



British Lichen Society

Bulletin



BRITISH LICHEN SOCIETY OFFICERS AND CONTACTS 2011

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British Lichen Society Bulletin no. 108

Summer 2011

Welcome to the Summer 2011 Bulletin. The BLS has always had lichen conservation as a prominent part of its remit, and the first two articles celebrate action on a local scale – one bringing lichen understanding to the general public via a dedicated walk in the Bristol area, the other showing what can be done with a quiet word in the ear of the land guardians. I don't think that either of the progenitors concerned would claim that their actions are earth-shattering in significance, but in the words of the well-known supermarket advert, "every little helps".

The report on the BLS contribution to the International Year of Biodiversity – a study of lichens in gardens – makes for interesting reading. Notable finds included new English records for *Caloplaca demissa* and *Epicladonia simplex* (from a garden with close connections to royalty!) Regrettably gardens seemed to be thin on the ground in Scotland and Wales, but responses were received from as far afield as Australia and New Zealand. The survey underlines the importance of gardens as reservoirs for lichen diversity, especially in areas where "natural" habitats are sparse or degraded.

Other contributions include a note on *Rinodina*, yet more on *Degelia plumbea* (this must be the most talked-about lichen species complex in recent years), a further dose of nomenclature (easy to swallow, I promise), and an article on lichens on holiday in California (the author, not the lichens, I'm sure....)

Regular articles include a bumper selection of "new and interesting" and accounts of the field meetings to the Isle of Man and Moray. Of especial note is the compilation of field meetings and workshops since the Society's inception – an extensive list but with some surprising gaps in coverage. If you'd like the Society to come and help survey your neck of the woods, have a word with Steve Price – but expect to be nobbled for the local organization!

Finally, we're all familiar with fungi being lichenized. Some have suggested that South American sloths may be regarded as lichenized, as algae reputedly colonize their hair (being slow-moving and all that) and perhaps they contribute to camouflaging. But I was really taken aback to find recently that salamanders may be lichenized. A paper just published in *Proceedings of the National Academy of Sciences* by Ryan Kerney and colleagues (doi: 10.1073/pnas.1018259108) describes the presence of algae actually inside eggs and embryonic cells of spotted salamanders. There's a possible symbiosis here, with the salamander embryos benefiting from increased oxygen levels and the algae gaining from nitrogenous wastes. External associations between salamander eggs and algae have been known for some time and those partnerships seem to promote egg survival, but an association actually inside the egg cells has not been previously reported. Perhaps we should have a joint meeting with the British Herpetological Society?

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Front cover: *Lecanora rupicola* parasitized by *Arthonia varia*, in a churchyard on Islay

The tale of a trail

Once upon a time, as all good tales begin, and not too long ago, a mature student embarked on a two year 'Wild Life Biology' Diploma Course at The School of Biological Sciences, Bristol University. This course offered challenging and stimulating modules with a dissertation as a final project.

So – it was in 2008 that I first began to think and look at lichens (never noticed before). I was requested by Mandy Leivers, Avon Gorge & Downs Biodiversity Education Officer to provide documentation on the lichens of the Downs. This held great appeal, regularly dog walking in this area. Also it was important to achieve a piece of work, a dissertation that would be useful. One of my objectives in 'FURTHER WORK' was to provide a resource, perhaps in the form of a trail, as an introduction to lichen ecology for the general public.

Whilst working on this final assignment, my brother Derek, a clever research scientist died unexpectedly. The dedication of my lichen work is for him and his death gave me further motivation and inspiration to realise my ambitions and helped to nullify the sadness and grief.

So – the idea of a Trail was born, and necessities regarding finance and format had to be organised; eventually The Trail was launched in January 2011. The project was a team effort. Mandy Leivers was instrumental as the coordinator, having produced

three other Downs Trails – Meadow, Bird and Tree. Finance was a priority and the British Lichen Society and Bristol Naturalists' Society generously promised funding. The Avon Gorge & Downs Wildlife Project would provide the balance.



Mandy, Sheila and Denice enjoying their 'Lichen Trail'

a circular route which would 'map' neatly. A bright, calm day was chosen for Denice Stout to take photographs. The results were amazing, surpassing all expectations with superb colours, forms and substrates.

David Hill enthusiastically walked The Trail offering advice, on the route and the key features of the selected lichens. Later he edited the lichen data for accuracy, at the same time realising the need for the information to be easily understood by the general public. Having assembled the information, the leaflet could be designed and Clare from Dandi Creative was commissioned. She was

experienced having worked with the other trails and was patient as draft after draft was revised. Finally after discussions and deliberations a final document and tree and lichen marker discs were ready to be printed. In total 3,000 leaflets were published and to date 1,000 have been circulated.

The Trail was publicised in various ways; leaflets as already mentioned, A4 posters, a press release, a promotional talk ‘The Colourful World of Lichens’ given by David Hill and two Downs Lichen Walks led by myself. The response from the local people has been enthusiastic with 45 people attending David’s talk and my walks fully booked. A display illustrating the features of The Trail, first shown at the BLS AGM this year, was displayed in the local library promoting the circulation of over 100 leaflets to date!



The leaflet briefly outlines the characteristics of ‘What is a Lichen?’ and describes the three main thallus forms – crustose, foliose and fruticose. A plan of the route is shown identifying six ‘stations’ naming the associated lichens and their key features with detailed colour photographs. The most noticeable and pertinent trees and lichens (in my opinion and with limited experience) were selected namely –

- 1) Mature oak in an open aspect with the trunk and lower branches heavily encrusted with grey, green and yellow lichens - *Punctelia subrudecta*
- 2) Hawthorn with contorted twigs - *Xanthoria parietina*, *Physcia tenella*
- 3) Mature oak in a shaded habitat – *Flavoparmelia caperata*, *Physcia aipolia*
- 4) Blackthorn bushes – *Ramalina farinacea*, *Evernia prunastri*
- 5) Mature ash, lower branches at eye level – *Lecidella elaeochroma*, *Lecanora chlarotera*
- 6) Hawthorn, exposed aspect – *Ramalina fastigiata*

I have adapted The Trail for the two walks organised as part of Mandy’s Events programme, in that more trees are observed, a longer route is walked and time allowed for questions, answers and opportunities at the end for ‘advancement’ suggestions. Having fired enthusiasm on the walk, an important aim of any programme is to maintain and continue interest. My



'advancement' information is low key and I look forward to a BLS professional package which can be offered to enthusiastic beginners.



Resulting from this interest and enthusiasm I have been invited to work with students on a Vocational Diploma Course based in the Education Centre at Bristol Zoo using ideas from the 'Opal Air Survey'. Many thanks to Richard Brinklow from BLS who at my request sent ten packets of epiphytic macro-lichens found in an area of low pollution levels for the students to handle. They were fresh and in 'proper' herbarium packets with data to demonstrate good practice. I really appreciated this gesture as giving the students the opportunity to observe the real thing is invaluable.

Hopefully, the story will not end there but continue with more projects, walks and talks to demonstrate the fascination of lichens as a useful and unique resource.

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Erratum: World distribution and ecology of *Degelia plumbea s.l.*

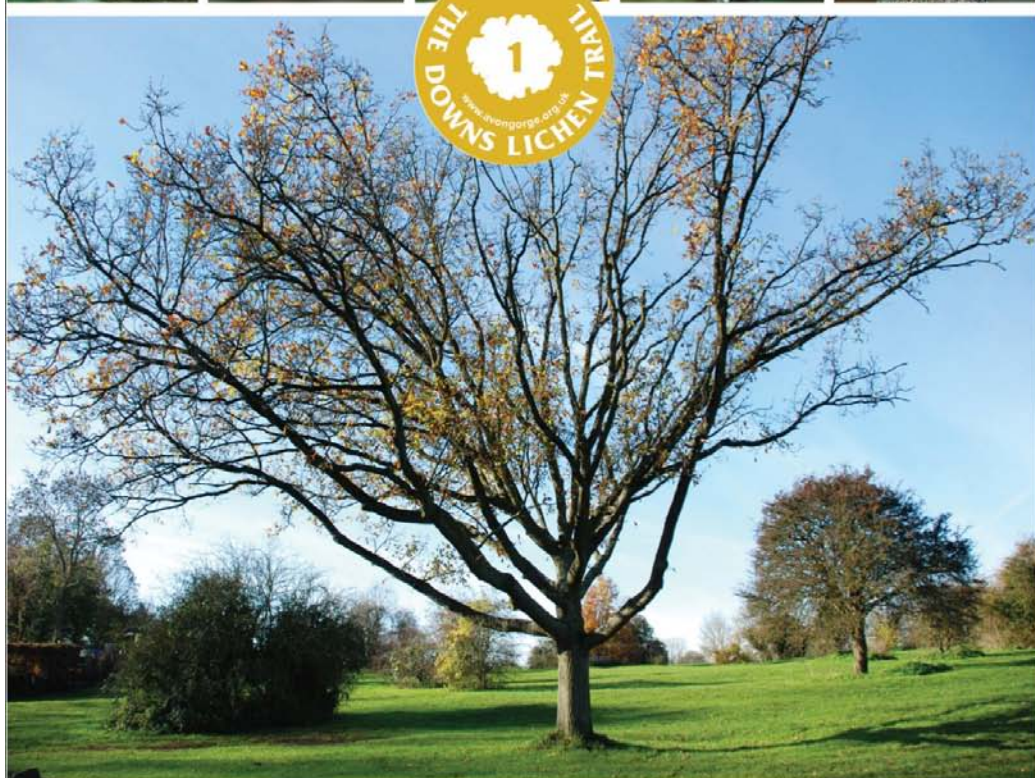
In the article with the above title in the Winter 2010 issue of the *Bulletin*, the following was omitted from the Acknowledgements section "Some of the information used or referenced in this document is Crown Copyright, compiled on behalf of COSEWIC under a contract with Environment Canada, however, comments or conclusions made by the authors using this information do not necessarily reflect the opinions of Environment Canada or COSEWIC".

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Discover the fascinating world of lichens on the Downs Lichen Trail

Our trail is bursting with information and stunning photographs to help you identify lichens growing on the bark of trees.



For a copy of the Downs Lichen Trail call the Avon Gorge and Downs Wildlife Project on 0117 9030609 E-mail mleivers@bristolzoo.org.uk, visit www.avongorge.org.uk or pick up a copy from the Downs tearoom. Photography and credits: Denice Stout

Lichens on softwood fences, some remarkable records and a happy ending

Bowd Lane Wood near Corby in Northamptonshire has a rich vascular ground flora and very productive hazel coppice. This wood did not suffer the long post-war period of neglect that was typical of so many ancient woodlands in the region. The proximity to the blast furnaces of Corby provided a surprising market for the coppice which was used in large bundles to relight the furnaces after their periodic maintenance. The lichen communities of the woodland trees are unexceptional having suffered from decades of Midland pollution; none of the species listed in the New Index of Ecological Continuity have been recorded here. The woodland is currently being fenced to protect it from the depredations of our increasing deer population and old, defunct fences are being removed. A line of old softwood posts supporting a sagging rusty strand of wire along the northern boundary of the wood looked unpromising for lichens at my first glance. The fence was shaded and I suspected that algae dominated. A closer examination revealed some intriguing convex, tuberculate fruits which prompted me to intensify my search. The tuberculate fruits turned out to be those of *Micarea sylvicola*, a species that is not uncommon on fence posts in the Scottish Highlands but a first for the lowlands. The base of the same post, where shaded by grass and starting to rot, was dominated by *Micarea prasina* while the neighbouring post had a large colony of *Placynthiella dasaea*. Bowd Land Wood is certainly not the first site in this region where the most exciting lichens have been found on worked lignum. Before consigning old gates and fence posts to the bonfire or the skip, it is worth considering ways of preserving them. Old fence posts can be left in the line of a new fence and old gates can be strapped to a nearby fence.

While chemically-untreated timber, particularly hardwood, has the best potential for developing interesting communities, those fence posts which have been treated with copper, chromium and arsenic compounds (they can usually be identified by their green-stained colour) support specialist toxi-tolerant lichens. A study of such posts at the Wimpole Estate in Cambridgeshire revealed several species of lichen rarely recorded in the region including *Lecanora stenotropa*, *Strangospora moriformis* and *S. pinicola*. Waste regulations stipulate that such timber should not be burnt nor incorporated into the general waste stream and specialist disposal is likely to be expensive. The retention of these posts in situ provides an interesting substrate while solving (or at least delaying) the problem of disposal.

I am looking forward to studying some of the many miles of post and rail fencing that have been erected along the bypasses constructed in the past three decades. These have the advantage of being relatively easy to date. A thorough study of this substrate requires collection and microscopic examination; dark convex fruits growing amongst the pycnidia of *Micarea denigrata* don't always belong to that species, sometimes they turn out to be to *Scoliciosporum umbrinum* or *Strangospora moriformis*. This is a territory where exciting discoveries and mysteries seem to be particularly frequent. A sterile, pycnidiate granular crust is common on chemically

treated fence posts; it is a species of *Bacidia* but its exact identity is not yet known. An abundantly fertile *Lecanora* collected from a post in North Bedfordshire is to be sent abroad to see if the Dutch lichenologists can name it.

Lichen surveys of several National Trust estates in the south of Bedfordshire made a surprising discovery. The most notable lichen (*Punctelia reddenda*) and two other new species for the county (*Lecanora aitema* and *L. albella*) were found on a rotting softwood fence at Whipsnade Tree Cathedral. *Punctelia reddenda* is a large leafy lichen, generally thought of as an ancient woodland indicator, usually growing on the mossy trunks of broad-leaved trees in the south and west of the British Isles. Its appearance at Whipsnade is remarkable for two reasons. Previously it was unknown from anywhere in East Anglia, the Midlands or the south-east of England north of London. Even where it does grow (and nowhere is it a common species) a rotting fence rail would be considered an unusual substrate.



This post and rail fence was due for imminent replacement but, alerted to its importance, the National Trust came up with an elegant solution. The old fence was retained in situ and a new supporting fence was constructed using untreated softwood. The result is eye-catching and will undoubtedly raise awareness of the importance of old fences and gates, not only for lichens but for bryophytes and invertebrates too.

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Making the most of microscopic sections

With practice good thin sections are cut and mounted onto a slide with swift fluency but I still like to make the most of a good section. Occasionally a fortuitous section shows features particularly well displayed and in other cases very little material may be available. Most collectors must have hovered over one of their few apothecia, with their razor blade poised, hoping to get a good diagnostic section while removing as little of a fruit as possible. A typical hand-cut section is perhaps 25µm thick, though it is possible to cut thinner when the need arises. Occasionally it is desirable to deliberately cut sections rather thicker, especially when diagnostic apothecial pigments are diffuse and difficult to interpret.

I like to start my examination in the smallest drop of water and then observe changes as K is drawn under the cover slip by capillarity. When it comes to elucidating the nature of paraphyses, water- or K-mounted sections are sometimes frustrating. I find that Lactophenol-cotton blue (LCB) often helps. In the same way that K and other reagents are introduced at the side of the cover slip, LCB will be drawn under but it can be hastened on its way by gently lifting one corner of the cover slip with the tip of a razor blade. Even before the LCB has started to stain the fungal hyphae, I find that the structures become more clearly viewed. I presume that this is a refractive effect – the lactic acid in the stain must contrast optically with the fungal structures to increase definition. If necessary, LCB can be left for some while for the stain to develop; this can be speeded by gentle warming. This is not the end of the useful life of a mounted section. One day I was contemplating preparing a further section of some sparse and problematic material to check the nature of the ascus and I wondered whether Lugol's iodine would be able to “cut through” the LCB to any useful effect. Not only did it do so but it stained the amyloid parts of the ascus to a convenient degree without the necessity to irrigate and re-stain in attempts to achieve an appropriate strength of reaction. A further advantage arises from the residual LCB (if not too much Lugol's has been introduced) which preserves the section and prevents rapid drying so the slide can be retained for reference. You might worry that the blue colours produced by using these stains in conjunction might be confusing but I have experienced no problem with this. I am minded of the modern BBC weather map which uses subtly differing shades of blue for frost and rain. The slight difference in colour, combined with context, allows the distinction to be made.

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Alcoholic Steiner's solution

The normal recipe for Steiner's solution is given as 1 g paraphenylenediamine, 10 g sodium sulphite, c. 0.5 ml detergent and 100 ml water. This preparation will last for

several months but it has the reputation for giving slow, weak reactions. It would be unfair of me to add to the criticism because I have not used it myself; as soon as I acquired some sulphite, I experimented with an alcoholic version. I presume that Pd is more soluble in alcohol than it is in water and that is why alcoholic solutions have the potential to give stronger reactions. Being unsure whether sodium sulphite is soluble in alcohol, my thoughts turned to vodka as a happy ratio of alcohol to water. I can't provide an exact recipe because I make up tiny batches in a small dropper bottle but, as a guide, a dozen or so crystals of Pd and ten times that volume of sodium sulphite in about a teaspoon of vodka should give a strong solution which will keep for several months. The efficacy of a batch can be tested on something containing fumarprotocetraric acid such as *Cladonia coniocraea*. At room temperature a colour change should start almost immediately and produce a deep rust-red in less than twenty seconds. Not only does my dropper bottle of alcoholic Steiner's accompany me in the field but it has replaced the watch-glass of loose crystals on my bench. I use a cocktail stick to transfer a tiny spot of solution to the specimen.

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The BLS on Gardeners' Question Time

On a freezing cold day in January this year two figures could be seen shivering in the churchyard of the magnificent church at Lavenham in Suffolk,. They were Ivan Pedley and Frank Dobson who had come to record a short piece on lichens which was to be broadcast in *Gardeners' Question Time* on February 4th 2011. They were soon joined by Nathan Callaghan and Emma Green representing OPAL who had come to assist in the recording.

The broadcast was to take the form of an interview with Bob Flowerdew one of the GQT panel members. They had time to discuss with him which subjects would be suitable to cover in a short five minute broadcast. They were soon joined by the producer of GQT, Howard Shannon who took out a small tape recorder and we commenced the recording.

The questions asked ranged over many aspects of lichenology and when it was completed they had recorded over 45 minutes. The problem for the producer was to edit this down to the meagre 5 minutes allowed for this slot in the main programme. Inevitably this meant that much that they thought would be of interest to the listeners had to be edited out. However, this recording should have helped the large Gardeners' Question Time audience to appreciate lichens rather more than previously. Hopefully, they would then not be in too much of a hurry to destroy lichens when they appeared in their gardens. This was reinforced in the programme

where the panellist Pippa Greenwood answered a question to emphasize that lichens did not damage trees and shrubs.



Recording Gardeners' Question Time at Lavenham, Suffolk. L to R: Ivan Pedley, Bob Flowerdew, Howard Shannon, Frank Dobson.

Ivan decided to make even more use of his visit and had braved the cold for even longer and thereby managed to record 102 species of lichens including refinding all the species found on the 1985 visit of the BLS.

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Lichen diversity in gardens – a contribution to IYB

Summary

Members' survey of garden lichens, the Society's contribution to the International Year of Biodiversity (IYB), gave much interest, as well as pleasure. It is hoped that from the results others will be encouraged to look more closely at lichens in gardens. Altogether 310 species were recorded in 45 private gardens, the majority of which were in England. Results from the survey indicated that:

- the South-West provided the highest diversity of lichens, with a good range of corticolous species, including some on old trees
- the Midlands followed closely, its strength being saxicolous species
- terricolous lichens are poorly represented
- garden size is an important factor, coupled with the presence of a variety of trees and saxicolous surfaces
- records include some significant and unusual species

The longest lists of lichens were from larger gardens though some shorter lists included interesting finds. The richest microhabitats indicate factors that encourage lichen colonisation and conservation. Records from four larger gardens open to the public are included for comparison.

The Project

Gardens have been in the news as important reservoirs for wildflowers and birds, for example, and several of us thought the IYB a splendid opportunity for exploring their potential for lichens. Our main aims were to:

- report on lichen diversity in gardens
- comment on garden features, habitats and history that enhance lichen diversity
- contribute to county lists and the BLS database of lichens

The initiative was advertised in the BLS *Bulletin* and participation was open to all BLS members. We hoped they would look at lichens in their own gardens and responses bear this out; the great majority of results are from the gardens of private homes. The diversity recorded is revealing though cannot be fully representative of regions because sampling was planned not on 10 km squares but on opportunities available to participants.

Everyone who participated is warmly thanked, over 50 BLS members, in all. Some reported as individuals and others in small groups, augmented by many garden-owners who were generally surprised (amazed, even) to have revealed interest in the smallest things which previously they had hardly noticed. Most of the records are from England, with a few from Scotland, Wales and the Channel Islands (Sark), altogether about 45 private gardens. It has been a pleasure to receive two records

from overseas: the Czech Republic and New Zealand. For comparison, records of four 'public' gardens are included in the table showing the full list of lichen species (NT Knole Gardens, Kent, and RHS Wisley, Surrey, in the South-East; and Marwood Gardens and RHS Rosemoor, both in Devon, in the South-West). As part of IYB and with the kind permission of HRH The Prince of Wales, in the summer of 2010 a visit was made by 11 lichenologists to Highgrove Gardens, Gloucestershire, and reference is made to features at Highgrove, in discussion of conservation issues.

All records received are valued. Most responses are based on systematic and thorough surveys but some record cards could not be completed because of constraints, eg time or the weather. Participants were asked to record lichen species and their substrate C (corticolous), L (lignicolous), S (saxicolous) or T (terricolous), together with observations of garden size, locations, age and history, the most common lichen and the richest microhabitat, on a 'garden recording form'. Fairly large private gardens (at least four tennis-courts in size) are well represented among the responses received, with relatively few 'pocket-handkerchief' gardens, such as frequently found with older terraced housing and the new-build homes springing up around our towns and in the countryside. Regrettably not all responses are included in the regional tables, mainly for reasons of space.

Diversity, substrates and regions

The overall lichen diversity found in gardens was 310: a commendable total. A small number of common lichens were recorded throughout the regions. Saxicolous species contribute substantially to the lichen flora in many private gardens. Corticolous exceeded saxicolous lichens only in the South-West, where some gardens included mature, old trees and also fruit trees. Few terricolous species were recorded.

Summary: Averages for Private Gardens in each Region							
Region	Age of garden (years)	Size (tennis courts)	Total lichens recorded	C	L	S	T
Midlands	67	2.4	46	14	4	28	0.6
Herts	58	3.1	37	16	7	18	0
South-East	116	1.8	35	12	6	25	0.4
South-West	88	2.9	53	28	4	22	0.7
Midlands = Bedfordshire plus single records from Cambridgeshire, Leicestershire and Northamptonshire							
Herts = Hertfordshire							
South-East = Greater London and suburban Kent							
South-West = Bristol, Somerset and Devon							

In the South-West (Bristol, Somerset and Devon) the largest number of species was found: a total of 166 lichens in private gardens, on a par with RHS Rosemoor which

has been looked at thoroughly. The overall total for the South-West (private plus public gardens) was 225, this diversity doubtless supported by the favourable climate and generally good air quality. This was the region with the highest proportion of corticolous lichens, some epiphytic on mature, even ancient, trees both in private gardens and at RHS Rosemoor; much at Marwood is younger. Records include: *Anaptychia ciliaris* var. *ciliaris*, *Bacidia* species, *Chaenotheca brunneola*, *Dimerella* species, *Lecanactis*, *Lecanographa lyncea*, *Lobaria pulmonaria* and *Usnea* species, and lirellate species (of *Graphis*, *Graphina* and *Opegrapha*). Most of the records of *Peltigera* species came from the South-West. Not all gardens in the region were old. Some of the newer gardens extended the range of substrates and contributed to saxicolous records.

South-West Region Private Gardens									
	Age (years)	Size (tennis courts)	Total lichens	C	L	S	T	Most common	Richest habitat
1	100 – 400	4	104	61	12	28	2	<i>Verrucaria elaeina</i>	variety of trees and sax. habitats
2	100	4+	60	36	0	23	1	–	oak
3	125	4+	53	34	0	19	1	–	oak
4	300	4	51	28	11	20	0	<i>Physcia tenella</i> , <i>Arthonia radiata</i>	fruit trees
5	110	1	50	14	3	33	0	–	old walls
6	22	2	45	17	3	28	1	<i>Peltigera hymenina</i>	mossy lawn
7	80	1	11	5	1	5	0	<i>Xanthoria parietina</i>	<i>Robinia</i>
Mean	88	2.9	53	28	4	22	0.7		

In contrast, the Midlands (Bedfordshire plus single records from Cambridgeshire, Leicestershire and Northamptonshire) provide distinctive records for those looking carefully at saxicolous communities, as well as several special finds (see the next section), giving an overall total of 131 lichens. Species included a good range of species of *Caloplaca*, *Candelariella*, *Lecanora*, *Trapelia* and *Verrucaria* as well as records of *Lecania inundata*, *Phaeophyscia nigricans* and *Pseudevernia furfuracea*.

Hertfordshire records provide similarities with those in the Midlands and, additionally, records of *Bacidia adastrata*, *Buellia griseovirens*, *Lecanora variabilis*, *Micarea erratica* and *Placynthiella dasaea*. Apple trees were notably good and corticolous plus lignicolous lichens more than matched saxicolous species in this county.

In private gardens in suburban Kent were found *Cladonia ochrochlora* (lignicolous in a garden with a long history), *Lecanora semipallida*, *Stereocaulon vesuvianum* var. *symphycheileoides* and *Xanthoria ucrainica*. In these areas of 'lowland England': the Midlands, Hertfordshire and the South-East, private gardens represent a reservoir of lichens: a total of 169 lichens were recorded in domestic gardens and 86 at NT Knole, Kent, bringing the total to 180. Knole is rich in Kentish ragstone and old walling, as well as fruit trees and old trees, and these substrates provided extra records.

Midlands Region Private Gardens									
	Age (years)	Size (tennis courts)	Total lichens	C	L	S	T	Most common	Richest habitat
1	50	4+	100	33	9	54	4	<i>Lecanora muralis</i>	variety of trees and sax. habitats
2	150	4	71	20	7	44	0	<i>Physconia grisea</i>	paving slabs
3	50	4	58	21	11	26	0	<i>Cladonia macilenta</i>	thatch
4	–	4	50	29	5	17	0	–	–
5	100	2	39	2	0	37	0	–	brick walls
6	100	1	32	8	0	24	0	<i>Lecanora albescens</i>	brick walls
7	30	1	31	6	0	25	0	–	concrete roof tiles
8	45	1	18	4	0	15	0	–	house brick
9	14	1	15	4	0	10	1	<i>Aspicilia contorta</i>	patio calcareous slabs
Mean	67	2.4	46	14	4	28	0.6		
Hertfordshire Region Private Gardens									
	Age (years)	Size (tennis courts)	Total lichens	C	L	S	T	Most common	Richest habitat
1	80	4	54	17	1 bry 1	37	0	<i>Lecanora muralis</i> (roof)	brick wall

					met				
2	64	4	52	23	25	18	0	<i>Lecanora dispersa</i>	bench, apple tree
3	80	4+	50	12	12	27	0	<i>Physcia tenella</i>	apple trees
4	30 - 50	4+	49	22	11	27	0	<i>Physcia tenella</i>	bench, plant troughs
5	80	4+	42	25	3	14	0	<i>Physcia tenella</i>	apple trees
6	70 - 80	2	41	21	13	15	0	<i>Parmelia sulcata</i> , <i>Physcia</i> spp., <i>Xanthoria parietina</i>	apple trees
7	41	2	35	23	2	13	0	<i>Physcia tenella</i>	apple trees
8	50	4	30	15	2	17	0	several co-abundant	apple trees
9	47	2	28	11	0	17	0	<i>Physcia adscendens</i>	paved areas
10	12	4+	25	18	0	7	0	<i>Physcia adscendens</i> , <i>P. tenella</i>	hawthorn
11	79	1	21	6	2	13	0	<i>Protoblastenia rupestris</i>	shed roof
12	55	2	15	2	0	5	0		
Mean	58	3.1	37	16	7	18	0		

South-East Region Private Gardens

	Age (years)	Size (tennis courts)	Total lichens	C	L	S	T	Most common	Richest habitat
1	300	2	47	21	9	25	1	<i>Physcia tenella</i>	apple trees
2	100	2	42	10	8	28	0	<i>Physcia tenella</i>	concrete
3	60	2	35	12	3	21	0	<i>Physcia adscendens</i> , <i>P. tenella</i>	–
4	40	1	28	4	7	16	1	<i>Aspicilia contorta</i> subsp. <i>hoffmanniana</i>	concrete paving
5	81	2	21	11	1	9	0	<i>Lecanora muralis</i>	calcareous paving
Mean	116	1.8	35	12	6	25	0.4		



A Leicestershire garden's staddle stone in front of *Rhododendron ponticum*, with Brian Coppins and Mark Powell, image by Ivan Pedley.

The numbers of records returned from elsewhere in England, Scotland, Wales and the Channel Islands (Sark) are few and may not be exhaustive for the gardens surveyed. Nonetheless they yield interesting finds: *Leptogium lichenoides* and *Solenopora candicans* are single records and found in a Cumbrian garden. *Bryoria fuscescens* var. *fuscescens* was found in Inverness; *Usnea articulata* in Carmarthenshire; and *Cyphelium inquinans*, *Pyrenula macrospora*, *Ramalina canariensis* and *Usnea esperantiana* in Sark, C.I. While not included in the main table because of the great differences in geography and habitat, it is illuminating to learn that, in addition to several 'exotic' species unknown in the UK, *Teloschistes chrysophthalmus* is widespread in gardens in Dunedin (NZ). The lichens recorded in Litomerice (Czech Republic), however, were much more akin to those in a small urban garden in the Midlands. In both New Zealand and the Czech Republic the microhabitat named as richest in lichens was fruit trees!

Lichens: Species Abundant or Special?

Lichen species winning the accolade of being 'most abundant' are, in order:

1. *Physcia tenella*, *P. adscendens*
2. *Parmelia sulcata*
3. *Aspicilia contorta*

Several finds were significant, including:

<i>Arthopyrenia analepta</i>	Bedfordshire, smooth bark, apple	1 st Vice-County record
<i>Caloplaca demissa</i>	Gloucestershire, urn	1 st English record
<i>Catillaria atomaroides</i>	Bedfordshire, pantile roof	1 st Vice-County record
<i>Epicladonia simplex</i>	Gloucestershire, <i>Cladonia parasitica</i>	1 st English record
<i>Phylloblastia inexpectata</i>	Leicestershire, <i>Rhododendron</i> leaf	1 st County record
<i>Pseudevernia furfuracea</i>	Bedfordshire, thatch	1 st Vice-County record
<i>Strangospora pinicola</i>	Bedfordshire, lignicolous	2 nd Vice-County record
<i>Usnea articulata</i>	Carmarthenshire, hawthorn	1 st Vice-County record
<i>Usnea esperantiana</i>	Sark, apple tree	1 st Sark record

Lichen Colonisation and Conservation

Diversity: The longest lists of lichens came from the larger gardens as evident from the regional tables. Such gardens provide more scope for extra garden features and more substrates, as well as trees. Several large gardens contained mature (even very old) oak trees and fruit trees, some from old orchards.

Habitats: The top three 'richest microhabitats' reported are:

1. paving, especially calcareous
2. fruit trees
3. bricks, especially old walls

Saxicolous species contribute substantially to the lichen flora in many private gardens, especially where surfaces include both concrete and a wide range of stone types. When the path needs redoing or wall needs rebuilding we can save good lichen stones and reset them with their original aspect as well as extending the variety of materials. The Leicestershire garden includes a good variety of stone surfaces, even tufa and a saddle stone (that is of sand-ironstone from nearby Northamptonshire).

Similarly, a variety of tree species and the presence of old, even ancient, trees provide different bark and twig surfaces, and significant lichen finds. In all regions fruit trees yielded a good diversity of lichens, as with apple trees in Hertfordshire. Many compact gardens can accommodate a tree, even a small fruit tree, and popular showy shrubs, for example, *Azaleas* and *Magnolias*, are hospitable substrates.



Porpidia crustulata, recorded in suburban Kent, the South-West and Wales.



Evernia prunastri was recorded throughout the regions

Thatch is a valuable lignicolous substrate and was responsible for records of several *Cladonia* species and also *Pseudevernia furfuracea*. Most terricolous lichens favoured older gardens or undisturbed patches in the South-West. A few other substrates were noted as particularly good for lichens, for example, a canvas chair in Devon and the leaves of *Rhododendron ponticum* on which *Phylloblastia inexpectata* was found (in Leicestershire). For the lichenologist, everything's worth looking at!

Highgrove Gardens, managed organically, include an unusual range of habitats. Walls and paving incorporate old and new materials of many different kinds; old brick walls have been retained where possible; and features include magnificent urns, on one of which was noted *Caloplaca demissa* (a new record for England). Most intriguing as a habitat is the stumpery (with its fallen trees and logs, some introduced, clothed in mosses, ferns and lichens). This supports a good range of *Cladonias*, including a luxuriant patch of *Cladonia parasitica* on which *Epicladonia simplex* (a lichenicolous fungus) was found (a new record for England). Although *Cladonias* spilt over from tree stumps, terricolous lichens were notable by their scarcity, as found generally in this study.

Environmental quality: In the South-West the climate with high rainfall and the generally good air quality favour lichen colonisation. In areas subjected in the not-very-distant past to considerable SO₂ pollution lichens are now recovering, as evident in data from the South-East (including RHS Wisley), Hertfordshire and Midlands. However, nitrogen enrichment is having an impact and supporting nitrogen-loving lichens (typically a xanthorion community), as in two Lancashire gardens. Several experienced lichenologists comment on the changes in the population of lichens in their gardens. Relatively little is known about succession (changes in growth and occurrence over time): perhaps continuing to look at lichens in our gardens may help us towards a better understanding of this.

Garden management and encouraging lichens: We can all encourage the colonisation and conservation of lichens in our gardens. Often, a balance has to be struck. The lichen algal partner requires light and moisture to thrive. Hence an open situation and avoidance of heavy shading will favour the growth of many lichens yet light shade may help to retain moisture. Regular disturbance of the surface inhibits lichen colonisation and competition with weeds and climbers (ivy is notorious) can be a menace; but look kindly on a little moss. Challenge is presented by terricolous lichens but there's scope around the base of trees (avoid cutting the lawn too close to the trunk). Avoid scouring surfaces. Here's an end to scrubbing pathways and using nasty chemicals. For more detailed (and much fascinating) information look at relevant sections in *Lichen Habitat Management* (Fletcher *et al.*, 2001) Allowing a patch

to remain relatively undisturbed, with only occasional tidying, probably helps. Guess who named 'mossy lawn' (with *Peltigera hymenina*) as their richest habitat?

Acknowledgements

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Reference

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SUMMARY OF GARDEN RECORDS														
NW	Lancashire + Cumbria							S	Inverness					
M	Bedfordshire + single records from Cambridgeshire, Leicestershire + Northamptonshire							CI	Sark					
H	Hertfordshire							K	NT Knole, Kent					
SE	Greater London + suburban Kent							W	RHS Wisley, Surrey					
SW	Bristol, Somerset + Devon							M	Marwood Gardens, Devon					
W	'Wales' (Carmarthenshire + Monmouthshire)							R	RHS Rosemoor, Devon					
Species	Private								Public					
	NW	M	H	SE	SW	W	S	CI	SE		SW			
									K	W	M	R		
<i>Acarospora fuscata</i>													•	
<i>Acarospora smaragdula</i>				•									•	
<i>Acrocordia conoidea</i>	•				•									
<i>Acrocordia gemmata</i>												•	•	
<i>Acrocordia salweyi</i>									•					
<i>Agonimia tristicula</i>	•	•	•	•	•				•					
<i>Amandinea punctata</i>		•	•	•	•	•			•	•			•	
<i>Anaptychia ciliaris</i> subsp. <i>ciliaris</i>													•	
<i>Anisomeridium biforme</i>					•							•	•	
<i>Anisomeridium polypori</i>			•		•									
<i>Arthonia cinnabarina</i>													•	

Species	Private								Public			
	NW	M	H	SE	SW	W	S	CI	SE		SW	
									K	W	M	R
<i>Arthonia pruinata</i>												•
<i>Arthonia punctiformis</i>		•			•			•				•
<i>Arthonia radiata</i>	•	•	•		•	•	•		•			•
<i>Arthonia spadicea</i>		•			•							
<i>Arthopyrenia analepta</i>		•										•
<i>Arthopyrenia cerasi</i>												•
<i>Arthopyrenia punctiformis</i>		•										•
<i>Aspicilia caesiocinerea</i>											•	
<i>Aspicilia calcarea</i>	•	•		•	•				•		•	•
<i>Aspicilia contorta</i> subsp. <i>contorta</i>	•	•	•	•	•							
<i>Aspicilia contorta</i> subsp. <i>hoffmanniana</i>		•	•	•	•				•			•
<i>Bacidia adastrata</i>			•									
<i>Bacidia arceutina</i>					•							
<i>Bacidia biatorina</i>												•
<i>Bacidia delicata</i>		•			•							•
<i>Bacidia egenula</i>		•										
<i>Bacidia laurocerasi</i>					•							
<i>Bacidia phacodes</i>					•							•
<i>Bacidia rubella</i>												•
<i>Bacidia saxenii</i>					•							
<i>Bilimbia sabuletorum</i>		•			•	•			•			
<i>Botryolepraria lesdainii</i>		•			•				•			
<i>Bryoria fuscescens</i> var. <i>fuscescens</i>							•					
<i>Buellia aethalea</i>		•		•	•							•
<i>Buellia griseovirens</i>			•									
<i>Buellia ocellata</i>		•			•							
<i>Caloplaca arcis</i>		•	•	•								
<i>Caloplaca aurantia</i>	•								•			
<i>Caloplaca cerinella</i>		•			•							•
<i>Caloplaca chlorina</i>		•			•							
<i>Caloplaca chrysodeta</i>									•			
<i>Caloplaca citrina</i> s.s.	•	•	•	•	•			•	•	•	•	
<i>Caloplaca citrina</i> s.l.			•			•						•

Species	Private								Public			
	NW	M	H	SE	SW	W	S	CI	SE		SW	
									K	W	M	R
<i>Caloplaca crenularia</i>						•						
<i>Caloplaca crenulatella</i>		•	•	•	•							•
<i>Caloplaca dalmatica</i>					•							•
<i>Caloplaca decipiens</i>		•	•									
<i>Caloplaca flavescens</i>	•	•			•	•		•	•	•	•	
<i>Caloplaca flavocitrina</i>		•	•	•	•							
<i>Caloplaca flavovirens</i>					•							
<i>Caloplaca holocarpa s.s.</i>		•										
<i>Caloplaca holocarpa agg.</i>	•	•	•	•	•				•	•		•
<i>Caloplaca oasis</i>		•	•									
<i>Caloplaca saxicola</i>		•	•	•	•				•			
<i>Caloplaca teicholyta</i>		•	•	•								
<i>Caloplaca variabilis</i>		•										
<i>Caloplaca xantholyta</i>									•			
<i>Candelaria concolor</i>	•	•			•						•	
<i>Candelariella aurella</i>		•	•	•	•				•			•
<i>Candelariella medians</i>		•	•									
<i>Candelariella reflexa</i>		•	•	•	•	•			•	•		•
<i>Candelariella vitellina forma vitellina</i>		•	•	•	•	•		•	•			•
<i>Catillaria atomarioides</i>		•										
<i>Catillaria chalybeia</i>		•			•							•
<i>Catillaria lenticularis</i>		•			•				•			
<i>Chaenotheca brunneola</i>												•
<i>Chrysothrix candelaris</i>	•							•		•		•
<i>Chrysothrix flavovirens</i>												•
<i>Cladonia chlorophaea s.l.</i>		•	•	•	•	•		•	•			•
<i>Cladonia coniocraea</i>		•	•	•	•	•				•	•	•
<i>Cladonia fimbriata</i>	•		•		•	•				•	•	•
<i>Cladonia floerkeana</i>					•							
<i>Cladonia furcata</i>										•		
<i>Cladonia humilis</i>		•										•
<i>Cladonia macilenta</i>		•	•			•						
<i>Cladonia ochrochloron</i>				•								
<i>Cladonia pyxidata</i>	•		•		•				•			•
<i>Cladonia ramulosa</i>		•			•							•

Species	Private								Public			
	NW	M	H	SE	SW	W	S	CI	SE		SW	
									K	W	M	R
<i>Cladonia squamosa s.l.</i>			•		•							
<i>Cladonia squamosa</i> subsp. <i>squamosa</i>												•
<i>Clauzadea monticola</i>	•				•				•			•
<i>Cliostomum griffithii</i>					•		•			•		•
<i>Collema auriforme</i>			•		•				•		•	
<i>Collema bachmanianum</i>						•						
<i>Collema crispum</i> var. <i>crispum</i>		•	•	•	•				•			•
<i>Collema furfuraceum</i>												•
<i>Collema tenax</i> var. <i>ceranoides</i>									•			
<i>Collema tenax</i> var. <i>tenax</i>	•	•	•		•	•			•	•		•
<i>Cyphelium inquinans</i>							•					
<i>Cyphelium sessile</i>												•
<i>Cyrtidula quercus</i>					•							
<i>Dimerella lutea</i>												•
<i>Dimerella pineti</i>					•		•					•
<i>Diploicia canescens</i>		•	•		•		•		•	•	•	•
<i>Diploschistes scruposus</i>		•	•									
<i>Diplotomma alboatrum</i>					•				•		•	
<i>Dirina massiliensis</i> forma <i>sorediata</i>					•							
<i>Enterographa crassa</i>					•		•					•
<i>Evernia prunastri</i>	•	•	•	•	•	•	•	•	•	•	•	•
<i>Fellhanera bouteillei</i>		•										
<i>Flavoparmelia caperata</i>	•	•	•	•	•	•	•		•	•	•	•
<i>Flavoparmelia soredians</i>		•		•	•	•	•			•		
<i>Fuscidea lightfootii</i>	•	•			•	•	•			•		•
<i>Graphina anguina</i>												•
<i>Graphis elegans</i>					•	•						•
<i>Graphis scripta</i>					•	•					•	•
<i>Haematomma ochroleucum</i>									•			
<i>Hyperphyscia adglutinata</i>		•			•					•		
<i>Hypocenomyce scalaris</i>		•										
<i>Hypogymnia physodes</i>	•	•	•	•	•	•	•		•	•	•	•
<i>Hypogymnia tubulosa</i>		•	•		•	•	•		•	•		•
<i>Hypotrachyna afrorevoluta</i>		•										

Species	Private								Public				
	NW	M	H	SE	SW	W	S	CI	SE		SW		
									K	W	M	R	
<i>Hypotrachyna laevigata</i>					•		•						
<i>Hypotrachyna revoluta</i>		•	•	•	•	•		•	•			•	•
<i>Jamesiella anastomosans</i>					•								
<i>Lecanactis abietina</i>													•
<i>Lecanactis subabietina</i>												•	•
<i>Lecania cyrtella</i>		•	•		•	•				•			•
<i>Lecania erysibe</i>		•	•	•	•								
<i>Lecania hutchinsiae</i>													•
<i>Lecania inundata</i>		•											
<i>Lecanographis lyncea</i>													•
<i>Lecanora albella</i>								•					•
<i>Lecanora albescens</i>	•	•	•	•	•	•		•		•			•
<i>Lecanora barkmaniana</i>					•								
<i>Lecanora campestris</i>	•	•	•	•	•	•		•		•	•	•	•
<i>Lecanora carpinea</i>		•	•		•	•				•	•		•
<i>Lecanora chlarotera</i>	•	•	•	•	•	•	•	•		•	•	•	•
<i>Lecanora compallens</i>				•	•								
<i>Lecanora confusa</i>		•		•	•			•					•
<i>Lecanora conizaeoides</i>		•	•	•	•					•			
<i>Lecanora crenulata</i>			•							•			
<i>Lecanora dispersa</i>	•	•	•	•	•	•				•	•		•
<i>Lecanora expallens</i>	•	•	•	•	•	•		•		•	•	•	•
<i>Lecanora hagenii</i>		•											
<i>Lecanora muralis</i>	•	•	•	•	•	•				•	•		•
<i>Lecanora persimilis</i>		•			•								
<i>Lecanora polytropa</i>		•		•	•								•
<i>Lecanora pulicaris</i>		•											
<i>Lecanora saligna</i>		•	•										
<i>Lecanora semipallida</i>		•		•									
<i>Lecanora symmicta</i>		•	•	•	•			•		•			•
<i>Lecanora varia</i>			•										
<i>Lecidea fuscoatra</i>						•							
<i>Lecidea grisella</i>		•	•										
<i>Lecidella carpathica</i>		•		•									•
<i>Lecidella elaeochroma</i> forma <i>elaeochroma</i>	•	•	•	•	•	•	•	•		•	•	•	•

Species	Private								Public			
	NW	M	H	SE	SW	W	S	CI	SE		SW	
									K	W	M	R
<i>Lecidella elaeochroma</i> forma <i>sorediata</i>					•			•				
<i>Lecidella scabra</i>		•	•	•	•				•			•
<i>Lecidella stigmatea</i>	•	•	•	•	•	•			•	•		
<i>Lepraria incana</i> s.s.		•			•	•						
<i>Lepraria incana</i> s.l.	•	•	•	•	•			•	•		•	•
<i>Lepraria lobificans</i>		•			•					•		
<i>Lepraria vouauxii</i>		•	•						•			•
<i>Leptogium gelatinosum</i>					•				•			
<i>Leptogium lichenicola</i>	•											
<i>Leptogium plicatile</i>					•							•
<i>Leptogium turgidum</i>		•										
<i>Leptorhaphis epidermidis</i>												•
<i>Lobaria pulmonaria</i>												•
<i>Melanelixia fuliginosa</i>												•
<i>Melanelixia glabratula</i>	•	•	•		•	•			•			•
<i>Melanelixia subaurifera</i>	•	•	•	•	•	•	•	•	•	•	•	•
<i>Melanohalea elegantula</i>			•						•			
<i>Melanohelia exasperata</i>						•	•					
<i>Melanohalea exasperatula</i>					•	•						
<i>Melanohalea laciniatula</i>					•							
<i>Micarea denigrata</i>		•	•	•								•
<i>Micarea erratica</i>			•									
<i>Micarea nitschkeana</i>		•										
<i>Micarea prasina</i> s.l.					•							
<i>Mycoporum antecellens</i>												•
<i>Normandina pulchella</i>					•	•						•
<i>Ochrolechia parella</i>					•	•		•			•	•
<i>Ochrolechia subviridis</i>												•
<i>Opegrapha atra</i>	•				•			•			•	•
<i>Opegrapha calcarea</i>					•							•
<i>Opegrapha corticola</i>					•							
<i>Opegrapha gyrocarpa</i>					•							
<i>Opegrapha herbarum</i>					•							
<i>Opegegrapha ochrocheila</i>		•			•	•						
<i>Opegrapha rupestris</i>									•			

Species	Private								Public			
	NW	M	H	SE	SW	W	S	CI	SE		SW	
									K	W	M	R
<i>Opegrapha varia</i>					•							•
<i>Opegrapha vermicellifera</i>					•							
<i>Opegrapha vulgata</i>			•		•					•		•
<i>Opegrapha zonata</i>					•							
<i>Parmelia saxatilis</i>	•				•	•			•			•
<i>Parmelia sulcata</i>	•	•	•	•	•	•	•	•	•	•	•	•
<i>Parmelina pastillifera</i>					•							
<i>Parmeliopsis ambigua</i>			•						•			
<i>Parmotrema perlatum</i>		•	•		•	•		•		•	•	•
<i>Parmotrema reticulatum</i>					•	•						
<i>Peltigera horizontalis</i>						•						
<i>Peltigera hymenina</i>		•			•	•	•			•		•
<i>Peltigera membranacea</i>						•						•
<i>Peltigera neckeri</i>		•										
<i>Peltigera praetexta</i>					•	•					•	•
<i>Peltigera rufescens</i>		•										•
<i>Pertusaria albescens</i> var. <i>albescens</i>												•
<i>Pertusaria albescens</i> var. <i>corallina</i>												•
<i>Pertusaria amara</i> forma <i>amara</i>					•						•	•
<i>Pertusaria coccodes</i>												•
<i>Pertusaria hymenea</i>					•	•					•	•
<i>Pertusaria leioplaca</i>					•	•						•
<i>Pertusaria multipuncta</i>											•	
<i>Pertusaria pertusa</i>					•			•				•
<i>Phaeographis dendritica</i>					•							•
<i>Phaeographis lyellii</i>					•							
<i>Phaeophyscia nigricans</i>		•										
<i>Phaeophyscia orbicularis</i>	•	•	•	•	•		•		•	•	•	•
<i>Phlyctis agelaea</i>												•
<i>Phlyctis argena</i>					•	•			•	•	•	•
<i>Phylloblastia inexpectata</i>		•										
<i>Physcia adscendens</i>	•	•	•	•	•	•	•	•	•	•	•	•
<i>Physcia aipolia</i>	•	•			•	•	•		•	•	•	•

Species	Private								Public			
	NW	M	H	SE	SW	W	S	CI	SE		SW	
									K	W	M	R
<i>Physcia caesia</i>		•	•	•								
<i>Physcia dubia</i>			•			•						
<i>Physcia leptalea</i>												•
<i>Physcia tenella</i> subsp. <i>tenella</i>	•	•	•	•	•	•	•	•	•	•	•	•
<i>Physconia distorta</i>			•					•			•	•
<i>Physconia grisea</i>		•	•		•					•		
<i>Placynthiella dasaea</i>			•									
<i>Placynthiella icmalea</i>		•	•		•							
<i>Placynthium nigricans</i>	•				•	•						•
<i>Platismatia glauca</i>	•	•				•		•				•
<i>Porina aenea</i>					•	•						•
<i>Porina borrieri</i> var. <i>borrieri</i>					•							
<i>Porina chlorotica</i> forma <i>chlorotica</i>		•		•	•	•					•	
<i>Porpidea cinereoatra</i>										•		
<i>Porpidia crustulosa</i>				•	•	•						•
<i>Porpidia platycarpoides</i>												•
<i>Porpidia soledizodes</i>		•	•	•						•		
<i>Porpidia tuberculosa</i>		•	•	•	•						•	•
<i>Protoblastenia rupestris</i>	•	•	•		•	•				•	•	•
<i>Pseudevernia furfuracea</i> var. <i>ceratea</i>		•										
<i>Psilolechia lucida</i>		•	•	•	•					•		•
<i>Punctelia jeckeri</i>		•	•	•	•	•				•	•	
<i>Punctelia reddenda</i>												•
<i>Punctelia subrudecta</i> s.s.	•	•		•	•	•				•		
<i>Punctelia subrudecta</i> s.l.			•		•			•		•		•
<i>Pyrenula macrospora</i>											•	•
<i>Pyrrhospora quernea</i>					•							•
<i>Ramalina canariensis</i>												•
<i>Ramalina farinacea</i>	•	•	•	•	•	•	•	•		•	•	•
<i>Ramalina fastigiata</i>		•			•	•	•	•		•	•	•
<i>Ramalina fraxini</i>					•							
<i>Rhizocarpon geographicum</i>												•
<i>Rhizocarpon reductum</i>		•			•	•				•		•
<i>Rinodina oleae</i>		•	•	•								•

Species	Private								Public			
	NW	M	H	SE	SW	W	S	CI	SE		SW	
									K	W	M	R
<i>Rinodina teicholyta</i>		•										
<i>Sarcogyne regularis</i>		•	•	•	•				•	•		•
<i>Schismatomma cretaceum</i>												•
<i>Schismatomma decolorans</i>					•			•			•	•
<i>Scoliciosporum chlorococcum</i>		•	•		•							
<i>Scoliciosporum umbrinum</i>		•		•					•			•
<i>Solenopsora candicans</i>	•											
<i>Stereocaulon nanodes</i>												•
<i>Stereocaulon vesuvianum</i> var. <i>symphycheileoides</i>				•								
<i>Strangospora moriformis</i>		•										
<i>Strangospora pinicola</i>		•										
<i>Tephromela atra</i> var. <i>atra</i>				•		•			•		•	
<i>Thelotrema lepadinum</i>												•
<i>Toninia aromatica</i>	•				•				•			
<i>Trapelia coarctata</i>		•	•	•						•		•
<i>Trapelia glebulosa</i>		•	•									•
<i>Trapelia placodioides</i>		•	•	•					•			
<i>Trapeliopsis flexuosa</i>		•	•	•	•				•	•		•
<i>Trapeliopsis granulosa</i>						•						
<i>Usnea articulata</i>					•	•						•
<i>Usnea ceratina</i>					•							•
<i>Usnea cornuta</i>			•		•	•		•			•	•
<i>Usnea esperantiana</i>								•				
<i>Usnea flammea</i>												•
<i>Usnea florida</i>						•						
<i>Usnea hirta</i>							•					
<i>Usnea rubicunda</i>												•
<i>Usnea subfloridana</i>	•		•		•	•	•					•
<i>Usnea wasmuthii</i>								•				•
<i>Verrucaria baldensis</i>	•				•				•			
<i>Verrucaria caerulea</i>					•							
<i>Verrucaria elaeina</i>					•	•			•			•
<i>Verrucaria fuscella</i>		•			•				•			
<i>Verrucaria fusconigrescens</i>								•				
<i>Verrucaria hochstetteri</i>					•				•	•		•

Species	Private								Public			
	NW	M	H	SE	SW	W	S	CI	SE		SW	
									K	W	M	R
<i>Verrucaria macrostoma</i> forma <i>furfuracea</i>		•	•	•					•			
<i>Verrucaria macrostoma</i> forma <i>macrostoma</i>		•	•		•							
<i>Verrucaria muralis</i>		•	•							•		•
<i>Verrucaria nigrescens</i>	•	•	•	•	•	•		•	•	•	•	•
<i>Verrucaria nigrescens tect</i>		•										
<i>Verrucaria praetermissa</i>												•
<i>Verrucaria viridula</i>		•	•		•	•			•			•
<i>Xanthoparmelia conspersa</i>					•							•
<i>Xanthoparmelia mougeotii</i>		•	•	•								•
<i>Xanthoria calcicola</i>		•	•	•						•		
<i>Xanthoria candelaria</i>		•		•	•					•		
<i>Xanthoria elegans</i>		•	•		•		•		•			
<i>Xanthoria parietina</i>	•	•	•	•	•	•	•	•	•	•	•	•
<i>Xanthoria polycarpa</i>		•	•	•	•	•	•		•	•		•
<i>Xanthoria ucrainica</i>		•	•									

Notes on *Rinodina intermedia*

Background and Summary:

Rinodina intermedia Bagl. has recently been discussed by Mayrhofer *et al.* (2001). John Sheard, coauthor of this paper, on receipt of the BLS *Bulletin* containing the article *Lichens of the Isles of Scilly* by Allen *et al.* (2010), suggested that specimens of *Rinodina conradii* Kőrb in the south-west of the British Isles (eg Isles of Scilly) were possibly *R. intermedia*. *R. intermedia*, a species known for the Channel Islands (specimens from Sark are cited in the paper by Mayrhofer *et al.*, 2001) had not been recorded from elsewhere in the British Isles and is not described in the ‘Lichen Flora’ (Smith *et al.*, 2009). Subsequently we checked and re-assessed all British and Channel Islands specimens stored as *R. conradii* Kőrb in the BM. We confirm that both of these morphologically similar species, *R. intermedia* and *R. conradii*, are represented in these BM collections and also in Devon, where Barbara Benfield recently has re-examined specimens originally identified as *R. conradii* from four sites and

redetermined two specimens as *R. intermedia*. It is likely that *R. intermedia* occurs in additional sites, eg in Devon, Cornwall and the Isles of Scilly. Should you newly discover or find in your collections possible material of *R. intermedia* please contact Ann Allen (maallen@eclipse.co.uk) as we are anxious to chart distribution.

Distribution and Ecology

Rinodina intermedia is reported to have a warmer, drier temperate distribution favouring more xeric habitats and lower altitudes than *R. conradii*. It extends as far north as the Channel Islands (and Devon), and San Francisco in North America, and as far south as Ecuador and Kenya (Mayrhofer *et al.*, 2001). *R. conradii*, on the other hand, has a preference for colder temperate regions and is distributed from Alaska to Argentina on the west of the Americas, in Iceland, Australia, Scotland, East Anglia and many northern and central European regions. Where the distribution of the two species overlaps as in the mountains of Nepal, the Andes and the Rockies, the species are separated by altitude, with the upper limit being lower for *R. intermedia* than *R. conradii* (Mayrhofer *et al.*, 2001).

With the recent discovery of both species in South Devon (South Hams), we can recognise an overlap in distribution. It is likely that further specimens from sites and collections from southern, especially south-western, Great Britain and Ireland may prove to be *R. intermedia* rather than *R. conradii*. (No voucher specimen has been located for the Isles of Scilly record of *R. conradii*. It is probable that *R. intermedia* is present in the Isles of Scilly with or without *R. conradii*.)

Both *R. intermedia* and *R. conradii* are characteristically fragile terricolous species. *R. conradii* may also grow on bark and lignum. Historic collections in the BM of *R. intermedia* from the Channel Islands are from sea cliffs, as are the specimens from Devon. The Devon *R. intermedia* specimens were collected from rabbit-grazed short dead vegetation close to the edge of sea cliffs near Grunta Beach, North Devon and on Cathole Cliff between Bolt Head and Bolt Tail, South Devon.

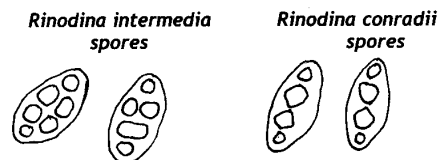
Distinguishing features

R. intermedia has a brown to grey-brown, cracked, areolate, somewhat warted thallus. Most specimens of *R. intermedia*, including those recently found in Devon, are better developed with a more continuous and thicker thallus than found in *R. conradii*.

Apothecia of *R. intermedia*, up to 1.1mm in diameter, are often clustered, with thick thalline margins that in larger apothecia become thinner. Discs are typically dark brown-black and rather granular in appearance, often becoming convex with age.

The critical distinguishing features between *R. intermedia* and *R. conradii* are:

(1) spore characteristics. The spore development in *R. intermedia* results in submuriform spores (at maturity 20.8-31.5 x 10.4-14.9 µm) with 5 to 12



irregularly rounded locules (Mayrhofer *et al.*, 2001). *R. intermedia* spores are proportionally broader than the spores of *R. conradii*, that at maturity have 4 locules of characteristic rhomboidal or diamond-shape (measuring 18-30 x 8.5-14 μm ; Smith *et al.*, 2009), and

(2) the presence of a unique fatty acid, deoxylichesterinic acid, in *R. intermedia*. No fatty acids are produced in *R. conradii*.

Examination of specimens

During the latter part of 2010 we examined, in addition to the four specimens from Barbara Benfield, 22 specimens in the collections of the BM in the folder labelled *Rinodina conradii* KÖrb. From examination of the spore features in particular we concluded that of the seven 19th century Larbalestier/Collings specimens from Sark (Channel Is), labelled *Rinodina diplinthia* (Nyl.) Zahlbr., a synonym of *R. intermedia*, six have spore features characteristic of *R. intermedia*. There was insufficient material for examination of apothecia and spores for the remaining Sark specimen which was originally labelled *Lecanora pyreniospora* Nyl. and may well be *R. conradii* which has also been recorded for Sark in recent years, but without a voucher specimen. Other specimens from the Channel Islands – four from Herm (dated 1986), and two 19th century Larbalestier specimens from Jersey (1867, 1889) – have the spore characteristics of *R. intermedia*. In contrast, two specimens from Scotland (1946, 1969), two specimens from Skomer (leg Wolseley 1987), and three from East Anglia (two from Thetford, 1963 and 1979, and one from Suffolk 1979) – all have spores characteristic of *R. conradii*. These specimens illustrate the difference in distribution of the two species.

In order to compare with published data and confirm our conclusions we measured a total of 115 submuriform spores from the 12 *R. intermedia* BM specimens and measured a total of 89 four-locular spores from the seven *R. conradii* BM specimens. Similar measurements were carried out on Barbara Benfield's four specimens. The table summarises these measurements:

	<i>R. intermedia</i> BM		<i>R. conradii</i> BM		<i>R. intermedia</i> BB		<i>R. conradii</i> BB	
	L μm	W μm	L μm	W μm	L μm	W μm	L μm	W μm
Sample size	115	115	89	89	20	20	25	25
Range	16.8– 32	9–17	18.4– 30	8–13	20–29	12–16	18–35	8–13
Mean	24.567	12.685	25.099	10.038	25.15	13.85	27.26	10.40
SD	3.246	1.483	2.750	1.261	2.477	1.225	4.161	1.323

Calculations of the T values for differences in the means for the widths of *R. intermedia* (BM) and *R. conradii* (BM) (T = 8.898), and for the widths for *R. intermedia* (BB) and *R. conradii* (BB) (T = 8.977), are statistically both highly significant. The difference in the means of the lengths of the spores of *R. intermedia* and *R. conradii* are

not significantly different (both BM and BB), while the ratios of length/width of the spores from the two species, like their widths, are significantly different.

In order to further confirm our conclusions drawn from spore characteristics, thin layer chromatography (t.l.c.) for the unique fatty acid, deoxylichesterinic acid, reported for *R. intermedia* was carried out. The Rf values given by Mayrhofer *et al.* (2001) are: 0.55 in solvent A, 0.50 in solvent B and 0.57 in solvent C.

Holger Thüs (NHM) ran t.l.c. on selected samples of material of *R. intermedia* in the BM collections:

BM000733975 (leg Mrs Collings, ex Herb C. Larbalestier, collected in Sark)

BM000733974 (slopes of L'Eperquerie, coast of Sark, 1868, ex Herb C. Larbalestier)

BM000761263 (Herm, granitic cliffs on S coast, leg James, Galloway and White, 1986),

The following results were obtained: Fatty acid spot at Rf values of 0.50 in solvent A, 0.49 in solvent B and 0.52 in solvent C. While a little lower than the results given by Mayrhofer *et al.* (2001), we do not consider the differences significant and regard the results as confirmation of these specimens as *R. intermedia*.

No fatty acids were noted in t.l.c. of the following BM specimens identified as *R. conradii*:

BM000733969 (Skomer Island, The Wick Site 15, leg Wolseley, 1987)

BM000733970 (Skomer Island, Near New Stone, Site 6, leg Wolseley, 1987)

BM000734062 (Fife, Tentsmuir, leg Topham and Hitch, 1969)

These results are consistent with our conclusion that these specimens are *R. conradii*.

Paul Harrold (RBGE) ran t.l.c. on Barbara Benfield's specimens and there were no fatty acids detected for the specimens from Kilkhampton, Cornwall or Sour Mill Cove, South Hams, South Devon, thereby confirming our identification of *R. conradii* from spore characters. Of the Devon material from near Mortehoe (Grunta Beach), there was inadequate material; but the scant specimen from Cathole Cliff, South Hams (confirmed from spore characteristics by Brian Coppins as *R. intermedia*) gave a fatty acid spot at Rf value 0.43 to 0.45 in Solution A which, although lower than expected, probably corresponds to deoxylichesterinic acid as it matched a control run.

In conclusion, there is good evidence to support two morphologically similar and rare species of *Rinodina*: *R. intermedia* and *R. conradii*. These species, differing in spore characters and chemistry, appear to have an overlap in distribution where the southern limit of *R. conradii* meets the northern limit of *R. intermedia* as, for example, in south Devon.

Acknowledgements

We would like to thank especially John Sheard for bringing the species *Rinodina intermedia* to our attention and consequent helpful correspondence; Holger Thüs for help with specimens in the BM and running t.l.c. on selected BM material; Paul

Harrold for running t.l.c. on Barbara Benfield's specimens; Brian Coppins for confirmation of identification of *R. intermedia* from Devon; and Barbara Benfield for her discovery of the Devon *R. intermedia* and its loan.

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Names for Lichens. 2. Names for New Taxa

A *taxon* (plural *taxa*) is anything to which a formal biological name is applied. The species *Parmelia saxatilis* is a taxon. So is the variety *Pseudevernia furfuracea* var. *ceratea*, or the genus *Caloplaca*, or even ascomycetes as a whole (the phylum *Ascomycota*). It is a useful word, in part because of its generality: whether we call it *Cladonia pocillum*, *C. pyxidata* subsp. *pocillum*, *C. pyxidata* var. *pocillum*, or *C. pyxidata* forma *pocillum* (and all of these names have been used) we are referring to the same taxon.

Another useful word, relevant to species and infra-specific taxa, is *epithet*. When used without qualification it means the last part of a name. Thus the epithet in *Parmelia saxatilis* is 'saxatilis'; the epithet in *Pseudevernia furfuracea* var. *ceratea* is 'ceratea'. If we wanted to refer to the 'furfuracea' part of the latter name we would say the specific epithet.

Two or more names that refer to the same taxon are said to be *synonyms*. For the *pocillum* names above, all the synonyms had the same epithet and belonged to the same genus, but this need not be the case in general.

Most readers will never wish to create a new lichen name. However, especially if you subscribe to *The Lichenologist*, you will read publications in which new names *are* created, and it is nice to understand what is going on.

There are two reasons for creating a new name. The first, and most obvious, is that you have recognised a new taxon (most commonly a species); it does not yet

have a name, and clearly needs one. The second reason is that you consider the present name of an existing taxon to be unsatisfactory; a common case is a species that you consider belongs to a genus other than the one in which it was originally placed. These two reasons are sufficiently different that they are best treated separately, and in this article I will discuss only names for new taxa. For simplicity, I will mostly talk about names for new species. Nearly everything said for species applies without change to infra-specific taxa. Genera are only slightly different.

Suppose that you think you have just discovered a new species of lichen. We will assume that it looks vaguely *Parmelia*-ish, and that you have seen it on a few trees in and around London, and nowhere else. Do you immediately write an article for *The Lichenologist* about your "new species"? No, you do not. Definitely not. The literature is full of descriptions of "new species" that eventually turned out not to be new, and as a result we have many thousands of synonyms - unwanted and unloved - that we have to keep track of.

Your "new species" may be well known in some other part of the world, even if it has not been seen in London before. Lichens do sometimes turn up in unexpected places: an example is *Parmelia submontana*, which seems to be spreading north in Europe. Your "new species" may have been described from your region in the past, in some long-forgotten publication. (Admittedly, this is not very likely if you live in London, but it is a real concern for lichenologists in less well-studied parts of the world.) Your "new species" may be no more than unusual-looking individuals of a species that you already know: grazing, parasitism, pollution, or even just living on an unusual substrate, can all do funny things to lichens. The message here is plain: you need to do a lot of work before you conclude that an apparent "new species" really is new.

If, after doing all that work, you still believe that your lichen is new, what then? Well, you need to publish. The Code distinguishes two levels of publication. *Effectively published* basically just means published. *Validly published* means published together with enough information to be useful. A new name must be both effectively published and validly published. If it isn't, other botanists are entitled to ignore it.

A name scribbled in your notebook, or written on a herbarium packet, or mentioned in a letter to a friend is not effectively published. A name in a paper in *The Lichenologist* is effectively published. Usually it is obvious whether or not a lichen name is effectively published, but the Code has rules covering the many grey areas that occasionally arise. I will only mention two of these. The first is that purely electronic publication is not effective publication. This rule is starting to become inappropriate, and it is likely that the Code will eventually be changed to allow electronic publication, provided that it is done in a sensible way. The second grey area concerns university theses. The rules here are complicated, but the bottom line is that most such theses are not effectively published.

There is no list of "approved journals" for publishing lichen names, or even botanical names generally. If you are silly enough to publish your new name in

Theoretical Astrophysics Review or in the *Journal of Sanskrit Epigraphy*, it will still be effectively published. In practice this is rarely a problem, because lichenologists nearly always want to be sure that other lichenologists will see what they write.

Suppose that your paper in *The Lichenologist* about your new species consists, in its entirety, of the following. "I have just discovered *Parmelia londinensis*. The End." The obvious problem with this - apart from the difficulty of getting it past the Editor - is that if I, or anyone else, comes across an unusual *Parmelia*-ish lichen we have no way of telling whether or not it is the same species as yours. In other words, we need a description of *P. londinensis*, or at least something that will serve in place of a description. For valid publication you must provide this. The word "description" is self-explanatory. You may, alternatively, provide a "diagnosis", which is a statement of how the new species differs from some other species. For example, "Like *Parmelia saxatilis* but with soralia and without isidia" would be a diagnosis for *Parmelia sulcata* (though not a very good one). A photograph or drawing is not an acceptable substitute for a description or diagnosis.

At present, you must provide a description or diagnosis in Latin. This rule has outlived its usefulness (if, indeed, it ever had any). If you look at descriptions of new species in *The Lichenologist* you will often see just a sentence or two in bad Latin, there to satisfy the rules, followed by the "real" description in half a page or more of English. The Latin requirement was only introduced in 1935 - before then, any language could be used - and it may soon be eliminated. We probably won't go back to any-language-at-all-is-OK (who wants to see descriptions in Inuit or Tokharian?), but it is not yet clear whether the new rule will be "only English" or "only one of a small number of specified languages". There are good arguments for and against each of these options.

Here is the description of a well-known lichen. It was published (long before 1935) solely in Latin. *Lichen pallide viridis rugosus margine undulatus*. [A pale green, wrinkled lichen with wavy margins.] What lichen is this? You haven't a clue, have you? If I hadn't already seen the name that was attached to this description, I wouldn't have had a clue either. It is in fact Linnaeus's description of the lichen that we now call *Flavoparmelia caperata*, but it doesn't provide enough details to make that obvious now that we recognise far more species of lichens than Linnaeus did. Modern descriptions tend to be more complete than this one, but future generations of lichenologists will *certainly* regard some of them as incomplete. This is because we cannot anticipate all the characters that will, in the future, be regarded as important for separating species, so we do not include all of those characters in our descriptions. Fifty years ago, for example, detailed chemical information was never included in descriptions, yet in some groups of lichens it is now regarded as essential.

Because our descriptions can never be complete, the Code insists that we designate an actual specimen of a lichen - a type specimen - that is linked to the name. For valid publication you must designate a type. The idea is that if future lichenologists find your description to be inadequate, they can have a look at the type specimen and fill in the gaps themselves. The basic idea is simple, but the subject of

types can get complicated, and it merits a future article all to itself. There are other things that can affect whether or not the name of a new species is validly published, but most of them are esoteric. If you don't go out of your way to do something offbeat, you probably won't have a problem.

What about genera? You must provide a description (or equivalent) for the genus, though in some rather narrowly circumscribed situations (see Article 42) you can use a species description as a simultaneous generic description. Instead of designating a type *specimen*, you must designate a type *species*.

In choosing actual names of genera and species you need to bear a few things in mind. The name as a whole is considered to be Latin. The generic name is regarded as a noun. Therefore, if the epithet is an adjective it must agree in gender with the generic name: thus, for example, *Lecanora frustulosa* but *Placodium frustulosum*. Not all examples are as simple as this: in the name *Collema granuliferum* f. *minus* all three elements are in the same (neuter) gender, though this might not seem obvious. If in doubt, seek advice from one of those poor unfortunates who was force-fed Latin grammar from morning to night at school, but survived to tell the tale. The epithet can be a noun, in which case it does not change from one genus to another. Nouns in the nominative case are sometimes used, e.g. *Caloplaca saxicola*, but more commonly nouns are used in the genitive case, to indicate "of something", e.g. *Arthonia aspiciliae* (a parasite of *Aspicilia* species), *Diplotomma atacamae* (of the Atacama [Desert]), *Caloplaca obamae* (of Obama - commemorating the current President of the USA). This is fine for nouns with well-established Latin forms, or which, like Obama, easily fit into the grammatical structure of Latin, but many modern surnames have no obvious Latin equivalent. To ensure some uniformity, the Code specifies how the genitive form of such surnames is to be constructed. The rules depend on how the name is spelt and on the gender of the person concerned: thus *lambii* if you want to commemorate a Mr. Lamb, but *lambiae* for Miss Lamb.

Authors have a great deal of freedom in their choice of new generic names and new epithets. Very few things are forbidden. Hyphenated epithets (as in *Lecanora orae-frigidae*) are allowed but are not encouraged, and should obviously be used with restraint: no-one would want to see *Micarea brianii-ioannis-coppinsii* instead of *Micarea coppinsii*. One of the few things that is explicitly forbidden is a specific epithet that repeats the generic name: you can't have *Parmelia parmelia*, for example. (This is a silly and unnecessary restriction: zoologists often do that sort of thing - e.g. *Bufo bufo*, the common toad - and are none the worse for it.) Another is use of a phrase involving the ablative case. So if you ever feel an urge to use *in-londinio* or *in-parte-dextra* as an epithet you will just have to resist it and find an alternative way of expressing yourself (e.g. *londinii* or *inter-oves*).

In the next article I will discuss new names for existing taxa.

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A little more on the distribution and ecology of *Degelia plumbea*

In the previous Bulletin, Richardson *et al.* (2009) discuss the world distribution of *Degelia plumbea* s. lat. (i.e. including the recently described *D. cyanoloma*) and its ecology, paying particular attention to North America. At the other end of its range, in the eastern Mediterranean, their map suggests that the species is very rare. However, at least in Greece, it is more common than that map suggests. The map below, from the *Lichen Atlas of Greece* (unpublished), which was prepared from information in Abbott (2009), shows its known distribution in that country.



D. plumbea is fairly widespread in Greece. Its absence from the NE of the country probably reflects the more continental climate there, though under-collecting may play a part; Thrace and eastern Macedonia are not well known lichenologically. It is recorded at altitudes from 50 to just over 1500 m, but is uncommon below 500 m, and commonest in the montane forests (1000 - 1500 m). It usually occurs on bark, most commonly of *Abies* or *Quercus*, but is also known from *Pinus* and *Ulmus*. There is a single report from wood of *Juniperus oxycedrus*.

In the Peloponnese, the region I know best, *D. plumbea* is basically an infrequent, but not really rare, species of undisturbed montane *Abies cephalonica* forests, where it usually occurs on bark of that species. However, it does occur, though only occasionally, in other habitats. It is not threatened so long as its – fairly extensive – habitats remain intact. However, those habitats might be at risk if the projections that I have seen for global warming are reliable: precipitation in Greece is forecast to drop by about 40% over the next 50 years, a greater percentage drop than for anywhere else on the planet. In a drier climate, the montane forests might be at risk of total destruction by fire.

I would expect that its ecology is similar throughout the eastern Mediterranean, i.e. it probably occurs at low altitude in a few places where the climate is sufficiently maritime, such as on some islands, but it is probably predominantly a species of montane forests.

All of the above remarks refer to material reported as *D. plumbea* or one of its

synonyms, but some of those reports might actually be based on material of *D. cyanoloma*. From memory, most of the material that I have seen probably belongs to *D. plumbea* sensu stricto, but I have not revised collections since *D. cyanoloma* was described in 2009. There is a single explicit report of *D. cyanoloma* for Greece (island of Kefallonia, as *Parmeliella plumbea* var. *cyanoloma*, made by Miroslav Servít in 1935; it was cited by Abbott 2009 under *D. plumbea*), but Servít was not the most careful of workers, and it is not clear whether the report should be accepted. I have not seen the material on which that report was based.

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Using microscopes for identifying lichens on limestone (18-20 February 2011)

We assembled at the University of Bristol Botanic Gardens on the Friday night, and after discovering the range of experiences of the participants, which included bee-keeping and painting, we began the course in earnest with an excellent lecture from David Hill and Brian Coppins, packed full of tips for the aspiring field lichenologist. The importance of different microhabitats was duly stressed, but we were also given many hints on how to maximise the usefulness of any collections we might make in the field; for example, ensuring that attempts were made to note, and collect examples of, variation in species in the field (possibly to pre-empt future systematic rearrangements or splits), and emphasizing that the parts of lichens which would be most useful for microscopy, e.g. fresh perithecia, were sometimes the least evident in the field! Despite these potentially fazing tips, the group were stimulated by the lecture and especially keen to get out and collect on the Carboniferous Limestone of Sand Point (ST330659) near Weston super Mare.



Sand Point

Luckily the weather was fine for our collecting, and everybody managed to avoid slipping off the slippery slope of limestone that is Sand Point. Back in the lab at the University my first main objective was to cut some good apothecial sections of any lichen that would yield to it. I started with a *Caloplaca* and was eventually rewarded with the magnificent sight of the bursting forth from the section at 100X, surely a

vision to turn somebody on to lichens if ever there was one. In fact, this was my favourite part of the course; I am surprised that there isn't a video of this online that I can find – possibly a project for me in the coming months! After pinning down the

Caloplaca to species *oasis* with the help of Arup (2009), I turned my attention to a *Verrucaria*. This was so that I could practice sectioning perithecia, and, after remembering David Hill's advice to make two cuts at right angles to the desired plane of the perithecial section before sectioning, I finally got a section onto a slide without flicking it across the lab. Staining with Lugol's iodine was also taught and practised, and, although I never quite saw the ascus tips as described on my *Lecanora* specimen, I was happy that if I got a specimen that played along, I was confident with the general principle.



The essential tools

My main aim in attending this course was simply to learn more about lichens and to practice the microscopic techniques required for accurate identification; it

would have been hard not to meet these aims given the expert assistance on hand, the excellent reference materials we were provided with and of course the convivial atmosphere created by all the course participants. A testament to the success of the course is the fact that immediately after the course I bought a stereo-microscope to complement my compound one.

Acknowledgements

Thank you to the BLS for a grant from the Wallace-Burnett-Gilbert fund assisting my participation in the meeting. Also to David Hill and Brian Coppins for arranging and delivering such a stimulating weekend.

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The Melvill Lichen Collection at the National Botanical Garden of Wales

James Cosmo Melvill BA, DSc, FLS (1 vii 1845 - 4 xi 1929), grandson of the Chief Secretary of the East India Company¹ and son of the Under Secretary of State for India, all with the same name, was born in Hampstead and educated at Harrow and Trinity College, Cambridge. His greatgrandfather came from Guernsey. He lived near Manchester, where he worked first for an uncle and then for his father-in-law, an East Indian Merchant, before retiring, in 1904, near Shrewsbury. His collection of some half a million botanical specimens was gifted to Manchester University, which conferred a DSc on him as acknowledgement. He was chair of the Museum

¹ The East India Company (EIC) was chartered by Elizabeth I in 1600 to trade with India and the spice islands and by the end of the century had an important base in Calcutta; by 1764 they had control of Bengal and in 1806 opened the East India Docks in London. The West India docks were where sugar and imports from the slave plantations came in. However by 1813 they had lost their monopoly of the Indian trade and in 1858, the year after the Indian mutiny, the Government replaced the EIC with direct rule; eventually the EIC was dissolved in 1874. Its legacy lived on in a manufacturing town like Manchester; Lancashire cotton and Wedgwood pottery had become part of the trade that went on in the British Empire – however times were changing fast. Some claim the EIC was the first multinational.

Committee and wrote a Handbook (No. 54) listing the collections (Melvill, 1904). In the Kew copy there is a cutting from the Guardian on the presentation ceremony at which Thistleton-Dyer gave an address, commenting that collections were considered old-fashioned and 'hay' but that both John Stuart Mill and Jeremy Bentham had said a study of systematic botany is a good basis for logical thinking and the production of legislative codes. Melvill took his cryptogams with him to Meole Brace, nr Shrewsbury and eventually left his British plants, including lichens, to Harrow who have now gifted them to the National Botanical Gardens of Wales (NBGW) where they are still kept in their five original cabinets. The lichens are a small part of the collection but are a useful source of voucher material.

Melvill contributed to a Harrow Flora (1864) whilst at school but also collected shells and *Lepidoptera*. In Manchester he made friends with another collector, Charles Bailey, with whom he divided the world as they both wanted to leave their collections to the University; Bailey had the British Isles, Europe and Africa bordering the Mediterranean and Melvill had the rest of the world. Bailey worked for Ralli Brothers, who traded as far as India, and was involved in many scientific and natural history societies but there are no lichens collected by him here. There was a magnificent flowering of scientific societies at this time and part of the interest of this collection is as a social document illustrating how the amateur was involved in natural history. This was post the heyday of natural history (Barber, 1980) but before the rise of the conservation movement and Wildlife Trusts. These two collectors even bought a second house each for their collections. Melvill travelled extensively in North America and collected many plants (Weiss, 1930). Other plants collected by him are at ABD, BRISTM, GLR, K, NMW and OXF (Herbaria United, 2011).

The lichen collection covers the British Isles, with a couple of American specimens, and is in twelve blue folders, within which are genus folders containing separate species folders. The specimens are stuck on sheets. The order follows A.L. Smith: pins, jellies, bluegreens, fruticose, *Xanthoria*, *Physcia*, *Parmelia*, *Lecanora*, *Lecania*, *Umbilicaria*, *Cladonia*, *Lecidea*, *Arthonia*, *Verrucaria* (Smith, 1911, 1918). It does not appear that he did much collecting himself but used commercial collectors like William Gardiner, originally an umbrella maker who found he could earn more selling lichens – almost 100 specimens here. Other Scottish collectors represented are J. McAndrew from New Galloway, A. Oswald Brodie and Thomas Rogers. His own Scottish collections are from a relative's estate, Aberuchill, Comrie, now owned by a Russian oligarch. Fred Bower came from Manchester and is represented by over 50 specimens; Larbalestier collected in Jersey and Connemara and Isaac Carroll of Cork collected in Ireland each contributing over 30 specimens. The north of England is represented by William West and W. Mudd; the southwest by the collections of Miss Jelly of Penzance and William Curnow. Hugh Preston collected around Minehead. Leighton was the author of the most comprehensive flora until Crombie's and produced several exsiccatae. There are two collections attributed to Dr Brown – presumably Robert Brown, Bank's librarian and collector of the first known specimen from Kew (Waterfield & Henrici, 2009). There is one collection from Admiral Jones who persuaded Crombie to take up lichenology. A rough list of

the lichen collection has been made but the names have not been updated or the specimens critically examined.

Acknowledgements

I would like to thank the library staff of Royal Botanic Gardens Kew and the Natural History Museum; Natasha de Vere, Head of Conservation and Research at the National Botanic Garden for Wales for access to the collection; Dr Brian Spooner, Head of Mycology at Kew, and Professor Mark Seaward who read through my rough list.

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Corrections and additions to ‘Treasures of the backlog boxes...’

The original communication arose from notes made whilst foldering part of the Babington collection. I would like to acknowledge that Wikipedia was a source of some information. Hawksworth & Seaward (1977) is an invaluable source and dipping back into it I found that Thomas Edmundson (1823-46) was the naturalist aboard the HMS *Herald* until he was killed by natives in Ecuador, Seeman being his replacement. The nineteenth century was a dangerous time for naturalists.

Jack Laundon brought my attention to the fact that Borrer contributed to the Supplement of *English Botany*; Smith contributed the lichens for the original volumes (Laundon, 2005; Laundon & Waterfield, 2007). Another misleading remark was attributing the comment about Lay and Collie to J. Hooker, whilst in fact it was Arnott to JDH (Huxley, 1918). [Robert McCormick, the assistant surgeon on the other ship on the Ross expedition, was the original surgeon on the *Beagle* and was accompanying JDH when he first met Darwin before they set off on their voyage on the *Erebus* and *Terror*; his journal can be seen at the Wellcome Trust Archives in London.] In my original manuscript the surnames were in bold and this has led to confusion over Alphonse Barthele Boistel in the fourth paragraph where a comma went missing in the change. The voyage of HMS *Rattlesnake* took place in 1846 not 1946.

Holger Thüs informs me that although Taylor's herbarium went to Harvard there is still much material at NHM. He also informs me that his team is working hard to complete the foldering of the backlog; the database will be available on line and he should be thanked for making such a useful resource available. Most of the Hooker lichens went to NHM. Admiral Jones to Nylander in 1865 commented that JDH has to pay himself for cryptogams as Government grants were only for useful plants (Mitchell, 1996); lichens have always been an underresourced area of natural history.

Additional information I have found out was that Andrew Bloxam was the nephew of the painter Thomas Lawrence – there happened to be an exhibition at the National Portrait Gallery at the time of the BLS 2011 AGM where a sketch, privately owned, was shown of the two brothers. He also went to Rugby School, as did Berkeley, the father of British mycology. Bloxam benefitted by becoming a curate at Twycross, a living in the gift of Rugby. Rugby was one of the nine schools that became independent of church and state in the 1868 Public Schools Act – the others being Charterhouse, Eton, Harrow, Merchant Taylors, Shrewsbury, St Paul's, Westminster and Winchester. This was a time of great educational change - University College, London, was founded in 1826 as the first non clergy college, based on French and German models. One of the founders was the uncle of JDH's friend Bentham and his clothed skeleton still presides over the college. The clergy's reply was King's College, London; so it was 1836 before the University of London was finally chartered as an examining body. It was a truly modern university reaching beyond London via a network served by railways as well as overseas within the Empire; before this England had two universities, Scotland three all clerically based (Harte, 1986). With industrialisation came urbanisation and the railways created greater mobility; and the nineteenth century saw the blossoming of redbrick universities and greater access to learning. Natural philosophy gave way to Science and through education, journals and societies became more accessible; new career paths opened up for the keen naturalist. *Science Gossip*, founded in 1865, was edited by M.C. Cooke who was to become the first mycologist at Kew in 1879. Churchill Babington, who had never been on a voyage of discovery himself, became Professor of Archaeology at Cambridge.

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Lichens and coalition government

Stuck in traffic on the M1 on a hot day in early May (remember the spring heatwave?), I found myself listening to the election results and was struck by the similarities between the coalition government and our old friend, the lichen symbiosis.

The major party (fungus) forms much of the structure, and is largely all that you see. It shelters a minor party (green alga), which although not obvious to the casual observer has a vital role to play. The major party can't manage without it. The minor party could, but it would have to stay in the shadows and its life would be more limited. Both find that their priorities are changed by the process of coalition (symbiosis), and the minor party even loses the ability to reproduce.

Sometimes there is also a third party (I'm thinking of species of *Peltigera*, with their cyanobacteria tucked away in cephalodia). It doesn't really get on with either of the others and has to be kept apart, but is very useful all the same. One or two lib dems with strong opinions come to mind.

Of course this is a gross oversimplification of both government and the lichen symbiosis, but perhaps we should offer our leaders a short course on lichen biology.

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Lichens on holiday in California

Travelling to see family in California brought lichenological joys to one member of our group. On the coast where the cool sea breezes in at unexpected moments in summer, the Monterey Pines and Cypresses and the Coastal Redwoods are draped in *Ramalina menziesii* (Figure A). What an amazing evolutionary adaptation this lichen seems to have developed. The ends of the fine branches grow as nets (Figure B), apparently sieving the air for water droplets in an otherwise quite dry Mediterranean climate. Fast growing, this lichen appears to have a unique structure of its own. How it evolved is a mystery. Some trees are draped and some are bare: just how this happens is another conundrum. Like the patchiness of *Letharia vulpina* on the trunks of the conifers in Yosemite National Park. This bright lichen is a striking feature of the forest. Is it green or is it yellow? My wife and I could not agree. But we agreed that it added a *je ne sais quoi* to the pillar like trunks and made them stand out beautifully.

I couldn't help noticing, as we wandered through the forest of huge trees, that the *L. vulpina* (Figures C and D) grew mainly on the trunks whilst on the twigs the *Letharia* was mainly *L. columbiana* (Figure E) which appears to be a non-sorediate and apothecial counterpart species. I found this cat-like lichen quite endearing, crawling long the twigs and branches and occasionally jumping onto the trunks.

On a sleepy hillside, a trail we followed wandered in and out of the sun streaming into the valley. Here fallen twigs again caught my eye because they too were hosting apothecial lichens such as *Hypogymnia imshaugii* and *Tuckermanopsis platyphylla* (Figure F). Yes, it seems that there too (as according to Ellis & Coppins (2007; see Hill, 2010), twigs tend to be colonised by apothecial species and the trunks with vegetatively reproducing species – not just *L. vulpina* but the very familiar *Flavoparmelia caperata* and good old *Parmelia saxatilis*.

There were quite a few British species around which helped with confidence in trying to get to the names of some of the non-British species with the help of Hale's book (Hale, 1988). But rare is *Xanthoria parietina* – can you imagine a country where you just don't see *X. parietina*? *Xanthoria fallax* (Figure G) was quite common on trees occupying perhaps the same habitat as our species. Although common on the European mainland, *X. fallax* has not been recorded reliably in Britain – well, not up to now. Maybe its will appear with global warming and other climate change, so it is perhaps worth looking out for.

I should end with thanks to the other members of the family for sharing with my momentary lapses into the joys of lichenology.

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Figure A. *Ramalina menziesii*, Pacific Grove. B. Close up showing terminal network. C. *Letharia* on conifer trucks and branches, Yosemite National Park. D. *Letharia vulpina* on conifer trunk, Yosemite National Park. E. *Letharia columbiana* on conifer twig, Yosemite National Park. F. *Hypogymnia imshaugii* and *Tuckermanopsis platyphylla*, Yosemite National Park. G. *Xanthoria fallax*, Yosemite National Park.



Newbury Council gets serious about lichens (and other wildlife)

I am pleased to report that during the course of site management consultations regarding the Newtown Road Cemetery in Newbury, Berkshire, England; the presence of lichens has been appreciated. After a ten-year closure due to health and safety reasons, the decision had been made to reopen the historic cemetery to the public, and in March 2010, I was contacted by the Grounds Maintenance Officer of Newbury Town Council (NTC). Having discovered my webpage as the Recorder of Lichens for the Reading & District Natural History Society, NTC was keen to enlist help in the form of a baseline species survey at the site, the results of which would be fed into their Wildlife Management Plan. The Council had contacted various 'specialists' in order to facilitate assessment of the biodiversity at the cemetery.

A report has now been submitted, including management recommendations sympathetic to the lichen community at the site. Moreover, following discussions with the Friends of Newtown Road Cemetery and NTC, both organizations were supportive of a venture that would increase awareness of the cemetery and of the lichens therein. In the first instance, a one-day walk/workshop with both local historical and lichenological emphases took place on 12 March 2011, co-led by Elizabeth Capewell (from the Friends) and me. It was pleasingly well attended. A total of 23 people took part, aged from 17 to 65 years, and the majority showed a keen interest in learning about the biology, ecology and importance of lichens.

The recent review of Local Biological Record Centres and biodiversity recording, led by Natural England (I attended the South East Regional Steering Group Workshop in May 2010), has brought to the fore the importance of multi-directional communication between 'experts' (in fact, often 'amateurs' due to the lack of paid professionals in ecological and taxonomic disciplines), who create records, and the end users for whom they are of particular significance for policy development (Wearn, 2011). Although limited to a single site at this time, the proactivity shown by NTC, in lichenological terms, is reassuring, and provides a good example of how internet presence of local recorders as well as national organizations can aid the tailoring of management policies to lichens, in addition to more commonly considered taxonomic groups: another step towards ensuring correct management of essential lichen habitats. Further engagement and the forging of close relationships at local (in addition to national and international) scales are essential to supporting this process from the bottom up.

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On Dunyeats Hill – a meditation on the lichens that grow there

West of Bournemouth and north of Poole the heath really begins. Follow the diagonal that cuts the conurbation in two and you will soon find yourself navigating a switchback of hills dotted with tumuli. We are in Rackham's ancient countryside; the context for Hardy's *'The Return of the Native'* and for 15 years, home to the Bohemian artist Augustus John and his endless cortège of Bloomsbury friends (writers, poets, musicians) who came in droves, inhaled its magic, were inspired. By winters end, cloudless days spin web-like mists by sundown, the grainy light frozen against crimson-purple technicolour skies. By daybreak all is suspended moisture: nourishment and more for a succession of lichens that live here.

Dunyeats Hill: that pocket-sized ridge of sandy ground near to where Alfred Russell Wallace rests in peace in Broadstone cemetery is one such speck of flinty heath. Its gentle, north-facing slopes overlook the delicious Delph (Delf), a sheltered nineteenth century oakwood ringed with pine. Exploited for brick-clay, imprisoned by developers and regularly incinerated since 1975, Dunyeats has become a symbol of hope for those working to protect its wildlife. Here, from the ragged meniscus of its edge I study its altered symmetry: new boundary fence, gated entrances, firebreak strips, reptile-friendly woodpiles, sinuous, easy-flowing topography. Heathlands are fast-regenerating ecosystems and now a new order is arising from the ashes of the last. I wade between the thickets of birch, heather and gorse to find star-moss carpets speckled with rime and glistening crusts. A dark-green cloak (= *Trapeliopsis flexuosa*) clings fast to stumps where shoals of russet-rimmed squamules (= *Cladonia coniocraea*) grow their tapering towers. In sudden clearings above charcoal-blackened soils a preponderance of scale, stalk and disc mark the *Cladonia* tribe's unique and congested populations. The entirety of the carpenter's bench is here: corkscrews, wrenches, mallets, drill-bits, bent nails and rasps, hammer heads, steel wire, even the cantilever toolbox (*Cladonia verticillata*). Lying hidden among the bare peaty hollows of the valley bogged slopes like slowly-expanding molecular models, are the multi-domed palaces of *Cladina*: their misty-eyed shapes, voluptuous and exotic in the cool, breathless air, engineered to perfection like Monroe's goose bumps. Here they bathe gloriously in the sun, now a late-afternoon laser-stream of deepening orange light. It is always useful to inspect such monocultures if only to prove they are not. Hunkered down among the *portentosa* are colonies of *ciliata* (var. *tenuis*), *uncialis*, *crispata* (var. *cetrariiiformis*) and scraps of *squamosa*.

Stumps of pine, disintegrating to balsa-light cubes of weightless touchwood, hide a myriad of detail revealed through a lens – rashes of pycnidia (= *Micarea denigrata*); grey-black discs, emerging from splinter-sized crevices (= *Amandinea punctata*); hardened droplets of skimmed-thin milk (= *Lecanora symmicta*). For a moment, a spider breaks the stillness as it moves erratically among the twig litter, each tactile twitch a tense and tremulous adventure. Lumps of brick discoloured by time shine beige with granules and pale brown discs (= *Trapelia coarctata*). The bony cores of the decaying trees, crowd the gaps. Like a dinosaur graveyard. Yet these are living gardens flowering with lichen life. Wave upon wave of granular goniocysts

(*Placynthiella icmalea*) spread between the feather-forests of squamules. I tear a lump of spongy wood from a near-invisible stump flicking away the year's first wood ants with my little finger that are determined to stand their ground and fight. It is the silvered thallus and cratered discs that initially grabs my attention. 'This is never *Ramonia* or *Thelotrema* 'I gasp. The name I want is surfacing: *Diploschistes muscorum*, an unexpected but welcome addition here. I think of William Barnes' couplet: 'In the warmth o'Spring vorget/Leafless winter's cwold an' wet', and smile.

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Database project – Summer 2011 update

The project to computerise records for England and Wales is now in its third year, and has just received a welcome boost in the form of some additional funding from CCW and the Environment Agency. Over the last few months we have been concentrating on inputting cards from the Mapping Scheme archive, working down the country from the north of England to the south-west and now Wales. There are now more than 1.3m records in the database. Most of the general cards are for woodlands, but churchyard cards keep turning up and we now have nearly 9,850 computerised, which is nearly 38% of the records held.

Survey name	General	Churchyards	Total
England	317,400	394,042	711,442
Scotland	288,244	10,495	298,739
Wales	71,714	14,240	85,954
Channel Islands	7,485	0	7,485
	684,843	418,777	1,103,620

Our other priority over the winter has been to review the records for rare and threatened lichens, make them as accurate and complete as possible, and extract them as a new version of the threatened lichens database. This will always be a work in progress, but the efforts of more than 30 people have ensured that it is now much improved and fit for use. Natural England, the Countryside Council for Wales and the Environment Agency already have copies, and we will be putting it onto the NBN Gateway as soon as we can.

The database is there to be used. A few people have already installed Recorder 6 on their PCs so they can have a copy of all or part of it, or the records for a particular species, site or vice county can easily be supplied as spreadsheets. If you want a spreadsheet or perhaps a set of up-to-date distribution maps, please ask. I try

to respond to requests within a couple of days, unless I'm away from home when it may take a little longer. More records are always welcome!

Database – important!

If you submit records to the BLS database, or use it in any way, please note:

1. In sending records in to the BLS, you are implicitly giving the society permission to use them in the database and to make them publicly available through the NBN Gateway, GBIF, and our own or related websites. Records are supplied from the database to the country agencies, academics, local record centres and others who request data for conservation or research purposes, and the authors of local floras. We have no control over the use of records from the internet.
2. Recorders' names may form part of the information supplied, but it is not always possible to acknowledge all the recorders or suppliers of records.
3. It is your responsibility as a data supplier to get any agreement needed from clients or other recorders. The BLS can't do this for you. If there is any doubt, please let me know by email and I will either remove the record altogether or disguise it by removing the location details and changing the grid ref to 1km or 10km resolution.
4. No database can ever be complete or fully accurate, and although we try to check the most important records it is not possible for the BLS to verify all the records sent in to it. The BLS can accept no liability for the consequences of any inaccuracies.

Janet Simkin

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Literature pertaining to British lichens - 48

Lichenologist **42**(6) was published on 11 October 2010, **43**(1) on 29 January 2011, and **43**(2) on 10 February 2011.

Taxa prefixed by * are additions to the checklists of lichens and lichenicolous fungi for Britain and Ireland. Aside comments in square brackets are by the author(s) of this compilation.

ARUP, U. & SANDLER BERLIN, E. 2011. A taxonomic study of *Melanelixia fuliginosa* in Europe. *Lichenologist* **43**: 89–97. From morphometric and molecular analyses, the two 'subspecies' of *M. fuliginosa* are convincingly shown to be independent species: *M. fuliginosa* (Fr. ex Duby) O. Blanco et al. and *M. glabratula* (Lamy) Sandler & Arup.

- COPPINS, A.M. [Sandy] 2006–2010. Wildlife reports: Lichens. *British Wildlife* **17**: 289–290, 444–445 (2006); **18**: 291–292, 443–444, **19**: 139–140 (2007); **19**: 290–291, 442–443, 136–137 (2008); **20**: 291–293, 443–444 (2009); **21**: 286–288, 441–442, **22**: 137–138 (2010). Thrice yearly column on the latest discoveries and developments in British lichenology, usually with one or two colour photos.
- COPPINS, A.M. [Sandy] 2010. The heritage of volcanoes. *Plantlife* **58**: 24–25. A popular article highlighting the lichenological importance of the basalt and trachyte outcrops of volcanic cones, laccoliths and sills in the lowlands of SE Scotland.
- EDWARDS, B. 2006. Wildlife reports: Lichens. *British Wildlife* **18**: 139–140. [See above under Coppins, A.M.]
- GIAVARINI, V.J.. 2005. Wildlife reports: Lichens. *British Wildlife* **16**: 442. A personal tribute to the late Oliver Gilbert, who was a regular contributor to *British Wildlife* for many years.
- GILBERT, O.L. 2004–2005. Wildlife reports: Lichens. *British Wildlife* **16**: 139–140 (2004); **16**: 288 (2005). [See above under Coppins, A.M.]
- LAUNDON, J.R. 2010. *Lecanora antiqua*, a new saxicolous species from Great Britain, and the nomenclature and authorship of *L. albescens*, *L. conferta* and *L. muralis*. *Lichenologist* **42**: 631–636. *Lecanora antiqua* J.R. Laundon is described for the C+ orange member of the *L. dispersa* group, previously known as *Lecanora conferta*. The author claims that the type of the latter name is not a member of the *L. dispersa* group, but resembles *L. symmicta* and is C– and KC–. [The suggested correction to the authorship of *L. albescens* is unfortunately incorrect, and should be *L. albescens* (Hoffm.) Flörke (1828). The name (new combination) was published in a work by Flotow. Although Flotow did not agree with this, the actual author of the combination, Flörke, did. A very similar case is cited in the latest ICBN as Article 34, Ex. 3. Although, *Lecanora saxicola* (Pollich) Ach. is shown to be the nomenclaturally correct name for *L. muralis*, it will not be adopted for the British Checklist as a formal proposal to ‘save’ the name “*muralis*” for such a common and globally wide-spread species is likely to be forthcoming and successful.]
- LUMBSCH, H.T. et al. 2011. One hundred new species of lichenized fungi: a signature of undiscovered global diversity. *Phytotaxa* **18**: 1–127. Available free on-line at <http://www.mapress.com/phytotaxa/content/2011/pt00018.htm>. A hundred species are newly described by 103 authors. One species occurs in the British Isles, namely **Opegrapha viridipruinosa* Coppins & R. Yahr, a corticolous species from Britain and Ireland.
- PÉREZ-ORTEGA, S., SPRIBILLE, T., PALICE, Z., ELIX, J.A. & PRINTZEN, C. 2010. A molecular phylogeny of the *Lecanora varia* group, including a new species from western North America. *Mycological Progress* **9**: 523–535. The type of *Lecidea filamentosa* Stirt. (1879) is found to be an earlier name for *Lecanora ramulicola* (H. Magn.) Printzen & P.F. May (2002), a member of the

- L. symmicta* group. The new combination, **Lecanora filamentosa* (Stirt.) Elix & Palice, is made.
- POWELL, M. 2010. The lichens of Wicken Fen. *Nature in Cambridgeshire* 52: 26–34. Presents two annotated species lists for the site separated in time by 36 years: in 1972 by Jack Laundon, and 2008 by Mark Powell. The differences between the two lists are quite remarkable and possible explanations for these differences are discussed.
- POWELL, M. 2010. Ordinary and unusual lichens in a domestic garden. *Journal of the Northamptonshire Natural History Society* 43(1) [Issue 274].
- POWELL, M. 2010. Lichens in St Luke's churchyard, Duston. *Journal of the Northamptonshire Natural History Society* 44(1) [Issue 275].
- PRICE, S.G. 2010. A checklist of Derbyshire lichens. *The Sorby Record* 45: 2–36. A time-scaled list for the county (VC 57), enumerating 571 taxa, including 19 lichenicolous fungi, and 26 species now considered to be extinct in the county. Annotations as to abundance and status are also provided. [Copies can be obtained from Derek Whiteley, Secretary Sorby NHS, Beech Cottage, Wardlow, Derbyshire SK17 8RP email sorbyrecord@sorby.org.uk, for £3.50 incl. UK p&p (cheque to 'Sorby NHS'); copy includes the Lichen Recorder's Report (see next).]
- PRICE, S.G. 2010. Lichen Recorder's report. *The Sorby Record* 45: 37–41. A report of the 63 additions to the Derbyshire list of lichens and lichenicolous fungi in recent years, as well as details of other records of special interest.
- PRINTZEN, C. & MAY, P. 2002. *Lecanora ramulicola* (Lecanoraceae, Lecanorales), an overlooked lichen species from the *Lecanora symmicta* group. *Bryologist* 105: 63–69. A detailed account of *L. ramulicola*, which has recently been added to the British list under the name *L. filamentosa* [see above under PÉREZ-ORTEGA *et al.* 2010].
- SANDERSON, N. 2009. Wildlife reports: Lichens. *British Wildlife* 21: 139–140. [See above under Coppins, A.M.]
- SEAWARD, M.R.D. 2010. Lichen flora of the West Yorkshire conurbation: a conspectus. *The Naturalist* 135: 173–187. The results of lichen recording in the area over 43 years is summarized, and older, historical records are reassessed in the light of current taxonomic concepts. Changes to the lichen flora in the recording period are mainly a result in changing air quality and further urban expansion. A total of 363 taxa is enumerated in an annotated checklist.
- SHEARD, J.W. 2010. *The Lichen Genus Rinodina (Ach.) Gray (Lecanoromycetidae, Physciaceae) in North America, North of Mexico*. Ottawa: NRC Research Press. Pp 246. ISBN 978-0-660-19941-2. A monograph treating the 96 species of *Rinodina* recorded for North America, including 36 that are apparently endemic. However, many of the treated species also occur in Europe, and most fully treated species are illustrated with fine micrographs of ascospores. The introductory sections include invaluable information on characters, especially those pertaining to ascospore development and morphology. There is also a 10-page thought-provoking section on phytogeography. No name

changes result from this work, although *R. immersa* is considered to be a synonym of *R. bischoffii*, with comment that both specimens with immersed or sessile apothecia can have, or not, hymenial oil drops. Also, the saxicolous *R. gennarii* and corticolous *R. oleae* are treated separately, awaiting further evidence for their being conspecific.

- ŠOUN, J., VONDRÁK, J., SØCHTING, U., HROUZEK, P., KHODOSOVTSSEV, A. & ARUP, U. 2011. Taxonomy and phylogeny of the *Caloplaca cerina* group in Europe. *Lichenologist* **43**: 113–135. **Caloplaca monacensis* (Ledr.) Lettau (1912) is cited from Cornwall, Essex, and Wales, and **C. turkuensis* (Vain.) Zahlbr. (1931) from Moray. The position of *C. virescens* within this group remains enigmatic owing to the absence of recent collections suitable for sequencing.
- WEDIN, M., WESTBERG, M., CREWE, A.T., TEHLER, A. & PURVIS, O.W. 2009. Species delimitation and evolution of metal bioaccumulation in the lichenized *Acarospora smaragdula* (Ascomycota, Fungi) complex. *Cladistics* **25**: 161–172.
- WESTBERG, M. & ARUP, U. 2010. *Candelaria concolor* – a rare lichen in the Nordic countries. *Graphis Scripta* **22**: 38–42. Gives notes and habit photographs on *Candelaria pacifica* M. Westb. & Arup, a new species which has since been detected amongst British material of *C. concolor*.
- WESTBERG, M., CREWE, A.T., PURVIS, O.W. & WEDIN, M. 2011. *Silobia*, a new genus for the *Acarospora smaragdula* complex (Ascomycota, Acarosporales) and a revision of the group in Sweden. *Lichenologist* **43**: 7–25. The new genus *Silobia* M. Westb. & Wedin is proposed for the *Acarospora smaragdula* group. So far British species are: **Silobia rhagadiza* (Nyl.) M. Westb. [type is *Lecanora rhagadiza* Nyl. from Whitehaven in Cumberland; syn. *A. scyphulifera* Vain.; *A. benedarensis* is a possible synonym], *S. rufescens* (Ach.) M. Westb. & Wedin [syn. *A. rufescens*], *S. smaragdula* [syn. *A. smaragdula*] and *S. scabrida* (H. Magn.) M. Westb. [syn.: *A. scabrida* H. Magn. (1924); *A. verruciformis*].
- ZHURBENKO, M.P. & GRUBE, M. 2010. *Arthonia pannariae* (Arthoniaceae, Arthoniales), a new lichenicolous fungus from northern Holarctic. *Graphis Scripta* **22**: 47–51. Illustrated description of a new species that inhabits the apothecia of *Protopannaria pezizoides* and *Psoroma hypnorum*. [This species is also known from the Findhorn Dunes, Moray, from a collection of infected *Psoroma hypnorum* by Peter James on the BLS meeting there in 1974.]

B.J. Coppins

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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 1XW, 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, e.g. 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 can be sent to me on e-mail, my address is cjbh.orchlodge@freeuk.com, 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.

New to the British Isles

Arthonia pannariae Zhurb. & Grube (2010): on apothecia of *Psoroma hypnorum*, Findhorn Dunes, VC 95, Moray, GR 38(NJ)0--6--, August 1974. Collected by P.W. James (BM). Recently described from northern Norway, Russia and Greenland, mostly in the apothecia (less often the thallus) of *Protopannaria pezizoides* and *Psoroma hypnorum*. Apothecia black, convex, mostly aggregated; spores 1-septate, *c.* 9.5–12.5 × 3.5–4.5 µm; hypothecium hyaline. For full description and illustrations see Zhurbenko & Grube (2010) *Graphis Scripta* 22: 47–51. **BLS no. 2576.** B.J. Coppins

Biatora ocelliformis (Nyl.) Arnold (1870): (i) on *Ulmus* branch in bottom of ravine, Allt a'Chamais Shalach, Camas Salach, Glen Cripesdale, Sunart SSSI, VC 97, West Inverness-shire, GR 17(NM)/68-60-, alt 70 m, November 2010. Collected by B.J. Coppins. Herb. Coppins 23378 (E); (ii) on *Corylus*, *ibid.*, southwest of Camas Salach GR 17(NM)/682.607, alt 10–20 m. Collected by A.M. Coppins. Herb. Coppins 23392 (E). The grey-black to blue-black apothecia, often with a paler, shallow margin, somewhat resemble those of *Lecidella elaeochroma*, but the thallus is C–, P+ red (argopsin), the hypothecium is a mottled green-black in K, and its simple spores are narrowly ellipsoid, 7.5–14 × *c.* 3.5 µm. **BLS no. 2567.**

B.J. & A.M. Coppins

Candelariella pacifica M. Westb. & Arup (2011, in press). Three British records have been identified amongst collections of *C. concolor* in the Edinburgh herbarium (E): (i)

Berwick, near Shrewsbury, VC 40, Shropshire, GR 33(SJ)/4.1., undated [c. 1851], Leighton *Lich. Brit. exs.* no. 12; (ii) near mouth of Melgam Water, Den of Airlie, VC 90, Angus, GR 37(NO)/29-52-, June 1945. Collected by U. K. Duncan; (iii) on old *Quercus* by A82, Invermoriston, VC 96, East Inverness-shire, GR 28(NH)/419.166, June 1975. Herb. B.J. Coppins 2286. Differs from *C. concolor* in having smaller, raised, squamule-like lobes, with a non-corticate, arachnoid underside. The lobes of *C. concolor* have a shiny, corticate undersurface. Sometimes the lobes of *C. pacifica* are so short that the thallus has the appearance of a granular-blastidiate crust. It may be that *C. pacifica* has a northern distribution in Britain, as it is much more common than *C. concolor* in Scandinavia. For illustrations and further discussion see Westberg & Arup (2011) *Graphis Scripta* **22**: 38–42. The species will be formally described in a forthcoming volume of *Bibliotheca Lichenologica*. **BLS no. 2578.** *P. Clerc & B.J. Coppins*

Endococcus ramalinarius (Linds.) D. Hawksw. (1985): on *Ramalina farinacea* on large *Populus tremula*, also with *Abrothallus suecicus* (anamorph), Invertromie Wood, Insh Marshes NNR, VC 96, East Inverness-shire, GR 28(NH)/7811.9969, February 2010. Herb. Coppins 23245 (E). Originally described from New Zealand, but also known on *R. farinacea* from Spain. **BLS no. 2580.** *B.J. & A.M. Coppins*

Lichenonium lichenicola (P. Karst.) Petr. & Syd. (1927): in apothecia and thallus of *Physcia aipolia* on young *Salix*, northeast of An Stac, Glen Truim, VC 96, East Inverness-shire, GR 27(NN)/671.897, alt 320 m, December 2010. Herb. Coppins 23108 (E, K(M) 169480). Confirmed by D.L. Hawksworth. Pycnidia 115–130 µm diameter. Conidia often truncate, 5–7.5 × 4–5 µm. Previously known only from the type collection from Finland. Differs from *L. usneae*, also recorded on this host, by its much larger conidia, which are often truncate at the point of attachment. **BLS no. 2581.** *B.J. Coppins*

Nectriopsis micareae Diederich, van den Boom & Ernst (1999): on *Micarea micrococca* on *Betula*, north of Camas Salach, Glen Cripesdale, Sunart SSSI, VC 97, West Inverness-shire, GR 17(NM)/68-61-, alt 20–50 m, November 2010. Herb. Coppins 23389 (E). Perithecia pale dull orange, c. 100–125 µm diameter, collapsing when dry, developing in pale greyish discoloured portions of the host thallus. Microscopically, perithecia with tiny hyaline hairs, c. 17–30 × 2.5–3.5 µm; spores 4–8/ascus, 1-septate, 12–14 × 3.5–4.5 µm. Originally described as a parasite on *Micarea viridileprosa*, which has a C+ red thallus. However, the host in the Scottish collection is C–, although *M. viridileprosa* occurred on the same tree. Full description in Sérusiaux *et al.* (1999). *Lejeunia* **162**: 57–58. **BLS no. 2569.** *B.J. & A.M. Coppins*

Pycnora praestabilis (Nyl.) Hafellner (2001): on fence post near valley bottom, West Hopes, Lammermuir Hills, VC 82, East Lothian, GR 36(NT)/55-62-, alt 230 m, October 2010. Herb. Coppins 23207 (E). Superficially identical to *P. xanthococca*, but differing in having ellipsoid (3–5.5 × 1.5–2.5 µm) rather than subglobose conidia (2.5–4 × 1.5–3 µm). **BLS no. 2570.** *B.J. Coppins & A.M. Fryday*

Zwackhiomyces physciicola Alstrup (1993): on *Physcia caesia* on sarsen stone, Fyfield Down NNR, Delling Penning, VC 7, North Wiltshire, GR 31(SU)/1397.7133, alt. 207 m, June 2010. Herb. Coppins 23184 (E); Recognized by the sessile, black

perithecia occurring in rows along the margins of the host's lobes and the hyaline, 1-septate spores, *ca* 18–22 × 5.5–6.5 µm. See also under **Other Records. BLS no. 2566.**

B.J. Coppins

Other Records

Absconditella trivialis: on cyanobacterial crust, over sandy soil, of recently (within the past two years) felled *Pinus* plantation, Rowney Warren, VC 30, Bedfordshire, GR 52(TL)/123.401, February 2011. Herb. Powell 1619. New to the Vice-county.

M. Powell

Acarospora anomala: on fence rails around riverine marsh, Hogmarsh Reserve, VC 25, East Suffolk, GR 62(TM)/010326, September 2001. Herb. Hitch (L54). Determined by I. G. Pedley. New to the Vice-county.

C.J.B. Hitch & P.M. Earland-Bennett

Acarospora anomala: on wooden fence post near spoil heap, South Crofty Mine, Tuckingmill, VC 1, West Cornwall, GR 10(SW)/6616.4062, alt 99 m, August 2007. Herb. Douglass 2007-16. Determined by A. Fletcher. Fourth British Record, also known from North Lincolnshire, Suffolk and Warwickshire.

J.R. Douglass

Acarospora cervina: on limestone gravestone, Thornliebank cemetery, VC 76, Renfrewshire, GR 26(NS)/5528.5971, alt 32 m, 2009. Determined by B.J. Coppins. Herb. Douglass 2009-48. New to the Vice-county.

B. Simpson

Acarospora rufescens: on lignum of horizontal batons of Heligoland trap, McLeod's Garden, Isle of May, VC 85, Fife, GR 36(NT)/6556.9930, July 2010 Herb. Coppins 23313 (E). Unusual occurrence on lignum.

B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen

Acarospora umbilicata: on sandstone string course low on church wall and on base of a memorial, St Deiniol's Church, Hawarden, VC 51, Flintshire, GR 33(SJ)315659, alt 20 m, September 2010. Field record. New to the Vice-county.

I. Pedley, M. Powell & S.P. Chambers

Arthonia arthonioides: on dry bark of old *Betula* on steep slope in native pinewood, Cadha Beag, Rothiemurchus, Cairngorms SSSI, VC 96, East Inverness-shire, GR 28(NH)/9129.0700, alt 420 m, May 2010. Field Record. New to Strath Spey.

N.A. Sanderson & A.M. Cross

Arthonia didyma: on massive *Corylus* bush within a small woodland (? an old orchard) at north boundary of Sandy Smith Nature Reserve, Chicksands, VC 30, Bedfordshire, GR 52(TL)/109.393, January 2011. Herb. Powell 1581. New to the Vice-county.

M. Powell

Arthonia invadens: parasitising *Schismatomma quercicola* on two *Quercus* on cliff edge in ravine, Hendergrove Wood, Draynes Wood SSSI, VC 2, East Cornwall, GR 20(SX)/2161.6846 & 20(SX)/2160.6844, October 2010. New record for this Near Threatened and BAP species.

N.A. Sanderson

Arthonia phaeophysciae: on *Phaeophyscia orbicularis* on *Malus* in orchard, Megginch Castle, VC 89, East Perthshire, GR 37(NO)/24.24, alt 16 m, May 2010. Herb. Coppins 23167 (E). Associated with an undescribed *Sclerococcum* species with 0- to 1-septate, grey-brown conidia, 9–16.5 × 8.2–13.2 µm. New to the Vice-county.

B.J. Coppins, J.R. Douglass & P. Aspen

Arthonia thelotrematis: parasitising *Thelotrema lepadinum*, on old *Ilex* on river bank within woodland, Landy Wood, Millook valley woods, VC 2, East Cornwall, GR20(SX)/1801.9850, January 2011. Herb. Sanderson 1565. New to Cornwall.

N.A. Sanderson

Arthonia varians: on thallus & apothecia of *Lecanora muralis*, Kae Hueghs, Garelton Hills, VC 82, East Lothian, GR 36(NT)/51-76-, alt c. 100 m, November 2011. Herb. Coppins 23395 (E). Apparently a new host, unless this collection represents an undescribed, related species.

B.J. Coppins & A.M. Fryday

Arthonia zwackhii: parasitising *Phlyctis argena* and *Phlyctis agelaea*, growing on two *Acer pseudoplatanus* and one *Sorbus aucuparia*, within pasture woodland, Millook valley woods, VC 2, East Cornwall, GR 20(SX)/1827.9924, 20(SX)/ SX1845.9876 and 20(SX)/1848.9874, January 2011. Herb. Sanderson 1561, 1562 & 1563. The first record of this species parasitising *Phlyctis agelaea*. New to East Cornwall.

N.A. Sanderson

Arthopyrenia nitescens: on old *Ilex* on river bank within woodland, Landy Wood, Millook valley woods, VC 2, East Cornwall, GR 20(SX)/1801.9850, January 2011. Herb. Sanderson 1565. New site for this rare species in the southwest.

N.A. Sanderson

Arthopyrenia subcerasi: on trunks of old *Betula* within old growth boreal *Betula* pasture woodlands, Ruigh Creagan, Ruighe nan Leum and Creag na Gaibhre, Glen Feshie, Cairngorms SSSI, VC 96, East Inverness-shire, GR 27(NN)/8614.8958, 27(NN)/887.889 & 27(NN)8516.9126, alt 435 – 460 m, June, 2009. Herb. Sanderson 1328. A new 10 km national grid square record for this Near Threatened species.

N.A. Sanderson, A.M. Cross & P. Aspen

Arthopyrenia subcerasi: on *Corylus* within abandoned coppice, Abbeyford Woods, VC 4, North Devon, GR 20(SX)/58-97-, alt 200 m, March 2010. Herb. Coppins 23204 (E).

B.J. Coppins

Arthopyrenia subcerasi: on old *Betula* within native *Pinus* – *Betula* pasture woodland, Coylum Bridge, Rothiemurchus, North Rothiemurchus SSSI, VC 96, East Inverness-shire, GR 28(NH)/9165.1008, alt 250 m, May 2010. Herb. Sanderson 1415. A new 10 km national grid square record for this Near Threatened species.

N.A. Sanderson & A.M. Cross

Aspicilia radiosa: on the top of a ham stone box tomb in churchyard, Chardstock, VC 3, South Devon, GR 31(ST)/308044, January 2011. New to the county. *B. Benfield*

Bacidia auerswaldii: on *Fraxinus* at edge of pasture, north side of River Attadale, opposite Home Farm, Glen Attadale, VC 105, West Ross, GR 18(NG)/9272.3854,

alt. 50–70 m, July 2010. Herb. Coppins 23279 (E). Recorded during IAL Excursion. New to Scotland and first British record since the 1930s. *B.J. Coppins*

Bacidia circumspecta: two records within *Quercus* – *Fagus* pasture woodland, New Forest SSSI, VC 11, South Hampshire - (i) on wound track on squirrel damaged young *Fagus*, planted in 1954, within old growth woodland, Whitley Wood, GR 41(SU)/2997.0570, November, 2010; (ii) at edge of wound track on old *Fagus*, with *Bacidia incompta*, in wound track, Fox Hill, Rushpole Wood, GR 41(SU)/3049.0991, January 2011. Herb. Sanderson 1527 & 1569. This declining Vulnerable RDB and BAP lichen has been recorded from *Fagus* in five woods in the New Forest in since 2005, suggesting that this area is now a major stronghold for this species since the loss of populations on elm elsewhere. First record made during the NHM New Forest Quantitative Inventory project. *N.A. Sanderson & A.M. Cross*

Bacidia fuscoviridis: on pebbles in French drain at base of north wall of church (St. James the Great), Silsoe, VC 30, Bedfordshire, GR 52(TL)/082.356, February 2011. Herb. Powell 1666. New to the Vice-county. *M. Butler, B.J. Coppins & M. Powell*

Bacidia igniarii: growing with *Bacidia vermifer*, on wound track of old *Betula*, within native *Pinus* – *Betula* pasture woodland, Creag an Fhithich, Loch an Eilein, Rothiemurchus, Cairngorms SSSI, VC96, East Inverness-shire, GR 28(NH)/8883.0727, alt 280 m, May 2010. Herb. Sanderson, 1412. A new 10 km grid square record for this Vulnerable species. *N.A. Sanderson & A.M. Cross*

Bacidia incompta: on wounded *Acer pseudoplatanus* & *Aesculus* in woodland in former deer park, north of Boconnoc Park, Boconnoc Park & Woodlands SSSI, VC2, East Cornwall, GR 20(SX)/1403.6065 & 20(SX)/1394.6086, September 2010. Field Record. A new site for this Vulnerable RDB and BAP species. *N.A. Sanderson*

Bacidia incompta: inside a hollow *Acer pseudoplatanus*, within developing pasture woodland, Bastard Mill, Millook valley woods, VC2, East Cornwall GR 21(SX)/1778.9776, January 2011. Field record. New site for this Vulnerable RDB and BAP species. *N.A. Sanderson*

Bacidia trachona: fertile, on east-facing wall of walled garden, Top Garden, Isle of May, VC 85, Fife, GR 36(NT)/6546.9933, July 2010. Herb. Coppins 23305 (E). Unusual in being with apothecia. New to the Vice-county. *B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen*

Bacidia trachona: fertile, in bark crevices of *Fraxinus excelsior* in sheltered coastal dingle woodland, Cwm Cilfforch, southwest of Aberaeron, VC 46, Cardiganshire, GR 22(SN)/439617, alt 10 m, February 2011. Herb. SPC. Seen on *ca* 6 trunks. Epiphytic, and previously recorded on *Ulmus chaterorum* in the Clogfryn dingle *ca* 2 km along the coast. Second occurrence in the Vice-county *S.P. Chambers*

Bacidia vermifera: on wound tracks of three old *Betula*, within native *Pinus* – *Betula* pasture woodland, Creag an Fhithich, Loch an Eilein, Rothiemurchus, Cairngorms SSSI, VC96, East Inverness-shire, GR 28(NH)/8883.0727, 28(NH)/8883.0728, & 28(NH)/8883.0746, alt 260 – 280 m, May 2010. Herb. Sanderson, 1411, 1412 &

1413. A new site for this Endangered species, growing with *Bacidia igniarii* and *Sclerophora peronella*.
N.A. Sanderson & A.M. Cross

Bacidia viridescens: on oolitic limestone stone at the base of north wall of church (St. James the Great) Silsoe, VC 30, Bedfordshire, GR 52(TL)/082.356, February 2011. New to the Vice-county.
B.J. Coppins

Bactrospora corticola: for details, see under *Phlyctis agelaea*.

Biatora britannica: on *Ulmus*, in wood at E end of Loch a' Bhadaidh Daraich, Scourie, VC 108, West Sutherland, 29(NC)/174.443, October 2010. Herb. Coppins 23126 (E). New to the Vice-county and most northerly British record.
B.J. & A.M. Coppins

Biatora globulosa: on trunk of old *Sorbus aucuparia*, within old growth boreal *Betula* pasture woodland, Ruigh Creagan, Glen Feshie, Cairngorms SSSI, VC 96, East Inverness-shire, GR 27(NN)/8645.8915. alt 460 m, June 2009. Herb. Sanderson 1326. A new 10 km grid square record for this Near Threatened species.

N.A. Sanderson, A.M. Cross & P. Aspen

Biatoropsis usnearum: on an extensive colony of *Usnea cornuta*, on northwest side of old *Betula* in streamside wood-pasture, Coed Dipws, east of Cwmere, VC 46, Cardiganshire, GR 22(SN)/704.882, alt 16 m, September 2010. Herb. SPC. New to the Vice-county.
S.P. Chambers

Blarneya hibernica: overgrowing *Schimatomma decolorans*, *Schimatomma niveum* and *Opegrapha xerica* on *Quercus*, *Alnus* & *Crataegus* on at least 18 trees within pasture woodland, Millook valley woods, VC 2, East Cornwall, GR 20(SX) 18.99., 20(SX)/18.98., 20(SX)/17.99. & 20(SX)/17.98., first seen October 2002, surveyed January 2011. Herb. Sanderson 458 & field records. First records of this Near Threatened RBD & BAP species from the north Cornish coast.
N.A. Sanderson

Buellia hyperbolica: extensive stands on old *Quercus*, edge of village green within the New Forest common grazings, Bartley Green, New Forest SSSI, VC 11, South Hampshire, GR 41(SU)/3036.1292, August 2010. Field record. New 10 km record and fourth New Forest record for this Near Threatened RDB and BAP species.

N.A. Sanderson

Buellia violaceofusca: on large *Quercus*, in woodland by Black Water, Contin, VC 106, East Ross, 28(NH)/447.576, alt 35 m, September 2010. Herb. Coppins 23129 (E). New to the Vice-county.
B.J. Coppins

Buelliella physciicola: on *Phaeophyscia orbicularis* on concrete in walled garden, Top Garden, Isle of May, VC 85, Fife, 36(NT)/6546.9933, July 2010. Herb. Coppins 23309 (E). New to the Vice-county. *B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen*

Calicium hyperelloides: on moist acid bark in quite sunny but sheltered locations on three ancient *Quercus*, within pasture woodland in parkland, Deer Park, Boconnoc Park & Woodlands SSSI, VC 2, East Cornwall, GR 20(SX)/1452.6014, 20(SX)/1453.6012 & 20(SX)/1445.5993, September 2010. Herb. Sanderson 1504. Second record for Britain, and since the only known New Forest tree with this species fell over, the only extant site for this mainly tropical species. On one tree, this species grew on the sunny side and *Calicium lenticulare* on the shaded side of the tree.

N.A. Sanderson

Calicium lenticulare: on moist acid bark and lignum in shaded situations on six old *Quercus*, within active and abandoned deer park and over growth park to the north, Boconnoc Park & Woodlands SSSI, VC 2, East Cornwall, GR 20(SX)/145.601, 20(SX)/144.605 & 20(SX)/144.606, September 2010. Herb. Sanderson, 1504, 1506 & 1556. New to Cornwall. *N.A. Sanderson*

Caloplaca arnoldii: one fragmentary thallus on siliceous block-face under sheltering eave on south-facing wall of outbuilding in churchyard, Llanilar, VC 46, Cardiganshire, GR 22(SN)/624.751, alt 30 m, January 2011. Field record. New to the Vice-county. *S.P. Chambers*

Caloplaca littorea: on vertical face of cliff above sea-shore, Siccar Point, VC 81, Berwickshire, GR 36(NT)/81-70-, November 2010. Herb. Coppins 23222 (E). First record for the east coast of Scotland. *B.J. Coppins & A.M. Fryday*

Caloplaca luteoalba: on mortar and sandstone, west side of mine building, Lecht Mine, VC 94, Banffshire, GR 38(NJ)/2376.1593, alt 500 m, March 2007. Herb (E). Second record for the Vice-county and an unusual, inland, upland locality. *J.R. Douglass & P. Aspen*

Caloplaca verruculifera: on *Sambucus* twigs, near Low Light, Isle of May, VC 85, Fife, GR 36(NT)/6548.9952, July 2010. Herb. Coppins 23311 (E). An unusual corticolous occurrence, indicating heavy eutrophication from the nearby large bird colonies. *B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen*

Cercidospora macrospora: on *Lecanora muralis* on sarsen stone, main sarsen valley (Compartment 3a), Fyfield Down NNR, VC 7, North Wiltshire, GR 31(SU)/1359.7101, alt 200 m, June 2010. Herb. Coppins 23185 (E). New to England. *B.J. Coppins, A.M. Coppins & M. Powell*

Cercidospora macrospora: on *Lecanora muralis*, on north side of the Main Light, Isle of May, VC 85, Fife, 36(NT)/6546.9938, July 2010. Herb. Coppins 23334 (E). New to the Vice-county, and third Scottish record. *B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen*

Chaenothecopsis nigra: on vertical lignum on ancient *Quercus*, within pasture woodland in parkland, Deer Park, Boconnoc Park & Woodlands SSSI, VC 2, East Cornwall, GR 20(SX)/1447.6008. Herb. Sanderson, 1503. New to Cornwall. *N.A. Sanderson*

Chaenothecopsis savonica: on *Betula* lignum, within old growth boreal *Betula* pasture woodland, Ruigh Creagan, Glen Feshie, Cairngorms SSSI, VC 96, East Inverness-shire, GR 27(NN)/8653.8908 alt 460 m. Herb. Sanderson, 1324. New to the eastern Highlands and the Vice-county. *N.A. Sanderson, A.M. Cross & P. Aspen*

Chaenothecopsis viridireagens: on *Stichococcus* on lignum of standing dead *Pinus*, in glade within old growth *Pinus sylvestris* pasture woodland, near the Cairngorm Club Bridge, Rothiemurchus, North Rothiemurchus SSSI, VC 96, East Inverness-shire, GR 28(NH)/9305.0770, alt 310 m, May 2010. Herb. Sanderson 1409. New to Strath Spey and the first record of this species, directly parasitic on *Stichococcus* rather than parasitic on *Stichococcus*-containing *Chaenotheca* spp. *N.A. Sanderson & A.M. Cross*

Cladonia borealis: in east-facing rock crevices in heathy *Erica cinerea* – *Ulex gallii* ffridd (rough scrubby moorland) on south-facing upland hillside, east of Alltgochymynydd, Cwm Ty-nant, VC 46, Cardiganshire, GR22(SN)713881, alt 310m, September 2010. Confirmed by Alan Orange (barbatic acid by TLC). Herb. SPC.. Only recorded otherwise in Wales by Alan Orange from near Beddgelert, VC 49, Caernarvonshire. Its occurrence here, however, at relatively low altitude in a standard ffridd habitat suggests it could be widely overlooked in mid & northwest Wales. New to the Vice-county.
S.P. Chambers

Cladonia pleurota: on fallen decayed decorticate trunks of *Pinus* within old growth *Pinus sylvestris* woodlands, Cadha Beag, Rothiemurchus and Allt Ruagh, Glen Feshie, Cairngorms SSSI, VC 96, East Inverness-shire, GR 28(NH)/ 9119.0649 and 28(NH)/8650.0104, alt 530 m and 420 m, May and August 2010. Herb. Sanderson, 1420. New to Strath Spey. See www.uklichens.co.uk for picture.

N.A. Sanderson & A.M. Cross

Cliostomum flavidulum: two records from VC 2, East Cornwall - (i) widespread on acid *Quercus* & *Quercus* lignum, within working and neglected deer park, Boconnoc Park & Woodlands SSSI, GR 20(SX)/14-60- and 20(SX)/14-59-, September 2010; (ii) within *Quercus* & *Betula*, pasture woodland, Millook valley woods, GR 20(SX)/18.99.and 20(SX)/18.98., January 2011. Field records. New to Cornwall.

N.A. Sanderson

Collema dichotomum: locally abundant on mudstone bedrock and large boulders, River Hodder, VC 60, West Lancashire – (a) upstream of Higher Hodder Bridge, between GR 34(SD)/6974.4110 to 34(SD)/6808.4253; (b) downstream of Higher Hodder Bridge GR 34(SD)/6969.4108 to 34(SD)/6992.4037; (c) upstream of Doeford Bridge between GR 34(SD)/6510.4310 to 34(SD)/6469.4334; (d) upstream of Lower Hodder Bridge between GR 34(SD)/7045.3925 to 34(SD)/7073.3977 and (e) downstream of Lower Hodder Bridge between GR 34(SD)/7041.3919 to 34(SD)/7101.3820., September 2007. Herb. Douglass 2007-53 & 54. New records for Lancashire.

J.R. Douglass & A. Hanson

Collema fragile: on limestone outcrop, near Mingary Castle, just north of track, Ardnamurchan, VC 97. West Inverness-shire, GR 17(NM)/505.632, alt 10 m, April 2007. Herb. Douglass 2007-21. Determined by B.J. Coppins. New record for Ardnamurchan and West Inverness-shire.

J.R. Douglass

Collema fragile: on limestone outcrop, just west of Swordle Bay House, Ardnamurchan, VC 97. West Inverness-shire, GR 17(NM)/5452.7072, alt 10 m, May 2007.

J.R. Douglass

Collema nigrescens: three thalli with dominant *Lobaria virens*, on a base-rich *Quercus* on wooded steep bank by stream, Trebarfoote, Millook Valley, VC 2, East Cornwall, GR 20(SX)/1867.9964, January 2011. Field record. This is a refinding of a 1989 record for this declining species.

N.A. Sanderson

Collema polycarpon: on limestone in drystone dyke, just north of Mingary Castle, Ardnamurchan, VC 97. West Inverness-shire, GR 17(NM)/5015.6358, alt 30 m, April 2007. New record for Ardnamurchan and Westerness.

J.R. Douglass

Degelia atlantica: widespread on *Fraxinus*, *Salix* & *Acer pseudoplatanus* (recorded on 28 trees or *Salix* clumps), in old and developing pasture woodland, Millook valley woods, VC 2, East Cornwall, GR 20(SX)/18.99., 20(SX)/18.98., 20(SX)/17.99., 20(SX)/17.98. & 20(SX)/17.97., January 2011. Field records. An important and largely healthy population. Some areas in Landy Wood had declined due to increased shade from *Ilex* and *Fraxinus* regeneration since last looked at in 1989, but new areas were found (not visited in 1989), where recently arrived red deer were maintaining open woodland habitats. N.A. Sanderson

Echinodiscus lesdainii: on *Lecania cyrtella* on *Sambucus* at edge of young conifer plantation, Whitmuir Estate VC 80, Roxburghshire, GR 36(NT)/4929.2690, alt 250 m, February 2011. Herb. Coppins 23234 (E). Second record for Scotland. B.J. Coppins

***Endococcus parietinarius* (*Sphaerellothecium parietinarium*)**: on *Xanthoria parietina* on concrete below air tanks, South Horn, Isle of May, VC 85, Fife, GR 36(NT)/659.988, July 2010. Herb. Coppins 23318 (E); also collected on two further occasions on the island. New to the Vice-county and second Scottish locality. B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen

Endococcus verrucosus: (i) on *Aspicilia grisea* s.l. on quartzitic boulder beside upland pool, Llyn y Wrach (Witches' Pool), Sychnant Common, Conwy, VC 49, Caernarfonshire, GR 23(SH)/751.764, alt 235 m, September 2001. Herb. SPC; (ii) on *A. grisea* s.l. on sloping side of gritstone boulder in upland sheepwalk, Llethr Llwyd, VC 46, Cardiganshire, GR 22(SN)/733.525, alt 425 m, August 2010. Herb SPC. Confirmed by A. Orange. New to the Vice-county. S.P. Chambers

Endophragmiella hughesii: on *Lobaria pulmonaria*, woodland near Glenuig Hall, Glenuig, VC 97, West Inverness-shire, GR 17(NM)/669.774, alt 5–30 m, October 2009. Herb. Coppins 23147 (E). Second British record. B.J. Coppins

Enterographa soreliata: on five ancient *Quercus*, within pasture woodland in parkland, Deer Park, Boconnoc Park & Woodlands SSSI, VC 2, East Cornwall, GR 20(SX)/1407.6015, 20(SX)/1407.6014, 20(SX)/1421.6009, 20(SX)/1421.6009 and 20(SX)/1453.6005, September 2010. Field records. A new site for this Near Threatened and BAP species. N.A. Sanderson

Fellhanera bouteillei: on old cones of Japanese larch *Larix kaempferi* within small area of mixed woodland, Cilgattw Farm, VC 44, Carmarthenshire, GR 22(SN)/5162.2645, November 2010. Herb. TEG. Confirmed by S.P. Chambers. New to the Vice-County. T.E. Greenaway

Halecania spodomela: on rocks by bridge, east side of River Aline, Ardtornish, VC 97, West Inverness-shire, GR 17(NM)/698.476, alt 5 m, October 2009. Herb. Coppins 23161 (E). New to the Vice-county and fifth Scottish record. B.J. Coppins

Hertelidea botryosa: very locally frequent on fallen decorticate trunks of *Pinus* within old growth *Pinus sylvestris* pasture woodlands, Ruigh-aiteachain and Creag na Gaibhre to An Càgain, Glen Feshie, Cairngorms SSSI, VC96, East Inverness-shire, GR 27(NN)/8469.9311, 27(NN)/8468.9308, 27(NN)8528.9074, 27(NN)8530.9071, 27(NN)8531.9071, 27(NN)8604.9023, and 27(NN)/8631.9010, alt 360–430m, June

2009. Seven sites in this new 10 km national grid square for this Near Threatened pine-wood specialist. *N.A. Sanderson, A.M. Cross & P. Aspen*

Heterodermia leucomela: on low sweeping *Fagus* branches (refound on the three known trees and on two new trees), in parkland, Boconnoc Park & Woodlands SSSI, VC 2, East Cornwall, GR20(SX)14376004 & 20(SX)1443.6075, September 2010. Field records. This is currently the only known epiphytic population of *Heterodermia leucomela* in Britain. Accompanied by *Teloschistes flavicans* on one tree. *N.A. Sanderson*

Hypogymnia farinacea: eight thalli on ancient *Alnus*, within open park-like old growth *Pinus sylvestris* pasture woodland on alluvial flats, Ruigh-aiteachain, Glen Feshie, Cairngorms SSSI, VC 96, East Inverness-shire, GR 27(NN)/ 8470.9283, alt 360 m, June 2009. Field record. The first record from *Alnus* in Britain. New to Strath Spey and the Vice-county. *N.A. Sanderson, A.M. Cross & P. Aspen*

Lecania chlorotiza: on flushed base-rich bark on old *Fagus*, within relic pasture woodland in abandoned deer park, Boconnoc Park & Woodlands SSSI, VC 2, East Cornwall, GR 20(SX)1410.6085, September 2010. Herb. Sanderson, 1507. New to Cornwall. *N.A. Sanderson*

Lecania chlorotiza: on base-rich bark of old *Quercus*, at edge of wood on coastal slope Martinhoe Manor, Woody Bay, VC 4, North Devon, GR 21(SS)/6755.4891, December 2010. Herb. Sanderson 1545. A new site for this Near Threatened and BAP species. *N.A. Sanderson*

Lecania cuprea: at base of north-facing cliff, southeast of St. Andrew's Well, Isle of May, VC 85, Fife, GR 36(NT)/6539.9960, July 2010. Herb. Coppins 23320 (E). New to the Vice-county. *B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen*

Lecania fructigena: on shore rocks in mesic-supralittoral zone, Kirk Haven, Isle of May, VC 85, Fife, 36(NT)/6594.9910, July 2010. Herb. Coppins 23339 (E). New to Scotland. *B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen*

Lecania fructigena: on vertical face of cliff above sea-shore, with *Caloplaca littorea*, Siccar Point, VC 81, Berwickshire, GR 36(NT)/81-70-, November 2010. Herb. Coppins 23223 (E). New to the Vice-county, and second Scottish record. *B.J. Coppins & A.M. Fryday*

Lecania subfuscata: on rock of north-facing cliff (also on adjacent turf), between Low Light and crossing to Rona, Isle of May, VC 85, Fife, GR 36(NT)/6529.9963, July 2010. Herb. Coppins 23327 (E). New to the Vice-county. *B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen*

Lecanora caesiosora: on basalt in drystone dyke, Harelaw, 3 km south of East Kilbride, VC 77 Lanarkshire, GR 26(NS)/607.493, alt 212m, April 2007. Herb. Douglass 2007-50. Determined by B.J. Coppins. *J.R. Douglass & B. Simpson*

Lecanora caesiosora: fertile, on stone on underside of granite block, Creag Choinnich, VC 92, South Aberdeenshire, GR 37(NO)/1597.9165, April 2010. Herb. Coppins 23230 (E). *B.J. Coppins*

Lecanora fugiens: on lignum of diagonal batons of Heligoland trap, McLeod's Garden, Isle of May, VC 85, Fife, GR 36(NT)/6556.9930, July 2010. Herb. Coppins 23314 (E). An unusual occurrence on lignum.

B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen

Lecanora mughicola: on fallen decorticate trunk of *Pinus*, within open park-like old growth *Pinus sylvestris* pasture woodland on alluvial flats, Ruigh-aiteachain, Glen Feshie, Cairngorms SSSI, VC 96, East Inverness-shire, GR 27(NN)/8453.9222, alt 480 m. Herb. Sanderson, 1322. A new site for this Near Threatened pine-wood specialist.

N.A. Sanderson, A.M. Cross & P. Aspen

Lecanora persimilis: on twig, in churchyard (St. James the Great), Silsoe, VC 30, Bedfordshire, GR 52(TL)/082.356, February 2011. Herb. Powell 1656. Suspicions that this lichen occurred in Bedfordshire were previously overshadowed by confusion with *L. hagenii*. New to the Vice-county.

M. Butler, B.J. Coppins & M. Powell

Lecanora sublivescens: two sites in New Forest SSSI, VC 11, South Hampshire - (i) a small patch on old *Fagus*, within *Fagus – Quercus – Ilex* pasture woodland, Mallard Wood, GR 41(SU)3224.0890, September, 2010. Field record (N.A. Sanderson & A. M. Cross); (ii) an extensive colony on old *Quercus* by unsurfaced track in wide, grazed lane, Bartley Green, GR 41(SU)/3022.1307, October, 2010. Herb. Sanderson 1521 (N.A. Sanderson). Second and third recent records for the New Forest for this Near Threatened RDB and BAP lichen.

N.A. Sanderson & A.M. Cross

Lecidea erythrophaea: on a species rich old *Populus tremula*, on ravine slope within degraded old-growth boreal *Betula* pasture woodland, Ruighe nan Leum, Glen Feshie, Cairngorms SSSI, VC 96, East Inverness-shire, GR 27(NN)/8859.8899, alt 460 m, June 2009. Herb. Sanderson 1329. Determined by B.J. Coppins. New to the Strath Spey woods

N.A. Sanderson, A.M. Cross & P. Aspen

Lempholemma chalazanellum: amongst moss near the base of buttress of south wall of church (St. James the Great), Silsoe, VC 30, Bedfordshire, GR 52(TL)/082.356, February 2011. Herb. Powell 1591. Confirmed by B.J. Coppins. New to the Vice-county.

M. Powell

Lempholemma polyanthes: among moss on drystone dyke, Mingary, Ardnamurchan, VC 97. West Inverness-shire, GR 17(NM)/499.635, alt 30 m, April 2007. Herb. Douglass 2007-45. New record for Ardnamurchan and West Inverness-shire.

J.R. Douglass

Leptogium corniculatum: on damp, compacted sand, near the visitor centre, Dawlish Warren, VC 3, South Devon, GR 20(SX)/983.790, November 2010.

B. Benfield

Leptogium cyanescens: abundant on *Fraxinus* within ravine in Deer Park, Boconnoc Park & Woodlands SSSI, VC 2, East Cornwall, GR 20(SX)/1441.5999, September 2010. Field record. Originally determined as *Leptogium cochleatum* by Dr F. Rose in 1984, but the material was clearly not this in 2010. Possibly it was fertile in 1984, which could lead to confusion.

N.A. Sanderson

Leptogium subtorulosum: (a) a few thalli on boulder, shaded by tree canopy, on east side of river, upstream of Higher Hodder Bridge, River Hodder, VC 60, West

Lancashire, GR 34(SD)/6983.4122, alt, 53 m, September 2007; (b) nine thalli also found further downstream on west side of river on bedrock shelves at GR 34(SD)/6863.4258 and (c) locally abundant upstream of the Higher Hodder Bridge on east side of river on bedrock shelves between GR 34(SD)/7000.4073 to 34(SD)/6992.4037. Herb. Douglass 2007-51 & 52. Confirmed by B.J. Coppins. New to the Vice-county. *J.R. Douglass & A. Hanson*

Leptogium teretiusculum: on mortared sandstone boundary wall of churchyard, (St. James the Great) Silsoe, VC 30, Bedfordshire, GR 52(TL)/082.356, February 2011. Herb. Powell 1584. Confirmed by B.J. Coppins. New to the Vice-county. *M. Powell*

Lichenopeltella ramalinae: on *Ramalina farinacea* on *Prunus spinosa* in meadow, east side of River Isla, Den of Airlie NNR, VC 90, Angus, GR 37(NO)/29-52-, December 2009. Herb. Coppins 23298 (E). New to the Vice-county, and fourth British record. *B.J. Coppins & P. Harrold*

Lichenosticta alcicornaria: parasitic on *Cladonia pyxidata* on mossy *Fagus* root, Berry Wood, New Forest SSSI, VC 11, South Hampshire, GR41(SU)2161.0554, January 2011. Herb. Sanderson 1558. Second English record, made during a Wessex Lichen Group meeting. *N.A. Sanderson*

Megalalaria laureri: on rain track of ancient *Fagus*, within *Fagus – Quercus – Ilex* pasture woodland, Frenches Bushes, Shave Wood, New Forest SSSI, VC 11, South Hampshire, GR 41(SU)2972.1216, January 2011. Field record. A new site for this very rare New Forest speciality. The tree was revealed by incidental *Ilex* cutting carried out as a general conservation measure for the pasture woodlands. *N.A. Sanderson*

Megalospora tuberculosa: on base-rich bark of two old *Quercus*, within pasture woodland in parkland, Deer Park, Boconnoc Park & Woodlands SSSI, VC 2, East Cornwall, GR 20(SX)/1452.5993 & 20(SX)/1448.5992, September 2010. Herb. Sanderson, 1515. A new site for this Near Threatened and BAP species. *N.A. Sanderson*

Melanohalea elegantula: one thallus on fallen canopy branch of veteran *Acer pseudoplatanus* in pasture, Cwm Mabws Hall, east of Llanrhystud, VC 46, Cardiganshire, GR 22(SN)/564685, alt 90 m, December 2010. Herb. SPC. New to the Vice-county and most westerly Welsh record. *S.P. Chambers*

Melaspilea amota: two sites in VC 2, East Cornwall - (i) on moist acid bark of ancient *Quercus*, within pasture woodland in parkland, Deer Park, Boconnoc Park & Woodlands SSSI, GR 20(SX)/1452.6014, September 2010. Field record; (ii) on acid bark of old *Quercus* within oceanic woodland, on cliff edge high on the side of a ravine, Hendergrove Wood, Draynes Wood SSSI, GR 20(SX)2169.6850, October 2010. Herb. Sanderson, 1512. New to Cornwall. *N.A. Sanderson*

Micarea adnata: on invertebrate-riddled and heavily decayed lignum, of large fallen 'stag's horn' *Quercus* bough, propped against trackside wall within old oakwood, Ynys-hir, Eglwys Fach, VC 46, Cardiganshire, GR 22(SN)/681.961, alt 25 m, September 2010. Herb. SPC. New to the Vice-county. *S.P. Chambers*

Micarea curvata: on low, block-like sandstone headstone, in churchyard (St. James the Great), Silsoe, VC 30, Bedfordshire, GR 52(TL)/082.356, February 2011. Herb. Powell 1652. New to England and second report of this lichen from a churchyard. An inconspicuous species resembling a pallid *Scoliciosporum umbrinum*.

M. Butler, B.J. Coppins & M. Powell

Micarea deminuta: on soil covered *Fagus* roots on upturned root plate, within *Quercus* – *Fagus* – *Ilex* pasture woodland, Highland Water Inclosure, New Forest SSSI, VC 11, South Hampshire, GR 41(SU)2457.0850, November 2010. Herb. Sanderson 1533, Determined by B.J. Coppins. Recorded during the NHM New Forest Quantitative Inventory project. Second English record.

N.A. Sanderson, P.A. Wolseley & H. Thüs

Micarea hedlundii: at three sites in New Forest SSSI, VC 11, South Hampshire on damp *Quercus* lignum, of cut stumps, natural broken stumps and standing dead trees, within old growth woodland - (i) South Bentley Inclosure, GR 41(SU)/2341.1285, (ii) Ocknell Inclosure GR 41(SU)/2461.1158 and Tantany Wood, GR 41(SU)/3670.0411, November 2010 & January 2011. Herb. Sanderson 1534. Recorded during the NHM New Forest Quantitative Inventory project and found in three out of fifteen samples. This suggests that this species is local but widespread in the New Forest old growth woodlands. However, the damp lignum habitat has rarely been searched in detail. Once spotted the pycnidia of this species are highly distinctive, see picture at www.uklichens.co.uk. First records for lowland England.

N.A. Sanderson, P.A. Wolseley & H. Thüs

Micarea stipitata: at two sites in VC 2 East Cornwall – (i) on moist acid bark of old *Quercus*, in area of old trees within wood adjacent to deer park, Colliershill Wood, Deer Park, Boconnoc Park & Woodlands SSSI, GR 20(SX)/1434.6077, September 2010; (ii) on acid bark of old *Quercus* within oceanic woodland, on cliff edge high on the side of ravine, Hendergrove Wood, Draynes Wood SSSI, GR 20(SX)/2235.6862, October 2010. Field records. New to Cornwall.

N.A. Sanderson

Micarea sylvicola: on shaded softwood fence post, north edge of Bowd Lane Wood, VC 32, Northamptonshire, GR 42(SP)/807.868, March 2011. Herb. Powell 1669. This species is not uncommon on fence posts in the Scottish Highlands but surprising for lowland England.

M. Powell

Micarea tuberculata: on outcrop in small, narrow valley, Wester Shearnie Cleugh, Hopes, Lammermuir Hills, VC 82, East Lothian, GR 36(NT)/54-61-, alt c. 300 m, October 2010. Herb. Coppins 23213 (E). New the the Lothians.

B.J. Coppins & A.M. Fryday

Micarea xanthonica: rare on acid *Quercus* within older and better lit areas of oceanic woodland in deep ravine, Draynes Wood SSSI, VC 2, East Cornwall, GR 20(SX)/21-68- & 20(SX)/22-68-, October, 2010, Field records. New to East Cornwall.

N.A. Sanderson

Mycomicrothelia confusa: on several old *Sorbus aucuparia* on cliff-tops within oceanic woodland in ravine, Draynes Wood SSSI, VC 2, East Cornwall, GR

20(SX)/2220.6855 & 20(SX)/2153.6850, October 2010. Herb. Sanderson, 1514. New to Cornwall. N.A. Sanderson

Myriospora heppii: on marble cross in churchyard, (St. James the Great), Silsoe, VC 30, Bedfordshire, GR 52(TL)/082.356, February 2011. Herb. Powell 1667. An inconspicuous species collected as a candidate for *Catillaria lenticularis*! New to the Vice-county. M. Butler, B.J. Coppins & M. Powell

Ochrolechia turneri: fertile, on poplar, Parke, Bovey Tracey, VC 3, South Devon, GR 20(SX)/809.790, Aug. 2010. Herb. Benfield, in E. B. Benfield & C.J.B. Hitch

Ochrolechia turneri: fertile on *Fraxinus* at Sowton, Exeter, VC 3, South Devon, GR 20(SX)/980.925, September 2010. Herb. Benfield. This and the above collection are the first two samples found in the UK with mature spores. B. Benfield, M. Putman & T. Holwill

Ochrolechia turneri: a third fertile sample of this taxon has been noted in Devon (pers. comm.) by B. Benfield.

Opegrapha areniseda: on sandstone of north-facing inside wall, St Ethernan's Priory [St Adrian's Chapel], Isle of May, VC 85, Fife, GR 36(NT)/65-99-, July 2010. Herb. Coppins 23330 (E). New to the Vice-county. B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen

Opegrapha cesareensis: a large colony, c. 2 × 1.7 m., on north-facing side of outcrop on west side of track, just south of crossing to Rona, Isle of May, VC 85, Fife, GR 36(NT)/6521.9977, July 2010. Herb. Coppins 23326 (E). New to the Vice-county. B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen

Opegrapha cesareensis: in crevices at base of basalt cliff, above sea-shore, Siccar Point, VC 81, Berwickshire, GR 36(NT)/81-70-, October 2010. Herb. Coppins 23220 (E). Third record for southeast Scotland. B.J. Coppins & A.M. Fryday

Opegrapha demutata: on limestone headstone in churchyard, (St. James the Great), Silsoe, VC 30, Bedfordshire, GR 52(TL)/082.356, February 2011. Herb. Powell 1661. New to the Vice-county. M. Butler, B.J. Coppins & M. Powell

Opegrapha physciaria: on *Xanthoria parietina* on south-facing limestone, Sand Point, VC 6, South Somerset, GR 31(ST)/31-59-, alt 15 m, February 2011. Herb. Coppins 23133 (E). Recorded during BLS Excursion. New to Somerset. B.J. Coppins

Parmelinopsis minarum: (a) on low sweeping *Quercus* branch, on old collapsed *Salix cinerea*, (b) on acid bark of trunk of old *Quercus*, within pasture woodland in parkland, Boconnoc Park & Woodlands SSSI, VC 2, East Cornwall, GR20(SX)/1409.6015, 20(SX)/1387.6085 and 20(SX)/1434.6077, September 2010. Field records. A new site for this Vulnerable RDB species. N.A. Sanderson

Parmelinopsis minarum: on low sweeping *Quercus* and *Fagus* branches, within *Quercus* – *Fagus* – *Ilex* pasture woodland, Berry Wood, New Forest SSSI, VC11, South Hampshire, GR 41(SU)/2151.0528 & 41(SU)/2150.0529, January 2011. Field records made during a Wessex Lichen Group meeting. A new site for this Vulnerable RDB lichen. N.A. Sanderson

Parmotrema arnoldii: on top of sloping boulder and on west-facing mossy outcrop below perched *Sorbus aucuparia* on wet, north-facing oceanic hillside, Tarren Tyn-y-maen, Cwm Llyfnant, VC 46, Cardiganshire, GR 22(SN)723.971, alt 230 m, October 2010. Herb. SPC. An unusual non-epiphytic occurrence, associated with saxicolous *Parmelion laevigatae* community elements, including *Hypotrachyna laevigata*, *Ochrolechia tartarea* and *Sphaerophorus globosus*. New to the Vice-county. S.P. Chambers

Peltigera neckeri: dominating a curbed grave in churchyard (St. James the Great), Silsoe, VC 30, Bedfordshire, GR 52(TL)/082.356, February 2011. Herb. Powell 1644. New to the Vice-county. M. Butler, B.J. Coppins & M. Powell

Pertusaria pustulata: an extensive colony on base of ancient *Fagus*, within *Fagus* – *Quercus* – *Ilex* pasture woodland, Plain Green, Busketts Wood, New Forest SSSI, VC11, South Hampshire, GR 41(SU)/3080.1027, January 2011. Herb. Sanderson 1568. First record from the New Forest woods since 1976, and one of the few recent records from Britain for this Vulnerable RDB species. N.A. Sanderson & A.M. Cross

Phlyctis agelaea: (i) about 10 patches, to ca 2 x 2 cm, on smooth bark of six tall young, ca 9 cm dbh *Fraxinus excelsior* saplings in glade-edge scrub in old woodland, west of Penwernfach, Capel Tygwydd, VC 46, Cardiganshire, GR 22(SN)/262.437, alt 50 m, October 2010. Herb. SPC; (ii) one patch, ca 3 x 2.5cm, on ca 12 cm dbh sapling (*Fraxinus excelsior*), in gladed area, Coed Tyddyn-du, N of Cenarth, VC 46 Cardiganshire, GR 22(SN)/271426, alt 55 m, October 2010. From these two records *P.agelaea* appears to be an epiphyte of both ancient and modern woodland in the VC, as the first site has veteran oaks, with *Bactrospora corticola*, while Coed Tyddyn-du (owned by Coed Cadw/Woodland Trust) is the largest area of natural secondary woodland in the county, developed on formerly open pasture since about 1914. New to the Vice-county. S.P. Chambers

Placynthium tantaleum: on flat slab of pre-Cambrian (Dalradian) schist on lip of small cascade in streamlet, on west flank of Buckoogh, north of Newport, VC H27, West Mayo, GR 03(F)/986.003, alt 310 m, August 2008. Herb. SPC & duplicate in NMW. Confirmed by Alan Orange. New to the Vice-county. S.P. Chambers

Polycoccum crassum: on *Peltigera rufescens* in close-cropped coastal grassland, Yellow Craigs, Dirleton, VC 82, East Lothian, GR 36(NT)/5186.8587, alt 5 m, May 2010. Herb. Coppins 23168 (E). New to southeast Scotland. B.J. Coppins

Polycoccum microsticticum: abundant on *Acarospora fuscata* on steep east-facing upland rock face in sheepwalk, Banc Trawsnant, west of Llyn Rhosgoch, VC 46, Cardiganshire, GR 22(SN)/709.832, alt 400 m, December 2010. Herb. SPC. New to the Vice-county. S.P. Chambers

Porina ahlesiana: on damp shaded shale on wooded coastal slope, Martinhoe Manor, Woody Bay, VC 4, North Devon, GR 21(SS)6723.4924, December 2010. Herb. Sanderson 1546. A new site for this Near Threatened and BAP species. N.A. Sanderson

Pronectria santessonii: on *Anaptychia runcinata* on rocks in broad gully, Isle of May, VC 85, Fife, GR 36(NT)/6586.9896, July 2010. Herb. Coppins 23333 (E). New to the Vice-county. B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen

Pyrenidium actinellum: on *Xanthoparmelia mougeotii* on headstone and on granite chippings in churchyard (St. James the Great), Silsoe, VC 30, Bedfordshire, GR 52(TL)/082.356, February 2011. New to the Vice-county. *B.J. Coppins*

Pyrenula acutispora: on *Corylus* within ravine, Dearg Abhainn, Gleann Salach, VC 98, Argyll Main, GR 17(NM)/96.40., alt 80–100 m, May 2010 Herb. Coppins 23375 (E). Second record for the Vice-county, and sixth for Scotland. *B.J. Coppins*

Ramalina polymorpha: very abundant on flat rocks, South Plateau, Isle of May, VC 85, Fife, GR 36(NT)/65-99-, July 2010. Herb. Coppins 23321 (E). Probably the largest population of this taxon in the British Isles.

B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen

Ramalina portuensis: on drystone dyke, Mingary, Kilchoan, Ardnamurchan, VC 97. West Inverness-shire, GR 17(NM)/501.01 63605, alt 30 m, February 2006. Herb. Douglass 2006-46. Determined by B.J. Coppins. New record for Ardnamurchan and the vice-county. *J.R. Douglass*

Ramalina portuensis: with *Ramalina farinacea* in a mixed sward on smooth bark of multi-stemmed *Fraxinus excelsior* and on *Crataegus monogyna* branch, at seaward end of coastal dingle woodland, Cwm Cilfforch, southwest of Aberaeron, VC 46, Cardiganshire, GR 22(SN)/438.617, alt 10 m, February 2011. Herb. SPC. New to the Vice-county. *S.P. Chambers*

Ramonia dictyospora: (i) on soft, moist bark, on south side of old *Quercus* within modified riparian woodland strip, north bank of Afon Cyneiniog, Coed Bryn y fedwen-fawr, east of Cwmere, VC 46, Cardiganshire, GR 22(SN)/703.882, alt 150 m, September 2010. Herb. SPC; (ii) on damp, soft bark, northeast side of trunk of *Fraxinus excelsior* in modified woodland (with old field banks), Cwm Mabws, VC 46, Cardiganshire, GR 22(SN)/560.683, alt 70 m, December 2010. Herb. SPC. Second and third Vice-county records. *S.P. Chambers*

Ramonia dictyospora: on lignum inside hollow old *Ilex*, within *Ilex* pasture woodland, Pigsty Hat, Stoney Moors, New Forest SSSI, VC 11, South Hampshire, GR 40(SZ)/2113.9962, January 2011. Confirmed under the microscope. Recorded during the NHM New Forest Quantitative Inventory project. A new 10 km grid square record for this Near Threatened RDB and BAP lichen, rarely recorded in the New Forest. *N.A. Sanderson*

Ramonia dictyospora: on bare patch of bark, on base rich ancient *Quercus*, within open *Quercus* – *Fraxinus* pasture woodland, east of The Den, Millook Valley, VC 2, East Cornwall, GR 20(SX)/1844.9877, January 2011. Herb. Sanderson 1564. New to Cornwall. *N.A. Sanderson*

Rhaphidicyrtis trichosporella: in crevice in dry bark of mature *Quercus*, within *Ilex* pasture woodland, Pigsty Hat, Stoney Moors, New Forest SSSI, VC 11, South Hampshire, GR 40(SZ)/2112.9962, January 2011. Herb. Sanderson 1570. Recorded during the NHM New Forest Quantitative Inventory project. First record for lowland England. *N.A. Sanderson*

Rhymbocarpus cruciatus: on fertile *Diploicia canescens* on trunk of freestanding *Acer pseudoplatanus* in pasture, Cwm Mabws Hall, VC 46, Cardiganshire, GR 22(SN)/564.683, alt 120 m, December 2010. Herb. SPC. New to the Vice-county.

S.P. Chambers

Rinodina griseosoralifera: on *Fraxinus* at edge of pasture, north side of River Attadale, opposite Home Farm, Glen Attadale, VC 105, West Ross, GR 18(NG)/9272.3854, alt 50–70 m, July 2010. Herb. Coppins 23280 (E). Recorded during the IAL Excursion. Most northerly record in Britain. New to the Vice-county. B.J. Coppins

Rinodina intermedia: (i) on decaying vegetation among short turf at cliff edge, Soar Mill Cove, VC 3, South Devon, GR 20(SX)/689.376, December 2004; (ii) on soil beside path, Grunta Beach, VC 4, North Devon, GR 21(SS)/453.449, May 2005. A browner thallus and submuriform spores separate *R. intermedia* from *R. conradii*, which grows in a similar habitat. Checked with TLC at RBGE. New to mainland Britain. B. Benfield

Rinodina oxydata: on low igneous outcrop, near Mingary Castle, Kilchoan, Ardnamurchan, VC 97. West Inverness-shire, GR 17(NM)/504.631, alt 5 m, April 2007. Herb. Douglass 2007-17. Determined by B.J. Coppins. New record for Ardnamurchan. J.R. Douglass

Rinodina pyrina: on lignum of wooden ladder, McLeod's Garden, Isle of May, VC 85, Fife, GR 36(NT)/6556.9930, July 2010. Herb. Coppins 23314 (E). New to the Vice-county. B.J. Coppins, J.R. Douglass, S.G. Price & P. Aspen

Romjularia lurida: limestone outcrop, nr. Mingary Castle, Kilchoan, Ardnamurchan, VC 97. Westernness, 17(NM)/50. 631, alt 4m, April 2007. First confirmed record for Ardnamurchan and Westernness. J.R. Douglass

Ropalospora viridis: on *Alnus* on river bank, within native *Pinus* woodland, River Luineag, Rothiemurchus, North Rothiemurchus SSSI, VC96, East Inverness-shire, GR 28(NH)/9559.0968, alt 330 m, August 2010. Field record. New to the Vice-county. N.A. Sanderson & A.M. Cross

Schismatomma graphidioides: frequent on old *Salix cinerea* in glade infilled by *Betula* within *Quercus* – *Fagus* – *Ilex* pasture woodland, Whitley Wood, New Forest, VC11, South Hampshire, GR 41(SU)/2956.0550, November, 2010. Herb. Sanderson, 1526. Found about 1 km northeast of the earlier records for this species. Recorded during the NHM New Forest Quantitative Inventory project. Second record for the New Forest for this Vulnerable RDB and BAP lichen. N.A. Sanderson & P.A. Wolseley

Schismatomma graphidioides: (a) on trunk of one old *Fraxinus excelsior* in patch of valley floor within wet *Salix* – *Fraxinus* woodland; (b) on three younger *F. excelsior* in line of trees beside field ditch and (c) on one ancient *Quercus* on wooded slope at field edge, Ystwyth valley southeast of Plas Abermad, VC 46, Cardiganshire, GR 22(SN)60-75-, alt 25m, January 2011. Herb. SPC. The strongest population yet found in Wales and the only one where it occurs on more than one tree. S. P. Chambers

Scoliciosporum curvatum: on leaves and twigs of *Taxus baccata* on sheltered north side of tree in churchyard (St. Mary's), Derwen, southwest of Ruthin, VC 50,

Denbighshire, GR 33(SJ)/070.507, alt 250m, September 2010. Specimen in Herb. Powell. First churchyard record and new to the Vice-county. *S.P. Chambers*

Sclerophora peronella: on wound tracks on four *Betula pubescens* and one *Sorbus aucuparia*, within old growth *Betula* and *Pinus* pasture woodlands, Ruigh Creagan and Creag na Gaibhre, Glen Feshie, Cairngorms SSSI, VC 96, East Inverness-shire, GR 27(NN)/8613.8951, 27(NN)/8614.8951, 27(NN)/8615.8945, 27(NN)8635.8925 and 27(NN)8516.9126, alt 435 – 480 m, June 2009. Field records. A new 10km grid square record for this Near Threatened species. *N.A. Sanderson, A.M. Cross & P. Aspen*

Strigula jamesii: on limestone pebble and concrete-mortar fragment at base of north wall of churchyard (St. James the Great), Silsoe, VC 30, Bedfordshire, GR 52(TL)/082.356, February 2011. New to the Vice-county. *B.J. Coppins*

Teloschistes flavicans: one thallus on sweeping low *Fagus* branch, of field-edge tree in parkland, Boconnoc Park & Woodlands SSSI, VC 2, East Cornwall, GR 20(SX)/1443.6075. Field record. Growing with *Heterodermia leucomelos*. This is the first record for Boconnoc Park since it was found by Edward Forster in 1849. A very welcome sight after 162 years. *N.A. Sanderson*

Unguiculariopsis manriquei: on *Lobaria pulmonaria* on *Corylus*, south of Bardrishaig, Luing, VC 98, Argyll Main, GR 17(NM)/74-11-, alt 10–30 m, March 2010. Herb. Coppins 23377 (E). Third site (second hectad) for Britain. *B.J. Coppins*

Usnea florida: locally frequent on branches of *Quercus*, within open *Quercus* pasture woodland, Berry Wood, New Forest SSSI, VC 11, South Hampshire, GR 41(SU)/2140.0555, January 2011. Field record. Species first recorded in 2004 as frequent here and revisited by the Wessex Lichen Group to check on the condition of this population. This threatened BAP species appears to be holding its own in the New Forest, reflecting low levels of ammonia deposition in this area. *N.A. Sanderson*

Usnea glabrescens: (a) on *Quercus* branches, on edges of glades within pasture woodland and on fallen branches, New Forest SSSI, VC 11, South Hampshire, GR 41(SU)/2434.0765, 41(SU)/3135.1127, 41(SU)/2139.0540 and 41(SU)/2140.0555, November & December 2010 & January 2011. Herb Sanderson, 1531 & 1559. First and last sites visited during the NHM New Forest Quantitative Inventory project and a Wessex Lichen Group meeting, respectively. First correct records for Hampshire. *N.A. Sanderson*

Usnea wasmuthii: on branches of Japanese larch *Larix kaempferi* at edge of copse, Cilgattw Farm, VC 44, Carmarthenshire, GR 22(SN)/516.264, March 2011. Herb. TEG. Confirmed by S.P. Chambers, but TLC not yet done. New to the Vice-County. *T.E. Greenaway*

Verrucaria nigrescens f. *tectorum*: on limestone headstone in churchyard (St. James the Great), Silsoe, VC 30, Bedfordshire, GR 52(TL)/082.356, February 2011. Field record, confirmed by B.J. Coppins. This taxon is thought to be common in the county but has not previously been recorded. New to the Vice-county. *M. Butler, B.J. Coppins & M. Powell*

Xenonectriella streimannii: on *Sticta sylvatica* on *Corylus* within valley *Corylus-Betula* woodland, Bealach Gaoithe, Kilmory, Ardnamurchan, VC 97, West Inverness-shire, GR 17(NM)/53-70-, May 2009. Herb. Coppins 23252 (E). New to the Vice-county.

B.J. Coppins, A.M. Coppins & J.R. Douglass

Vezeadaea aestivalis: on moribund moss clumps within developing lichen heath at former tarmac works, Sandhouse Lane Nature Reserve, VC 30, Bedfordshire, GR 42(SP)/935.297, April 2011. Herb. Powell 1680. New to the Vice-county. M. Powell

Vulpicida pinastris: on wooden boardwalk, Langlands Moss LNR near East Kilbride, VC 77, Lanarkshire, GR 26(NS)/6347.5132, alt 215 m, December 2006. Herb (E). New to the Vice-county.

J.R. Douglass & B. Simpson

Wadeana dendrographa: on two ancient *Fraxinus* by stream on edge of woodland, Trebarfoote, Millook Valley, VC 2, East Cornwall, GR 20(SX)/1854.9975 & 20(SX)1852.9956, January 2011. Field records. Refinding of a 1989 record for this Near Threatened and BAP species.

N.A. Sanderson

Xerotrema megalospora: on two standing decorticate *Pinus* trunks, within old growth tree-line *Pinus sylvestris* woodlands, Cadha Beag, Rothiemurchus, Cairngorms SSSI, VC 96, East Inverness-shire, GR 28(NH)/9137.0675 & 28(NH)/9135.0674, May, 2010. Field records. A new 10 km grid square record for this Near Threatened pinewood speciality.

N.A. Sanderson & A.M. Cross

Xerotrema megalospora: on two standing or fallen decorticate *Pinus* trunks, within old growth *Pinus sylvestris* pasture woodlands, Creag na Gaibhre to An Càgain, Glen Feshie, Cairngorms SSSI, VC 96, East Inverness-shire, GR 27(NN)/8529.9072 and 27(NN)/8588.9032, alt 385–400 m. Checked microscopically. A new 10 km grid square record for this Near Threatened pinewood specialist.

N.A. Sanderson, A.M. Cross & P. Aspen

Xylographa vitiligo: abundant on bark of *Larix* in meadow, Gob na Roinne, Dorusduain, VC 105, West Ross, GR 18(NG)/9810.2232, alt 70 m, July 2010. Herb. Coppins 23283 (E). Recorded during the IAL Excursion. An unusual occurrence on bark rather than lignum.

B.J. Coppins

Zwackhiomyces physciicola: on *Physcia caesia*, north side of the Main Light, Isle of May, VC 85, Fife, GR 36(NT)/6546.9938, July 2010. Herb. Coppins 23335 (E). See also under **New to the British Isles**.

B.J. Coppins

British Isles List of Lichens and Lichenicolous Fungi

March 2011 update to list

The fully corrected list is available on the BLS web site, <http://www.theBLS.org.uk>.

We are indebted to Philippe Clerc, Alan Fryday, David Hawksworth, and other checklist users, for bringing several of the required changes to our notice. Anyone

encountering difficulties regarding nomenclature or BLS code numbers, please contact one of us, as below.

E-mail contacts (with main responsibilities):

Brian Coppins (nomenclature, BLS and NBN species dictionaries, spelling, authorities, dates of publication) *lichensEL@btinternet.com*

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Janet Simkin (Recorder, BioBase and spreadsheet species dictionaries)
janetsimkin@btinternet.com

Add:			Notes
2455	<i>Acarospora rhagadiza</i>	Acar rhag	
2572	<i>Adelolecia pilati</i> subsp. <i>pachythallina</i> ##	<i>Adelolecia pila</i> pach ##	1
2563	<i>Arthonia coerulescens</i> #	Arthon caer #	
2564	<i>Arthonia destruens</i> #	Arthon dest #	
2576	<i>Arthonia pannariae</i> #	Arthon pann #	
Add:			Notes
2567	<i>Biatora ocelliformis</i>	<i>Biatora ocel</i>	
2496	<i>Caloplaca monacensis</i>	Calo mona	
2574	<i>Caloplaca turkuensis</i>	Calo turk	
2578	<i>Candelaria pacifica</i>	<i>Candelaria paci</i>	
2573	<i>Cliostomum subtenerum</i> ##	Clio subt ##	1
2580	<i>Endococcus ramalinarius</i> #	Endococ rama #	
2568	<i>Fuscidea ocellata</i>	Fuscid ocel	2
2577	<i>Hypotrachyna revoluta</i> s. str.	Hypotr revo s.s.	
2575	<i>Lecania granulata</i> ##	<i>Lecania gran</i> ##	
2579	<i>Lecanora filamentosa</i>	<i>Lecanora fila</i>	

2561	Lecanora sinuosa		Lecanora sinu			
2571	Lecidea herteliana ##		Lecidea hert ##		1	
2581	Lichenocodium lichenicola #		Lichenocod lich #			
2562	Lichenopeltella pannariacearum #		Lichenopelt pann #			
2569	Nectriopsis micareae #		Nectriop mica #			
2570	Pycnora praestabilis		Pycnora prae			
2565	Rinodina intermedia		Rino intermed			
2566	Zwackhiomyces physciicola #		Zwac phys #			
Delete (correct name or notes given below as applicable):						
Delete:			Replace with:			Notes
1459	Usnea chaetophora	Usnea chaet	1460	Usnea dasypoga	Usnea dasy	
Change of genus (sometimes also species epithet):						
Change from:			Replace with:			Notes
1911	Catillaria alba	Catil alba	1911	Biatora veteranorum	Biatora vete	
293	Fuscidea lugubris f. sorediata ##	Fuscid lugu sore ##	293	Ropalospora lugubris f. sorediata ##	Ropal lugu sore ##	1
1698	Lecidea doliiformis	Lecidea doli	1698	Micarea doliiformis	Mica doli	
Change of epithet:						
Change from:			Replace with:			Notes
31	Acarospora verruciformis	Acar verr	31	Acarospora scabrida	Acar scab	

2033	Clypeococcum epicrassum #	Clyp epic #	2033	Clypeococcum psoromatis #	Clyp psor #	
640	Lecanora conferta	Lecanora confer	640	Lecanora antiqua	Lecanora antiq	
695	Lecidea antiloga	Lecidea anti	695	Lecidea globulispora	Lecidea globul	
1460	Usnea filipendula	Usnea fili	1460	Usnea dasypoga	Usnea dasy	
Change of rank						
Change from:			Replace with:			Notes
1013	Hypotrachyna revoluta	Hypotr revo	1013	Hypotrachyna revoluta s. lat.	Hypotr revo s.l.	
Change of abbreviation						
Change from:			Replace with:			Notes
762	Adelolecia pilati		762	Adelolecia pilati subsp. pilati	Adelolecia pila pila	
1290	Rinodina interpolata	Rino inte	1290	Rinodina interpolata	Rino interpol	
522	Ropalospora lugubris	Ropal lugu	522	Ropalospora lugubris f. lugubris	Ropal lugu lugu	

Notes

1 – unpublished name in manuscript or in press.

2 – provisional name. It may be that British material does not belong to *F. ocellata*, but to an undescribed taxon. This is currently under investigation by Alan Fryday and Brian Coppins.

B.J. Coppins, M.R.D. Seaward & J. Simkin

BLS Field Meeting to the Isle of Man, 22-27 April 2010

22 April

On the evening of arrival, despite the best efforts of an Icelandic volcano, participants gathered in a seafront hotel for a welcome from Mark Seaward, who organised and subsequently led the field excursions. Kate Hawkins, Curator of Natural History at Manx National Heritage, then gave a brief introduction to the physical features and wildlife of the Island, ably supported by a discussion of its geology by Peder Aspen. The following participated for most, if not all, of the 6-day meeting: Peder Aspen, Graham Boswell, Chris Forster Brown, Annalie Burghause, Paul Cannon, Brian Carlyle, Ginnie Copey, Robin Crump, Kate Hawkins, Jan Heaney, Andrew Hodkiss, Bob Hodgson, Penny Hodgson, Tracey Lovering, Steve Price, Maxine Putnam, Mark Seaward, Holger Thüs and John Wardle; from time to time we were joined by local naturalists who welcomed us warmly and were keen to join in with our activities.



Group photo, The Ayres – image © John Wardle

23 April

Poyllvaaish (SC230686 to 242681)

Basic rocks are in short supply in the Isle of Man and natural exposures of limestone are more or less confined to the south coast, where they emerge from the thick glacial deposits otherwise blanketing rocks of Carboniferous age. Beds of limestone derived

mostly from planktonic foraminifera in an ancient equatorial sea are interrupted by thin, darker mudstone layers.

Signs of human activity associated with this coast include lime kilns, walls and buildings of various materials (including limestone), quarrying and farming. Historically, limestone was quarried between Poyllvaaish and Scarlett and shipped around the Isle of Man for farmers to burn in their own lime kilns. Trackside vehicle passing places have created areas of sparsely vegetated ground, including the head of the beach, where boulders, shingle and sand have been stable for some time.

The area surveyed included part of the Poyllvaaish coast Area of Special Scientific Interest (ASSI), designated for its saltmarsh, intertidal elements, vegetated shingle and strandline, coastal grassland and bird life. In the light of this, despite being granted a permit by the Department of Environment, Food and Agriculture (DEFA), lichen collection was restrained.



Solenopsora candicans, Polyvaaish



Coastal rocks at Poyllvaaish. Image © John Wardle

Furthermore, access was unfortunately not granted on this occasion to study the rocky promontory (SC244677) which has a distinctive lichen flora. However, participants were able to concentrate on basic rocks (some intertidal) and walls, as well as beach cobbles, bare ground and sparse scrub. In all, 54 taxa were

recorded, mostly *Collema*, *Leptogium* and *Verrucaria*.

The Sound (SC173666)

The Sound, at the south-west tip of the island, is popular with visitors because of its dramatic scenery and wildlife. The cliffs that rise to the east and which feature prominently on the Calf of Man across The Sound channel are home to significant seabird nesting colonies and support a flora typical of much of the rocky coast

around the Isle of Man. The turbulent waters around the Calf of Man and running through the Sound have claimed ships and lives in the past. Memorials stand along this coast, testament to shipwrecked sailors and those who risked their lives to rescue them. Unfortunately, we were unable to arrange transport to the Calf, but there is clearly potential for future lichenological work there!



Anaptychia runcinata and *Caloplaca crenularia*, The Sound

The geology of this area is characteristic of the tall cliffs around the east, south and south-west coasts of the Isle of Man. Ancient Ordovician rocks of the Manx Group (470-490 million years old) consist of sandstone, mudstone and siltstone strata, the rocks much folded and faulted by tectonic movements. The lichen communities here are adapted to acid substrata and must survive exposure to wind and sea spray.

Lunch was taken at the café, built by Manx National Heritage in 2002 after the land was acquired by the IoM Government.



Studying lichens on the coastal rocks at The Sound. Image © John Wardle

Members then spent some time identifying and photographing the profusion of

lichens on the acidic rocks, stretching from the grassy cliff tops down to the tidal race. A luxuriant, rather than a species rich, lichen flora composed mainly of *Lecanora*, *Ramalina*, *Rhizocarpon* and *Xanthoparmelia* species covered rocks in the upper levels through to the splash zone, but the tidal rocks were less accessible and received less attention. Of the 44 taxa noted, those of particular interest were *Acarospora benedarensis* and *Anaptychia ciliata* subsp. *mamillata*.

Meayll Hill (SC190676)

Meayll Hill, overlooking Cregneash, with outcrops of Manx Group (Ordovician) rocks, is topped by acid heath, which is in turn dominated by heather and gorse. Just below the summit lies the unique ring of Neolithic chambered tombs, the Meayll Circle, designated an Ancient Monument in the care of Manx National Heritage; this was studied in some considerable detail, but, naturally, the removal of lichens was not encouraged within the compound in order to protect the monument. A variety of other habitats were explored, the most interesting in terms of lichen diversity being a wartime pill-box which supported 34 of the 79 taxa recorded.

A breakway group spent some time exploring the lichens of a disused quarry (SC191673) which serves as a car park for Cregneash. The strongly mineralised black slates and schists supported an interesting flora of 17 species.

The landscape hereabouts is typical of Manx 'hill' farming, with small fields managed as mixed, largely traditional agriculture, within which is located the delightful Cregneash Village Folk Museum. Here members took afternoon refreshment, after of course first inspecting village buildings, including the tiny church, and the dry stone walls for lichens.

In the evening, Peter McEvoy from the Department of Environment, Food and Agriculture (DEFA) gave an entertaining talk on the protected sites of the Island and the challenges faced in conserving its unique habitats.



Mark tries out a tomb for size

24 April

The Ayres ASSI and National Nature Reserve

Prior to our investigation of this important site we received a welcome and presentation by Erica Spencer and Richard Selman in the Visitor Centre. The site, extending from NX450045 to 405032 (but only NX435038 to 423032 were surveyed), is a system of sand and shingle ridges and maritime heath which have developed on a post-ice age raised beach, the ancient shoreline of which can be seen as rising ground to the south. Land here was subject to grazing in the past, and marram grass was gathered for thatching local buildings. Rounded cobbles were collected from beaches as building material for local houses. A lime kiln provides evidence of some attempt at ‘improving’ the land. Next to it is a small experimental conifer plantation which looks out of place, but provided another habitat for lichens.

Classic habitat succession is seen from the pioneering flora at the top of the beach, through marram dominated dunes, to de-calcified fixed dunes with a mixed flora, merging into heather and gorse dominated heath. The shoreline is accreting material brought northwards from the eroding glacial cliffs of the north-west coastline.

This reserve has a rich diversity of wildlife. Terns nest along the beaches and the site has a long vascular plant list, including rare species such as Portland Spurge, Isle of Man Cabbage and Pyramidal Orchid. It is also home to a rich insect fauna, including the Heath Bee-fly (*Bombylius minor*), its only other location in the British Isles being the heaths of Dorset.



Usnea articulata (left), and *Bryoria fuscescens* (right), both growing uncharacteristically on the sandy ground (see next page)

Behind the dunes, a lichen heath has developed which supports a wide variety of *Cladonia* spp. However, despite a detailed search by participants, it would appear that there has been a significant reduction in lichen diversity since the survey undertaken by Peter Earland-Bennett in 1973, more particularly species of *Cladonia*

which have reduced in number from 18 to 9; furthermore, *Pycnothelia papillaria* was not relocated, and certain characteristic species, such as *Cetraria aculeata* and *C. muricata*, were infrequently found. On a more optimistic note, numerous epiphytes had established themselves on the ground, including *Usnea articulata* which was commonly found on stabilised sandy ground behind the dunes, its frequency increasing on the sides of grassy walkways. However, the fragile lichen heath is subject to trampling and invasion by other vegetation, particularly gorse, which is becoming a problem for habitat management.

Intermingled with the terricolous lichens were shingle and stabilised beach cobbles of various origins which supported a variety of saxicolous species; the stems of shrubs, mainly *Calluna*, *Sambucus* and *Ulex*, as well as tree bark in the small coniferous plantation provided additional records, making a total of about 50 species (compared with 85 in 1973). The Island's DEFA and Manx National Heritage, which between them own the land within the NNR, will be provided with an up to date species list and hopefully any insight from participants (e-mail: kate.hawkins@mnh.gov.im) as to whether or not current management practices are appropriate for the preservation of its lichen flora.

Ballaugh Curragh ASSI and Ramsar Site (c. SC364951)

The Ballaugh Curragh is an area of flooded peat workings, old wet pasture and willow scrub and swamp, all that remains of a lake which formed at the end of the last Ice Age between the retreating ice sheet to the north and the Manx hills to the south. Peat was dug and willows kept cut back for hundreds of years until about 1900, when agricultural activity decreased and willow and Bog Myrtle began to get the upper hand. In 1963, the Manx Government passed the Curraghs Acquisition Act, bringing the core of the wetland, by then much valued by nature conservationists, into public ownership and subsequently into the care of Manx National Heritage. Unfortunately this did not prevent the silting up of much of the open water habitat and further rapid invasion by willow scrub.



The Curragh wetlands. Image © John Wardle

The Ballaugh Curragh supports birds such as nesting Curlew, Water Rail, Woodcock, Willow Warbler,

Grasshopper Warbler and Chiffchaff. It is notable as a winter roost site for Hen Harriers, although the numbers of this important bird have declined in recent years, possibly mirroring a downward trend in the British Isles population as a whole. Boggy areas are characterised by Bogbean, Marsh Cinquefoil and Bog Myrtle, and on the more open semi-improved meadows owned and managed by the Manx Wildlife Trust to the north, wild orchids grow in profusion. Curragh land owned by MNH, the Manx Wildlife Trust, the Wildlife Park and private landowners forms the ASSI and the Island's first, and to date only, Ramsar Site. There is cooperation over management of the wetland amongst the public bodies and management advice is available to private landowners. Clearance of scrub occurs on a small scale to keep areas open for roosting Hen Harriers, provide modest access to visitors, and to maintain as much of the biodiversity as possible.

Our access to the Curragh was by walkways and pathways created through the scrub and swamp along old field boundaries, often lined by Royal Fern. These routes took us past old willow trees frequently supporting a luxuriant growth of lichens on trunks, branches and stumps, although the diversity of taxa was modest. Of the 36 species, mainly epiphytes, recorded, the following were noteworthy: *Hypotrachyna britannica*, *Normandina acroglypta*, *Punctelia reddenda*, *Tuckermanopsis chlorophylla* and several *Usnea* species, including *U. flammea* on an upright siliceous boundary stone. Manx National Heritage, as landowner, would be interested to hear views on the importance of these trees to lichen biodiversity and their place in future management (e-mail: kate.hawkins@mnh.gov.im).

A congenial evening followed, when all participants and Isle of Man guests met over a specially arranged group dinner at the Claremont Hotel in Douglas.

25 April

Snaefell and Laxey

A delightful and interesting journey on the electric tram, operated by the Manx Electric Railway between the north end of Douglas Bay and Laxey, afforded panoramic views over the north-east coastline of the island. From Laxey, when the weather permitted, the trip to the summit of Snaefell on the Snaefell Mountain Railway presented members with further impressive views, the tram pausing part of the way up at the 'Bungalow', a well-known milestone on the TT course. The top of the mountain is the highest point in the Isle of Man at 621m (2037 ft), rather puny by the standards of the Scottish highlands, but still able to support (just) one alpine species of vascular plant, *Salix herbacea*.

Examination of boulders, frost shattered stone and ground bare of higher plants around the summit (c. SC3988) would have yielded more lichen taxa for our list, but soon after our searches began, the shrouding cloud developed into driving rain, many of us ill-prepared for the onslaught. Very soon many of us were to be found, with due regard for personal comfort and safety, firstly recording lichens from the concrete structures associated with the café and telecommunications buildings built at the summit, the rocky outcrops affording little shelter, and secondly taking advantage of the hot food on offer within the café! The 46 species recorded on

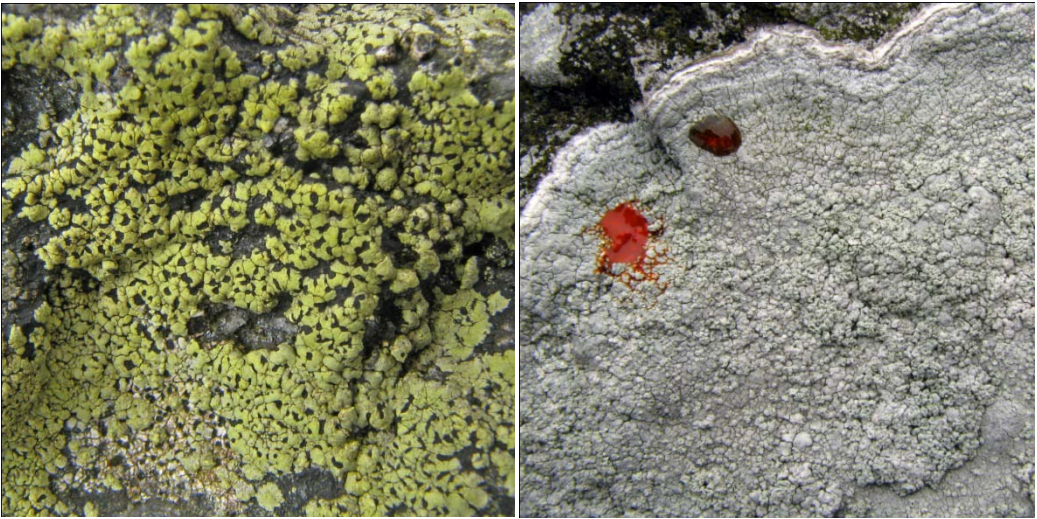
natural soil and rock substrata included 11 *Cladonia* species, several taxa of *Pertusaria*, *Rhizocarpon* and *Stereocaulon*, as well as *Umbilicaria cylindrica*.



Lichen-hunting in challenging conditions, Snaefell. Image © John Wardle

Thanks to an improvement in the weather, members, whether travelling down the mountain by tram or on foot, enjoyed views across the valley to the north. Those on foot investigated the waterfall in Laxey Valley (SC417868), the old lead/zinc mine (c. SC408874), and the hamlet of Agneash, (SC431861) two miles further down the valley, where some of the 19th century miners used to live. Of the 43 taxa recorded, *Ephebe lanata* and *Placopsis lambii* on stone and *Ramalina fastigiata* and *R. fraxinea* on hawthorn were of particular interest.

A few of us took the opportunity to explore the old mining village of Laxey, but there was no time to visit the Great Laxey Wheel (SC432852), the ruined buildings associated with the once important lead and zinc ore mining industry, and a short stretch of publicly accessible adit, all set in a pleasant wooded glen. However, an exploratory visit by MRDS in October 2009 unfortunately did not reveal anything special about the lichen communities, although it was hoped at the time that a few metallophytes might be present. Incidentally, the Laxey Wheel was designed by Manxman Robert Casement to pump water out of the mine, an ever-present threat to the men working underground. It was built in 1854 and was able to raise about 250 gallons (1136 litres) of water per minute from a depth of 1,500 ft (457 metres). The wheel is thought to be the largest working water wheel in the world, at 72ft 6in diameter and 6ft wide (22m x 1.8m). However, on this occasion MRDS had time to



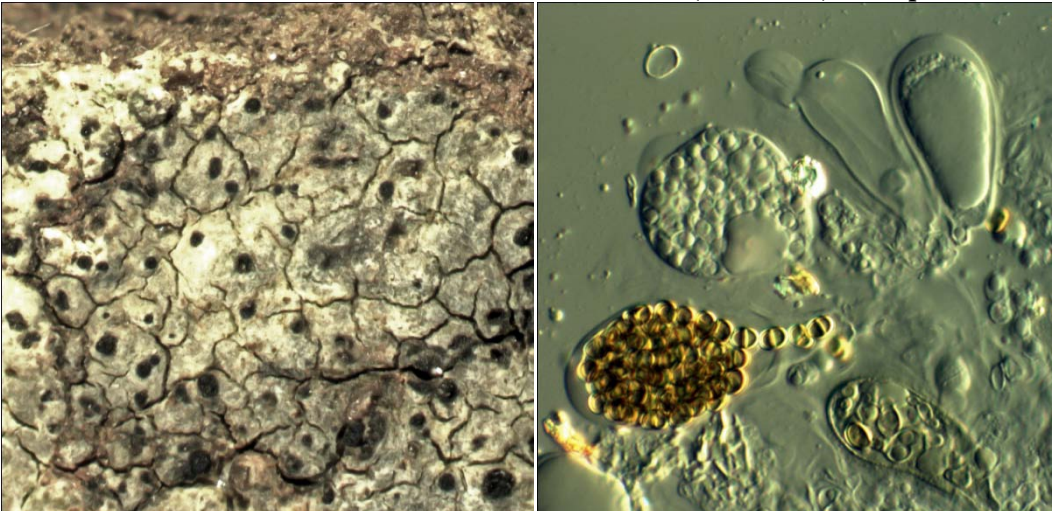
Rhizocarpon lecanorinum (left) and *Pertusaria aspergilla* (right) – complete with spot tests....

investigate the area centred on SC433845, the urban and post-industrial landscape supporting more than 60 taxa on walls (including cementwork) and mature trees.

26 April

Peel coast (SC252846 to 253848)

A short excursion investigated the sandstone cliff-tops and walls at Traie Fogog (SC253847) and rocky outcrops adjacent to the small rocky beach (SC252846) to the north of Peel on the west coast. The Peel Sandstone (Devonian) here provides an



Muellerella pygmaea, a parasite of *Porpidia cinereoatra*; external appearance (left), polysporous asci and ascospores (right)

acid substratum for a modest number of lichen taxa, but it was often the abandoned man-made structures that caught the attention of lichenologists, such as the Victorian bathing pool (SC252846), with more than 80 species recorded within a relatively short period of time.

A luncheon (and delicious ice-cream) break was taken in Peel, but time did not permit us to view the Castle with its outer wall mostly built in the mid-1400s of local stone from the Dalby Group (Silurian), quarried close by. However, the Castle gatehouse, its adjacent walls and some of the older buildings in Peel town, built of Peel Sandstone (Devonian), quarried from the characteristic red rocks which form the cliffs at the north-eastern end of the bay, had been investigated in the past by various lichenologists, more particularly Peter Earland-Bennett in 1973.

The Raggatt (SC242830 to 246828)

Our journey next took us inland to the banks of the River Nab at The Raggatt, now the site of an arboretum, nature reserve and public open space in the responsibility of the Island's Department of Environment, Food and Agriculture. Here we were joined by a reporter from Manx Radio, who interviewed several of the party to get to the bottom of this strange fascination with lichens!



Cliostomum griffithii (left) and *Ramalina calicularis* (right)

It would appear that the lichens at this site have never been studied previously. Habitats investigated included tree trunks and branches, which were particularly rewarding in a small area of willow curragh (carr) adjacent to the disused railway line which now serves as a public footpath between Peel and Douglas. The lichen list of more than 50 species is indicative of a moderately diverse flora, largely free from the effects of agricultural and other pollutants; a wide variety of natural and planted trees supported, for example, *Hypotrachyna laevigata*, *Parmotrema perlata*, *Physcia stellaris* and five species of *Ramalina*. A small stream captured the attention of Holger Thüs, his small list adding considerably to our knowledge of the Island's freshwater lichens.

27 April

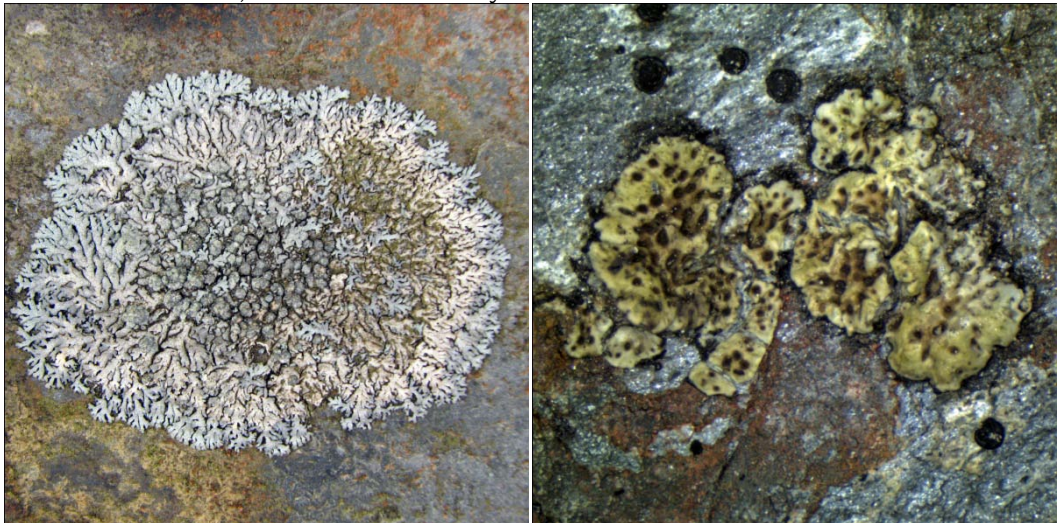
Beckwiths Mine (c. SC252778)



The old mine building. The chimney was like that before we arrived, honest.... Image © John Wardle

Those who stayed an extra day took the opportunity to visit this disused lead mine in Glen Rushen under the management of the Island's DEFA. Beckwiths Mine, which opened in 1831 and closed in 1879, is the most westerly of the Foxdale group of 13 mines which run in an east-west orientation.

Due to the toxic nature of the mine spoil, the site remains sparsely vegetated, with heather and willows the primary vegetation. The surface remains are fairly well preserved in terms of slate constructed buildings, but the washing floors, extensively excavated in 1970, have unfortunately suffered some deterioration due to motor



Physcia caesia (left) and *Acarospora smaragdula* (right) – greenish due to the metal content of the rock

cycles. However, the site has been closed to motorcycling activities for a number of years and those surveying it were pleased to find some large crustose lichens, as well

as *Stereocaulon nanodes* and *S. pileatum*, on small rocks, indicating a lack of disturbance for some number of years. Despite inclement weather and an ever present mist, the group persisted with their exploration, their terricolous list, for example, including 15 *Cladonia* taxa, before adjourning for lunch, when they were transported to the more hospitable surroundings of DEFA's Headquarters in nearby St Johns.

Garey nu Cloie Gardens, St Johns (SC227809)

After lunch at DEFA, the weather brightened and some of the group could not resist the temptation for one last sortie into the mature landscaped gardens which have been in the ownership of the Isle of Man Government since the 1930s. The gardens underwent major renovation in the 1960s to accommodate the newly relocated forest nursery and garden centre. It was about this time that much of the presently maturing amenity woodland was established. The site, which lies at the tree-cloaked foot of Slieau Whallian, with the Foxdale River flowing through it, has many mature and semi-mature less common trees, which provided only a modest list of 15 epiphytes in the time permitted.

From a recording point of view, the meeting was most profitable in that 20 taxa were new to the Isle of Man, ten had not been seen there for more than 70 years, and innumerable 10 x 10 km records were added to the mapping scheme.

Acknowledgements

The above account could not have been undertaken without the input of the enthusiastic group of participating lichenologists who clearly enjoyed their stay in the Isle of Man. The authors, and indeed the British Lichen Society, are indebted to all those who made this visit possible and contributed in various ways to its success, more particularly Steve Price who ferried us everywhere, Peter McEvoy, Aline Thomas, Richard Cuthbert, Erica Spencer, John Wardle, Nick Pinder and the Peel Town Commissioners. Mark Seaward is most grateful to the financial support he received from Manx National Heritage which allowed him to make a preliminary visit to the Island in 2009 to investigate suitable/potential sites, etc. for the Society's meeting. The participants as a whole are particularly grateful for funding from Isle of Man Tourism and the British Lichen Society for the hire of transport and a room respectively.

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Isle of Man field meeting: list of lichens recorded

Sites visited: 1 = Poollvaish (SC230686-242681); 2 = The Sound (SC173666); 3 = Meayll Hill (SC190676); 4 = Creagneash Quarry (SC191673); 5 = The Ayres (NX435038-423032); 6 = Ballagh Curragh (c. SC364951); 7 = Snaefell (c. SC3988); 8 = Laxey Valley (SC417868 & 408874); 9 = Laxey (SC433845 & 432852); 10 = Peel coast (SC252846-253848); 11 = The Raggatt (SC242830-246828); 12 = Beckwiths Mine (c. SC252778); 13 = St Johns Park (SC227809)

* = new to the Isle of Man

	Poollvaish	The Sound	Meayll Hill	Creagneash Quarry	The Ayres	Ballagh Curragh	Snaefell	Laxey Valley	Laxey	Peel coast	The Raggatt	Beckwiths Mine	St Johns Park
* <i>Acarospora benedarensis</i>		•											
<i>A. fuscata</i>			•						•	•			
<i>A. smaragdula</i>		•	•	•	•							•	
<i>Acrocordia conoidea</i>	•												
<i>A. salweyi</i>										•			
<i>Amandinea punctata</i>			•		•	•			•	•			•
<i>Anaptychia ciliaris</i> subsp. <i>mamillata</i>		•											
<i>A. runcinata</i>		•								•			
<i>Anisomeridium polypori</i>											•		
<i>Arthonia radiata</i>			•		•	•			•		•		•
<i>A. spadicea</i>						•							
<i>Arthopyrenia punctiformis</i>											•		
<i>Aspicilia caesiocinerea</i>										•			
<i>A. calcarea</i>	•		•							•			
<i>A. cinerea</i>							•			•			
<i>A. contorta</i>	•		•		•			•	•				
<i>Baeomyces rufus</i>							•	•	•			•	
<i>Bilimbia sabuletorum</i>									•				
<i>Bryoria fuscescens</i>					•								
<i>Buellia aethalea</i>			•	•		•	•	•	•				
<i>Caloplaca aurantia</i>			•										
<i>C. ceracea</i>										•			
* <i>C. chlorina</i>			•										
* <i>C. chrysodeta</i>										•			

	Poolvaish	The Sound	Meayll Hill	Creagneash Quarry	The Ayres	Ballagh Curragh	Snafell	Laxey Valley	Laxey	Peel coast	The Raggatt	Beckwiths Mine	St Johns Park
<i>C. citrina s.str.</i>			•	•	•				•	•			
<i>C. citrina s.lat.</i>						•	•						
<i>C. crenularia</i>		•	•		•		•		•	•			
<i>C. crenulatella</i>			•										
<i>C. flavescens</i>	•		•						•	•			
<i>C. flavocitrina</i>	•		•						•	•			
<i>C. flavovirescens</i>			•		•				•	•			
<i>C. holocarpa</i>	•		•		•		•		•	•			
<i>C. marina</i>	•									•			
<i>C. microthallina</i>										•			
<i>C. thallincola</i>		•								•			
<i>C. verruculifera</i>		•											
<i>Candelaria concolor</i>											•		•
<i>Candelariella aurella</i>	•		•		•				•	•			
<i>C. vitellina</i>		•	•						•	•		•	
<i>Carbonea vorticosa</i>							•						
<i>Catillaria chalybeia</i>										•			
<i>C. lenticularis</i>	•												
<i>Cetraria aculeata</i>					•								
<i>C. muricata</i>					•								
<i>Chrysothrix candelaris</i>											•		
<i>Cladonia caespiticia</i>							•						
<i>C. cervicornis</i> subsp. <i>cervicornis</i>		•	•				•	•				•	
* <i>C. cervicornis</i> subsp. <i>verticillata</i>												•	
<i>C. chlorophaea</i>							•		•			•	
<i>C. ciliata</i> var. <i>ciliata</i>			•									•	
<i>C. ciliata</i> var. <i>tenuis</i>						•							
<i>C. coniocraea</i>						•			•			•	
<i>C. diversa</i>							•	•				•	
<i>C. fimbriata</i>			•		•	•	•		•		•	•	
<i>C. floerkeana</i>							•	•				•	
<i>C. foliacea</i>		•			•								

	Poolvaish	The Sound	Meayll Hill	Creagneash Quarry	The Ayres	Ballagh Curragh	Snaefell	Laxey Valley	Laxey	Peel coast	The Raggatt	Beckwiths Mine	St Johns Park
<i>C. furcata</i>		•	•		•		•	•		•		•	
<i>C. glauca</i>											•		
<i>C. gracilis</i>					•		•					•	
<i>C. humilis</i>										•		•	
<i>C. macilenta</i>			•										
<i>C. pocillum</i>									•				
<i>C. portentosa</i>					•		•	•				•	
<i>C. pyxidata</i>			•				•	•				•	
<i>C. ramulosa</i>						•		•				•	
<i>C. rangiformis</i>		•			•				•	•		•	
<i>C. squamosa s.str.</i>							•					•	
<i>C. squamosa s.lat.</i>								•					
<i>C. subcervicornis</i>		•	•	•			•	•					
<i>C. subulata</i>						•		•				•	
<i>C. uncialis ssp. biuncialis</i>					•								
<i>Cliostomum griffithii</i>					•						•		
<i>Collema auriforme</i>	•												
<i>C. crispum</i>			•							•			
<i>C. cristatum</i>	•												
<i>C. tenax</i>	•								•				
<i>Dermatocarpon miniatum</i>		•											
<i>Dibaeis baeomyces</i>												•	
<i>Diploicia canescens</i>	•									•			
<i>Diploschistes scruposus</i>								•					
<i>Diplotomma alboatrum</i>	•												
<i>D. chlorophaeum</i>										•			
<i>Ephebe lanata</i>								•					
<i>Evernia prunastri</i>					•	•			•		•		•
<i>Flavoparmelia caperata</i>						•			•		•		
<i>Fuscidea cyathoides</i>			•				•			•			
<i>F. lightfootii</i>						•					•		•
<i>F. lygaea</i>							•						
<i>Graphis elegans</i>								•	•				

	Poolvaish	The Sound	Meayll Hill	Creagneash Quarry	The Ayres	Ballagh Curragh	Snæfell	Laxey Valley	Laxey	Peel coast	The Raggatt	Beckwiths Mine	St Johns Park
<i>G. scripta</i>			•		•	•			•		•		
<i>Hypogymnia physodes</i>					•	•		•	•		•		•
<i>H. tubulosa</i>					•	•					•		•
<i>Hypotrachyna britannica</i>						•							
<i>H. laevigata</i>											•		
<i>H. revoluta</i>					•	•					•		
<i>Ionaspis lacustris</i>								•					
<i>Lecania aipospila</i>			•							•			
<i>L. erysibe</i>			•							•			
<i>L. hutchinsiae</i>										•			
<i>L. rabenhorstii</i>	•												
<i>Lecanora actophila</i>										•			
<i>L. albescens</i>	•		•		•				•	•	•	•	
<i>L. campestris</i>	•		•						•	•			
<i>L. chlarotera</i>		•	•		•	•			•		•		•
<i>L. confusa</i>			•		•	•				•	•		
<i>L. crenulata</i>	•								•	•			
<i>L. dispersa</i>	•		•						•	•	•		
<i>L. expallens</i>					•	•			•	•	•		
<i>L. gangaleoides</i>		•								•			
<i>L. helicopsis</i>										•			
<i>L. intricata</i>							•						
<i>L. orosthea</i>	•												
<i>L. poliophaea</i>		•								•			
<i>L. polytropa</i>		•	•	•	•		•	•	•	•			
<i>L. pulicaris</i>											•		
<i>L. rupicola</i>		•	•							•			
<i>L. soralifera</i>					•		•	•	•			•	
<i>L. sulphurea</i>		•	•							•			
<i>L. symmicta</i>		•								•			
<i>L. zosteriae</i>		•											
<i>Lecidea fuscoatra</i>										•			
<i>L. lapicida</i>												•	

	Poolvaish	The Sound	Meayll Hill	Creagnash Quarry	The Ayres	Ballagh Curragh	Snafell	Laxey Valley	Laxey	Peel coast	The Raggatt	Beckwiths Mine	St Johns Park
<i>L. lithophila</i>							•						
<i>Lecidella asema</i>		•								•			
<i>L. elaeochroma</i>	•	•	•		•	•			•	•	•		•
<i>L. meiococca</i>										•			
<i>L. scabra</i>				•				•	•	•		•	
<i>L. stigmatea</i>			•						•	•			
<i>Lepraria incana s.lat.</i>	•		•			•		•	•	•	•		
<i>L. lobificans</i>	•			•						•			
<i>L. vouauxii</i>									•				
* <i>Leptogium gelatinosum</i>	•												
* <i>L. schraderi</i>	•												
<i>Lichina confinis</i>		•								•			
<i>Melanelixia fuliginosa</i>			•	•				•					
<i>M. glabrata</i>					•	•		•	•		•		
<i>M. subaurifera</i>					•	•			•		•		
<i>Micarea lignaria</i>			•	•				•		•		•	
<i>M. prasina</i>										•			
* <i>Muellerella pygmaea</i>										•			
<i>Normandina pulchella</i>						•					•		
* <i>N. acroglypta</i>						•							
<i>Ochrolechia androgyna</i>						•	•						
<i>O. parella</i>	•	•	•							•			
<i>Opegrapha atra</i>	•	•							•		•		
<i>O. calcarea</i>	•	•								•			
<i>O. gyrocarpa</i>			•	•									
* <i>O. rupestris</i>	•												
<i>O. vulgata</i>						•			•				
<i>Parmelia omphalodes</i>			•										
<i>P. saxatilis</i>		•	•			•	•	•					
<i>P. sulcata</i>					•	•			•		•		•
<i>Parmotrema perlatum</i>			•			•					•		•
<i>Peltigera canina</i>					•								
<i>P. hymenina</i>					•	•	•						

	Poolvaish	The Sound	Meayll Hill	Creagnesh Quarry	The Ayres	Ballagh Curragh	Snaefell	Laxey Valley	Laxey	Peel coast	The Raggatt	Beckwiths Mine	St Johns Park
<i>P. membranacea</i>						•							
<i>Pertusaria aspergilla</i>							•						
<i>P. corallina</i>							•	•	•	•			
<i>P. excludens</i>							•						
<i>P. hymenea</i>						•							
* <i>P. lactescens</i>							•						
<i>P. pseudocorallina</i>		•	•				•			•			
<i>Phaeophyscia nigricans</i>			•										
<i>P. orbicularis</i>	•		•										
<i>Phlyctis argena</i>						•			•				
<i>Physcia adscendens</i>	•				•					•			•
<i>P. aipolia</i>											•		•
<i>P. caesia</i>												•	
<i>P. stellaris</i>											•		
<i>P. tenella</i>	•		•		•	•			•		•		•
<i>Placopsis lambii</i>							•	•				•	
<i>Placynthium nigrum</i>	•		•						•				
<i>Platismatia glauca</i>							•						
<i>Polysporina simplex</i>			•	•									
<i>Porina aenea</i>											•		
<i>P. chlorotica</i>	•							•			•		
* <i>P. linearis</i>	•												
<i>Porpidia cinereoatra</i>			•	•									
* <i>P. contraponenda</i>							•						
<i>P. crustulata</i>									•			•	
<i>P. flavocruenta</i>												•	
<i>P. macrocarpa</i>							•	•	•	•		•	
<i>P. platycarpoides</i>										•			
<i>P. sorelizodes</i>			•					•	•				
<i>P. tuberculosa</i>			•	•			•	•	•	•		•	
<i>Protoblastenia rupestris</i>	•		•		•		•	•	•	•			
<i>Pseudevernia furfuracea s.lat.</i>								•					
<i>P. furfuracea var. ceratea</i>					•								

	Poolvaish	The Sound	Meayll Hill	Creagneash Quarry	The Ayres	Ballagh Curragh	Snafell	Laxey Valley	Laxey	Peel coast	The Raggatt	Beckwiths Mine	St Johns Park
<i>Punctelia reddenda</i>						•							
<i>P. subrudecta s.str.</i>						•							
<i>Ramalina calicaris</i>											•		
<i>R. canariensis</i>					•								
<i>R. farinacea</i>			•		•	•		•	•		•		•
<i>R. fastigiata</i>					•	•		•			•		•
<i>R. fraxinea</i>								•			•		
<i>R. lacera</i>											•		
<i>R. siliquosa</i>	•	•	•							•			
<i>R. subfarinacea</i>		•	•										
* <i>Rhizocarpon cinereovirens</i>							•						
<i>R. geographicum</i>		•	•	•			•	•	•	•			
* <i>R. lavatum</i>								•					
* <i>R. lecanorinum</i>							•						
<i>R. oederi</i>			•	•			•	•				•	
<i>R. reductum</i>	•	•	•	•	•		•	•	•	•		•	
<i>R. richardii</i>		•											
* <i>R. umbilicatum</i>							•						
<i>Rinodina atrocineria</i>			•										
<i>R. oleae</i>	•	•								•			
<i>Sarcogyne regularis</i>			•							•			
<i>Scoliciosporum chlorococcum</i>											•		
<i>S. umbrinum</i>										•		•	
<i>Solenopsora candicans</i>	•		•										
<i>Stereocaulon dactylophyllum</i>							•						
<i>S. nanodes</i>												•	
<i>S. pileatum</i>												•	
<i>S. vesuvianum</i> var. <i>vesuvianum</i>							•						
* <i>S. vesuvianum</i> var. <i>nodulosum</i>							•						
<i>Tephromela atra</i>		•	•							•			
<i>Toninia aromatica</i>	•		•							•			
<i>Trapelia coarctata</i>								•				•	
<i>T. glebulosa</i>			•	•				•					

	Poolvaish	The Sound	Meayll Hill	Creagneash Quarry	The Ayres	Ballagh Curragh	Snafell	Laxey Valley	Laxey	Peel coast	The Raggatt	Beckwiths Mine	St Johns Park
<i>T. obtegens</i>			•	•			•						
<i>T. placodioides</i>			•	•			•					•	
<i>Trapeliopsis granulosa</i>			•				•					•	
<i>Tremolecia atrata</i>							•						
<i>Tuckermanopsis chlorophylla</i>						•							
<i>Umbilicaria cylindrica</i>							•						
<i>Usnea articulata</i>					•								
<i>U. ceratina</i>						•							
* <i>U. cornuta</i>						•							
<i>U. flammea</i>						•							
<i>U. subfloridana</i>						•		•		•			•
<i>Verrucaria aquatilis</i>										•			
<i>V. baldensis</i>	•												
<i>V. calciseda</i>	•												
<i>V. csernaensis</i>											•		
<i>V. denudata</i>											•		
* <i>V. ditmarsica</i>	•									•			
<i>V. elaeina</i>								•			•		
<i>V. fusconigrescens</i>	•												
* <i>V. internigrescens</i>										•			
<i>V. macrostoma</i> forma <i>macrostoma</i>	•												
<i>V. macrostoma</i> forma <i>furfuracea</i>									•	•			
<i>V. maura</i>	•									•			
<i>V. mucosa</i>	•	•								•			
<i>V. muralis</i>	•		•						•	•			
<i>V. nigrescens</i>	•		•						•	•			
<i>V. praetermissa</i>											•		
<i>V. prominula</i>		•											
<i>V. rheitrophila</i>											•		
<i>V. striatula</i>	•												
<i>V. viridula</i>	•												
<i>Xanthoparmelia conspersa</i>			•										

	St Johns Park												
	Beckwiths Mine												
	The Raggatt												
	Peel coast												
	Laxey												
	Laxey Valley												
	Snaefell												
	Ballagh Curragh												
	The Ayres												
	Creagneash Quarry												
	Meayll Hill												
	The Sound												
	Poolvaish												
	<i>X. loxodes</i>												
	<i>X. pulla</i>												
	<i>X. verruculifera</i>												
	<i>Xanthoria aureola</i>												
	<i>X. calcicola</i>												
	<i>X. candelaria</i>												
	<i>X. parietina</i>												
	<i>X. polycarpa</i>												

BLS Summer Meeting – Moray Aug 14th –Aug 21st 2010

List of attendees

Peder Aspen, Ishpi Blatchley, Annalie Burghause, Richard Burghause, Gerard Chesa, Marie Jose Chesa, Sandra Chesa, Sylvia Chesa, Steen Christensen, Inge Christensen, Brian Coppins, Sandy Coppins, Ginnie Copsey, Katie Grundy, Les Knight, Sue Knight, Peter Lambley, Jill Lambley, Oliver Moore, Heather Paul, Steve Price, Sheila Reid, Alan Silverside, Amanda Waterfield, Pat Wolseley and Rebecca Yahr. Part-time attendees included: Chris Edwards, Dave Genney, Janet Macpherson, Marion Moir, Neil Sanderson and Davina Thomas.



Arrival

For the bulk of the attendees, the BLS had booked caravans at the Findhorn Foundation and rooms had been carefully allocated. Steve had been thoughtful enough to make sure there was a 'starter pack' of goodies for breakfast and tea etc. The bedrooms were fairly cosy to say the least. There was about four inches between the beds in a twin room and so people had to alternate who got in and out of bed. Rebecca was concerned that she may stretch her arms in the night and accidentally punch Pat who was in the next bed. Fortunately, this did not happen. On the last night, Les got quite a surprise when 'a German-speaking woman' entered his room in the small hours. She probably got more of a shock (seeing a strange man in her bed) but it goes to show how similar all the caravans looked.

In Sandy and Jill's caravan, a great deal of negotiation was required if anyone wished to access the fridge. Opening the fridge door effectively prevented people from getting out of the two bedrooms or in/out of the toilet. Using any one of

these rooms meant that the fridge had to be temporarily out of bounds. When Bella (the dog) brought a tick into the caravan there was some concern about whether there would be any space available for the new resident.

Cooking equipment was scattered randomly among the caravans and did not necessarily include equipment that might actually be of use. This made for interesting meal arrangements as some meals were spread over a sequence of caravans – depending on who had what cooking utensils. (There is some suspicion that whisky availability may also have been a factor).

Katie and Oliver had decided to camp at East Grange Farm campsite – about five miles away. The facilities here were excellent and both felt bad that they had two cookers between them in a large communal kitchen. It meant that they had to commute to the laboratory facilities and travel directly to the field sites. They were “both grown men”, according to Sandy, so this did not cause any difficulties.

Quirks aside – everyone in the caravans seemed to enjoy their stay at the Findhorn Foundation. Two studios had been hired for the week, for microscope work and drying of specimens etc., for a very reasonable price and we had access at anytime of day. Steve had also brought the BLS dissecting and compound microscopes for communal use. This was a really useful resource and saw some action every night.

Sandy kicked off the field meeting with a fine presentation about the delights we could expect to see in the week ahead. Gerard had kindly made us all a bookmark – illustrated with some of his wonderful lichen cartoon characters.

August 15th 2010

Findhorn shingle ridges and dunes



Photo © Katie Grundy

Walking out of the back of the Findhorn community toward the sea we headed for some really interesting stabilised shingle ridges and dunes. The stunning lichen communities found here remain under increasing threat from the advancing gorse scrub and pine tree regeneration, both of which already cover vast areas of the shingle and inland dunes. A few of us pulled up some young pine trees in a gesture of defiance.

Early on, the track next to an area of conifer plantation caught our attention with a good population of *Peltigera malacea*. When wet this species has a malachite green thallus. The thickness of the thallus, reddish-tinge below and cottony-feel, and rhizines few to absent distinguish it from *P. hymenina* that also grew here, together with the robust and tomentose *P. membranacea*. A surprise find from this same sand track amid heathy vegetation was *Massalongia carnosa* – a species more usually encountered on damp, mossy siliceous boulders by water. It grew here with *Leptogium palmatum*.



Where did you say you dropped it again, Amanda? Photo © Katie Grundy

Pat headed a discussion concerning the presence of ‘discrete islands’ or ‘archipelagos’ of green algal cells on the podetia of *Cladonia rangiformis* or *C. furcata* respectively. The latter was the find that prompted this dredging of memory. This day was rapidly proving to be a useful preparation for Culbin Forest on the morrow. As we moved into more open areas of the shingle system we also came across *Cladonia arbuscula*, *C. cervicornis* var. *verticillata*, *C. ciliata* var. *tenuis*, *C. diversa*, *C. gracilis*, *C. mitis*, *C. portentosa*, and *C. subulata*. An impressive sight was that of the bright grey-yellow, robust and erect cushions of *Cladonia uncialis* ssp. *uncialis*. With people such as Brian, Rebecca and Annalie around, there was much help for the beginners at *Cladonia*-identification.

In more open areas, with sand over shingle, the habitat took on the feel of a desert. The weather of bright sun and warm breeze added to the feeling. A black and grey biotic crust appeared to be holding the sand grains in place. *Trapeliopsis granulosa* was occasional and answered for the greyish crusts. Brian and Rebecca found the dominant black crust to be made up of three species of *Placynthiella* namely: *P. icmalea* (with a coralloid-isidiate black/brown thallus), *P. oligotropha* (different from the others because ‘you can see it’ according to Brian) and *P. uliginosa* (made up of small contiguous black/green granules).

In an area of stabilised shingle, the highlights included *Melanelia disjuncta* (perhaps its most northerly British locality according to Brian) and *Ochrolechia frigida* (more usually found on high level summit heaths). Moving into a flat area of stabilised shingle with scattered heather we came across curious lichens at this near-sea location. For example, *Alectoria sarmentosa* var. *vexillifera* was locally frequent – again more usually encountered with Alpine Bearberry on summit heaths at much higher altitude. *Bryoria fuscescens* adorned some of the pebbles and grew with species such as *Arctoparmelia incurva*, *Cladonia strepsilis* (a lovely bronze in colour and common in this habitat), *Cornicularia normoerica*, *Pseudephebe pubescens* and the occasional *Parmelia omphalodes* amid the abundant *P. saxatilis* (appearing very dark brown in this sun-baked habitat). A single patch of *Pycnothelia papillaria* was a treat for some of us.

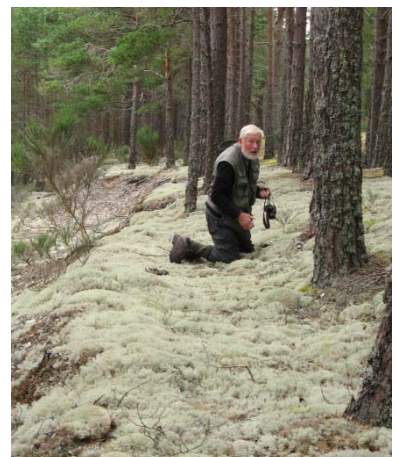
The fieldwork came to a gradual halt but not before we had spent time appreciating a marvellous yellow-green field of *Cladonia zopfii*. Steve remembered something Brian had said in the past about there being tiny fibres on the inside edge of the hollow tube of the podetia. It was true – there really were.

In the evening, Katie, Oliver, Pat and Peter went out to Roseisle Forest (further down the coast) looking for another potential site for *Alectoria sarmentosa*. However, the habitat was unsuitable with lush grass and herbaceous species dominant. However, they were greeted with a fine sunset on the beach. Did Peter really see Nessie or was it some other leviathan?

August 16th 2010 Culbin Forest

Culbin Forest is situated on the south side of the Moray Firth and planted with pines in the 1920s and 1930s by the Forestry Commission (who owns much of the dune system). Ancient banks of shingle occur among the forested sand hills leading to very free-draining conditions – ideal for stunning lichen-heath communities to have developed where the trees are stunted, or have failed, offering shelter but not obliterating light. Alan and Richard augmented our ranks today and remained for the rest of the week.

Our destination was the rather ominous sounding compartment 13. We were pleased that



Peter spots the monster again..
Photo © Katie Grundy

Fraser McBirnie of the Forestry Commission (and keen lichenologist) had provided some useful maps for us all, as Culbin is a notorious place in which to get lost. We began with an unbelievably brisk march (for lichenologists) over 500m although we could not contain ourselves any longer and set about the huge hummocks of *Cladonia* spp. On a trackside bank within the forest, there grew the robust, silvery-blue



Cladonia mats in the Culbin Forest. Photo © Sandy Coppins

cushions of *C. rangiferina* covered in a dense cottony-felt, dwarfing the likes of *C. ciliata* var. *ciliata* (non-usnic variety) and *C. portentosa*. Some of our continental lichenologists – Annalie, Richard, Steen and Inge were very much at home with these species. Alan Silverside also helped share the burden of identifying species for the beginners among the group. *C. mitis* was distinguished initially by it being not quite as robust as prime specimens of *C. arbuscula* (but more so than *C. ciliata* var. *tenuis*) and in having sudden dark-brown tips to the podetia without any brown smears below. A negative Pd test would then confirm these ‘jizz’ characters that Alan had noticed whilst working on photographing specimens for his website.

There were some beautiful lichen-covered shingle ridges within the forest. Lichenologists tiptoed amid the larger *Cladonia* spp. and found smaller species sheltering on the banks and among the stones. Other species found included *C. bellidiflora*, *C. carneola*, *C. cervicornis* var. *verticillata*, *C. sulphurina*, *C. squamosa* and big

cushions of *C. uncialis* var. *uncialis*. *Cladonia diversa* was distinguished from similar species by having a crumble-mix of slightly scurfy granules within the cup rather than the smooth pebble-like granules found within *C. borealis*.

We pushed on and stopped for lunch in the track – having still not yet reached compartment 13. We admired the abundant spine fungi (*Hydnellum peckii* and another species that requires further taxonomic investigation). Pat was positively drooling over them and was considering collecting a few for the pot until Rebecca reminded her that these particular ‘shrooms’ were Biodiversity Action Plan species. Ishpi got a bit twitchy when crested tits were calling all around us as a mixed-tit flock passed by. Not sure if an actual sighting was made but it was a thrill to hear them at least.

After lunch we reached our destination and took in an amazing lawn of *Cladonia gracilis* and *Cetraria muricata* and *C. aculeata*. Brian showed us large swathes of *Ochrolechia frigida* with abundant apothecia. Several folk admired the desiccation cracks in *Cladonia uncialis* var. *uncialis* and *C. portentosa* carpets. It was around this time that Brian went missing. Fortunately, Bella was present and when told to ‘Find Brian’ she sniffed around, started off in one direction, corrected herself and then bolted in the right direction. This ability was greatly appreciated and ‘Find Brian’ became a regular cry throughout the week. We were unable to find the *Cetraria islandica* that Brian had recorded from this area a few years previously.

On the edge of a forest track in this area we admired the black apothecia on pseudopodetia of *Stereocaulon condensatum*. Rebecca had a good eye to spot a specimen that looked a bit different. Following microscopic examination she keyed it out to be *S. glareosum*. It was distinguished by its lovely, soft and pinkish cephalodia. Sandy found *S. vesuvianum* with its grey brain-like cephalodia in evidence.

Heather encouraged Gerard, Mariajo, Sandra, Sylvia and a few others to climb up the Hill 99 viewpoint (good views but no ice-cream sadly). Others made their way to an old gravel pit where they rested by the pool and watched Les and Sue



Desiccation cracks in a *Cladonia* carpet. Photo © Katie Grundy

entertain the on-lookers with their strange tackle. Actually it was their homemade apparatus for collecting aquatic algae and not magnetic fishing gear after all. Eventually, we made our way out of the forest with a desire to return and explore other pockets of wonder.

The laboratory was fairly quiet this evening as several members took part in quite a marathon meal. It was still going strong at 23.45.

August 17th 2010

River Findhorn (Logie Steading and Randolph's Leap)

We parked at Logie Steading and donned waterproofs for the only rain of the week. Our focus today was the woodland along the edge of the river. There were large beech, oak and sycamore trees and a small area of hazel-ash woodland to examine. On three oaks, near the start of the ravine walk, Brian and Sandy showed us lichens associated with old woodlands namely; *Lecanographa amylacea*, *Schismatomma graphidioides* and *Buellia violaceofusca*. Brian was particularly pleased at finding *Biatora veteranorum* (formerly *Catillaria alba*). All of these species were encountered in greater quantity later in the week at Cawdor. Peder and Oliver found more of the *Schismatomma graphidioides* (with its distinctive pinkish thallus and rather short, black apostrophe-like fruits) on old beech trees as well. Brian showed us *Caloplaca lucifuga* on another oak within the woodland. This had a lovely green-tinged yellow colour and looked like a small deposit of insect eggs.



A day at the beech.... Photo © Katie Grundy

On a dead but standing elm trunk, Rebecca found *Opegrapha vermicellifera* with a satisfyingly grey thallus and scattered prominent white pycnidia. *Nephroma laevigatum* also occurred on the bark. Some of the group had taken a sneak preview of the hazel wood before lunch whilst the more hungry had circled back to the café for their soup. The hazelwood was deemed worthy of exploration so half the party searched here in the afternoon whilst the rest of the group went to Randolph's Leap.

Following a satisfying lunch at Logie Steading a group of damp members ventured further upstream on the River Findhorn to Randolph's Leap (NJ 001496) mainly in search of *Peltigera britannica*. (Apparently Randolph, the Earl of Moray in the mid-14th Century, didn't jump across the river. Legend has it that an enemy he was pursuing one day made good his escape by leaping across it here – he must have had his porridge for breakfast that day).



Peltigera britannica. Image © Steve Price

On the shaded rocks near the river a goodly amount of *P. britannica* was found, the largest amount in a sheet of about 1m by 0.5m. Also found here on the trunk of a mature larch was *Hypocenomyce friesii*, a species demanding a bit more of a closer inspection.

In the hazelwood there were lichens associated with a more Atlantic climate. *Degelia plumbea*, *Lobaria pulmonaria*, *Nephroma laevigatum*, *Normandina pulchella*, *Pannaria conoplea*, *P. rubiginosa*, *Parmeliella triptophylla* and *Peltigera collina* were rare to

occasional in this area. Katie made Brian look more critically at a *Protopannaria*-like species growing on an ash ‘that did not look quite right’ and later in the laboratory proved to be *Fuscopannaria ignobilis* once the spores had been scrutinised. (The ascospores were apiculate at one end). This is a BAP species, and a new record for Morayshire.

Interesting members of the *Graphidion* here included: *Opegrapha niveoatra* - which had such a thin thallus the orange of the photobiont (*Trentepohlia*) was visible – and Brian got excited about *Opegrapha pertusariicola* – a lichenicolous parasite with large star-shaped lirellae on *Pertusaria leioplaca*.

Back at the car park, the old sycamores held some fantastic thalli of *Physconia distorta*. They had gone really green in the drizzle and their apothecia were relatively large and abundant. *P. enteroxantha* was also present. The walls of the Steading itself held a community that included species more usually associated with trees such as *Ramalina farinacea*, *R. fastigiata* and *R. fraxinea*. They grew with *Caloplaca citrina*, *C. saxicola*, *Candelariella vitellina*, *Lecanora albescens*, *L. campestris*, *L. chlarotera* and *L. dispersa*, making for a colourful mixture.

August 18th 2010
Ardclach Chapel (Lower Findhorn)



River Findhorn at Ardclach. Photo © Steve Price

A wonderful old cemetery with granite walls and headstones, close to the edge of the River Findhorn was our morning field excursion. Alan and Sheila tackled the first gravestone they encountered and pointed out various species to those of us less experienced with this habitat. *Hypogymnia physodes*, *Lecanora rupicola*, *Melanelixia fuliginosa*, *Parmelia saxatilis*, *Rhizocarpon geographicum*, *R. oederi* and *Xanthoria candelaria*. Elsewhere on some of the other headstones there grew *Bryoria fuscescens*, *Pseudevernia furfuracea*, *Tuckermanopsis chlorophylla*, *Umbilicaria polyphylla* and *Xanthoparmelia mougeotii*. Katie and Ginny later keyed out *Physcia caesia* in the lab – a species that was growing in beautiful rosettes at the base of a gravestone.

The old wall of the cemetery itself engaged the attention of several members. Species included *Diploschistes scruposus*, *Lecanora intricata*, *Tephromela atra*, *Trapelia placodioides*, *Tremolecia atrata* and *Xanthoria elegans*. Peder and Steve found the rather marvellous blackish coralloid-looking *Placynthium nigrum* growing in the cracks of the wall on mortar. The characteristic blue prothallus was seen in some places. Alan, Brian, Peter and Steve discussed the identity of a rather cracked and brown-grey crustose lichen found on top of a headstone. Alan took a small sample from one of the thalli and later determined it to be *Aspicilia cinerea*. Steve pointed out *Clauzadeana macula* - a very flat black lichen that resembled a *Verrucaria* but growing on the granite wall. Brian had also identified *Fuscidea recensa* and *Rimularia badioatra* that grew close by.

In the afternoon, the bulk of the party ventured out of the cemetery to explore some of the trees and rocks close to the River Findhorn. Ishpi found *Psoroma hypnorum* – with diagnostic green squamules and apothecia with red discs and knobbly thalline margins - growing on a mossy siliceous rock. On the other side of the same rock she discovered a good candidate for *Protopannaria pezizoides* (the spores required checking). Heather checked up on some delightfully fruiting *Hypocenomyce scalaris* on a tree close to the river. Les and Sue found a good patch of *Dermatocarpon luridum* among rocks by the river.



Lobaria amplissima. Photo © Sandy Coppins

Brian, Katie,
Oliver, Rebecca and

Sandy went to look at a hazelwood that had an Atlantic lichen flora – surprising this far east. There were good quantities of species such as *Lobaria amplissima*, *L. pulmonaria* and *Pannaria conoplea*. *Collema fasciculare* was locally abundant on some of the hazel branches. Other species that were frequent in this community included *Degelia plumbea*, *Nephroma parile*, *Normandina pulchella*, *Ochrolechia androgyna*, *Parmelia saxatilis* and *Peltigera collina*. Among the micro-lichens on the younger hazel limbs was *Graphis scripta*, *Lecanora chlarotera*, *Lecidella elaeochroma* and *Pertusaria leioplaca*. In addition, Sandy and Rebecca spotted “Tomas Elliot” (at least that was what Katie heard when they told her the name of *Tomasellia gelatinosa*) embracing the twigs. Its fruits looked like someone had sat on tiny blackberries. Rebecca also noticed *Arthonia punctiformis* – a species with tiny fruits containing just one opening pore.



Collema fasciculare. Photo © Sandy Coppins

wishing to see the lichen *in situ*. Apparently, we had to look for a birch with two stems (most had this feature) about two stumps deep into the wood from the track and then find the hazel with a stem of bracken he had arched over (we did not fancy our chances). Sandy explained that Brian was very good at creating these obvious markers in the field. After half an hour, we still had not located Brian’s tree but several smaller thalli of *F. mediterranea* had been found. Eventually, Brian retraced his steps (probably making use of the powdered leaf he had sprinkled liberally from his pocket as he had walked back previously) and we could admire the mauve tinge to the woolly-granular soralia on the margins of the squamules and the fawn-coloured hue of the otherwise grey thallus. It was much smaller than *Pannaria conoplea*.

Meanwhile, Brian had been searching for decent patches of *Fuscopannaria mediterranea*. He had been gone some while so Bella was despatched to find him. We had been discussing how the species in question might differ from other *Pannaria*-type species and Bella must have picked up on this since Brian tracked back with a small sample of the *F. mediterranea* for the very purpose. Conscientiously, Brian had been careful to leave a field sign so that

the prize tree may be re-located for those of us

On the sheltered side of an old birch with beautiful bark, several small pinheads each with a white collar were found. Brian confirmed Rebecca's identification of this devout species as *Calicium glaucellum*. Other species of interest included *Bacidia absistens* – occasional and distinctive with its wine-gum raised black apothecia on a usually pale grey-green thallus – and the slimy green balls of *Lichenomphalia hudsoniana* – both (species that is) on birch. Rebecca found another green algal-ball looking lichen but with black apothecia growing with *Normandina pulchella* on bark. This was confirmed by Brian to be *N. acroglypta*.

Chanterelles were abundant and several were collected for breakfast next morning. A table from Studio 4 had gone missing during the day but all of the other equipment was sound. There had been some chanting during the previous night but that was probably not connected.

August 19th 2010 Kingston Shingle (near Garmouth)



Raised shingle beach at Kingston. Photo © Steve Price

A vast tract of stabilised shingle was the focus of this excursion. Fortunately, there were no red flags flying today so the lichenologists could marvel at the intricate patterns on each individual stone. We got an idea of just how stable the stones were

by observing how species such as *Pertusaria corallina* had jumped from one stone to another. Where motor-cyclists had demonstrated ignorance and driven over the shingle they had left trails manifest in the absence of lichens on the upturned rocks. Though perhaps this could be deemed habitat creation.

Kingston Shingle (NJ 3166) is the largest area of raised beach shingle in the UK. It was formed by the post glacial flows from the River Spey and built up to the west of the river mouth. Invasive gorse and conifer was being controlled around some of the edges, although a few juniper bushes were allowed to remain. A wide, linear grassy strip across the centre of the site has long been used as a firing range by the military. The track to the shingle passed some World War II anti-tank blocks. The concrete of these supported good colonies of *Caloplaca flavovirescens* and fertile *C. albolutescens*. Interesting though they were, they were not the reason for visiting the site. The stability of the shingle has allowed colonisation by a good range of mostly crustose lichens, in particular: species of *Fuscidea* (especially the dominating *F. lygaea*) and *Lecidea* s. str., *Aspicilia grisea*, *Clauzadeana macula*, *Miriquidica leucophaea*, *Rhizocarpon geographicum*, *Schaereria fuscocinerea* and the 'rusty' *Tremolecia atrata*. More careful searching revealed such inconspicuous species as *Lecidea commaculans*, *Micarea marginata* and *Rimularia intercedens*. The stability of the stones was demonstrated whereby *Pertusaria corallina* was able to colonize adjacent pebbles where they touched. The foliose *Parmelia saxatilis* also grew abundantly in shallow hollows in the pebble matrix, binding pebbles together.

We were very close to Spey Bay, and added interest was from seeing dolphins leaping in the Bay, together with an aerial argument between a big brown Bonxie (Great skua) and the resident gulls, plus several whimbrels flying over and rafts of goosander.

Les, Sue, Steen and Inge spent the afternoon east of Hopeman harbour where they enjoyed typical lichens associated with rocky shores and representing classic zonation. *Lichina confinis* was particularly frequent in the splash zone. They later witnessed a rather exciting helicopter-rescue of two children who had been cut off by the tide.

In the evening, Steve gave a talk about the wonder of lichens in general and then Sandy added a local flavour, by illustrating some of the special features of sites such as Culbin, Cawdor and the Findhorn coast. It was a public event and over 60 people attended including local residents and members of the Local Council. People were made aware of the problem of gorse and pine encroachment on the shingle and dunes at Findhorn. Useful contacts were made with local teachers keen to get their students looking at lichens.

August 20th 2010

Cawdor Wood

Chris Edwards, David Genney and Neil Sanderson joined us for today, which began with an informative talk by Stan Thompson, forester and lecturer, who has been involved in Cawdor for many years. Our focus was the Big Wood – created for timber in the 18th century with many of the present trees around 250 years old. In the

past cattle roamed the wood-pasture but these were removed some while back and now *Luzula sylvatica* completely dominates the ground flora to the detriment of bluebells and other ground flora. The core oak wood is a Site of Special Scientific Interest that covers 160 hectares. The present management sets out to make the wood a more dynamic system, e.g. deadwood not cleared away, and Douglas fir regeneration is removed and replaced with planted oaks. A continuing major threat to the oak wood comes from dense shade by escalating beech regeneration. Majestic beeches line parts of the ravines that flank two sides of the wood and produce the mast from which the young beeches are colonising. The Estate are aware of this problem, and management plans are in place to deal with this, though it is tricky accessing massive beech regeneration in ravines. It is from the ravines that many of the old forest lichens have colonised from in the first place. We were impressed with the enlightened approach to woodland management adopted by the owner (the Dowager Countess of Cawdor) and the lichens were clearly benefiting.

The oak wood owes its lichenological interest to its low density of mature oak trees (80–100 per hectare), which has resulted in straight, well-grown trunks. There is very little by way of a shrub layer. Combined with comparatively low rainfall in this part of Scotland, this particular woodland structure means that dry-bark conditions prevail, and over time has resulted in a significant if specialised lichen flora being present today. Three scarce BAP species are here in some abundance: *Lecanographa amylacea* (present on 40+ trees, and frequently fertile); *Schismatomma graphidioides* (on 100+ trees), and *Buellia violaceofusca* (50+ trees). We selected our trees, and soon were able to see these special lichens, sometimes occurring in very obvious sheets down the tall trunks. *B. violaceofusca* showed up as bluish-tinted stains down the bark when viewed from afar. Another species associated with some of the old oaks was *Caloplaca lucifuga*. Brian took great delight in showing us all *Biatora veteranorum* (formerly known as *Catillaria alba*) – a genuine old-woodland species. It was characterised by its tiny whitish pillars of pycnidia and soft, gelatinous skin-pink apothecia.

Stan Thompson joined us through the day and pointed out interesting features such as the remains of glue bands around most of the mature oaks. After a recent particularly disastrous de-foliation event by caterpillars, the glue-bands proved a locally successful attempt to prevent flightless females of ‘umber’ moths from climbing up to lay their eggs.

We selected our trees to examine and quickly found some of the more interesting lichens such as *Lecanographa amylacea*, *Schismatomma graphidioides* and *Buellia violaceofusca*.

Becky noticed a rather dirty-grey green smudge on a dry part of an oak during lunch. The presence of pinheads aided identification and suggested that this was at least partly caused by the thallus of *Chaenotheca trichialis*. On an old pine this species grew with three other pinheads namely; *C. ferruginea*, *C. chrysocephala* and *Microcalicium disseminatum*. Neil showed some of us a candidate for *Biatora efflorescens* that was K negative and resembled miniature granules of cous-cous. It was less fluffy than *Pyrrhospora querneae* though similar in colour but care should be taken so as not to confuse the more widely recorded *Biatora britannica*. Later, Neil told Brian that he

had collected fertile *Bacidia biatorina*, and was promptly told to check the spores. On returning home Neil duly did so and was able to send an excited e-mail to Brian that the spores were indeed not those of *B. biatorina* (long and acicular), but of *B. auerswaldii* (shorter and fusiform) – a species recorded in West Ross a few weeks earlier, but not otherwise seen in Britain since the 1930s!

Brian pointed out the *Lobaria scrobiculata* on a high branch of oak that only Steen had a realistic chance of closely scrutinising. David had found it a few years ago on the forest floor – this had been the first time it had been seen in these woods since Francis Rose first recorded it here in the 1960s. Elsewhere *L. pulmonaria* was occasional in the Big Wood.

We all paid careful homage to the only British site for *Peltigera scabrosella* on our way out of the woods. Brian informed us that the nearest site to this population is probably Norway. The day ended well with a slice of cake to celebrate Sylvia's birthday. Lighting the candles was more of a challenge than blowing them out on this occasion owing to the sudden winds that blew up from nowhere.

Acknowledgements

We had seen some smashing lichens during a fun week in Moray. Heather should be congratulated for the smooth running of the week. Thanks also to Steve, Sandy and Brian for their role in making this a successful meeting. I am also grateful for the help I received with identifying lichens in the field from just about everyone. The notes from Steve Price and editing of Brian and Sandy Coppins are much appreciated.

Oliver Moore
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Sites represented in Table below

VC 95, Morayshire

- 1 **FD**: Findhorn Dunes, NJ0563 & NJ0564. Alt. 0–10 m.
- 2 **CF**: Culbin Forest NNR, NH9962 & NH9963. Alt. 10 m.
- 3 **SB**: Spey Bay SSSI: Kingston shingle, NJ3066, NJ3165 & NJ3166; Kingston shore NJ3266; and *Calluna - Erica cinerea* heath W of Lein, NJ NJ328657. Alt. 0–5 m.
- 4 **LFW**: Lower Findhorn Woods SSSI, W of Logie Steading [Logie Home Farm], NJ0050, and NW of Logie House, Craighall, NJ0051. Alt. 70–80.
- 5 **RL**: Lower Findhorn Woods SSSI, Randolph's Leap, NJ0049. Alt. 80–100 m.
- 6 **LS**: Findhorn Valley, Logie Steading [Logie Home Farm], NJ0050. Alt. 95.
- 7 **WLS**: Findhorn Valley, W of Logie Steading [Logie Home Farm], woodland on E side of River Findhorn just outwith SSSI, NJ0050. Alt. 70–80 m.

VC 96, Easternness (Nairn)

- 8 **AC**: Findhorn Valley, Ardclach Chapel, NH954450. Alt. 128 m.
- 9 **AR**: Findhorn Valley, Ardclach riverside, NH9544. Alt. 125 m.
- 10 **DA**: Findhorn Valley, SW of Daltra, NH9343 & NH9443. Alt. 150–175 m.
- 11 **CW**: Cawdor Wood SSSI, NH8448 & NH8449. Alt. 65–100 m.

Annotations

* - new to VC 95, Morayshire

** - new to VC 96, Easternness (Nairn)

	FD	CF	SB	LFW	RL	LS	WLS	AC	AR	DA	CW
<i>Acarospora fuscata</i>						•					
<i>Acarospora impressula</i> *			•								
<i>Acarospora smaragdula</i>			•								
<i>Acrocordia gemmata</i>				•			•				
<i>Alectoria sarmentosa</i> subsp. <i>vexillifera</i>	•										
<i>Amandinea punctata</i>							•				
<i>Anisomeridium bifforme</i>				•		•	•				
<i>Arctoparmelia incurva</i>	•										
<i>Arthonia apotheciorum</i> *						•					
<i>Arthonia didyma</i>				•						•	•
<i>Arthonia radiata</i>				•						•	•
<i>Arthonia vinosa</i>											•
<i>Arthopyrenia salicis</i>				•						•	
<i>Aspicilia cinerea</i> s. str.								•			
<i>Aspicilia grisea</i>	•		•								
<i>Aspicilia laevata</i>									•		
<i>Bacidia absistens</i>										•	•
<i>Bacidia arceutina</i>				•							
<i>Bacidia auerswaldii</i> *											•
<i>Bacidia rubella</i>											•
<i>Bactrospora corticola</i>					•						•
<i>Baeomyces rufus</i>										•	
<i>Biatora chrysantha</i>				•	•						•
<i>Biatora efflorescens</i>											•
<i>Biatora globulosa</i>							•				
<i>Biatoropsis usnearum</i>		•									
<i>Bilimbia sabuletorum</i>								•			
<i>Bryoria fuscescens</i>	•	•					•			•	•
<i>Bryoria subcana</i>		•								•	•
<i>Buellia aethalea</i>			•								
<i>Buellia disciformis</i>							•			•	
<i>Buellia schaeeri</i>							•				•
<i>Buellia violaceofusca</i>							•				•
<i>Calicium glaucellum</i>							•				•
<i>Calicium salicinum</i>									•		
<i>Calicium viride</i>							•				•
<i>Caloplaca albolutescens</i>			•								

	FD	CF	SB	LFW	RL	LS	WLS	AC	AR	DA	CW
<i>Caloplaca cerina</i> var. <i>cerina</i>											•
<i>Caloplaca citrina</i> s. str.						•					
<i>Caloplaca crenularia</i>									•		
<i>Caloplaca flavovirescens</i>			•								
<i>Caloplaca holocarpa</i>						•					
<i>Caloplaca lucifuga</i> *							•				•
<i>Candelariella aurella</i>						•					
<i>Candelariella vitellina</i>						•		•			
<i>Carbonea vorticosa</i>			•								
<i>Catillaria alba</i> *							•				•
<i>Catillaria chalybeia</i> var. <i>chalybeia</i>								•			
<i>Catillaria lenticularis</i> *			•								
<i>Cercidospora epipolytropa</i>	•							•			
<i>Cetraria aculeata</i>	•	•	•								
<i>Cetraria muricata</i>		•									
<i>Chaenotheca brunneola</i>											•
<i>Chaenotheca chrysocephala</i>											•
<i>Chaenotheca ferruginea</i>					•						•
<i>Chaenotheca hispidula</i>											•
<i>Chaenotheca stemonea</i>											•
<i>Chaenotheca trichialis</i>				•	•						•
<i>Chaenothecopsis pusilla</i>				•							
<i>Chrysothrix candelaris</i>				•	•		•				•
<i>Cladonia arbuscula</i> subsp. <i>squarrosa</i>	•										
<i>Cladonia bellidiflora</i>		•									
<i>Cladonia borealis</i>		•									
<i>Cladonia cervicornis</i> subsp. <i>cervicornis</i>			•								
<i>Cladonia chlorophaea</i> s. lat.			•							•	
<i>Cladonia ciliata</i> var. <i>ciliata</i>		•	•								
<i>Cladonia ciliata</i> var. <i>tenuis</i>		•	•								
<i>Cladonia coniocraea</i>					•					•	
<i>Cladonia cornuta</i>		•	•								
<i>Cladonia diversa</i>	•	•	•								
<i>Cladonia fimbriata</i>				•							
<i>Cladonia fimbriata</i>					•						
<i>Cladonia foliacea</i>			•								
<i>Cladonia furcata</i>	•		•								
<i>Cladonia glauca</i>		•									
<i>Cladonia gracilis</i>	•	•									
<i>Cladonia humilis</i>		•									

	FD	CF	SB	LFW	RL	LS	WLS	AC	AR	DA	CW
<i>Cladonia mitis</i>	•	•									
<i>Cladonia ochrochlora</i>		•									
<i>Cladonia polydactyla</i> var. <i>polydactyla</i>			•		•						
<i>Cladonia portentosa</i>	•	•	•								
<i>Cladonia pyxidata</i>				•				•		•	
<i>Cladonia ramulosa</i>		•									
<i>Cladonia rangiferina</i>		•									
<i>Cladonia rangiformis</i>			•								
<i>Cladonia scabriuscula</i>		•									
<i>Cladonia squamosa</i> var. <i>squamosa</i>		•			•						
<i>Cladonia strepsilis</i>	•										
<i>Cladonia sulphurina</i>		•									
<i>Cladonia uncialis</i> subsp. <i>uncialis</i>	•	•									
<i>Cladonia zopfii</i>	•										
<i>Clauzadea monticola</i>			•					•			
<i>Clauzadeana macula</i>			•					•			
<i>Cliostomum griffithii</i>				•			•			•	•
<i>Collema fasciculare</i>				•						•	
<i>Cornicularia normoerica</i>	•										
<i>Cornutispora ciliata</i>											•
<i>Degelia plumbea</i> s. str.				•						•	
<i>Dermatocarpon luridum</i>				•							
<i>Dibaeis baeomyces</i>			•								
<i>Diploschistes muscorum</i>	•										
<i>Diplotomma alboatrum</i>						•					
<i>Endococcus verrucosporus</i> **									•		
<i>Evernia prunastri</i>		•	•		•	•	•			•	•
<i>Fuscidea cyathoides</i>			•		•						
<i>Fuscidea gothoburgensis</i>			•								
<i>Fuscidea lightfootii</i>										•	
<i>Fuscidea lygaea</i>			•								
<i>Fuscidea recensa</i>								•			
<i>Fuscopannaria ignobilis</i> *				•							
<i>Fuscopannaria mediterranea</i>										•	
<i>Graphis scripta</i>				•						•	
<i>Hypocenomyce friesii</i>					•						
<i>Hypocenomyce scalaris</i>		•			•						
<i>Hypogymnia physodes</i>	•	•	•			•	•			•	•
<i>Hypogymnia tubulosa</i>		•	•			•	•				
<i>Immersaria athroocarpa</i>								•			

	FD	CF	SB	LFW	RL	LS	WLS	AC	AR	DA	CW
<i>Ionaspis lacustris</i>									•		
<i>Lecanographa amylacea</i>					•		•				•
<i>Lecanora albescens</i>						•					
<i>Lecanora campestris</i>						•					
<i>Lecanora chlarotera</i>				•	•	•	•			•	
<i>Lecanora dispersa</i>						•					
<i>Lecanora expallens</i>				•			•			•	•
<i>Lecanora intricata</i>		•	•					•			
<i>Lecanora orosthea</i>				•							
<i>Lecanora polytropa</i>	•	•	•					•			
<i>Lecanora pulicaris</i>		•				•					
<i>Lecanora rupicola</i> var. <i>rupicola</i>					•						
<i>Lecanora soralifera</i>			•								
<i>Lecanora sulphurea</i>			•								
<i>Lecanora symmicta</i>		•									
<i>Lecidea auriculata</i>			•								
<i>Lecidea brachyspora</i>	•										
<i>Lecidea commaculans</i>			•								
<i>Lecidea diducens</i>			•					•			
<i>Lecidea lactea</i> s. str.			•					•			
<i>Lecidea lapicida</i>			•					•			
<i>Lecidea lithophila</i>		•	•								
<i>Lecidea plana</i>		•	•								
<i>Lecidea swartzioidea</i>			•								
<i>Lecidella elaeochroma</i>							•			•	•
<i>Lecidella scabra</i>			•					•			
<i>Lecidella stigmatea</i>			•								
<i>Lepraria elobata</i>		•									
<i>Lepraria jackii</i>		•									
<i>Lepraria lobificans</i>				•				•		•	
<i>Lepraria membranacea</i>				•	•						
<i>Lepraria rigidula</i>				•						•	
<i>Leprocaulon microscopicum</i>									•		
<i>Leptogium lichenoides</i>				•			•				
<i>Leptogium palmatum</i>	•								•		
<i>Lichenomphalia umbellifera</i>				•							
<i>Lobaria amplissima</i>										•	
<i>Lobaria pulmonaria</i>				•			•			•	•
<i>Lobaria scrobiculata</i>									•		•
<i>Lopadium disciforme</i>											•
<i>Loxospora elatina</i>				•							•

	FD	CF	SB	LFW	RL	LS	WLS	AC	AR	DA	CW
<i>Massalonia carnosa</i>	•								•		
<i>Megalaria grossa</i>				•			•				
<i>Megalaria pulverea</i>				•	•					•	•
<i>Melanelixia disjuncta</i> *	•										
<i>Melanelixia fuliginosa</i>			•					•			
<i>Melanelixia glabratula</i>				•			•			•	
<i>Melanelixia subaurifera</i>						•	•				•
<i>Micarea byssacea</i>										•	
<i>Micarea erratica</i>		•									
<i>Micarea leprosula</i>		•									
<i>Micarea leprosula</i>	•										
<i>Micarea lignaria</i> var. <i>lignaria</i>		•									
<i>Micarea marginata</i> *			•								
<i>Micarea peliocarpa</i>		•									
<i>Microcalicium disseminatum</i>											•
<i>Miriquiredica leucophaea</i>			•								
<i>Muellerella pygmaea</i>			•								
<i>Mycoblastus fucatus</i>							•				
<i>Mycoblastus sanguinarius</i>										•	
<i>Mycoporum lacteum</i>											•
<i>Nectriopsis lecanodes</i>	•										
<i>Nephroma laevigatum</i>				•			•		•	•	
<i>Nephroma parile</i>				•			•		•	•	
<i>Normandina acroglypta</i>				•						•	
<i>Normandina pulchella</i>				•						•	
<i>Ochrolechia androgyna</i>	•	•		•	•		•			•	
<i>Ochrolechia frigida</i> forma <i>frigida</i>	•	•									
<i>Ochrolechia parella</i>								•			
<i>Opegrapha atra</i>				•							
<i>Opegrapha herbarum</i>							•			•	•
<i>Opegrapha pertusariicola</i>				•							
<i>Opegrapha sorediifera</i>					•					•	•
<i>Opegrapha varia</i>							•				•
<i>Opegrapha vermicellifera</i>							•				
<i>Opegrapha vulgata</i>				•	•		•			•	•
<i>Opegrapha zonata</i>				•							
<i>Pannaria conoplea</i>				•						•	
<i>Pannaria rubiginosa</i>				•						•	
<i>Parmelia omphalodes</i>	•										
<i>Parmelia saxatilis</i>	•		•					•			
<i>Parmelia sulcata</i>				•		•	•	•		•	•

	FD	CF	SB	LFW	RL	LS	WLS	AC	AR	DA	CW
<i>Parmeliella triptophylla</i>				•						•	
<i>Parmeliopsis hyperopta</i>		•									•
<i>Peltigera britannica</i>					•				•		
<i>Peltigera collina</i>				•			•		•	•	•
<i>Peltigera didactyla</i>	•										
<i>Peltigera hymenina</i>		•			•		•				•
<i>Peltigera malacea</i>		•									
<i>Peltigera malacea</i>	•										
<i>Peltigera membranacea</i>	•		•								•
<i>Peltigera polydactylon</i>				•							
<i>Peltigera praetextata</i>				•							
<i>Peltigera rufescens</i>								•			
<i>Peltigera scabrosella</i>											•
<i>Pertusaria albescens</i> var. <i>corallina</i>							•				
<i>Pertusaria amara</i> forma <i>amara</i>				•	•		•			•	
<i>Pertusaria coccodes</i>							•				
<i>Pertusaria corallina</i>			•		•			•			
<i>Pertusaria flavida</i>					•		•				•
<i>Pertusaria hemisphaerica</i>							•				•
<i>Pertusaria hymenea</i>				•	•		•				
<i>Pertusaria lactescens</i>			•								
<i>Pertusaria leioplaca</i>				•			•			•	
<i>Pertusaria pertusa</i>				•	•		•			•	
<i>Phaeocalicium populneum</i>											•
<i>Phlyctis agelaea</i>										•	
<i>Phlyctis argena</i>				•			•			•	
<i>Physcia aipolia</i>							•				•
<i>Physcia tenella</i>							•				
<i>Physconia distorta</i>						•	•				
<i>Physconia enteroxantha</i>						•					
<i>Physconia perisidiosa</i>						•					
<i>Placynthiella icmalea</i>										•	
<i>Placynthiella oligotropha</i>	•										
<i>Placynthiella uliginosa</i>	•										
<i>Placynthium nigrum</i>								•			
<i>Platismatia glauca</i>				•		•	•			•	
<i>Porina chlorotica</i>								•			
<i>Porpidia crustulata</i>		•	•								
<i>Porpidia macrocarpa</i> forma <i>macrocarpa</i>									•		
<i>Porpidia tuberculosa</i>		•	•					•			
<i>Protopannaria pezizoides</i>									•		

	FD	CF	SB	LFW	RL	LS	WLS	AC	AR	DA	CW
<i>Protoparmelia badia</i>	•		•								
<i>Pseudephebe pubescens</i>	•										
<i>Pseudevernia furfuracea</i> s. lat.						•					
<i>Pseudevernia furfuracea</i> var. <i>ceratea</i>	•		•				•				
<i>Psilolechia lucida</i>		•					•				
<i>Psoroma hypnorum</i>									•		
<i>Pycnothelia papillaria</i>	•										
<i>Pyrrhospora quemea</i>							•				
<i>Ramalina calicaris</i>							•			•	
<i>Ramalina farinacea</i>				•		•	•			•	
<i>Ramalina fastigiata</i>						•	•			•	
<i>Ramalina fraxinea</i>						•	•				
<i>Rhaphidicyrtis trichospora</i> *				•							
<i>Rhizocarpon geographicum</i>	•		•					•			
<i>Rhizocarpon lavatum</i>									•		
<i>Rhizocarpon lecanorinum</i>	•										
<i>Rhizocarpon oederi</i>								•			
<i>Rhizocarpon petraeum</i>								•			
<i>Rhizocarpon reductum</i>		•	•					•	•		
<i>Rimularia badioatra</i>								•			
<i>Rimularia furvella</i>	•							•			
<i>Rimularia intercedens</i>			•					•			
<i>Sarcogyne regularis</i>								•			
<i>Schaereria fuscocinerea</i>			•					•			
<i>Schismatomma decolorans</i>							•				•
<i>Schismatomma graphidioides</i>					•		•				•
<i>Sclerococcum sphaerale</i>			•								
<i>Scoliciosporum umbrinum</i>			•					•	•		
<i>Skyttea gregaria</i>							•				
<i>Sphaerophorus globosus</i>					•						•
<i>Spirographa fusispora</i>											•
<i>Stereocaulon condensatum</i>	•	•									
<i>Stereocaulon glareosum</i>		•									
<i>Stereocaulon vesuvianum</i>		•	•								
<i>Sticta limbata</i>										•	
<i>Stigmidium microspilum</i>				•							
<i>Syzygospora bachmannii</i>		•									
<i>Tephromela atra</i> var. <i>atra</i>			•					•			
<i>Tephromela grumosa</i>								•			
<i>Thelotrema lepadinum</i>				•							•
<i>Tomasellia gelatinosa</i>										•	

	FD	CF	SB	LFW	RL	LS	WLS	AC	AR	DA	CW
<i>Trapelia placodioides</i>								•			
<i>Trapeliopsis flexuosa</i>						•				•	
<i>Trapeliopsis granulosa</i>		•									
<i>Trapeliopsis pseudogranulosa</i>		•		•							
<i>Tremella pertusariae</i>							•				
<i>Tremolecia atrata</i>	•		•								
<i>Umbilicaria polyphylla</i>								•			
<i>Unguiculariopsis lettaui</i>							•				
<i>Usnea filipendula</i>										•	
<i>Usnea glabrescens</i>										•	
<i>Usnea hirta</i>	•	•									
<i>Usnea subfloridana</i>	•	•	•			•	•			•	
<i>Verrucaria nigrescens</i> forma <i>nigrescens</i>								•			
<i>Xanthoparmelia mougeotii</i>	•										
<i>Xanthoria calcicola</i>			•								
<i>Xanthoria elegans</i>	•		•			•		•			
<i>Xanthoria parietina</i>						•		•			
<i>Xylographa vitiligo</i>		•									

British Lichen Society Field Meetings & Workshops Programme 2011 & 2012

note: All members of whatever level of experience are welcomed on all BLS Field Meetings. No member should feel inhibited from attending by the fact that some meetings are associated with BLS Council meetings or the AGM. Workshops, on the other hand, may be aimed at members who have some level of experience. If so this fact will be specified in the meeting notice.

BLS SUMMER WORKSHOP 2011

**The Identification and Ecology of Amphibious Lichens from Freshwater Habitats
Sunday 14 – Sunday 21 August 2011**

A BLS residential workshop for intermediate and experienced lichenologists (Some level of competency in microscope work is required)

Tutor : Holger Thues, The Natural History Museum
Location: Orierton Field Centre, Pembroke, Pembrokeshire

This workshop will study the identification and ecology of amphibious lichens from freshwater habitats, and will consist of indoor tutor sessions and field visits to the excellent range of freshwater habitats available in Pembrokeshire. These include areas with limestone, sandstone and volcanic geology. A wide range of genera will be studied : from *Aspicilia* to *Verrucaria* by way of *Collema*, *Ionopsis* & *Rhizocarpon*.

So that all attendees will have the opportunity to learn whilst both indoors and outdoors **the number of participants will be strictly limited to 14** and therefore booking is essential. At the time of writing the workshop is fully booked and there is a waiting list of one person, but if interested in attending please do enquire about the current situation.

The cost will be £290 per attendee for full board (bed, breakfast, packed lunch, dinner, teas and coffees). This cost will include the hire of the work / tutor room for the group. The cost has been calculated on the basis of all attendees staying at the Centre. The workshop is therefore being run as a residential course.

Attendees wishing to, will be able to bring partners to stay at Orielton. The same charge will apply as for workshop attendees.

Please book with the Field Meetings Secretary, Steve Price by email (lichenrecords@sorby.org.uk) or by post to Woodlands, Combs Road, Combs, High Peak, Derbyshire SK23 9UP.

Places will be allocated on a first-come first-served basis. Booking for attendees is secured on receipt of a deposit of £30 per person with cheques made payable to the 'The British Lichen Society', being sent to the Field Meetings Secretary. The balance of the cost will be required by the end of May 2011.

Details of the location of Orielton and travel there can be found on the Field Studies Council website www.field-studies-council.org. Individuals' arrangements for transport to and during the workshop can be made nearer the time.

BLS AUTUMN 2011 FIELD MEETING, Derbyshire

Thursday 6th - Monday 10th October 2011

One highlight of this meeting is a full-day of a specially arranged visit to continue the recording on the splendid ancient oaks in the Old Park, Chatsworth which is normally private. The meeting base will be in the village of Hartington giving access to a range of other superb habitats in the Peak District. The focus of this meeting is away from the limestone, however for the addicts of 'little black dots' there will be plenty of the stuff around.

Outline programme:

Thursday 6 evening: Assemble, dinner and introduction;
Friday 7: Gritstone outcrops, boulders and streams;
Saturday 8: Lead mines on both limestone and shales;
Sunday 9: The Old Deer Park, Chatsworth;
Monday 10 morning: Lichens on basalt & an optional churchyard.

Meeting base:

YHA Hartington Hall, Hall Bank, Hartington, Derbyshire SK17 0AT tel 01298 84223 (grid ref SK132 603).

This is a return visit for the Society (having previously stayed here in October 2009) to a very luxurious hostel with a café, a restaurant and a bar that sells the locally brewed Hartington beer. Further details of the hostel can be found on www.yha.org.uk.

30 beds in a number of single, twin and triple en-suite rooms (some with bunk beds) have been reserved for us - the cost b&b is around £32.00 per night. Double rooms and dormitory rooms are also available in the hostel but no beds in these have been reserved.

Booking arrangements:

Rooms should be booked (and paid for) direct with the hostel on 01298-84223 quoting **booking reference 17561**. *Do not book via the central YHA booking system.* Advise the hostel before-hand if an evening meal is required on the day of arrival. The rooms will be held until 6 weeks before the meeting, after which they will become available for public booking. Other types of local accommodation can be found through the website www.visitpeakdistrict.com.

The nearest rail station is in Buxton, 20mins car drive to the north. This station is the end of a branch line from Manchester and Stockport. There is a bus service (no 199) from Manchester Airport to Buxton. There are infrequent bus services from Buxton which call at Hartington. See www.derbyshire.gov.uk/transport_roads for current timetables. If you have particular problems with transport please contact Steve Price (see below).

If you plan to attend please advise Steve Price, the BLS Field Meetings Secretary, by email (lichenrecords@sorby.org.uk), or by post to: Woodlands, Combs Road, Combs, High Peak, Derbyshire SK23 9UP. More detailed information will be sent out to attendees shortly before the meeting.

SOUTH WALES (day meeting)**Sunday 5 February 2012**

This is a field trip associated with the BLS AGM in Cardiff. For details see the forthcoming notice for AGM.

BRISTOL UNIVERSITY WORKSHOP - Splits and Look-alikes

Friday 17th - Sunday 19th February 2012

Tutors: Dr Brian Coppins and Dr David Hill

Course fee: £50.00

A number of species, some common such as *Hypotrachyna revoluta*, *Lecidea fuscoatra*, *Degelia plumbea* and *Placopsis gelida*, have been split giving rise to *H. afrorevoluta*, *L. grisella*, *D. cyanoloma* and *P. lambii* respectively. There are others where completely unrelated species can look very similar in the field in the same habitat such as *Amandinea punctata* and *Catillaria nigroclavata* (and *Rinodina biloculata*!). These splits and look-alikes lead to the under-recording of the less common species and the over-recording of the better known names.

This course will give lichenologists greater precision and confidence in fieldwork, identification and recording. Please bring specimens for identification including any that could in a split or look-alike group and, of course, pyrenocarps and *Caloplacas*! Selected herbarium material will be provided. We will be working on both morphological characters (as well as ecology and distribution) as well as microscopical examination.

If you are interested in attending this course please email David Hill (d.j.hill@bris.ac.uk) or phone 01761 221587 for further information.

BLS SPRING WORKSHOP 2012 - The genus *Caloplaca*

Sunday 22 - Friday 27 April 2012

Location: Kingcombe, Dorset

Workshop leader : Bryan Edwards

The objective of this workshop is to give participants the knowledge and confidence to identify species in this potentially confusing genera. The latest revisions of the species concepts will be explained, keys provided, and there will be ample opportunity to examine specimens collected during the week and also those brought along by participants. So that all attendees will have the opportunity to benefit the number of participants will be limited to 25.

Meeting Base & Accommodation

The Kingcombe Environmental Centre, Toller Porcorum, Dorchester, Dorset DT2 0EQ. Email: office@kingcombecentre.org.uk, telephone: 01300 320684, website: www.kingcombe.org

Costs at Kingcombe

All inclusive (about!) £76 per person per night; B&B (about!) £38 per person per night; Day rates for food are yet to be determined but should be about £25 per person

per night for dinner, £20 for lunch and two lots of refreshments per person per day.

Booking Arrangements

Please book with the BLS Field Meetings Secretary, Steve Price, and confirm it by sending him a £30 deposit. Cheques to be made out to 'The British Lichen Society' (not to 'BLS' please).

Contact: Steve Price, Woodlands, Combs Road, Combs, High Peak, Derbyshire SK23 9UP, email: lichenrecords@sorby.org.uk

Balances for accommodation and meal costs will be payable directly to Kingcombe Centre.

Travel

See the website: www.kingcombe.org for details of getting to Kingcombe. Arrangements may be able to be made to pick attendees up at rail stations.

Workshop start

Sunday 22 April

15.00 -17.00 Arrival

17.30 Welcome & Introductory meeting

19.00 Dinner

Workshop finish

Friday 27 April

09.00 Vacate accommodation

12.00 Vacate workshop room

BLS SUMMER MEETING 2012 - The Isle of Muck

Saturday 23 - Saturday 30 June 2012

This is an opportunity to participate in a thorough survey of the lichens of a moderately small, family owned, island off the west coast of Scotland. The recording challenge is made greater by the four 10k grid squares that overlay the island. Muck, along with Rum and Eigg, make up the 'Small Isles'. The 559 hectare island is composed mostly of sheet basalt with dolerite intrusions and an area of jurasic sediments. The island is low lying with a high point of 137m.

Accommodation

The family-run Port Mor Hotel (grid ref NM 42 79) and the island bunkhouse have been reserved for our group. Camping is also possible at the bunkhouse. The bunkhouse has a double and two twin rooms, shower & bathroom, kitchen and lounge.

The cost of full board at the hotel is £60 per person per day in 2011.

The cost of staying in the bunkhouse is £12 per person per night in 2011, although we may get a group discount on this rate. The hotel are willing to provide breakfast and dinner for those of our group staying in the bunkhouse or camping. The costs of these meals will be approximately £5 for breakfast and £20 for a three-course dinner. Please note there are no food shops on the island so if you are planning to self-cater you have to take all your food for the duration of your stay.

Places are limited. The maximum number that can be accommodated is 15 in the hotel and 6 in the bunkhouse, and this number depends on double occupancy of double beds. A few cottages are also available for rent on the island but because of the limited dining capacity at the hotel there is no guarantee that they will be able to cater for people using these.

For more information on the island visit www.isleofmuck.com

Microscope work

A room in the island community hall has been reserved for our use as a laboratory. This facility is 2 minutes walk from the bunkhouse and 5 minutes from the hotel.

Transport

Caledonian MacBrayne ferries run from Mallaig. In 2011 the 14.25 Saturday ferry arrives on Muck at 16.25 and on the return journey the 11.50 ferry arrives at Mallaig at 14.05. Trains from Glasgow and Fort William connect with the ferry and there is an overnight rail sleeper service from London to Fort William.

Contact: www.calmac.co.uk or phone 01687 462403.

Cars are not allowed onto the island without a special permit so we will all need to travel as foot passengers. The ferry fare from Mallaig, in 2011, is £9.50 single.

Arisaig Marine also visit the island but not on a Saturday.

Booking

Reserve your place on this island adventure with the Field Meetings Secretary, Steve Price. Please state your preferred style of accommodation (i.e. hotel; bunkhouse; camping) and confirm the booking by sending him a £30 deposit. Cheques to be made out to 'The British Lichen Society' (not to 'BLS' please). Contact: Steve Price, Woodlands, Combs Road, Combs, High Peak, Derbyshire SK23 9UP email: lichenrecords@sorby.org.uk

The payment of final balances will be made at the end of the stay directly with the hotel.

The Midge

We have been assured that midges in these parts prefer to spend summer-time on Rum and Eigg. But they would say that wouldn't they?

BLS AUTUMN 2012 FIELD MEETING, Bedfordshire - Advanced notice

Thursday 4th - Monday 8th October 2012

Local organiser: Mark Powell

The theme of the weekend will be to raise awareness of the surprising diversity of lichens to be found in this southern part of the East Midlands. This area may never have been quite the lichen desert as it was portrayed: calcareous substrata, especially old parish churches were always interesting but much neglected. There is also the excitement of witnessing the recolonisation, which is especially dramatic for the corticolous lichens. It is intended to have many specimens and exhibits on display in our meeting room to introduce people to some lichens from the area that they may not be familiar with - *Fellhanera viridisoediata* from coppice stems; *Psilolechia clavulifera* and *Micarea myriocarpa* from rootplates; *Micarea curvata* and *Opegrapha demutata* from headstones, *Acarospora moenium* from concrete; *Phylloblastia inexpectata* from leaves. Also lots of pairs and tricky groups on display - *Lecania erysibe* vs *L. inundata*; C-, K- *Acarosporas*..... you get the idea. The sites we will visit will include a churchyard, an ancient woodland and a quarry. The meeting will be based in Bedford with evening facilities for relaxing in the bar or for identification or we are very happy to help people to begin with or improve their microscope skills.

Steve Price, BLS Field Meetings Secretary

Field Studies Council Lichen Courses 2011

see: www.field-studies-council.org or phone 0845 3454071 for more details

31 May – 3 June, Preston Montford, Shropshire

Identifying Lichens: Intermediate Level (tutor: David Hill)

Identifying lichens is very rewarding and this course will help participants to use both field guides and a hand lens to identify a range of common macro lichens and collect specimens for reference collections and microscopic examination. Field visits and workshops will help participants to identify key features and prepare voucher specimens and gain confidence in identification skills.

David Hill is an experienced tutor with both the British Lichen Society and the University of Bristol with research interests in lichens, plants and conservation.

22-26 August, Slapton Ley, South Devon

Lichens and Lichenicolous Fungi (tutor: David Hawksworth)

A workshop-style course covering identification of lichens and also the fungi that are obligately associated with them both in the field and under the microscope. Ideal for those with enthusiasm and a little knowledge wishing to increase their confidence

and learn more. Advantage will be taken of the rich material of lichens and lichenicolous fungi present in Slapton and in its vicinity.

David Hawksworth is a former President of the British Lichen Society and author of numerous articles on lichens and associated fungi. __

26-29 August, Malham Tarn, Yorks

Lichens in the Dales: An Introductory Course (tutor: Allan Pentecost)

The Malham Tarn area is rich in lichen species, occurring on rocks, trees and soil, allowing the beginner to form a useful and informative collection of material. Methods of collection and examination will be explained and specimens from the field will be examined further at the Centre. Gain confidence in using simple identification keys and chemical tests and obtain an understanding of their biology and impact on the landscape. A course for beginners or those with little experience with lichens, though the more experienced are also welcome.

Allan Pentecost, an experienced tutor, has published many research papers on lichens including Malham Tarn Lichen Flora. He has been visiting and collecting in the area for over 30 years.

9-11 September, Flatford Mill, Suffolk

Identifying Lichens: Intermediate Level Workshop (tutor: John Skinner)

This course is an intermediate level workshop on lichen identification for anyone who would like to take their interest several stages further. As in our March course, there will be a combination of field excursions, microscope work and use of keys to help you with the identification of scarcer lichens.

John Skinner runs our lichen course for beginners and is looking forward to helping people extend their knowledge and to encourage more recording of lichens.

Index to BLS Field Meetings & Workshops

Peter Lambley & Steve Price

version 1.0, 31 March 2011

The list below is of known BLS field meetings and workshops starting with the first in 1959. The entries were taken mostly from BLS Bulletins. Where a report of a meeting has been published in the *Lichenologist* or the *BLS Bulletin* the volume / issue is identified. The bulk of the work in extracting the details has been performed by Peter Lambley.

The list may not be comprehensive. Should any member have details of any of the un-reported meetings or of any meeting that has been omitted from the list, even if it is only a list of attendees or a list of species, please send them to the Field Meetings Secretary, or even better write them up for publication in the Bulletin. Lists of species will be contributed to the BLS database and this list of meetings will be maintained and updated for future re-publication.

Year	Dates	Venue	Report Published
1959	7 – 12 Apr	Chagford, Devon	
	31 Oct – 1 Nov	Flatford Mill, Suffolk	<i>Lichenologist</i> 1 (3) 119 <i>Lichenologist</i> 1 (4) 203 - 206
1960	20 – 23 Apr	Dolgellau, Merionethshire	<i>Lichenologist</i> 1 (5)269-274
	30 Sept – 1 Oct	Lyndhurst, Hampshire	<i>Lichenologist</i> 1 (5) 275 -276
1961	31 Mar – 4 Apr	Arnside, Cumbria	<i>Lichenologist</i> 2 (1) 97-100
	?	Aviemore, Moray	
	autumn	Preston Montford, Shropshire	
1962	12 – 17 Apr	Bangor, Denbighshire	<i>Bulletin</i> 106 82
	autumn	Market Raisen, Lincolnshire	
1963	spring	Wareham, Dorset	
	25 Jul – 9 Aug	Killin, Mid Perthshire & Kinlochewe, West Ross & Cromarty	<i>Lichenologist</i> 3 (1) 155-172
	25 – 27 Oct	Folkestone, Kent	<i>Lichenologist</i> 3 (1) 173-174
1964	spring - cancelled	Cardiff, Glamorganshire	
	spring	Boscastle, Cornwall	
	autumn	Repton, Derbyshire	
1965	Apr	Llandovery, Carmarthenshire	
	summer	Barnard Castle, Durham & Newton Stewart,	

Year	Dates	Venue	Report Published
		Wigtownshire	
	autumn	Stamford, Lincolnshire	
1966	spring	Channel Islands	
	summer	W. of Ireland – Clifden & Bantry	
	autumn	Cheltenham, Gloucestershire	<i>Bulletin</i> 30 9. <i>Rep. N. Gloucestershire Nat. Soc. J.</i> 7 31-34
1967	spring	Wells, Somerset	
	summer	Scandinavia	
	autumn	Battle, Sussex	
1968	spring	Scilly Isles	
	Summer	Aviemore, Moray & Braemar, Aberdeenshire	
	autumn	King's Lynn, Norfolk	
1969	spring	Totnes, Devon	
	summer	Bangor, Denbighshire	
	31 Oct – 2 Nov	Leicester	<i>Lichenologist</i> 5 (1/2) 170 - 174
1970	spring	Brittany, France	<i>Lichenologist</i> 5 (1/2) 149 - 169
	30 Jul – 5 Aug	N. Yorks (Richmond)	<i>Lichenologist</i> 5 (3/4) 326 - 331
	5-12 Aug	Cheviots (Wooler), Northumberland	<i>Lichenologist</i> 5 (3/4) 337 - 341

Year	Dates	Venue	Report Published
	autumn	Oxford (Wychwood & Rollright Stones)	
1971	spring	Blandford, Dorset	
	4-11 Aug (cancelled)	Hereford	
1971	30 Aug – 6 Sept	Ilfracombe, Devon (IMC)	
1972	29 Mar – 5 Apr	Newquay, Cornwall	
	Summer (postponed)	Wexford, Ireland	
	27-29 Oct	Halifax, Yorkshire	<i>Lichenologist</i> 6 (1) 115 -121
1973	18-25 Apr	Cardigan	
	28 Jul – 4 Aug	Kintyre (Lochgilphead), Argyllshire	
	autumn	Chester, Cheshire	
1974	1 – 8 Apr	Bristol, Gloucestershire	
	1-8 Aug	Forres, Moray	
	8-13 Aug	Banff, Banfshire	
	25-27 Oct	Cambridge	<i>Lichenologist</i> 10 (1) 105-109
1975	2-9 Apr	Alderney, Channel Islands	
	30 Jul – 6 Aug	Ayrshire (Girvan)	<i>Lichenologist</i> 9 (2) 153 - 167
	24 -26 Oct	Leek, Staffordshire	<i>Lichenologist</i> 8 (2) 189 - 196

Year	Dates	Venue	Report Published
1976	7-14 Apr	Gregynog, Montgomeryshire	
	2 – 11 Sept	Catalonia, Spain	<i>Bulletin</i> 40 11-12
	15 – 18 Oct	Lancaster, Lancashire	<i>Lichenologist</i> 9 (1) 83 - 85
1977	15 – 18 Apr	Louth, Lincolnshire	<i>Lichenologist</i> 10 (1) 111-122
	20 – 22 Apr	Aylesbury, Buckinghamshire	<i>Lichenologist</i> 10 (1) 123-129 <i>Bulletin</i> 43 12
	13 – 20 Jul	Lake District (Ambleside), Cumbria	
	20 – 27 Jul	Melrose, Roxburghshire	<i>Lichenologist</i> 11 (1) 97-101
	21 – 23 Oct	Kettering, Northants	
1978	5-14 Apr	Tenerife, Canary Isles	
	16-23 Jun	Newbridge on Wye, Radnorshire	
	23-25 Jun	Worcester	
	6-9 Oct	Loch Lomond, Dunbartonshire	
	20-22 Oct	Whitby, Yorkshire	
1979	3-9 Apr (cancelled)	Yelverton, Devon	
	25 - 31 July	Penrith, Cumbria	<i>Lichenologist</i> 13 (2) 191-199
	1-8 Aug	Swaledale & Wensleydale (Langthwaite), Yorkshire	
	19-21 Oct	Canterbury, Kent	<i>Bulletin</i> 46 6
1980	3-14 July	Fontainbleu, & Alencon,	<i>Bulletin</i> 47 10

Year	Dates	Venue	Report Published
		Normandy, France	
	19 July	Sevenoaks, Kent	
	24-27 Oct	Ludlow, Shropshire	<i>Lichenologist</i> 14 (2) 185-188
1981	22-29 Aug	Bangor, Denbighshire	
	8-12 Oct	Duns, Berwickshire	<i>Lichenologist</i> 14 (2) 189-193
	24 Oct	Wimbledon Common, Surrey	
1982	12-18 Apr	Newport, Isle of Wight	<i>Lichenologist</i> 16 (1) 59-62
	22-29 Aug <i>Cancelled</i>	Algarve, Portugal	
	9-11 Jul	Dublin, Ireland	
	4 Sep	Staverton, Suffolk	
	25 Sept	Brockenhurst, Hants	
	15-19 Oct	Llangollen, Merionethshire	<i>Lichenologist</i> 16 (1) 63-66 <i>Bulletin</i> 52 24-26
	16 Oct	Richmond Park, Surrey	
1983	9-19 Apr	Coll & Tiree, Inner Hebrides	<i>Lichenologist</i> 16 (1) 67-80
	24-30 Jul	Exeter, Devon	
	13-17 Oct	Newton Stewart, Wigtownshire	
	28-31 Oct	Gosforth, Cumbria	
1984	24 March	Lyndhurst, Hants	
	9 -14 Apr	Marlborough, Wiltshire	<i>Lichenologist</i> 18 (3) 269-273

Year	Dates	Venue	Report Published
	25 Aug – 3 Sep	Bettyhill, Sutherland	<i>Lichenologist</i> 18 (3) 275-285 <i>Bulletin</i> 55 10
	25 – 28 Oct	Banbury (S Northants)	<i>Lichenologist</i> 19 (1) 77-92 <i>Newsl. Northampton Trust</i> <i>Nat. Cons.</i> 39 13-14
1985	10-15 Apr	Arran, Clyde Islands	<i>Lichenologist</i> 18 (4) 371-381
	Nov	Sudbury, Suffolk	<i>Bulletin</i> 57 19-20
1986	17-23 Apr	The Lizard, Cornwall	<i>Lichenologist</i> 19 (3) 319-314 <i>Bulletin</i> 59 20-21
	?	Masham, N.Yorks	<i>Bulletin</i> 60 7
1987	summer	Sligo, Ireland	<i>Bulletin</i> 61 7
	23-25 Oct	Rye, Sussex	
1988	15 – 20 Apr	Ilfracombe, Devon	
	15-26 Aug	Gower, Glamorganshire	
	21 – 24 Oct	Howgill Fells, Cumbria	<i>Lichenologist</i> 21 (3) 287-292
1989	20 – 27 Apr	Wigtownshire	<i>Lichenologist</i> 22 (2) 183-190 <i>Bulletin</i> 65 19-21
	20 – 22 Oct	N Norfolk (Walsingham)	
1990	17 – 26 Apr	Isle of Man	<i>Bulletin</i> 67 24-25
	31 Aug – 1 Sep	St Dogmaels, Cardigan (maritime workshop)	<i>Bulletin</i> 67 9-11
	10 – 14 Sep	Gower, Glamorganshire	

Year	Dates	Venue	Report Published
	19 – 22 Oct	Castleton, Derbyshire	
1991	3-10 Apr	Chichester, Sussex	
	6-20 Jul	Co. Mayo, Ireland	
	17 -21 Oct	Llandudno, Caernarvonshire	
1992	Summer	Lands End, Cornwall (Zennor)	
	17 – 26 Oct	Co. Antrim & Co. Down, Northern Ireland	<i>Bulletin 72</i> 19-23
1993	10 – 17 Apr	Lochinver, Sutherland	
	28 Jun – 6 Jul	Slovakia	
	22 – 25 Oct	Orielton, Pembrokeshire (<i>Collema, Leptogium</i> workshop)	<i>Bulletin 74</i> 29-32
	27 -31 May	Rutland	<i>Bulletin 75</i> 18-23
	8-21 Jul	Co. Wicklow & Wexford	
	21 – 24 Oct	Malvern, Worcestershire	
1995	8 Jan	Nonsuch Park, Surrey	<i>Bulletin 76</i> 44
	9 – 13 Jul	Anglesey (coastal)	
	30 Aug – 6 Sep	Orielton, Pembrokeshire (<i>Cladonia</i> workshop)	
	26 – 31 Oct	Llanraedr, Denbighshire, Clwyd	<i>Bulletin 78</i> 21-23
1996	Jan AGM	Ashtead Park, Surrey	<i>Bulletin 78</i> 26
	29 – 31 Mar	Aberystwyth, Cardiganshire (lichens on disused mines)	

Year	Dates	Venue	Report Published
1996	27 Apr – 4 May	Killarney, Ireland	
	26 Jul – 2 Aug	Slapton, Devon (<i>Parmelia</i> & <i>Ramalina</i> workshop)	
	25 – 28 Oct	Grange over Sands, Cumbria	<i>Bulletin</i> 80 33
1997	Jan	Headley Heath, Surrey	<i>Bulletin</i> 80 34-35
	9 – 18 May	Weymouth, Dorset	<i>Bulletin</i> 82 14-17
	15 – 22 Aug	Slapton, Devon (<i>Caloplaca</i> workshop)	<i>Bulletin</i> 82 18-20
	3- 6 Sep	Bangor, Denbighshire (Habitat Management workshop)	<i>Bulletin</i> 81 12-15
1998	25 Apr – 2 May	S.E. Connemara, Ireland	<i>Bulletin</i> 83 30-36
	11 – 18 Jul	Kindrogan, Perthshire (<i>Lecanora</i> workshop)	<i>Bulletin</i> 85 31-35
	18 – 20 Sep (<i>cancelled</i>)	Wakehurst (Sussex sandrocks)	
	23 – 25 Oct	Abergavenny, Monmouthshire	<i>Bulletin</i> 83 28-29
1999	6 – 13 Apr	Isles of Scilly	
	7 – 14 Aug	Helmsdale, Sutherland	
	22 – 25 Oct	Kirkby Stephen, Cumbria	
2000	25 Apr – 1 May	Dolgellau, Merionethshire	<i>Bulletin</i> 87 45-59
	9 -15 Jul	Strathspey, Moray & Inverness-shire (Caledonian pine forest)	<i>Bulletin</i> 88 38-41

Year	Dates	Venue	Report Published
	27 – 29 Oct	Bourton-on-the-water, Cotswolds, Gloucestershire	<i>Bulletin 87</i> 60-61 & <i>88</i> 42-51
2001	17 – 24 Mar	Jersey, Channel Islands	<i>Bulletin 89</i> 57-69
	7 – 14 Jul	Kingcombe, Dorset (<i>Opegrapha</i> workshop)	<i>Bulletin 89</i> 42-56
	26 – 29 Oct	Church Stretton, Shropshire	<i>Bulletin 90</i> 44-56
2002	6 – 13 May	Co. Donegal, Ireland	<i>Bulletin 91</i> 21-38
	4 – 10 Aug	Blencathra, Cumbria (<i>Cladonia</i> workshop)	<i>Bulletin 92</i> 42-59
	25 – 27 Oct	Camelford, Cornwall	<i>Bulletin 94</i> 36-44
2003	25 – 30 May	Connel, Oban, Argyllshire (<i>Graphidiaceae</i> workshop)	<i>Bulletin 94</i> 45-61
	28 Jul – 1 Aug	Nettlecombe, Somerset (<i>Physcia</i> workshop)	<i>Bulletin 95</i> 15-26
	24 – 26 Oct	Marlborough, Wiltshire	<i>Bulletin 95</i> 27-32
2004	7 – 11 May	Soest, Netherlands	<i>Bulletin 95</i> 33-39
	6 – 13 Aug	Bangor, Denbighshire (maritime lichens workshop)	<i>Bulletin 96</i> 38-52
	1 – 3 Oct	Nottinghamshire	<i>Bulletin 96</i> 53-60
2005	9 Jan	Kew, Surrey	<i>Bulletin 96</i> 17-22
	20 – 27 Apr	Orielton, Pembrokeshire	<i>Bulletin 97</i> 16-37
	26 Jun – 4 Jul	Kingcombe, Dorset (<i>Leptogium</i> & <i>Collema</i> workshop)	
	Oct	Battle, Sussex	<i>Bulletin 99</i> 20-21

Year	Dates	Venue	Report Published
2006	May	Sierra de Guadaramma, Spain	
	26 Aug - 2 Sep	Blencathra, Cumbria (<i>Pyrenocarp</i> workshop)	
	5 – 8 Oct	Tavistock, Devon (<i>Usnea</i> & <i>Ramalina</i> workshop)	<i>Bulletin</i> 100 33-47
2007	14 Jan	Bookham Common, Surrey	<i>Bulletin</i> 100 21-23
	10 – 15 Jun	Connel, Oban, Argyllshire, (<i>Micarea</i> & <i>Bacidia</i> workshop)	<i>Bulletin</i> 101 18-40
	5 – 11 Sep	Newfoundland, Canada	<i>Bulletin</i> 101 12-17
	5 – 7 Oct	Charnwood, Leicestershire	<i>Bulletin</i> 103 56-72
2008	23 – 30 Apr	Falmouth, Cornwall	<i>Bulletin</i> 103 73-87
	Aug	Hoy, Orkney	<i>Bulletin</i> 104 53-70
	2 – 6 Oct	Wooler, Northumberland	<i>Bulletin</i> 105 54-68
2009	13 - 15 Feb	Bristol, Gloucestershire (lichens on limestone workshop)	
	18 – 25 Apr	The Burren, Co Claire, Ireland	<i>Bulletin</i> 105 69-103
	15 – 21 Jul	Raasay, Inner Hebrides	<i>Bulletin</i> 106 84-110
	9 – 12 Oct	Hartington, Derbyshire (limestone & Chatsworth)	<i>Bulletin</i> 106 110-123& 107 70
2010	17 - 18 Jan	Winterton & Holkham, Norfolk (dunes)	<i>Bulletin</i> 106 145-146
	26 - 28 Feb	Bristol, Gloucestershire (lichens on limestone workshop)	

Year	Dates	Venue	Report Published
	23 – 26 Apr	Isle of Man	
	14 – 21 Aug	Findhorn, Moray	
	7 – 11 Oct	Camarthenshire	
2011	16 Jan	Ashtead Common NNR, Surrey	
	18 - 20 Feb	Bristol, Gloucestershire (workshop: using microscopes for identifying lichens on limestone)	
	30 Apr - 7 May	Islay & Jura, Inner Hebrides	
	14 - 21 Aug	Orielton, Pembrokeshire (Freshwater lichens workshop)	
	6 - 10 Oct	Hartington, Derbyshire (leadrakes & Chatsworth)	

Lichenology Seminars at the Humboldt Institute on the coast of Maine

Jul 17 - 23 2011: *Lichens and Gravestones* (Judy Jacob and Michaela Schull)

Descriptions of seminars may be found at <http://www.eaglehill.us/programs/nhs/nhs-calendar.shtml>. Information on lodging options, meals, and costs may be found at <http://www.eaglehill.us/programs/general/application-info.shtml>. There is an online application form at <http://www.eaglehill.us/programs/general/application-web.shtml>

Syllabi are available for these and many other fine natural history training seminars on diverse topics.

For more information, please contact the Humboldt Institute, PO Box 9, Steuben, ME 04680-0009. Tel. 001 207-546-2821. Fax 001 207-546-3042. E-mail - office@eaglehill.us

Online general information may be found at <http://www.eaglehill.us>

Society business

Minutes of the 53rd Annual General Meeting of the British Lichen Society, 15 January 2011, The Natural History Museum, London

1. Present: Anne Allen, Lesley Balfe, Barbara Benfield, Stefano Bertuzzi, Ishpi Blatchley, Graham Boswell, Richard Brinklow, John Butt, Brian Carlyle, Paul Cannon, Don Chapman, Steve Chambers, Ginnie Copsey, Peter Crittenden, Andy Cross, Simon Davey, Frank Dobson, Heidi Döring, Sally Eaton, Bryan Edwards, Chris Ellis, Vince Giavarini, Cecile Gueidan, Paul Harrold, David Hawksworth, Mary Hickmott, David Hill, Barbara Hilton, Bob Hodgson, Peter Lambley, Jack Laundon, Fay Newbery, Don Palmer, Oliver Pescott, Mark Powell, Steve Price, William Purvis, Sheila Quin, David Richardson, Peter Schultz, Mark Seaward, Janet Simkin, John Skinner, Brian Starkey, Mike Sutcliffe, Neil Sanderson, Clifford Smith, Holger Thüs, Stephen Ward, Amanda Waterfield, Vanessa Winchester, Pat Wolseley, Ray Woods, Chris Young.

Apologies for Absence: Martin Butler, Nathan Callaghan, Brian Coppins, Sandy Coppins, Emma Green, Peter James, Ivan Pedley, Mike Simms.

2. Minutes of Norwich AGM:

Accepted as an accurate record.

3. Officers and Committee Chair Reports:

3a. **President's Report** - presented separately elsewhere in this *Bulletin*.

3b. **Treasurer's Report.** John Skinner presented his report for the period 2009-10. The importance of income from *The Lichenologist* was highlighted - up from £42,000, last year, to £54,000. In addition, all copies of *Lichens of Great Britain & Ireland* had been sold, generating income of £7,000. The main expenditure had been on the lichen database, towards which the Society had provided £6,000.

Council has approved consolidation of the Society's sales products through Richmond Press. This will relieve Brian Green, Don Palmer and John Douglass of their sales responsibilities and they were thanked for handling these over recent years. John thanked Council for their support, especially Heidi Döring for modernising the membership list and Jim Hines (American Treasurer).

A volunteer is sought to assist with gift aid.

Comments from the Floor:

- Clause B in the Trustee's Report should include the phrase 'or at a special general meeting'.

3c. **Membership Secretary's Report.** Heidi Döring has reconciled the membership list with the actual payment of subscriptions. This has resulted in a discrepancy between the mailing list (c. 700 names), and membership (c. 600 names), i.e. c. 100 members' dues appear to present a discrepancy.

For 2009-10, there were 34 resignations and 50 one-time members who cannot be contacted have been removed from the mailing list; 67 new members joined. Members are asked to note their membership number (see below) and quote this in future correspondence.

Council proposed two changes to subscription matters:

a. *Subscription.* Overseas members should be allowed, at the discretion of the Membership Secretary, to renew membership for up to a maximum of 4 years. This might apply (a) when it would reduce international bank transfer costs to the Society, (b) for those who wish their BLS subscription to coincide with the international conference cycle (e.g. IMC, IAL).

b. *Junior Associate Members:* the cost be raised from £5.00 to £10.00.

Comments from the Floor:

- the *Bulletin* will in future only be sent to paid-up members; this will be a good impetus for prompt payment of membership dues.
- it may be inappropriate for students to be referred to as 'juniors'; however, this modification would require a change to the constitution.
- the BLS membership number is on the address label of the *Bulletin*. (It is not the number on the address label for *The Lichenologist* which is needed for accessing the e-journal and electronic archive.)
- A potential problem was raised in accepting members under the age of 18, for insurance purposes, and the Treasurer will investigate this.
- In the light of recent discussions about Honorary Membership and the Ursula Duncan award, a third category 'Fellows' should be appraised by Council.

Vote:

a. To scrap the 3-year subscription system in favour of an annual system, with discretionary exceptions: proposed David Richardson, seconded David Hill, carried unanimously.

b. To increase the subscription rate for Junior Members from £5.00 to £10.00: proposed Pat Wolseley, seconded Peter Crittenden, carried unanimously.

3d. **Data Report.** David Hill introduced the data project. Janet Simkin provided a brief overview of recent progress. Over the last 2-years effort has focused on England and Wales. This has been a more difficult task than the Scottish project because the data are dispersed among so many different locations; the project was expected to take 3-years and is on schedule. The total cost had been estimated at c. £120K; but current projections suggest that it will cost c. £110K. The Environment Agency has offered a grant towards data entry of c. £10k in return for access to the threatened lichens dataset. By the summer we should have c. 1.45 million records in the database for England, Wales and Scotland and these will all be made available on

the NBN. BLS data is also now being uploaded onto GBIF so it can be viewed in a global context. Because of issues with the quality of identifications, data from 'Citizen Science' projects is to be stored separately,

3e. Members' Services Committee Report. David Hill described the work of this new Committee, its brief being to improve the service the Society offers its members. He acknowledged the importance of the membership survey in this regard, and thanked Graham Boswell for analysing the returns.

Other initiatives include the new BLS Handbook and a 'Welcome Pack' for new members. The Committee will consider how fuller use of the Library and Herbarium can be encouraged.

3f. Conservation Committee. Bryan Edwards highlighted the completion of the Conservation Strategy. A new edition of *A Conservation Evaluation of British Lichens* has been accepted by the JNCC and will be published shortly – Brian Coppins and Ray Woods were formally thanked.

Bryan introduced a new project – in development – to revisit sites in England and Wales surveyed for the *Lobarion* project at the NHM between 1986-1990, in order to quantitatively assess its current status - believed to have deteriorated markedly since the last survey.

A workshop is planned to produce indices of habitat quality, expanding on the success of the woodland indices for ecological continuity.

Bryan thanked Peter Lambley for his help, Neil Sanderson for his advice on woodland issues, and Brian and Sandy Coppins for their advice on Scottish issues.

3g. Bulletin Editor's Report. Paul Cannon thanked all the contributors to the Bulletin during 2010, and encouraged all members to contribute material.

The printers that had been used for many years has ceased trading and Charlesworths of Wakefield have now taken over, with excellent results – they are able to incorporate colour illustrations throughout at a similar price to the previous contractor.

Comments from the Floor:

- Paul said proofs could only be sent to authors in exceptional cases.

3h. Senior Editor, *The Lichenologist*. Peter Crittenden reported 80 submissions during 2010, compared with 60 submissions in 1999; over the several years the number of submissions has increased (with a record 104 submissions in 2009). Profits were up last year, with CUP projecting an increase in profits over the next three years.

The Lichenologist is in 'good shape', with the scheduling being very punctual. Last year was the first full year with on-line submission (through ScholarOne). This has been a success.

Peter paid tribute to the Editorial Board, the Editorial Assistant, the Managing Editor, and to the proof-readers, Barbara Benfield, Brian Coppins and Jack Laundon. *The Lichenologist* is an international and communal effort, and Peter

acknowledged the help of more than 100 referees (mostly overseas) and over 200 authors (mostly overseas).

Comments from the Floor:

- Jack Laundon appealed for more British contributions.
- There was a request for a note in the Bulletin specifying how to access electronic back-copies; any problems with access should be sent to the Membership Secretary, who will contact CUP.

3i. **Field Meetings Secretary.** Steve Price thanked the 80+ members who attended the six formal field meetings over the last year – a significant proportion of the active membership. Steve paid special tribute to the local organisers. Bristol and Moray had attracted overseas members. Often guests who have attended have subsequently joined the Society. Additionally, many members are working to advance field lichenology within other local natural history groups.

Two microscopes have been acquired for use by members on meetings.

The Bristol microscope workshop, which will cost attendees £50 is being subsidised by an equivalent amount by the Society.

Junior members are able to attend field meetings if accompanied by a parent or responsible adult.

Comments from the Floor:

- A map was requested for the *Bulletin* showing where all previous field meetings have been held so that future meetings can target gaps. Such a map has been published previously in 'Horizons in Lichenology'.
- Records from field meetings should be checked and then entered onto the database.
- Overseas field meetings – suggestions are welcome and will be investigated.

3j. **Librarian's Report.** Ray Woods reported that key papers will be made available on the web – e.g. James *et al.* (1977).²

3k. **Herbarium Curator.** Richard Brinklow reported that there is a list of collections on the website, and the nomenclature for this is being up-dated. Members wanting loans were encouraged to contact him: the herbarium is especially suited to amateurs, and can provide a wide range of fairly common, widespread macrolichens.

3l. **Questionnaire.** Graham Boswell outlined results of the membership survey. Generally, the results indicated that members were happy with the Society; highlighting particularly the successful interaction between professionals and amateurs. The results will be summarised and published in the Bulletin.

The survey asked how individuals might be willing to help the Society – this generated a strong response and offers are being followed up.

² James, P.W., Hawksworth, D.L. & Rose, F. 1977. *Lichen Communities in the British Isles: a preliminary conspectus*. In M.R.D. Seaward (ed) *Lichen Ecology*, pp. 295-413, Academic Press, London.

4. Retirement and Election of Officers.

The retiring officers were thanked for their service to the Society – Peter Lambley, Ivan Pedley, Steve Price.

Three new officers were nominated, two to be voted onto council. Allan Pentecost: proposed Peter Crittenden, seconded Paul Cannon. Mark Powell: proposed: Barbara Hilton, seconded: Steve Price. Both were unanimously voted onto Council. Cecile Gueidan is to be co-opted onto Council.

The re-election of serving officers en bloc was proposed by David Hawksworth; seconded by David Hill and carried unanimously.

5. Proposed changes to the Constitution.

Frank Dobson objected to proposed new rule 13, *Honours and Awards*. Restricting the Ursula Duncan Award to members of the Society would lower its status; this is unnecessary since the intention when the award was created was that it could be made on either national or international grounds. AND – in both cases (Ursula Duncan Award and Honorary Membership) – nomination should reflect direct service to the Society and not just an international contribution to lichenology.

The current wording allows the Society flexibility in making awards. It was suggested Council should discuss the matter further, including the possibility of electing Fellows.

Votes:

1. It was formally proposed by Jack Laundon that Changes 3 and 13 be not approved with recommendation that the Council further considers these issues; seconded by David Hill. Carried unanimously.
2. Additional changes put forward by the Membership Secretary and Treasurer (6. Officers). Proposed by Barbara Hilton; seconded by Don Chapman. Carried unanimously.

6. Ursula Duncan Award.

Peter Lambley spoke on behalf of Sandy Coppins, in nominating Ray Woods for the Ursula Duncan Award. The award was presented by the President.

8. Any Other Business.

The President summarised Barbara Hilton's excellent work Chairing the Education and Promotions Committee over the last 10 years. Nathan Callaghan and Emma Green are willing to take over this role as joint Chairpersons: proposed by David Hill, seconded by Simon Davey, carried unanimously.

9. Date and Place of Next AGM.

The traditional date of the next AGM clashes with the IAL in Bangkok, thus many officers would not be able to attend. Stephen Ward suggested the next AGM be held on 4th February 2012: proposed Peter Lambley, seconded Heidi Döring, carried unanimously.

Possible venues suggested were Belfast or Cardiff. A suggestion to hold it in London was countered on the grounds that a pattern of alternate years in London has now been established. A show of hands favoured Cardiff.

President's address, given at the AGM, NHM 15th January 2011

January is an opportune time for an AGM, allowing us to review 2010 and preview 2011. 2010 was the *International Year of Biodiversity* – the year by which politicians commanded (in 2004) that natural resources should sustain themselves and wildlife cease becoming extinct. It was obvious all along that the target was unattainable. That target has now been moved forward to 2020. How will biodiversity be faring by then? To stand any chance of that target being met there must be a massive and continuing committment of resources in every sense and at every level, i.e. not just time but money and not just voluntary sources but statutory sources too.

It would be wrong, however, to imply that such committment has been lacking hitherto. Commencing in the 1990s the *Biodiversity Action Plan* resulted in considerable resources being made available to lichenology.

The continuing decline of biodiversity has yet to catch the public's attention. Just before Christmas, a programme entitled *Decade of Discovery* about new species found around the world in the last ten years stated that we are better informed about space than biodiversity and that the well-known phrase should be adapted to become '*biodiversity – the final frontier.*' We are fortunate that Caroline Spelman, Secretary of State for the Environment is championing biodiversity. She said "*We are losing species hand over fist. I would be negligent if I didn't shout from the rooftops that we have a problem; that the loss of species will cost us money and it will undermine our resilience in the face of scientific and medical research. We are losing information that we cannot recreate that we may need to save lives and to save the planet as we know it. ... Biodiversity is where climate change was 20 years ago — people are still trying to understand what it means and its significance.*"

Given the 30% cut in Department of the Environment, Food and Rural Affairs (DEFRA) funding, a major challenge facing a learned society such as our's is how best to articulate lichenology's needs. We must begin by setting out what we have to offer 'Big Society' although, in many ways, this is business as usual since so much of our expertise is given at literally no cost to Society at large.

As a very small learned Society with fewer than a thousand members worldwide we punch above our weight. In the field of amateur skills (in the best sense of the word), our members collectively possess an impressive array of identification abilities. The Society has demonstrated self-help in bolstering the ranks of those able to undertake lichen surveys through our 'lichen apprentice' scheme.

This Society recently sought its members views in a questionnaire; I am grateful to Graham Boswell for carrying out the not inconsiderable task of analysis on your behalf. Among its findings is that you wish the Society to undertake more advocacy on behalf of lichens. In 2010 we advocated that:

○ a priority of the *Scottish Land-use Strategy* should be the conservation of biodiversity.

○ in response to DEFRA's *Invitation to Shape the Nature of England*, especially with regard to the role of Civil Society in managing and enhancing the natural environment, we said: "As one of Britain's learned societies, the British Lichen Society has played a key role in Civil Society since our inception in 1958. There are, however, limitations to what we can do. A successful lichen conservation policy relies on cooperation between ourselves and government-funded bodies such as the Natural History Museum, the Royal Botanic Gardens Kew, Natural England, the Joint Nature Conservation Committee and the Environment Protection Agency. Our links with the voluntary sector which include Plantlife, the National Trust, RSPB, Woodland Trust and the Wildlife Trusts are also of vital importance to lichen conservation. Many regional museums foster an interest in biodiversity in general and lichens in particular. We are also reliant on the goodwill of individual land owners and managers in enabling us to undertake lichen surveys."

"Civil Society relies upon central government for certain key services. For example, whilst the British Lichen Society is renowned for the superb identification skills of many of our members, we are deeply concerned – and have raised our concern with Government through select committees on several occasions over the last 20 years, at the continuing demise of taxonomic expertise. As world experts in British institutions retire, they are not being replaced; not only do we lose their expertise but also their role in mentoring the younger generation. At a time of immense concern at the loss of biodiversity, likely to be recorded in history as a period of mass extinctions, including the demise of species yet to be described by science, this failure to ensure maintenance of taxonomic expertise is baffling, ironic and irresponsible."

The government is to issue a White Paper in 2011 based on *Shaping the Nature of England*. Let us hope our concerns are reflected therein.

○ in response to the Welsh Assembly Government's (WAG) consultation *A Living Wales: – a New Framework for our Environment, our Countryside & our Seas* we said, in answer to what does and does not work "The conservation of sites through the SAC, SSSI and NNR designations has been remarkably effective in stemming loss and should be a priority for resources."

"WAG should lead by example in conserving threatened species. It is unacceptable to design road scheme after road scheme which ignore lichen species which the Assembly has set itself up to conserve:

- the A470 scheme near Newbridge-on-Wye destroyed a population of the lemon-tart lichen *Lecanora sublivescens* a lichen occurring on fewer than 300 trees in the world and with almost the entire world population in Wales. No attempt was made even to move the road slightly – which would have been perfectly feasible. This same scheme also destroyed a population of the pelargonium lichen *Caloplaca herbidella* - again on a tree that could have been avoided, which is now known from only 20 trees in Britain.
- plans to realign the A470 near Cross Foxes, Dolgellau cut through woodland protected as an SAC, and supporting Section 42 lichens, with only the most derisory of mitigation measures offered. The habitat within this area is already so suboptimal further destruction should not even be entertained as an option.

- *elsewhere in Wales we are aware of the destruction, in the course of road improvements, of the best tree known in Britain for Parmelina carporrhizans. Some small comfort may have been taken in attempts to 'save' the lichen by translocating it to trees nearby, but translocation is a disruptive process where technical knowledge is in its infancy and failure a more likely outcome than success."*

Again, you can read our reply in full on the website.

You will shortly hear from various officers of the Society about activities in their sphere. But first I will give a brief overview.

I will start with the work which Janet Simkin has been coordinating on the Society's database. The database passed an impressive milestone during 2010 with the millionth record – one made by Peter Lambley for *Squamarina lentigera* on Ministry of Defence land in the Brecklands. Our database is a powerful resource, which will be accessible to all via the *National Biodiversity Network*. Through it, on behalf of the 'Big Society', we can track changes in the status of species with time, following the demise of some, the changing distribution of others and advise upon the impacts of pollution, climate change and habitat destruction. Deciphering what is happening and why is, of course, very complex but the first requirement is good data. Through the *Threatened Lichen Database*, we can follow in detail species of conservation concern. Janet is aided and abetted in this by the Data Committee, chaired by David Hill, and a team of data-inputters. On your behalf, I would like to say a huge thank you to Janet and her team.

And one can't think of data without thinking of maps. Mark Seaward has now been plotting the distribution of lichens in Great Britain & Ireland for several decades, providing a rapid turn-around of maps based on meticulously maintained data sets. Indeed, during 2010, in cooperation with Damian McFerran of the *National Museums of Northern Ireland*, Mark has brought out a new edition (the 3rd) of his *Census Catalogue of Irish Lichens* – one of several fitting outcomes of the *Lichen Ireland* project.

I will turn now to a hitherto unsung hero. She has a very long job title – *Assistant Treasurer & Membership Secretary*. Heidi Döring dived into her membership role with gusto and, if you are behind with your membership dues, please make her job easier before '*she get's onto your case.*' Heidi has put the most incredible hours into bringing our membership database up-to-date. It is always difficult for a Society to know how many members it has at any one time, especially when members omit to renew promptly. Our constitution permits us to award up to 2.5% of our members with honorary status. We have c.600 members, permitting 15 Honorary Members - the number we have currently. There are other members whom we would like to honour, but until we catch up on the back-log of renewals, or attract more members, we are unable to consider doing so. So, do please keep up-to-date with your membership and give Heidi your renewal if you have not already done so and a huge thank you for her sterling work in this regard.

Another unsung hero is John Skinner, our Treasurer. This is a crucial role in any Society and one which today we must ensure does not go unthanked.

During 2010 the Society published a *Conservation Strategy*, the result of hard work by the Chair of the Conservation Committee, Bryan Edwards. Not content with serving a decade as editor the Bulletin and a stint as President, Peter Lambley has now taken on the role of supporting Bryan as Secretary to the Conservation Committee.

During the year, the Society has dispersed funds graciously left to us by stalwarts who have gone before – Nancy Wallace, Alice Burnet, Oliver Gilbert & Tom Chester. In that, I am aided by John Skinner, Peter Crittenden, Ray Woods and Barbara Hilton (with Ivan Pedley looking over her shoulder!).

Likewise, mention of Pat and Barbara brings me to Open Air Laboratories – a project which introduced a new generation to lichens. Thanks go also to Linda Davies, Emma Green and Nathan Callaghan for the enthusiasm they brought to this project. Through OPAL, our *Education & Promotions Committee* has also benefited in that Emma & Nathan who now jointly chair that Committee. With assistance from the *Big Lottery Fund*, the *Field Studies Council* and the *British Lichen Society*, OPAL rides again with a series of introductory courses given by John Skinner, David Hawksworth, Rebecca Yahr, Alan Pentecost, Pat Wolseley, Robin Crump, Ivan Pedley and Holger Thüs – an example of huge collective effort on the part of the Society. Barbara Hilton has taken the lead on preparing a policy for ‘vulnerable people’ attending courses or field meetings.

If you go up to the Downs this year, your in for a big surprise – the Bristol Downs to be precise. Sheila Quin of this Society and Mandy Leivers *Biodiversity Education Officer for the Avon Gorge & Downs*, with advice from David Hill, have developed *The Downs Lichen Trail*.

In the course of our October meeting in Carmarthenshire, Ray Woods – a man who appears in a variety of guises, this time as our Librarian - kindly arranged for us to visit the *National Botanic Garden of Wales* where we were able to visit the *British Lichen Society Library* which is now housed there. We were welcomed by Margot Greer and her staff – all of them volunteers. Margot is a retired librarian and we were most impressed by the friendship and courtesy with which we were received and delighted to see our Library in such good hands. Margot had on display two first editions of books by Acharius³ the Swedish ‘father of lichenology’ and it was a joy to see members examining the revered texts.

No rapid review of the year or preview of the next would be complete without a mention of the role of the Field Meetings Secretary, Steve Price - a huge thank you to Steve for coordinating these.

Not content with chairing the Data Committee, David Hill has taken on the Chair of the *Members’ Services Committee* which – as it says on the tin – is intended to bring you an improved service. Early delivery will include the Society’s first ever

³ *Synopsis methodical lichenum; sistens omnes hujus ordinis naturalis...et observationibus selectis illustravit.*
Lundae: Litteris et Sumtibus Svanborg et Soc, 1814.

& *Lichenographia universalis; lichens detectos...et observationibus sollicitè definitas.* Göttinghae, apud Iust.
Frid. Danckwerts, 1810.

Handbook, issued with this Bulletin, and I thank all those who have commented on it in draft. Other ideas include the development of a 'welcome pack' for new members; do let David or members of his committee know of improvements or innovations you would like to see.

Another of our unsung heroes is Webmaster Jacqui Middleton. The *Members' Services Committee* is planning a major revamp of the Website and Jacqui has intimated her wish to bow-out later this year. The Society owes her a huge thank you for her work in maintaining the Society's window on the world. Until the revamped website is up and running, it is premature to invite expressions of interest in becoming Webmaster – but nevertheless, if you do have skills and interests in that sphere, we would like to know.

Two stalwarts of the Society deserve especial mention. Paul Cannon's editing of *The Bulletin* is becoming legendry. Opening the envelope to see what this issue's cover will be is a joy in itself. The Bulletin is the Society's flagship for our members – an essential insight to lichens, lichenology, lichenologists and their exploits. Peter Crittenden heads an impressive editorial team, bringing out 6 issues a year of the internationally acclaimed *Lichenologist*.

During 2007 to 2010, we were pleased to cooperate with Plantlife Scotland on their *Lower Plant & Fungi Project*, which has been in abeyance for a year. If the funding can be secured, it is hoped to commence a new phase this year and this Society has once more offered our support.

We can count ourselves fortunate in our continuing links with learned institutions. The *Natural History Museum* has been our home for over 50 years and we are delighted to be here again today. We also enjoy close links with the Royal Botanic Garden Edinburgh and the Royal Botanic Gardens Kew.

Not forgetting the younger generation, I was intrigued to hear Sally Eaton urging us to open a 'facebook' account! The BLS has entered the 21st century – we are now 'on facebook'!

Last but most certainly not least, I wish to thank Barbara Hilton, your Vice-President, for her constant and diligent support. As President, you often need to be able to bounce ideas and Barbara is always there to receive and react. So to Barbara, all your officers and not least yourselves for coming along today to support us – our sincere thanks.

Notice of Annual General Meeting 2012

The Annual General Meeting of the British Lichen Society for 2012 will be held at the National Museum of Wales on 4 February 2012. Further details will be supplied in the Winter 2012 Bulletin.

Responses to the Membership Questionnaire

Introduction

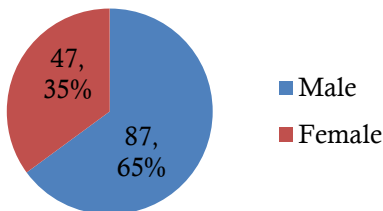
In 2009 the BLS undertook a strategic review of its activities. As part of this process the membership were asked to complete a questionnaire to help identify how the Society could best move forward, and to identify skills that members might have to offer the Society. This article summarises the responses to the questionnaire, highlighting some points of interest and suggests how the large amount of data collected might be used to further the Society's aims and provide a better service for members.

The number of people who responded to the questionnaire was 147 out of a total membership of 600; this represents a response of almost 25% which is very high for such a questionnaire.

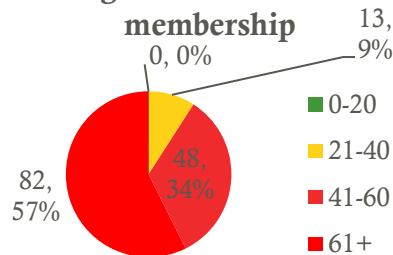
The questionnaire was divided in to eight sections; the results and comments follow a similar structure except for sections 2 and 3 which have been amalgamated. The graphical data was presented in poster form at the AGM in January and an outline given during the AGM.

Section 1. Gender, age and membership longevity

Gender of membership



Age distribution of membership



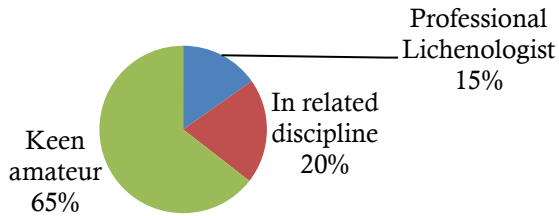
The first section of the questionnaire asked members about their gender, age and membership longevity. While there are no surprises about the gender split and age profile of members, we can see that the length of membership as a more even distribution indicating that there is a steady influx of new members and on the whole new members are retained. The age and gender split in the society is broadly in line with the findings of the Natural History Societies consultation undertaken by the Opal Project and Imperial College Hindson & Carter (2010).

Section 2 & 3. About you and your interests

Sections 2 and 3 asked if members were professional lichenologists, in a related discipline or were interested amateurs. This section also asked people to indicate

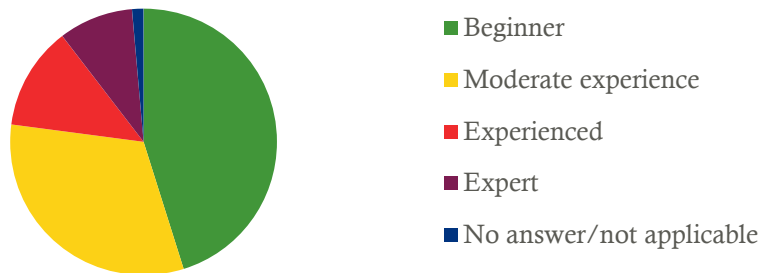
their level of expertise with lichens. The section also went on to gauge the level of interest in other areas of natural history and why in particular they joined the BLS. By far the majority of members consider themselves to be keen amateurs and many of these are also members of other natural history societies. A significant number of members are professional lichenologists or are in a related discipline. It should however be noted that a good proportion of those describing themselves as professional are either retired or work outside of the UK.

Professional Status



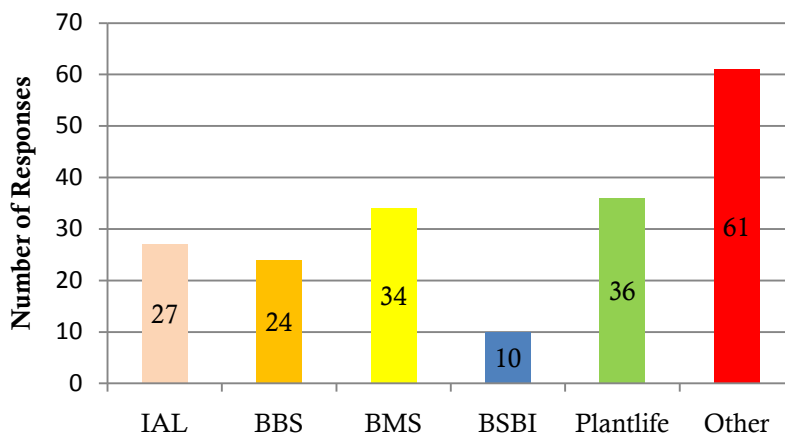
The 'pie chart' showing the level of expertise (below) hides a degree of modesty! Having read all the questionnaires it is apparent to me that many members who consider themselves to be of moderate experience are indeed a good deal more expert than they claim to be judging from their publications and field knowledge of lichenology!

Skill level



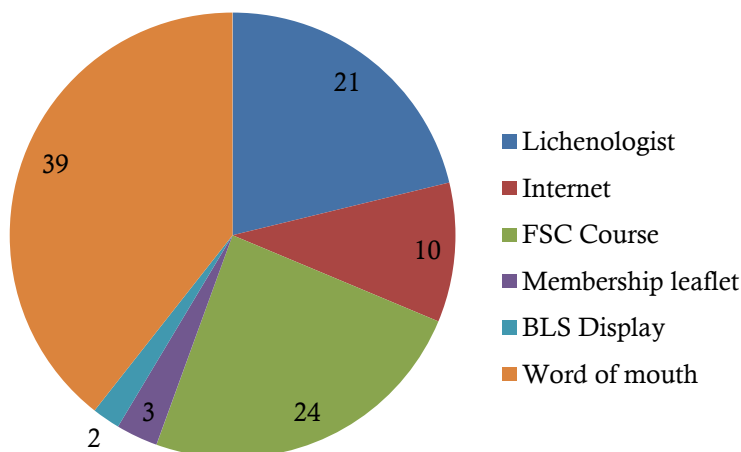
Most BLS members are keen all round natural historians; this is clearly indicated in the bar graph below. Most BLS members are members of other natural history societies, a significant number of respondents said they were members of many other natural history societies and at least 23 societies were mentioned by name. Once again this is in line with the recent study undertaken by Hinson & Carter. It might be worth the BLS considering forging closer links with other societies with a view to recruiting new members.

Membership of other Societies



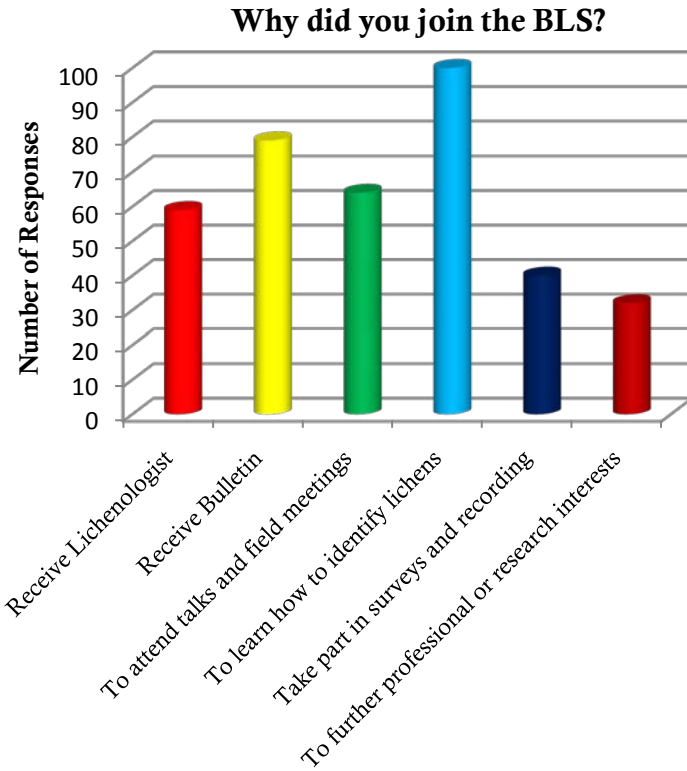
Members find out about the society in a variety of ways but a large proportion (39%) stated that they found out about the Society by word of mouth, a number of respondents even gave the name of the person who introduced them to the society; clearly 'word of mouth' is an excellent marketing tool for the BLS. If existing members are pleased with what they get from a society, others are encouraged to join. It is also clear that many members find out about the society by attending Field Studies Council courses. In addition the highly respected lichenologist draws many professionals and academics to become members of the society.

How did you find out about the BLS?



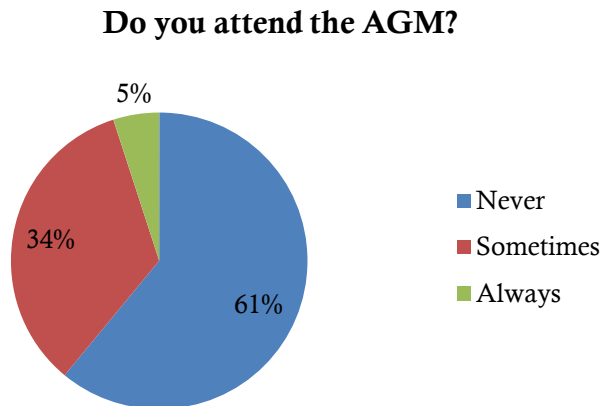
In answer to why did you join the BLS many respondents gave more than one answer. It is however clear that the opportunity for beginners to identify lichens and for the more experienced to consolidate their lichen knowledge is a major attraction.

It is also clear that members appreciate the above been delivered through our well organised field meetings. The other major attraction is the quality of our two publication; both the Bulletin and the Lichenologist are highly regarded by members.



Section 4. BLS Meetings

The pie chart (next page) indicates that 61% of members never attend the AGM; this figure hides the fact that a significant number of the membership live overseas and find it difficult to attend such meetings. The 5% who always attend are likely to be those members who



are involved with the day to day running of the Society through its many committees and specialist groups. The majority of members residing in the UK attend the AGM as and when they can.

Those who commented on the quality of events within the AGM found them good. The large number of 'no comments' arose due to the fact that some UK based members and most members residing overseas do not attend the AGM.

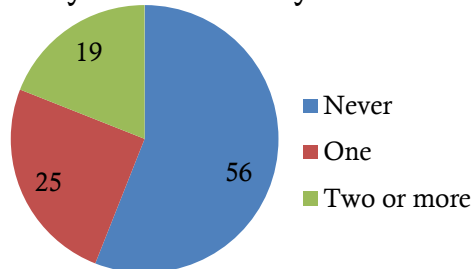
Section 4b. Comments on the format of the AGM and associated events

	Good	Poor	No answer/no comment
Quality of speakers	23 (100%)	0 (0%)	108
Content of talks	23 (100%)	0 (0%)	108
Buffet	15 (65%)	0 (0%)	117

BLS Field Meetings

It is clear that many UK based members see the field meeting as a real highlight, as do the small number of overseas members who attend the these meetings. The majority of people attending field meetings rated them as good to excellent. A few individuals found the timing and the location of the field meetings difficult, at the end of the day it is difficult 'to please all of the people all of the time.' If individuals do have suggestions for particular locations or a preference for certain times of the year they might like to contact the Field Meeting Secretary Steve Price and talk through their ideas.

How many field meetings do you attend each year?



A large number of respondents felt that the setting up of local groups and strengthening existing local groups was a good idea. Council and the Membership Services Committee are promoting and helping to maintain local groups wherever they can. The strength of a local group is very much dependent on members and interested parties turning up, and of course the quality and focal point of a leader/coordinator. During the past 2 years the Somerset group have been very active, David Hill has organised 10 visits and there is a full programme of visits on offer for the coming year. If you are interested in joining a local group you will find details on the web-site. Local groups welcome all BLS members and anyone with an interest in lichens to their meetings.

In addition to local meetings there is also interest in the BLS organising meetings outside of the British Isles. Escaping the short and cold day of winter for a warmer lichenological experience sounds like a good idea to me. You could make a start by attending the International Association for Lichenology meeting in Thailand next January; there are four field excursions been organised as part of this meeting. I have considerable experience in organising International mountain expeditions; I am willing to act as a focal point for discussions relating to overseas meetings.

Section 4di. How do you rate BLS field meetings on a scale of 1 to 5 (1= poor, 5 = excellent)

	Score					N/A & No Answer
	1	2	3	4	5	
Quality of leaders	0	0	1 (2%)	14 (25%)	42 (74%)	80
Help with identification	1 (2%)	0	7 (13%)	17 (30%)	31 (55%)	80
Length of time of meetings	0	1 (2%)	8 (14%)	18 (31%)	31 (53%)	80
Location	2 (4%)	5 (9%)	12 (21%)	7 (13%)	30 (54%)	80
Timing of meetings	0	3 (6%)	8 (15%)	20 (37%)	23 (43%)	81

Section 4dii Are there other field meeting you would like to see organised?

Type of meeting	Yes response	No comment
Beginners Field meetings	57	40
Small scale workshops on particular groups or habitats	61	40
Local Groups	66	40
Foreign meetings (ie not in the British Isles)	20	40

Section 5. BLS Publications

It is clear that the BLS publications are a resounding success with the vast majority of the membership. Many people included additional comments saying that either one or other of the publications was outstanding. Some members commented that the *Lichenologist* was too technical and biased towards molecular phylogeny and felt that there should be more UK based papers with ecology, conservation and biodiversity slants. It was noticeable that professional/expert lichenologist had a tenancy to rate the *Lichenologist* higher than the *Bulletin*; and for the amateur enthusiast to rate the *Bulletin* higher than the *Lichenologist*: maybe this just represents the diverse nature of our society and its all-inclusive approach?

How you rated the BLS publications on a scale of 1 to 5 (1 = poor, 5 = excellent)

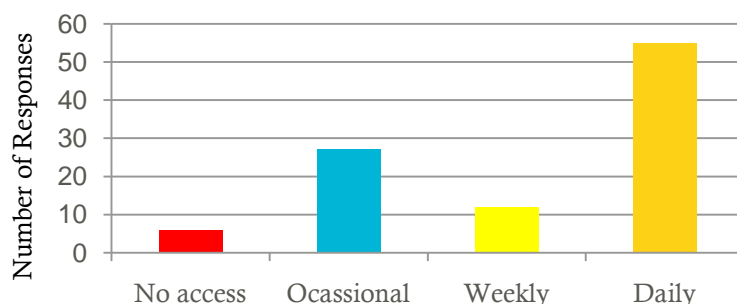
Publication	Score					No Comment
	1	2	3	4	5	
Bulletin	0	3 (2%)	12 (9%)	45 (33%)	76 (56%)	3
Lichenologist	5 (6%)	5 (6%)	9 (10%)	17 (19%)	54 (60%)	2

Section 6. BLS Website

Electronic communications have a major impact on the way the society is run, 55% of the membership access the internet daily, and almost all use it at some time. But we must not forget that 5% of the membership does not have access to the internet. 78% of members have visited the web-site at some stage and comments indicate that some members visit it on a regular basis. While many respondents rated the web-site as good to excellent a few were critical that it did not offer enough in terms of publications and details of events and a few people found the presentation not to their liking. Many members feel that more features could be offered: items and information about local groups; and more members lichen photographs are a popular request, but a few said why bother to duplicate Mike Sutcliff's site! Others requested an on-line survey and recording facility and habitat lists and notes about specific sites. A discussion forum is also a popular request.

I know that Council are aware how important the web-site is to the society and are giving it some priority in terms of effort and funding. Clearly the 'on line world' is moving us forward at a rapid rate and 'evolving dinosaurs' like me don't always have the brain capacity to keep pace with it! The report by Hindson and Carter referenced above highlight the importance of good affective web access and recommend that societies work together to disseminate best practice. BLS council realise the importance of an easily accessible, easy to use and informative web-site and are doing all in its powers to produce this.

How often do you access the internet?



How do you rate the BLS website on a scale of 1 to 5? (1 = poor, 5 = excellent)

Attribute	Score					No answer
	1	2	3	4	5	
Presentation	1 (1%)	5 (6%)	13 (16%)	34 (41%)	28 (35%)	53
Navigation	0	1 (1%)	11 (14%)	42 (54%)	24 (31%)	54
Event details	0	4 (5%)	14 (18%)	36 (47%)	23 (30%)	56
Recording details	0	3 (4%)	18 (26%)	32 (46%)	16 (23%)	56
On-line publications	4 (6%)	7 (10%)	13 (19%)	28 (42%)	15 (22%)	57
Links to other lichen sites	1 (1%)	2 (3%)	13 (19%)	33 (49%)	18 (27%)	57

C) What would you like to see more of on the BLS website?

Website Feature	Yes	No comment	Number of comments received
Items about local BLS Groups	52	50	7
Details of BLS events	29	51	1
Members' lichen photos	54	49	2
Information about identification of plants/animals	35	53	2
Discussion Forum	29	52	4
On-line surveys/recording	36	54	8

Section 7. What would you like to see the BLS do more of?

In this section there is a good response to all the activities suggested in the questionnaire. Beginners ID courses with and without field meetings are popular as is the demand for local groups already highlighted in sections 4 and 6 above. Workshops on specific and difficult lichen groups were needed, as were workshops on the techniques to identify lichens. The society are fully aware of the demand for such courses and realise their importance and will do everything in its power to find the resources to expand the courses and meeting already provided. A greater advocacy for lichens at international level was identified as being important, this fits clearly with the realisation that species have no concept of political boundaries and also fits well with those people who would like to see overseas field visits identified above.

Activities	Yes	No answer	Comments received
Beginners' ID courses and field meetings	68	36	8
Local groups	64	37	2
Advanced workshops on specific groups	40	39	4
Workshops on microscope and other techniques	49	39	4
Specialist analysis/identification service (e.g. TLC)	37	40	1
One day meetings	47	38	2
Advocacy for lichens at a national/international level	45	41	7

Section 8. Which of the following could you do for the BLS?

There were 120 responses to this section, some people offered help with many activities while others did not have the capacity to make a contribution at this stage in their lives. The lack of time and the low numbers of active members is a challenge for all natural history societies identified by Hindson and Carter 2010. I think the turnover of officers and roles within our society reflects the time and energy available at various stages of our natural life cycle. Hence we should not be disappointed at the high number of 'no answers', this just reflects the fact that these people are busy. However what we must do is take full advantage of all the skills that members with time and energy have to offer. To this end I know that some of those who identified themselves have already been contacted and I am sure the rest of you will be called upon in due course.

Activities	Yes	No Answer	Comments Received
Help man stands at events	17	72	6
Contribute photos/articles for the website or Bulletin	30	65	4
Speak at indoor meetings	10	71	0
Help with IT skills	10	71	1
Help with money matters	1	72	0
Help with library	8	72	1
Lead field meetings	13	70	1
Run workshops	6	72	2
Write publications	20	73	2
Serve on BLS Council	5	73	0

Conclusions

The overriding message from the responses is that membership are positive about the services provided. The *Lichenologist* and *Bulletin* are highly rated by the membership, those people who attend meetings and other activities feel that the quality is good and above all else the society is a friendly and welcoming place. A great strength of our Society which comes through the responses loud and clear is the Society's ability to accommodate professional and expert lichenologists with amateurs to the mutual benefit of both, however this should not surprise us as we are dealing with lichens! It is clear that as a modern and evolving society we must fully embrace new technology and use this to the mutual benefit of all members, and at the same time use the internet to engage the public and continue to forge links with others.

The BLS membership is diverse in the skills it can offer, the society needs to better tap in to these skills when they are available for use.

The BLS is an important spoke in the biodiversity wheel. Natural history is the foundation of what is becoming known as ecosystem services which will shortly be acknowledges as having economic value. A modern society will need to take advantage of such new concepts.

Reference

Hindson, J. & Carter, L. (2010). *Natural History Societies & Recording Schemes in the UK: A consultation in to the factors that limit their functioning and development*. Angela Marmot Centre for UK Biodiversity, Natural History Museum, London

A big thanks to all those who responded to the questionnaire, and especially to Peter Lambley and Heidi Döring.

Graham Boswell
 togooutdoors@hotmail.com

Membership Services Committee Report

Some while ago, Council realised that the amount of business on its agendas was too great and in order to get through it all, its meetings were too long. As a measure to help this situation a Membership Services Committee was set up to deal with matters relating to the Society's members (if you want to see the Terms of Reference please email or write to me). This has now met three times since last October. As Chairman I report on what we have achieved and what we are still trying to do as follows.

Heidi has been doing an excellent job as Membership Secretary and we have been working with her and supporting her in simplifying her tasks. Members who are slow in renewing, or who neither resign nor renew, are still taking a lot of her time. **MEMBERS PLEASE BE PROMPT IN RENEWING YOUR SUBSCRIPTIONS (DUES)**, or let Heidi know if you no longer want to be a member. There have been many time consuming matters that have accrued over the years that bring comparatively little benefit to the Society or its members and we are trying to reduce them. We are looking for a volunteer who can help with the posting of the Welcome packs to new members, if you could help please contact Heidi (h.doring@kew.org).

Steve has been running the field meetings with aplomb and anyone who has been on one can vouch for their excellent value – well organised and in really lichenologically interesting places. However, with the times we live in, we have to do some extra paperwork and we have developed suitable procedures for Health and Safety, Disadvantaged People and accountability (feedback suggestions!).

As Members we all want to see value for our membership subscriptions. So we have looked carefully at the all the benefits that Membership brings. We are planning to use these to steer our future agendas in our efforts to improve the benefits and oil the wheels of the publicity machine to encourage people to join and to keep members. If anyone wants this list, please ask me for the word.doc by email or write.

New members need to be encouraged in developing their interest and skills in one of the world most difficult groups of organisms and we have given a lot of thought to a “welcome pack” sent to people when they first join. This is mainly paperwork but we retain an open mind as to what it could contain.

Lastly but not least, Steven Ward has done sterling work on writing a Members Handbook. This was an urgent matter and he kindly set about it before the MSC got up enough steam to undertake the task. We have now revised it and arranged for printing and it should be included with this edition of the Bulletin. We would be very grateful indeed for comments and suggestions (email or write) as we will be revising it as time goes on to keep it up to date.

We still have much to get on with including the Society's Herbarium and the Library. These are wonderful and valuable assets that are presently little used but can offer a wealth of interest and help for our Members once we communicate what they offer and set up user friendly procedures for loans etc.

If there are other matters you think we could deal with, please let me know!

David Hill, Chairman (d.j.hill@bris.ac.uk or Yew Tree Cottage, Yew Tree Lane, Compton Martin, Bristol BS40 6JS).

Data Committee Report

It is a while since the Bulletin had a report of the work of the Data Committee. Our priority is still the mobilisation (jargon for computerisation) of the England and Wales records. This mammoth project is progress well and we are getting to the point where we have done most of the records now. Of course there will be no end of records “coming out of the woodwork” as it were and there will hopefully be lots of new records to add as an ongoing process. But we have captured the greater bulk of the existing paper records that’s to enormous amount of work by many people. Last autumn we added, as you may know from Sandy Coppins’s article in *British Wildlife*, the millionth record to the database. This milestone is a major achievement and demonstrates the progress that we have made.

The Mapping Scheme data can be accessed via the National Biodiversity Gateway (as can the Scottish data) and, hopefully in the not too distant future, the E&W data but these still need more work done on them. These data are also accessible via the Global Biodiversity Information Facility (<http://www.gbif.org/>) so that you can now see world distributions of British species.

We have been able to create some useful outputs from the project already. Frank Dobson’s new edition of his book will have maps generated by Janet and will show records pre-1960, 1960-2000 and post 2000 (with a hand lens!). This will help us see how much species have changed in more recent times than before. The Environment Agency has requested data for rare lichens to help with the licensing of development projects such agricultural animal units which could potentially cause pollution damage to biodiversity. We have received a contract and £10k to develop a special data set for the EA for this purpose. Our contact there, Nicola Barnfather, said that the EA is expected to spend no longer than 20 minutes in seeking whether or not to approve a license on environmental grounds. The conservation committee is developing a project to revisit Lobarion sites to see how these species are surviving in our changing environment. Data for the previously known location of key species will be provided by the database.

The EA has also sent out information on a proposed project to develop the use of volunteer natural historians in obtaining and analysing biodiversity information they collect. The two main emphases are on analysing the serendipitous records we collect and on developing standardised methods for data collection that is more suited to robust scientific statistical methods of analysis.

We have struggled to get another fascicle together for publication. Top of the list is the lirellate species. We plan to produce this as a pdf and in the same format as the previous hard copy fascicles and then put it on the BLS website. Further fascicles data will be directed towards the new website which will have a facility for separate pages for each species.

We have revised the general and churchyard mapping cards which will be downloadable from the BLS website as the previously. We can produce cards on a regional basis if required.

If you have any comments about this please email me.

David Hill, Chairman (d.j.hill@bris.ac.uk)

Ray Woods, recipient of the *Ursula Duncan Award*, January 2011

It is my pleasure to speak on behalf of Sandy Coppins who unfortunately cannot be here today. She proposed a member of the Society who has done so much behind the scenes that we have perhaps taken his presence for granted. He is Ray Woods that easy greeting, that cheerful presence – though some would say the arch-cynic and doom-monger – that epitomises Ray Woods. Ray can – and will – talk to anyone, but he is always willing to listen, to share and enlighten. A great teacher; many have benefitted from Ray's careful observations, often delivered in a slightly diffident manner that belies his enormous fund of knowledge. But all would agree that this man is that rarity, being something of a polymath; as exemplified in his *Flora of Radnorshire* (1993) in which uniquely, the flowering plants are complimented by inclusion of the Pteridophytes (ferns, clubmosses, horsetails), the stoneworts, the bryophytes, the lichens, and (unusually) the rust and smut fungi. As Francis Rose said in the Foreword:

'Ray Woods is an excellent naturalist and a remarkable botanist, with expert knowledge of mosses, liverworts and lichens, a rare ability these days.'

Ray's contribution to lichenology is hard to pin down; it is difficult to know where to start because he has been around for a long while, and is so active in many spheres (often 'behind the scenes') that maybe the full range of his achievements in lichenology are not widely known to the general BLS membership. Ray has been professionally employed in the conservation of wildlife in Mid Wales for nearly 40 years, mostly as a senior officer with the Nature Conservancy Council / Countryside Council for Wales (CCW), and latterly with Plantlife. In this role he has been a stalwart for working tirelessly to promote and raise awareness of lichens with Government Agencies, with politicians (local and national), in appearing at Public Enquiries – all hugely time-demanding and thankless tasks that need a respected and well-informed champion such as Ray to state the case for lichens.

This man is a great communicator. He has always risen to the challenge of presenting talks on lichens (often in the evenings or at weekends) to local Wildlife Trusts, to conservationists and to farmers' groups, all with the belief that by making the effort, it will make a difference. At the *Royal Welsh Show*, Ray can be found manning a stall promoting lichens. Ray has even been something of a fashion icon by modelling a multicoloured sweater, the colours being derived from lichen dyes, as can be seen in Oliver Gilbert's *New Naturalist* volume on lichens. He is now a well-known face on local Welsh (and national) television and radio, speaking up not only for lichens, but for the wider countryside issues, which will impact on the lichen interest as well. Many of us will have woken to Ray's voice on that Sunday early morning programme on the radio and have immediately moved from sleep to a wonderfully described world of waxcap fungi or lichens.

Outside Wales, not many people are aware of the compilation of *A Census Catalogue of Welsh Lichens* (1999, done in collaboration with Alan Orange). This is a major achievement, and again, is an example of the tireless and dogged commitment that Ray is able to give to tasks that few would want to attempt.

A similar collaborative project that has needed all of Ray's staying powers was *A Conservation Evaluation of British Lichens* (Woods & Coppins 2003). This was a ground-breaking document, providing an evaluation of the conservation importance of all British lichens known at that time. This called for a huge dedication and a great deal of collaboration with colleagues, but Ray was able to jolly everyone along to keep the project going. Ray (and Brian Coppins) are again taxing themselves with an update of this useful reference, hopefully due out shortly. Another milestone in 2003 was the *Lichen Flora of Brecknock* (privately published by Ray, with support from the BLS).

Ray has been a member of the Society for what seems countless years; over that time he has served on the Conservation Committee, and been elected to Council on many occasions, being valued for his hard-working approach, his dedication, and his huge experience. Ray was President of the BLS between 1996 and 1998 stepping in at short notice when the then vice president was unable to take up the post.

Ray has been a pillar within the BLS, his contribution largely unsung and unrecognised. However I am sure that Ursula Duncan, another polymath, would have recognised in Ray someone rather like herself and would have been delighted with his nomination. It is therefore with great pleasure I can say that the Society has now recognised his tireless efforts in promoting the interest and conservation of lichens by the presentation of the Ursula Duncan Award.

Peter Lambley on behalf of Sandy Coppins

Nominator: Sandy Coppins, supported by Ishpi Blatchley, Brian Coppins, Peter Lambley, Steve Price & Stephen Ward.

Post-AGM Field Meeting: Ashted Common, 16 Jan 2011

Following the 2011 AGM, a one-day field meeting was held on Ashted Common, just to the south-west of London and close to the M25 orbital motorway. Despite its unpromising location, Ashted Common is a National Nature Reserve, managed by the Corporation of London. The Common is an ancient area of park woodland with over 2,300 ancient oak pollards providing a stable habitat for many rare and endangered deadwood species. The Common is a mosaic of woodland, grassland, scrub and various wetland habitats - ponds, streams, ditches, springs and a well.

The large area of oak pollards (relic woodland pasture) provides an important habitat for lichens, mosses and liverworts, and is renowned for its invertebrates. Over 1,000 species of beetle have been recorded, of which more than 150 are internationally rare species. Non-lichenized fungi include specialities such as the BAP-listed oak polypore (*Piptoporus quercinus*) and the area was surveyed for microfungi quite extensively in the past by IMI staff, but apart from a similar one-day meeting held in 1996 (see the *Bulletin* 78: 26) there does not seem to have been a systematic attempt to record the lichens.

On a bright sunny day, around 20 BLS members and sympathisers gathered for the event. Typically for such events, it proved difficult to entice participants from the edge of the Common (several species were recorded from the gate-posts), but soon more traditional habitats were being studied.

The first real challenges to identification occurred on the parapets of the small bridge at TQ179593. A species of *Lecania* was frequent on the horizontal surfaces of the bricks which Mark recorded as *erysibe*; this is how it would be recorded by the Churchyard Sub-committee. He thinks that some records of *erysibe* may actually be referable to *L. inundata* which is common but over-looked. Brian Coppins can tell these two apart but few others seem to have got to grips with them. There were various species of *Verrucaria* present – many of the dark patches were *V. nigrescens* – along with *V. macrostoma* f. *macrostoma* and *V. viridula*. Steve pointed out smaller perithecia in the mortar joints with neatly “drilled” ostioles and these were good candidates for *V. muralis*.

Punctelia borreri was recorded in the scrub to the south of the area of old oaks; a collaborative decision based on its flattened appearance and black underside. It was not collected, being rare in (or perhaps new to) the London area. Many other species were recorded, with highlights including a single thallus of *Usnea subfloridana*. At the lunch stop just south of Flag Pond, Ishpi and Mark independently collected specimens of *Porina*. Mark’s specimen, from hazel, is typical of *aenea* in pigmentation and spore size. Ishpi’s specimen, from field maple, has K+ blue/grey pigment in the involucrellum and slightly larger spores. If one were blindly following the key in TLGB&I, the presence of this pigment would lead away from *aenea/chlorotica*.

Mark has met this problem once before and Brian thinks that *aenea* CAN contain this pigment and thus he would consider this specimen to be within the range of characters exhibited by *aenea*. On an old hazel there was an abundance of *Arthonia spadicea* near the base and another *Arthonia* with smaller, flatter and more stellate apothecia further up the stems. This was confirmed by microscopic features to be *A. didyma*.

The veteran oaks not suprisingly proved to be the main draw for the field recorders, with a number of pinhead lichens on rotting lignum. One had chlorococcoid algal cells, spherical spores c. 3-4 microns, and a thallus reacting Pd+ yellow, and proved to be *Chaenotheca brunneola*. On the Picnic Oak a pinhead with a more organised, bluish thallus looked like *C. trichialis*, later confirmed by microscopic examination. *Calicium glaucellum*, *C. salicinum*, *C. viride* and *Chaenotheca brunneola* were also recorded. A more in-depth survey of the lichens in this habitat would certainly be justified.



Phlyctis argena on oak bark, near the bridge over the Rye Brook

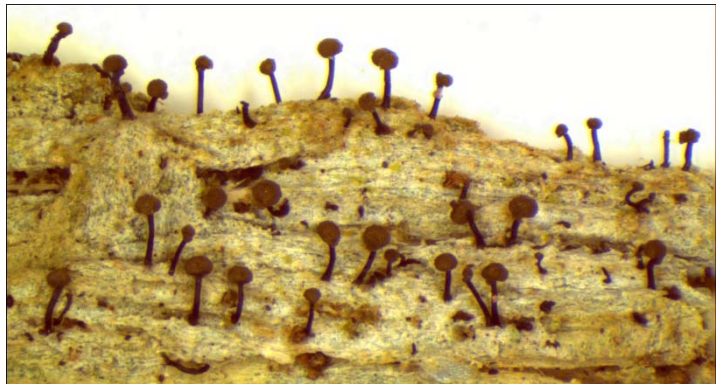


Lichen hunting under the Picnic Tree. Image © John Norton

It was on those wonderful lying dead oak limbs that identification became most difficult, especially due to the presence of mixed stands of *Cladonia* spp.. David and Barbara B. both found a lichen with pruinose apothecia on hard weathered lignum. In the field there was a mention of a *Diplotomma* that is sometimes found on wood but microscopically this lichen was shown to be a *Lecanora*. The only spot reaction it gives is a slight KC+ yellow. It has numerous pycnidia of at least two sorts. It is undoubtedly a member of the *Lecanora saligna* group and it may be more interesting than *saligna* itself. It will need referring to a *Lecanora* expert.

A total of 106 species of lichens and lichenicolous fungi was recorded, a substantial increase on the list to date. Many thanks to all who contributed to the success of the event – not least to Pat and David Hawksworth for tea and cakes afterwards.

Paul Cannon and
Mark Powell
p.cannon@cabi.org



Chaenotheca brunneola

Records from Ashted Common	Unlocalised	Beside bridge to common	Bridge over stream	Scrub by track to N of bridge	Area with old oaks SW of Flag Pond	Common to S of railway	Area with old oaks with old decayed oaks	Area with old oaks SW of Flag Pond	Old oak area to W of Flag Pond
		TQ 180591	TQ 179593	TQ 179594	TQ 177602	TQ 180589	TQ 176600	TQ 176599	TQ 175602
<i>Amandinea punctata</i>	•					•			
<i>Anisomeridium bifforme</i>				•					
<i>Anisomeridium polypori</i>				•	•				
<i>Arthonia didyma</i>					•				
<i>Arthonia punctiformis</i>	•								
<i>Arthonia radiata</i>				•					
<i>Arthonia spadicea</i>					•				
<i>Athelia arachnoidea</i>				•					
<i>Calicium glaucellum</i>							•		
<i>Calicium salicinum</i>	•								
<i>Calicium viride</i>					•				
<i>Caloplaca crenulatella</i>			•						
<i>Caloplaca flavocitrina</i>	•	•							
<i>Caloplaca lithophila</i>		•							
<i>Caloplaca oasis</i>	•								
<i>Caloplaca obscurella</i>				•					
<i>Candelaria concolor</i>				•					
<i>Candelariella aurella</i>			•						
<i>Candelariella reflexa</i>	•			•					
<i>Catillaria nigroclavata</i>				•					
<i>Chaenotheca brunneola</i>					•				
<i>Chaenotheca ferruginea</i>					•				
<i>Chaenotheca trichialis</i>							•		
<i>Cladonia chlorophaea</i>				•					
<i>Cladonia coniocraea</i>					•				
<i>Cladonia digitata</i>									•
<i>Cladonia furcata</i>							•		
<i>Cladonia macilenta</i>					•				
<i>Cladonia parasitica</i>					•				

Records from Ashted Common	Unlocalised	Beside bridge common	Bridge over stream	Scrub by track to N of bridge	Area with old oaks SW of Flag Pond	Common to S of railway	Area with old oaks SW of Flag Pond with old decayed oaks	Old oak area to W of Flag Pond
<i>Cladonia polydactyla</i>	•							
<i>Cladonia pyxidata</i>				•				
<i>Cladonia ramulosa</i>					•			
<i>Cliostomum griffithii</i>					•			
<i>Collema tenax</i>			•					
<i>Dimerella pineti</i>				•	•			
<i>Diploicia canescens</i>	•							
<i>Evernia prunastri</i>			•	•			•	
<i>Fellhanera bouteillei</i>			•	•				
<i>Flavoparmelia caperata</i>		•		•			•	
<i>Flavoparmelia soledians</i>		•		•				
<i>Fuscidea lightfootii</i>				•				
<i>Hypocenomyce scalaris</i>					•			•
<i>Hypogymnia physodes</i>				•				
<i>Hypogymnia tubulosa</i>				•				
<i>Hypotrachyna revoluta</i>				•				
<i>Illiosporiopsis christiansenii</i>				•				
<i>Intralichen christensenii</i>				•				
<i>Jamesiella anastomosans</i>			•	•				
<i>Lecania cyrtella</i>				•		•		
<i>Lecania erysibe</i>			•					
<i>Lecania naegelii</i>						•		
<i>Lecanora albella</i>				•				
<i>Lecanora cf albella/sarcopidioides</i>					•			
<i>Lecanora albescens</i>		•	•					
<i>Lecanora campestris subsp. campestris</i>		•	•					
<i>Lecanora carpineae</i>		•	•					
<i>Lecanora chlorotera</i>		•		•		•		
<i>Lecanora compallens</i>				•				
<i>Lecanora confusa</i>		•						
<i>Lecanora dispersa</i>		•	•					
<i>Lecanora expallens</i>		•				•		

Records from Ashted Common	Unlocalised	Beside bridge	Bridge over stream Bridleway to common	Scrub by track to N of bridge	Area with old oaks SW of Flag Pond	Common to S of railway	with old decayed oaks	Area with old oaks SW of Flag Pond	Old oak area to W of Flag Pond
<i>Lecanora intricata</i>		•							
<i>Lecanora persimilis</i>							•	•	
<i>Lecanora symmicta</i>		•		•					
<i>Lecidella elaeochroma f. elaeochroma</i>		•				•			
<i>Lecidella stigmatea</i>		•	•						
<i>Lepraria incana s. str.</i>		•				•			•
<i>Marchandiomyces aurantiacus</i>				•					
<i>Melanelixia subaurifera</i>		•		•		•			
<i>Melanelixia glabrata</i>	•		•	•					
<i>Micarea denigrata</i>		•							
<i>Micarea micrococca</i>				•					
<i>Micarea prasina</i>					•				
<i>Microcalicium ahlneri</i>					•				
<i>Normandina pulchella</i>				•					
<i>Parmelia saxatilis</i>				•					
<i>Parmelia sulcata</i>		•		•		•	•		
<i>Parmeliopsis ambigua</i>				•					
<i>Parmotrema perlatum</i>				•					
<i>Phaeophyscia orbicularis</i>						•			
<i>Phlyctis argena</i>				•					
<i>Physcia adscendens</i>		•		•		•	•		
<i>Physcia aipolia</i>		•		•					
<i>Physcia tenella subsp. tenella</i>		•		•					
<i>Physconia grisea</i>					•				
<i>Placynthiella icmalea</i>				•					
<i>Placynthiella uliginosa</i>					•				
<i>Porina aenea</i>					•				
<i>Punctelia borrieri</i>				•					
<i>Punctelia jeckeri</i>				•					
<i>Punctelia subrudecta</i>				•					
<i>Ramalina farinacea</i>				•			•		
<i>Ramalina fastigiata</i>				•					

Records from Ashted Common	Unlocalised	Beside bridge to common	Bridge over stream	Scrub by track to N of bridge	Area with old oaks SW of Flag Pond	Common to S of railway	with old decayed oaks	Area with old oaks SW of Flag Pond	Old oak area to W of Flag Pond
<i>Rinodina oleae</i>						•			
<i>Schismatomma decolorans</i>					•				
<i>Scoliciosporum chlorococcum</i>		•		•	•				
<i>Trapeliopsis flexuosa</i>				•	•				
<i>Trapeliopsis granulosa</i>					•				
<i>Usnea subfloridana</i>				•	•				
<i>Verrucaria macrostoma f. macrostoma</i>			•						
<i>Verrucaria muralis</i>			•						
<i>Verrucaria nigrescens f. nigrescens</i>			•						
<i>Verrucaria viridula</i>			•						
<i>Xanthoria parietina</i>		•		•		•	•		
<i>Xanthoria polycarpa</i>		•	•	•		•			
<i>Xanthoriicola physciae</i>				•					

Obituary: Gill Stevens



Image courtesy of the Natural History Museum

aspects of biodiversity and conservation at the NHM. In 2000 she became biodiversity co-ordinator for cryptogamic plants, when among other things she organised the 'Elm map' project which involved the public in mapping elm trees and

Dr Gill Stevens, head of UK Biodiversity at the Natural History Museum (NHM) and Deputy Director of the OPAL project, enthusiastic and gifted member of the BLS, died on 12 January 2012. Gill had been a member of the Society since starting as a researcher on lichen algae at the NHM in 1992, which is when I first met her. Her PhD at Manchester in 1991 was on ferns but since that time she has been involved in many different

lichenologists in hunting for *Caloplaca luteoalba*. In 2005 she became head of UK biodiversity at the NHM and was instrumental in setting up the Angela Marmont centre where Holger and I enjoyed running one-day lichen courses this year. In her role as deputy director of the OPAL project, she spent long working hours and weekends putting together the Big Lottery fund application together with Linda Davies, and in helping us to develop the 'Lichens and Air quality' project. Even then there were bouts when Gill disappeared to the Marsden or other hospitals where they tried to control the cancer. She was a brilliant interpreter and could capture the interest of both adults and children as this picture of her in waders in the Wildlife garden showing children aquatic life demonstrates. Right up to the end she retained this enthusiasm so that it came as a shock to those of us who knew and enjoyed working with her that she could be snatched away, aged only 45. We gathered to say goodbye to her in Roehampton cemetery in the chapel which was packed with people from all walks of life and afterwards we shared good memories accompanied by pictures put together by her husband Graham Castles.

Pat Wolseley
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NEW MEMBERS October 2010 to May 2011

Welcome to the following new members of the British Lichen Society ...

Miss N. Abah, Argyll, UK	Miss N. Marten, Brighton, UK
Dr Z. Abdurahimova, Arlington, USA	Mr P. Martin, Cumbria, UK
Ms N. Bacciu, Devon, UK	Mr C. Mason, Oxfordshire, UK
Miss J. Beadle, Yorkshire, UK	Mr J. McGee, Tyne and Wear, UK
Mr G. Bristowe, Yorkshire, UK	Mr T. McIlveen, Antrim, UK
Mr B. Burns, Aberdeenshire, UK	Dr A. Mezaka, Riga, LATVIA
Ms A. Castagni, Merseyside, UK	Mr B. Middleton, Sussex, UK
Mr D. Christie, Edinburgh, UK	Dr A.M. Millanes-Romero, Madrid, SPAIN
Dr M. Cotton, Lancashire, UK	Dr D.W. Minter, Yorkshire, UK
Miss G. Driver, Worcester, UK	Miss C. Murdoch, Edinburgh, UK
Ms A. Dunn, Ayrshire, UK	Miss F. Newcombe, Morayshire, UK
Mrs M. Ellis, Evanston, U.S.A.	Dr S.E. Nicholls, Sheffield, UK
Mr D. Fullman, Gloucestershire, UK	Mr J.A. Norton, Hampshire, UK
Mr L.V. Gregory, Norfolk, UK	Dr E.H.N. Oakley, Isle of Wight, UK
Miss A.V. Herbert, Liverpool, UK	Ms H. Paxman, Suffolk, UK
Mr M.F. Hodges Jr., Riverdale, USA	Mr J.K. Pool, Cheshire, UK
Mr J. Hollinger, Waynesville, USA	Dr J. Roche, Dublin, IRELAND
Mr I. Jamieson. Dublin, IRELAND	Ms H. Thomas, London, UK
Dr M. Kossowska, Wroclaw, POLAND	Mr E.J. Tripp, Nottingham, UK
Dr Y.L. Krishnamurthy, Shankaraghatta, INDIA	Mr A.H. Vajk, Edinburgh, UK
Mr J. Lagabrielle, Valmont, FRANCE	Mr A.T. Vidal, Barcelona, SPAIN
	Mr L. Walther, Sussex, UK

Professor J.C. Wei, Beijing,
P.R.CHINA
Mr E. Whiting, St,Leeton,
AUSTRALIA
Dr A. Wiczorek, Szczecin,
POLAND

Mr J. Wills, Sheffield, UK
Mr I. Wilson, Northampton, UK
Mr K. Wilson, Clwyd, UK
Dr C. Wüster, Conwy, UK
Mr B. Young, Tyne and Wear, UK
Mr A. Young, Inverness, UK

OBITUARY

Sadly we have to inform you that the following members of the British Lichen Society recently passed away:

Prof. Dr C. Leuckert, Berlin, GERMANY

Dr D.I. Morgan-Huws, Isle of Wight, UK

Dr G.E. Stevens, London, UK (see article on previous page)

Membership Matters – from the Membership Secretary

Please note, that two smaller changes for subscriptions rates for 2012 have been agreed on the AGM last January:

1) The reduced 3-year subscription for Non-UK members ceases. Non-UK members are from now on asked to renew annually similar to UK members. This will hopefully result in a more straight forward membership administration with fewer forgotten renewals. Most Non-UK members pay by credit card using PayPal and fees for these transactions are covered by the society. The few members who pay by international bank transfer are still welcome to contact the Membership Secretary or US Treasurer and to arrange for a payment for several years in order to reduce your bank charges. This option is now open for all membership categories (not only for Ordinary members), but there will be no discount for payments that are received for more than one year.

2) Junior Associates will pay the same as Senior Associates, £10. The rate for Junior Associates has been raised above the level of Family Members, who have no full membership rights.

Information you will find from now on in the top left corner (below the ‘return address’) on the envelopes in which you receive the Bulletin:

1. Membership number. This is a four digit number only. Sorry for the error that occurred when the envelopes for the last Winter Bulletin were printed (and the number appeared longer).

2. Expiring year. Annual renewal is now the preferred approach. However, if you don’t know whether you may still have a credit, check the envelope – the year your membership expires will be printed below your membership number. Alternatively, check the anonymous list placed on our website, which is from time to time updated with incoming payments (in order to use this list you need to know your membership number), or contact the Membership Secretary.

Articles for Sale – important notice

Please note that Society merchandise is now being handled by Richmond Publishing Ltd. (email rpc@richmond.co.uk). Further details will appear in a separate flyer.

BRITISH LICHEN SOCIETY – 2011 MEMBERSHIP DETAILS

Applications for membership should be made to The Membership Secretary, The British Lichen Society: Dr Heidi Döring, Mycology Section, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, email h.doring@kew.org, or through the Society's Web site: <http://www.theBLS.org.uk>

Queries on membership matters and subscription payments and **Changes of address** should be sent to: The Membership Secretary at the address above.

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.

Rate for 2011: **£30 / \$60** Three year rate for 2011-2013 (for non-UK members only): **£85 / \$170**

Electronic Membership, as Ordinary Members but access to 'The Lichenologist' online only (no hard copy). Rate for 2011: **£25 / \$50**

Life Membership is available to persons over 65 years of age at **£300 / \$600**. Life Members have the same entitlement as Ordinary Members.

All three categories of **Associate Member** listed below are entitled to all the facilities of the Society, including the *Bulletin*, but excluding *The Lichenologist*.

Associate Membership. Rate for 2011: **£22 / \$44**

Senior Associate Membership, for persons over 65 years of age. Rate for 2011: **£10 / \$20**

Junior Associate Membership, for persons under 18 years of age, or full-time students. Rate for 2011: **£5 / \$10**

Family Membership is available for persons living in the same household as a Member. They are entitled to all the facilities of the Society, but receive no publications and have no voting rights. Rate for 2011: **£5 / \$10**

Bulletin only subscriptions are available to institutions only. Rate for 2011: **£22 / \$44**

PAYMENT OF SUBSCRIPTIONS Members may pay their subscriptions, as follows:

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 (credit card) payments using PayPal: Please see the Society's website for the full details: <http://www.theBLS.org.uk/>

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 Membership Secretary if you wish to pay in this way, *and before you make any payment*. Her contact details are given above.

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