year. Members who have not paid current subscription will not receive publications, and the Council

has the power to remove them from membership. A person who has signed the form of membership and paid his subscription as an ordinary member shall be entitled to receive the Society's publications issued during the calendar year in which the subscription is paid.

6. Officers

The officers of the Society shall be the President, the Vice-president, the Secretary, the Treasurer, the Assistant Treasurer, the Senior Editor, The chairs of the Data Committee, the Education, Promotions Committee, the Members' Services Committee, the *Bulletin* Editor and such others as the Council shall decide. The positions of President, Secretary and Treasurer shall be held by three different members at any one time.

6. Officers

The officers of the Society shall be the President, the Vice-president, the Secretary, the Treasurer, the Senior Editor, and such others as the Council shall decide.

7. Election of officers

The President shall be nominated by the Council and elected for a term of two years by a majority vote of those present and voting at an Annual General Meeting of the Society. Nominations for the Vice-president and all other officers shall be in writing, submitted with the consent of the nominee, and shall be received by the Secretary at least two weeks before an Annual General Meeting. The Council shall have power to make nominations at any time prior to an Annual General Meeting. The Vice-president shall be elected for a term of two years and shall be ex-officio a member of all the Society sub-committees during his/her term of office. All other officers are elected for a term of one year. The election of officers shall be by a majority vote of those present and voting at an Annual General or Special General Meeting.

7. The Election of officers

The President shall be nominated by the Council and elected for a term of two years by a majority vote of those present and voting at an Annual General Meeting of the Society. Nominations for the Vice-president and all other officers shall be in writing, submitted with the consent of the nominee, and shall be received by the Secretary at least two weeks before an Annual General Meeting. The Council shall have power to make nominations at any time prior to an Annual General Meeting. The Vice-president shall be elected for a term of two years and all other officers for a term of one year by a majority vote of those present and voting at an Annual General Meeting.

8 . Council

The Council shall consist of the officers of the Society and of nine members each elected at a General Meeting of the Society for a term of three years with three new members normally being elected each year. Nominations for the members shall be in writing, submitted with the consent of the nominee, and shall be received by the Secretary at least two weeks before an Annual General Meeting. The Council shall have power to make nominations at any time prior to an Annual General Meeting. The members thus elected shall not be eligible for re-election until one year after their term of office. The retiring President shall remain a member of the Council for one year following his/her retirement. The Council shall have the power to co-opt to fill any vacancy on the Council or to offer specialist advice.

The following are not members of Council but are entitled to receive the minutes of Council meetings and to make a personal report at the Council meeting immediately prior to the AGM. Mapping Recorder, Database manager, Archivist, Curator, Librarian, Webmaster. At other Council meetings they will report through either the Chair of the Data Committee, Chair of General Services Committee or the Chair of Education and Promotions.

8. Council

The Council shall consist of the officers of the Society and of eight members each elected at a General Meeting of the Society for a term of two years with four new members normally being elected each year. Nominations for the members shall be in writing, submitted with the consent of the nominee, and shall be received by the Secretary at least two weeks before an Annual General Meeting. The Council shall have power to make nominations at any time prior to an Annual General Meeting. The members thus elected shall not be eligible for re-election until one year after their term of office. The retiring President shall remain a member of the Council for one year following his retirement. The Council shall have the power to co-opt.

9. Duties of Council and officers

The Council, through its officers, shall administer the affairs and the funds of the Society. The President, or in his or her absence, the Vice-president, shall preside at all General Meetings of the Society and the Council. In the absence of both, a chairman shall be elected by a majority vote of those present. The President shall be an ex-officio member of any Committees that the Council considers necessary for the running of the Society. In case of equality of votes on any matter, the President (or chairman of the meeting) shall have a casting vote. The Treasurer or his or her appointed deputy shall keep an account of all receipts and expenditure, a statement of which, reviewed by an Independent Examiner in accordance with the rules of the Charity Commission, shall be presented by him or her at the Annual General Meeting

and either published in the Winter edition of the '*The Bulletin*' or else included with it as a separate document. The Secretary, Treasurer, Senior Editor, and other officers shall submit written reports to the Annual General Meeting.

9. Duties of Council and officers
The Council, through its officers, shall administer the affairs and the funds of the Society. The President, or in his absence, the Vice-president, shall preside at all meetings of the Society and the Council. In the absence of both, a chairman shall be elected by a majority vote of those present. In case of equality of votes on any matter, the President (or chairman of the meeting) shall have a casting vote. The Treasurer or his appointed deputy shall keep an account of all receipts and expenditure, a statement of which, certified by an Auditor, shall be presented by him at the Annual General Meeting. The Secretary, Treasurer, Senior Editor, and other officers shall submit reports to the Annual General Meeting.

10 . Trustees
The Trustees shall be the officers and members of Council.

11. Payments to trustees
Any member of Council or their spouse/partner who possesses specialist knowledge or skills may receive reasonable fees when they or their company are instructed by the Council to undertake work which requires such specialist knowledge or skills. Provided that at no time shall more than seven members of the Council benefit under this provision and that a member of Council should withdraw from any meeting where his or her appointment or remuneration is under discussion.

12. Meetings
The Society shall hold an Annual General Meeting and such others as the Council shall decide. The Council shall hold an annual meeting and such others as it may decide. The Secretary (or in his or her absence a person appointed by the chairman of any meeting) shall publish to all members of the Society the formal decisions taken at every *General Meeting* of the Society. Minutes shall be taken of all formal meetings of the Society and its' Council. Notice of a *General Meeting* of the Society shall be sent to members at least four weeks before the date of the meeting. The procedure and order of business at meetings shall be decided by the chairman. A Special General Meeting of the Society shall be convened on the requisition of the Council or of twenty members. The requisition shall be addressed to the Secretary and shall specify the purpose for which the meeting is called. A convening notice stating this purpose shall be sent to every member at least fourteen days before the meeting is to take place. Notice of a Council meeting shall be sent to all members of Council at least fourteen days before the date of the meeting. A quorum at a General Meeting of the

Society shall be twenty five members and at a meeting of the Council eight members of Council.

10.Meetings
The Society shall hold an Annual General Meeting and such others as the Council shall decide. The Council shall hold an annual meeting and such others as it may decide. The Secretary (or in his absence a person appointed by the chairman of any meeting) shall publish to all members of the Society the formal decisions taken at every general meeting of the Society. Minutes shall be taken of all formal indoor meetings of the Society and its Council. Notice of a general meeting of the Society shall be sent to members at least four weeks before the date of the meeting. The procedure and order of business at meetings shall be decided by the chairman. A Special General Meeting of the Society shall be convened on the requisition of the Council or of twenty members. The requisition shall be addressed to the Secretary and shall specify the purpose for which the meeting is called. A convening notice stating this purpose shall be sent to every member at least seven days before the meeting is to take place.

13. Change to the Constitution
Changes in this Constitution may be made only at Annual or Special General Meetings of the Society and must be approved by not less than two-thirds of the members present and voting at the meeting. Proposals to change the Constitution must be detailed in the notice convening the meeting sent to every member. No alterations, variations, or additions shall be made to the Constitution which will make the objects of the Society not exclusively charitable or the funds and assets of the Society applicable otherwise than for exclusively charitable purposes.

11.Change of Rules
Changes in these Rules may be made only at Annual or Special General Meetings of the Society and must be approved by not less than two-thirds of the members present at the meeting. Proposals to change the Rules must be detailed in the notice convening the meeting sent to every member. No alterations, variations, or additions shall be made to the Rules which will make the objects of the Society not exclusively charitable or the funds and assets of the Society applicable otherwise than for exclusively charitable purposes.

LIBRARY REPORT FOR 2005

A fairly quiet year with 18 requests met for photocopies or loans of books and reprints. Notable acquisitions were reprints from Prof. Harada of Japan, many in English, and 39 items from the library of the late Dr Oliver Gilbert. Mrs Mary Hickmott has donated her photographic slide collection of lichens which could form the nucleus of a BLS lichen photograph library. Slides of personalia were sent to Prof. Mark Seaward, the society's archivist.

The library still needs better promotion to members to increase its usage. I have advised the new BLS webmaster on what might be needed to promote the service through the website.

Some progress was made with sorting the backlog of reprints but there is still a long way to go. Similarly, updating the catalogue with some 2000 entries still needs doing. I am hoping that a Leicester-based volunteer might come forward one day!

Anthony Fletcher

BIOSCIENCES FEDERATION AND INSTITUTE OF BIOLOGY REPORTS FOR 2005

I was able to attend only one meeting of each body during the year.

The BSF produced 12 responses to H.M. Government consultations, each acknowledging the BLS as a member body. I gave advice on behalf of the BLS to three of them. Several of these reports have been quoted extensively in House of Lords reports. The new Chief Executive, replacing Dr Mike Withnall, is Dr Richard Dyer. Sir Neil Chalmers, ex Director of the Natural History Museum has been co-opted onto council. There are now 38 member organisations representing some 65,000 biologists.

Noteworthy publications were the Strategic Plan 2006-11 and 'Enthusing the Next Generation', an important document recommending improvements to biological education. All publications are on the BSF website www.bsf.ac.uk.

An issue for 2006 is a proposed and potentially large increase in annual subscription, to be voted on at the next AGM. The matter has been referred to BLS council.

Institute of Biology.

Work on the environment committee has chiefly provided responses to government consultations. The IoB prepares joint responses for the BSF and represents about 45 organisations which are not members of the BSF. The 'Science – Policy Priorities 2005-9' was launched at the Affiliated societies forum in November. Publications are listed on the website www.iob.org.

Anthony Fletcher

FIELD SECRETARY'S REPORT

Since the last bulletin, the only field meeting undertaken by the Society was that which followed the AGM in Cardiff. On a cold morning with a chilly breeze, several hardy lichenologists assembled at St Donat Castle to the west and on the coast. We looked at walls and the Castle as well as valley woodland leading down to the sea. *Thelotrema lepadinum* had been reported, but was not refound, (for full account see 48).

At the time of writing, the visit to the Sierra de Guadarrama in central Spain approaches with a very healthy number of people taking part. The weather in Britain is particularly cold at this time, and the idea of Spanish sun has very great appeal. It should be a good occasion. Booking for the summer workshop on aquatic pyrenocarps to be held at the Field Studies Council's centre at Blencathra in Cumbria has been slow. This workshop led by Alan Orange will cover ground unfamiliar to most, and it is hoped that it will attract many more. In the autumn, we are indeed privileged to have a mini workshop led by Peter James centred on Tavistock in Devon. This will concentrate on recent advances in *Ramalina* and update our knowledge of *Usnea.*

It is good to report that there are no shortages of potential venues for field meetings well into the future, however new suggestions are always very welcome. Due to demand for local events, it has been decided that non UK field meetings will now not be part of the Society's official field programme. However, the Field Secretary will continue to organise them, and collect names of participants as before. The most immediate foreign field meeting will be held jointly with the Tuckermann Society next year in Canada, and will be organised and led by David Richardson. There is also the possibility of a meeting in southern Sweden sometime in the future.

Workshop plans for next year consist of a meeting concentrating on field recording. This will be to aid Damian McFerran in his initiative to record the lichens of Ireland.

With the recent publication of the guide for lichen consultants generated by the workshop at the AGM in Edinburgh in 2003, this should be particularly appropriate. A winter workshop on identification skills has also been suggested.

Other field meetings on the stocks include a visit to complement the field meeting which took place in Holland. We hope to invite Dutch lichenologists to East Anglia in an attempt to compare our native flora with that which we saw in 2004. Perhaps several species will be added to the British list as a result. Other venues for meetings suggested include Leicestershire with special attention given to Charnwood Forest as well as Guernsey, and in Scotland, Islay and the Shetland Islands. In 2008, which will be our 50th Anniversary, it is hoped to hold commemorative field meetings in England, Scotland and Wales with the theme being comparison between then and now.

Attending field meetings can be expensive, especially for younger members and students. It is also arguably the most valuable stage in a lichenologist's career to attend meetings. The Burnet-Wallace-Gilbert Fund is set up specifically to help those who can show financial difficulty in attending meetings, and will grant sums up to £100 in cases of need.

Simon Davey

SNH GRANT TO BLS FOR SCOTTISH LICHEN DATABASE AND TRAINING

Fifth 6-month claim – progress so far (October 1st 2005 to end 31st March 2006)

The team of data-inputters (Jeremy Gray, Jacqui Middleton, Stephen Ward and Christine Matheson) have been engaged in completing the last batches of Scottish Lichen Record cards held at Bradford, plus a batch of Francis Rose's cards for Skye, copies of which were recently unearthed at The Natural History Museum by Pat Wolseley. The entered data is sent on spreadsheets to Brian, who checks it through, and where possible, adds extra species or information from his note books and Det. Books, thus making each site entry as complete as possible. Data entry from the sources outlined at the beginning of the project should be completed by the end of March. The final six months will be a critical stage, for sorting out site definitions and ensuring that the resulting database will be up and running and accessible. The BLS understands the commitment of SNH to supporting the NBN, and that the Scottish Lichen Database was funded by SNH with the understanding that it would be available

on the NBN. Although SNH have agreed to a temporary 'stop-gap' arrangement of having enquiries to the Scottish Database available from 'named' holders using BioBase, this is not a very satisfactory or long-term arrangement. There are negotiations in train to convert the whole of the Scottish database to Recorder6 and hence make it available on the NBN Gateway.

The training of Lichen Apprentices: the final part of this was undertaken by a 2-day workshop in February, run by Brian Coppins at RBGE, on Lichen Taxonomy and TLC demonstrations. This course was attended by 12 Scottish members (including SNH's newly appointed Lower Plants Officer, Dave Genney), and aimed to provide insight into the fundamentals of lichenology, including how to make best use of national herbaria, and the value of lichen literature and Libraries in national institutions. The aim was to build on the developing expertise in identification that the Lichen Apprentices have already acquired and awaken an awareness into aspects of lichenology that are not covered in other courses. The Lichen Apprentice scheme has been a great success, and other groups and organisations in Scotland are now seeking to replicate the idea. As a practical outcome, the BLS now has active, young lichenologists currently carrying out lichen contracts, providing useful records (including contributing to the New, Rare and Interesting columns) and a Scottish Lichen Churchyard Group is established. There are plans for the Lichen Apprentices to produce targeted lichen leaflets and maybe go on to produce small identification guides focussed on specific Scottish habitats.

Sandy Coppins, March 2006

BRITISH LICHEN FLORA

KEYS TESTING WORKSHOPS

The new British Lichen Flora is proceeding well and should appear in 2007 in time for the 50th anniversary of the British Lichen Society. We would like the all-important keys to species and genera to be tested and approved by a wide variety of users. To this end a series of workshops has been arranged.

Aims. To test the new keys to genera and species. The workshops will be informal and convivial, with opportunities to meet others and discuss identification progress and problems. The doors will be open from 9 – 6 pm.

Participants: Everyone is invited, ideally a wide range of expertise from beginners to experienced will be best. A. Fletcher, Cliff Smith and Peter James will attend all workshops. Brian Coppins and Alan Orange will attend those at Edinburgh and Cardiff. But, numbers will be limited to 15 –20 persons each day because of workspace constraints.

When and Where: the venues with comprehensive lichen collections and facilities are -

July 1-2nd; Leicestershire Museums Service, Collections Resources Centre, Sileby Rd., Barrow on Soar, Leicestershire LE12 8LD.
Accommodation is plentiful in Loughborough, 3 miles away. Transport by rail (10 min) and bus (35 min) are good from both Loughborough and Leicester.

September 14-15th, Royal Botanic Garden Edinburgh, Inverleith Row, Edinburgh, EH5 5LR. Accommodation is mostly within walking distance. The venue is 1.5 miles from Waverley Railway Station.

November 4-5th, National Museum of Wales, Cathays Park, Cardiff. Accommodation is plentiful in Cathedral Rd, 20 minutes equidistant from the Museum and station.

What to bring: Please bring your own microscopes if you can. Also, it's ideal to bring your own problem specimens.

Accommodation: We can offer partial reimbursement of expenses, the exact amount will depend on the numbers attending.

Further details: For accommodation lists and transport details please contact: Anthony Fletcher, Leicestershire Museums, 31-33 Hayhill Industrial Estate, Sileby Rd, Barrow on Soar, Leicestershire LE12 8LD
Tel: 01509-815514 Fax: 01509-813934. email afletcher@leics.gov.uk

NOMINATIONS FOR THE URSULA DUNCAN AWARD

Please can we have nominations for the Ursula Duncan Award for outstanding services to the Society. For full details of the Award and how to nominate someone, contact the Secretary Dr S LaGreca, Department of Botany, The Natural History Museum, Cromwell Road, London SW7 5BD. (Tel 0207 942 5617, e-mail *bls@nhm.ac.uk*)

PUBLICATIONS AND OTHER ITEMS FOR SALE
(Subject to availability)

(All prices include postage and packing - U.S. Dollar rates are double the Sterling Rate)

For publications and other items please send orders to **Brian Green, 3 Tyn y Coed, Carneddi, Bethseda, Gwynedd, LL57 3SF, UK**, E-mail brian@regreen.co.uk Sterling Postal Orders, or cheques in Sterling or US Dollars should be made payable to **'The British Lichen Society'**, and drawn on a UK bank or on a bank with a UK branch or agent. *Overseas members may also pay by direct transfer into the Society's UK bank account. Please contact Brian Green for details if you wish to pay by this method.* Purchases in US dollars can be made through the Americas Treasurer. Cheques should be made out to 'British Lichen Society' and sent to J W Hinds, 254 Forest Avenue, Orono, Maine 04473-3202, USA.

Publications

Bulletin back numbers each £1.00
Please check for availability.

The Lichen Flora of Great Britain and Ireland (1992) edited by Purvis, Coppins, Hawksworth, James and Moore.
for members £35.00
for non-members £55.00

Lichen Atlas of the British Isles edited by Seaward
Fascicle 2 (*Cladonia* Part 1: 59 species)
for members £7.50
for non-members £10.00

Fascicle 3: The Foliose Physciaceae (*Anaptychia, Heterodermia, Hyperphyscia, Phaeophyscia, Physcia, Physconia, Tornabea*), *Arctomia, Lobaria, Massalongia, Pseudocyphellaria, Psoroma, Solorina, Sticta, Teloschistes*
for members £7.50
for non-members £10.00

Fascicle 4: *Cavernularia, Degelia, Lepraria, Leproloma, Moelleropsis, Pannaria, Parmeliella*
for members £7.50
for non-members £10.00

Fascicle 5: *Aquatic lichens and Cladonia (part 2)*
for members £8.00
for non-members £10.00

Fascicle 6: *Caloplaca*
for members £8.00
for non-members £10.00

Identification of (UK) *Parmelia* Ach. on CD-Rom - ISBN 0 9523049 4 5
for members £8.00
for non-members £13.00
for multiple users at one site £24.00

browser for Acorn computers free

Microchemical Methods for the identification of Lichens
for members £8.00
for non-members £11.00
(Airmail, additional at cost)

28 page Booklet "Lichens & Air Pollution" by James
each £1.50

Key to Lichens and Air Pollution by Dobson
each £2.00

Lichens on Rocky Shores
A1 Dalby 'Wallchart' each £6.00
A4 laminated Dalby 'Wallchart' each £1.50
Key to Lichens on Rocky Shores by Dobson
each £2.00

Proceedings of the symposium 'Taxonomy, Evolution and Classification of Lichens and related Fungi - London 10-11 January 1998' (reprinted from *The Lichenologist* Vol 30)
for members £8.00
for non-members £13.00

Bibliographic Guide to the Lichen Floras of the World (second edition) by Hawksworth and Ahti (reprint from The Lichenologist Vol. 22 Part 1).
each £2.00

Checklist of British Lichen-forming, Lichenicolous and Allied Fungi by Hawksworth, James and Coppins (1980).
each £2.00

Checklist of Lichens of Great Britain and Ireland by B J Coppins (2002)
for members £7.00
for non-members £9.00

Lichen Habitat Management Handbook
for members £10
for non-members £15.00

Mapping Cards: General, Churchyard, Woodland, Mines, Coastal, Urban, Chalk and Limestone, Moorland free

BLS leaflets: Churchyard lichens - Lichens on man-made surfaces (encouragement and removal) free

Horizons in Lichenology by Dalby, Hawksworth and Jury (1988).
each £3.50

Aide Mémoire: *Usnea* by P W James
for Members £3.90
for non-members £5.90

A Field Key to Common Churchyard Lichens by F.Dobson Members £5.50 Non-members £6.50 Postage £1.50

A Guide to common churchyard Lichens. By F.Dobson
Each £2.50

A Conservation Evaluation of British Lichens by R.G. Woods & B.J. Coppins
Members £4.00 Non-members £6.00

Indices of Ecological Continuity for Woodland Epiphytic Lichen Habitats
Of the British Isles by A.M & B.J. Coppins
Members £3.50 Non-members £6.00

Lichen Photography by Dobson (1977).
(Photocopies of A4 sheets) £1.00

Lichen Society Postcards: Lichens in full colour in assorted packs of 16.
per pack £3.00
(Orders for more than five packs are available at a reduced rate.)

British Lichen Society Car Sticker
5 colour 4" diameter self-adhesive plastic each £1.50

Other Items

All the following items have the British Lichen Society logo in three colours - black outline, silver podetia and red apothecia.

Woven ties with below-knot motif of BLS logo.
Colours available: maroon, navy blue, brown, black and charcoal £7.00.

Sweatshirts with breast pocket size embroidered motif of BLS logo.
Light-grey, Navy-blue, Bottle-green, Red: £16.00

Sweaters, wool with breast pocket size embroidered motif of BLS logo.
Colours available: maroon, bottle-green and navy (various sizes) £14.00

T-shirts with screen-printed full chest motif of BLS logo encircled by the words 'British Lichen Society'. Please specify size and colour options.
Light-grey, Navy-blue, Bottle-green, Tangerine (One old stock Yellow - small). £10.00

Earthenware mugs (white) with coloured logo on both sides and encircled by the words 'British Lichen Society' below £3.00

Hand lenses
Gowlland x10 plastic lens - a useful spare or second lens, handy when taking a friend with you! £3.00
x10 glass lens in metal body, lens diam 18mm £8.50
x30 lens diam 21mm. A new top quality lens £12

NEW FOR LOAN: For UK members only
A microscope stage-micrometer slide for the calibration of eye-piece graticules in 10μm divisions is available for loan. A deposit of £40 is required.

When ordering items through the post, please allow a month for delivery, as many items have to be ordered specially, or in bulk.
Postage - please add the appropriate postage below (ties and badges are post free).

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Cambridge University are pleased to announce that from 2006 all BLS members will be able to purchase back numbers of the Lichenologist (ISSN 0024-2829) at £10.00 per back issue and back volumes at £40.00. Cambridge holds issues back to and including Volume 33 (2001).
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Back stock is also held at SWETS. For details see:
http://backsets.swets.com/web/show/id=47067/dbid=16908/typeofpage=47001
A complete volume from SWETS costs 200 euros.

SUBMISSION DEADLINE

Please would intending contributors to the Winter 2006 issue of the *Bulletin* submit their copy to the Editor by 21 September. These can be sent by e-mail to plambley@aol.com as an attachment. This should be in MS Word. Alternatively they can be sent on a compact disc by post to the Editor (for address see back inside cover). It is helpful to have hard copies of tables and other diagrams. For the style of references see past *Bulletins*.

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CONTENTS

BULLETIN 98 Issued by the British Lichen Society (Registered Charity No 228850) c/o Department of Botany, National History Museum, Cromwell Road, London, SW7 5BD (Telephone 0171 938 8852). Edited by P W Lambley, The Cottage, Elsing Road, Lyng, Norwich, NR9 5RR. The views of contributors are not necessarily those held by the British Lichen Society.

Printed by Parker & Collinson Ltd, Nottingham.
ISSN 0300 - 4562