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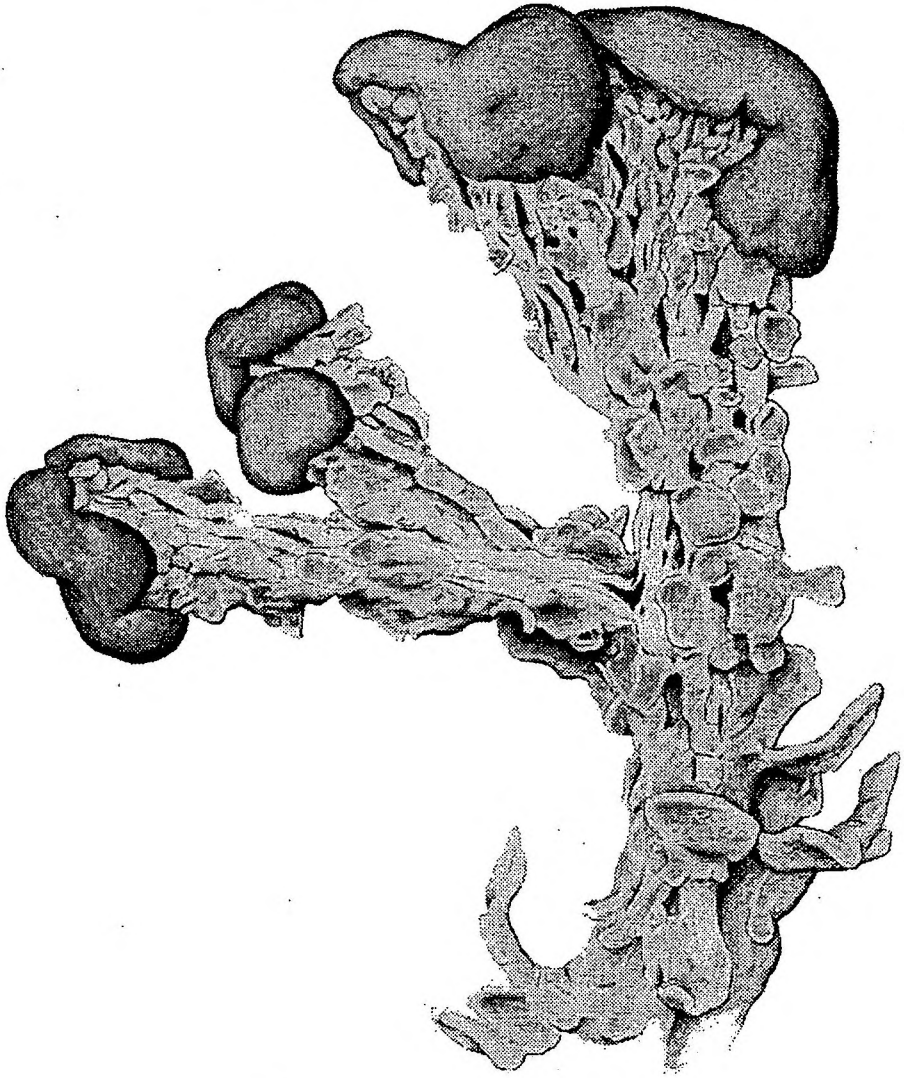

Edited by P W Lambley

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Cover art work *Cladonia cariosa* by Alan Orange

NEIL AND ANDY'S LICHEN ADVENTURE

Last summer Andy Cross and I carried a small lichen expedition into the wilderness north of Loch Rannoch. The aim of this was to record the lichens from isolated high altitude woods along the eastern side of Loch Ericht. These had been intriguing me for several years. As there were no strict epiphytes recorded from either of 10km national grid squares involved (NN56 & NN57), it seem no lichenologists had ever been to the woods before.

The trip up to Scotland started with an overnight stop at Brian and Sandy Coppin's; the usual great crack[1] and hangover the next day. We left the car by Loch Rannoch and crammed what appeared to be a ridiculous amount of stuff in to the rucksacks. Then we tramped 6km up the track to the dam at Loch Ericht after which we struck out over blanket bog. Here we found a rather unconventional epiphytic habitat: ancient stumps of pine washed out of the peat and dumped on the loch shore. Even this unpromising habitat produced several new, if unexciting, species for the grid square: ***Micarea melaena***, ***Mycoblastus fucatus***, ***Placynthiella icmalea*** and ***Xylographa paralella***. After ploughing through 2km of blanket bog, quite enough with heavy rucksacks, we hit steeper grassy slopes with old shielings. In spite of temptations to camp there I insisted on pressing on, as we were still a long way from the woods. After toiling on another kilometre the slopes were steepening and our packs apparently getting heavier. At 459m below Sròn a' Chlaonaidh we found a sort of not quite flattish bit of ***Juncus squarrosus*** bog. It was just possible to camp on this, but it was well short of where I had aimed. We were exhausted, however, and it turned out to be the only "flat" ground available for the next 7km anyway!

The view from the shelf was breath taking, giving a vast vista across Loch Ericht to Ben Alder. Just above us were broken cliffs with base rich flushing and a sub-alpine vascular plant flora including ***Alchemilla filicaulis vestita***, ***Galium boreale***, ***Cirsium heterophyllum*** and ***Saxifraga oppositifolia*** The lichens noted included ***Baeomyces placophyllus***, ***Lichenomphalia alpina*** and ***Polyblastia cruenta***, on a pebble in a base rich flush. Even the first isolated Rowan produced ***Lecidella elaeochroma*** new to the 10km square! The only downer was that Andy was a bit sick.

The night was broken by what became called the haggis party (much weird wwwwwwwohh and some burbling). The dawn chorus consisted of 'haggi', followed by a single very noisy cuckoo and then Red Throated Divers; strange and evocative! We woke to cloud down to 500m but still no midges. The rocks just north of the campsite produced ***Arthrorhaphis citrinella*** along with ***Rubus saxatilis*** & ***Geranium***

[1] See http://en.wikipedia.org/wiki/Crack Basically a serious but fun drinking and chatting session

sylvaticum. Beyond these, the first old tree appeared a magnificent ancient Alder pollard complete with an epiphytic Rowan tree, just as the mist lifted in wisps from the bulk of Ben Alder across Loch Ericht. This supported ***Bactrospora corticola***, so it looked like we were going to find a reasonable wood. Around the corner we got the first view into the wood, it was very thin and clearly the wood was very open and in poor condition. It proved to consist of a thin cover of old Mountain Downy Birch ***Betula pubescens*** ssp ***tortuosa***, with a scatter of Alders, including ancient pollards, with some huge old Mountain Goat Willows ***Salix caprea*** ssp ***sphacelata*** as well as Rowans. The latter proved to be of limited interest for lichens, but the Willows were of immense importance, with good ***Lobarion*** communities locally, while the Birches occasionally supported old tree specialists, especially on lignum, as did the Alders but less frequently than the Birch. Aspen was very rare and confined to one cliff ledge. The altitudinal range was 365m to 550m.

Species rich ***Nardus*** grasslands (NVC: U5c & CG11b) dominated between the trees. These had numerous unimproved grassland herbs frequent and occasional occurrences of grazing sensitive boreal species such as ***Galium boreale***, ***Trollius europaeus*** & ***Geranium sylvaticum*** in the sward. Red deer grazing appeared good for the grassland, and better than sheep grazing; but very bad for tree regeneration. The majority of the trees looked like they pre-dated the formation of the deer forest and had regenerated when the area was summer cattle-grazed transhumance pasture. Ungrazed ledges seen were species poor due to the dominance of ***Luzula sylvatica***.

On the way to the main area of relic wood we climbed up on to a cliff ledge with the only Aspen seen in the wood. These were rather acidic, but supported ***Buellia erubescens*** and ***Mycoblastus affinis***

As we progressed into the remains of the wood, below Creag a' Chais, recording picked up, especially where old Mountain Goat Willows ***Salix caprea sphacelata*** (NS) were found. The Near Threatened ***Ptychographa xylographoides*** was collected from ***Salix*** lignum along with ***Lecanora farinaria*** and, on Alder lignum, the old woodland dead wood species ***Lecidea turgidula*** and ***Chaenotheca brunneola*** Andy had a go at the rocks in this area and picked up ***Lithographa tesserata***. The birch produced ***Calicium salicinum***, ***Mycoporum antecellens*** and ***Thelotrema lepadinum*** Then things got really interesting when at 511m a gigantic phoenix Mountain Goat Willow was located, this was so big that it was forming a small grove all on its own. It supported a ***Lobarion*** community with ***Lecidea sanguineoatra***, ***Lobaria pulmonaria***, ***Nephroma parile***, ***Parmeliella parvula***, ***Peltigera hymenina*** & ***Psoroma hypnorum***

North from this produced the old woodland species ***Arthonia vinosa*** on Birch and Alder lignum, ***Protoparmelia ochrococca*** on Birch lignum, ***Anisomeridium***

ranunculosporum*, *Opegrapha multipuncta*, *Trapelia corticola and ***Thelotrema lepadinum*** on Alder. One old Alder supported large colonies of ***Pertusaria ophthalmiza***, currently the easternmost site in the Central Highlands. Further on old Mountain Goat Willows, including one of 2.20m girth, supported rich ***Lobarion*** with ***Lobaria amplissima*, *Lobaria pulmonaria*, *Ochrolechia szatalaensis*, *Peltigera collina*, *Peltigera horizontalis*, *Protopannaria pezizoides*** and ***Psoroma hypnorum*** A nearby old hollow Birch supported ***Arthonia vinosa*, *Opegrapha ochrocheila*** and the Near Threatened ***Sclerophora peronella*** on lignum in rain track.

We had lunch here, and poor Andy, who was still suffering badly from his sickness of the night before, dropped out, while I carried on towards the chaos formed by a gigantic landslide below Creag na h-Ioiaire. Before the chaos ***Thelotrema lepadinum*** and ***Buellia erubescens*** were recorded on a Rowan, ***Lecanora farinaria*** on Birch lignum and ***Loxospora elatina*** & ***Calicium glaucellum*** on Willow lignum

In the chaos Mountain Goat Willow became more frequent, with examples supporting ***Biatora epixanthoides*, *Lecanora intumescens*, *Lecidea sanguineoatra*, *Lobaria pulmonaria*, *Lobaria scrobiculata*, *Nephroma parile*, *Normandina pulchella*, *Parmeliella parvula*, *Parmeliella triptophylla*, *Peltigera britannica*, *Peltigera collina*, *Psoroma hypnorum*** and ***Trapelia corticola***. In the lower section of the chaos there were also some younger Willows in rocky areas hinting at a small regeneration episode in early 20th century, while a landslip into the loch supported seedlings of all trees seen, except Aspen, in bare soil.

The cliff at the head of the boulder field had an exposed fault, with strong base rich conditions. A brief examination produced ***Agonimia tristicula*, *Collema auriforme*, *Gyalecta jenensis*** var. ***jenensis*** and ***Myxobilimbia sabuletorum***, but by now it was time to head back. On the walk back to Andy, I found ***Platismatia norvegica*** on a rock at and a dead Birch produced ***Chaenotheca trichialis*** and ***Hypocenomyce friesii*** Back at our eyrie our dinner was serenaded by Red Throated Divers. The haggis party was on again over night; still no idea what was making the noise.

The next morning was beautifully clear, with high thin cloud but still some low mist over Loch Rannoch to the south. The scale of the landscape was very apparent and was accompanied by an immense silence; truly spellbinding.

Our target of the day was to get to the woods in the next 10km square to the north (NN57). Given the distance, 6 to 7km and the steep angle of the slopes along the loch side we decided that going up over Stob an Aonaich would be best, rather than traversing along the loch side. At least if we did not make it we would have had a good ridge walk. The main issue was that to get to the wood we would have to drop

from 855m to 400m and then come back up.

We first climbed up to Sròn a' Chloanaidh at to reach the ridge. Here the panorama expanded to take in the full length of the Braedalbane. Here there was a row of granite erratic boulders perched along on the skyline at 590m, which were very striking; the shieling dwellers below must have had a story about them. They also had some new lichens for the square including ***Candelariella coralliza*** and ***Lasallia pustulata*** by bird perches. Looking at the dot maps later, the ***Lasallia*** is the easternmost record in the central Highlands.

The ridge produce a fascinating array of habitats, at least for those who get this high rather infrequently, from ***Vaccinium*** snow patches to wind blown prostate heath. Vascular plants of interest seen on the way up included ***Rubus chamaemorus*** ***Empetrum hermaphroditum*** ***Diphasiastrum alpinum*** ***Vaccinium uliginosum*** ***Cornus suecica*** lower down, then in more exposed areas ***Loiseleuria procumbens*** and ***Gnaphalium supinum***

Lichens included a standard array of upland heath lichens, many of them new to the square: ***Cladonia strepsilis***, ***Lichenomphaliahudsoniana*** and ***Pycnothelia papillaria*** on peat hags and on the montane wind swept heath high up ***Cetraria islandica***, ***Cladonia arbuscula***, ***Cladonia ciliata*** var ***tenuis***, ***Cladonia crispata***, ***Cladonia portentosa*** and ***Cladonia rangiferina*** but no true montane species.

Once over the top of Stob an Aonaich Mhor, we had finished NN56, adding 119 new species to square. Descending for about 1km brought the northern woods into sight, if still 200 to 300m below us, at about 2.00pm. Andy was still feeling weak and could not face the descent, so I left him at a measured GPS point and gave myself 2hr for a dash down and back up. From above the wood looked reasonably dense, at least by Loch Ericht standards, and worth the effort. I started to the south on a steep rocky area of very high woodland (over 570m) with Birch, some Rowan and scattered old Mountain Goat Willow. These again produced ***Lobarion*** communities: ***Lecidea sanguineoatra***, ***Lobaria pulmonaria***, ***Lobaria scrobiculata***, ***Lopadium disciforme***, ***Peltigera britannica***, ***Peltigera collina***, ***Peltigera membranacea***, ***Peltigera polydactylon***, ***Pertusaria multipuncta*** and ***Protopannaria pezizoides***.

Additional species in this area were ***Calicium glaucellum*** and ***Lecanora farinaria*** on Willow lignum, ***Thelotrema lepadinum*** on Willow & Rowan and ***Bryoria subcana***, ***Mycoblastus caesius*** and ***Pertusaria pupillaris*** on Birch.

To the north, less steep slopes supported Birch with some Alders over similar species-rich grasslands as the wood to the south, including ***Galium boreale*** and ***Trollius***

europaeus in grassland. Lignum inside an old hollow Birch at 428m supported the Near Threatened ***Sclerophora peronella*** along with ***Calicium salicinum, Arthonia vinosa, Opegrapha ochrocheila*** and ***Micarea viridileprosa.*** Another Birch supported ***Platismatia norvegica.***

Time was running out for the site so the old Birch and Alder to the north were not given much time but the northern area also produced ***Lecidea hypopta*** and ***Protoparmelia ochrococca*** on Birch lignum and, on Alder, ***Loxospora elatina*** and ***Thelotrema lepadinum*** This quick dash into NN57 produced 50 new species for the square.

The climb back out was very stiff indeed but ***Oxyria digyna*** and ***Carex vaginata*** were spotted on the way out. I met up with Andy and we started the descent back to the campsite, when we saw ***Lycopodium annotinum*** and ***Salix herbacea*** I felt a bit weak on the way down but thought it was only the knocks caused by walking over the rough ground. We saw a few plants of ***Betula nana*** in blanket bog just north of Sròn a' Chloanaidh, which we had walked within meters of on the way up.

By the time we were near the campsite I felt a bit queasy and when we got back to the campsite, I collapsed. I had got Andy's bug; did not eat but was still sick in the night at about 12.30am and felt a bit better. It was actually a wonderful night with the moon out, but brighter to north as the sun set traveled round to the east. The mountains were still clearly visible with wisps of cloud on the summits. The haggises were flying about going wiwiwiwiwiwohh, all together somewhat hallucinogenic and later on there was also some burbling. It finally dawned on me that the haggises were night flying Snipe, along with Blackcock producing the burbling.

On the last morning I woke up very muzzy, and weak; off to a very slow start! Before leaving we recorded a 2 x 2m quadrat from the amazing herb rich ***Nardus stricta*** grassland with species such as ***Alchemilla alpina, Anemone nemorosa*** and ***Lathyrus linifolius*** by the campsite, which had also dominated in the open woods. We got 32 species within the quadrat – not quite the wet desert that is expected. I found the walk out a bit tough, hat off to Andy, who had got around most of the wood on the first day.

After this the holiday carried on with more prosaic lichen exploration of totally unknown woods meters from the road. This started early with a casual stop by an Oak with ***Lobaria pulmonaria*** on the north shore of Loch Rannoch. This produced the Vulnerable Schedule 8 ***Fuscopannaria ignobilis*** new to the Rannoch – Tummel area. It continued in west at the Loch Leven area in Lochaber, where a new site for the Near Threatened ***Rinodina isidioides*** was produced just above that was the old main road before the Ballachulish Bridge was built.

Although these latter sites produced more rarities they lacked the magic of the Loch Ericht Woods. These combined herb rich sub-alpine grasslands and open ancient woodland in an isolated wilderness landscape with the sure knowledge that no lichenologist had been there before us.

Combining both sampled areas of the Loch Erict woods resulted in totals of:

East of Scotland Indicators (ESIEC)	13 + 1 Bonus (B) sp
Pine Wood Indicators (NPIEC)	17
(ESIEC + NPIEC	21)
Near Threatened RDB (both dead wood specialists)	2
Notable (NS & IR not in RDB)	22
Nationally Scarce (NS)	20
International Responsibility Species (IR)	10

These are very good totals for a wood that must have lost species given its degraded condition (in both the ESIEC & NPIEC, a score of 10 indicates a site of high conservation importance). These mixed boreal woodlands are an extension of native boreal woodland on to base rich soils and, as such, are surely as significant as the native Pinewoods. The grassland associated with these woods is itself an Annex 1 priority habitat: "6230 * Species-rich ***Nardus*** grassland, on siliceous substrates in mountain areas", which was presumable originally the glade vegetation of these woods. The combination of woodland and grassland is of immense value as an example of a habitat complex that elsewhere in the area has been extensively changed by sheep grazing and the resultant complete loss of woodland and reduction in grassland herb content.

The future of the woods is very worrying because of the absence of any significant tree regeneration and the ongoing loss of mature trees established so long ago. The increasingly open canopy, as well as the loss of trees themselves, is eroding what little is left of the lichen habitat. The ***Lobarion*** was typically found 'cowering' in small patches of shade and much more strongly developed woodland conditions are required if this community is to prosper. An extremely valuable component of the ecological continuity of this landscape is collapsing. Such an apparently unique and important site needs urgent action to regenerate the next generation of trees. What is vital is that the needs of the grassland must be considered when regenerating the wood as well. Whatever is done, it must be done soon.

The above article is dedicated to the memory of both Francis Rose and Oliver Gilbert, both an inspiration.

Neil A Sanderson & A M Cross

JANUARY MEETINGS 2007
Friday 12 January

The meeting was held at the Natural History Museum and began with an opportunity to look at the various posters and other displays which were set out in the foyer of the Flett Lecture Theatre. There was then an opportunity to socialise at an excellent buffet, where members were able to exchange experiences of new finds and events over the last year. This was followed by the sixth Dougal Swinscow lecture (see below).

THE SIXTH DOUGAL SWINSCOW LECTURE

Dr Allan Green,
Waikato University, New Zealand.

Lichens in Antarctica: what controls their distribution and how extreme are conditions?

Dr Green began by describing the environment of Antarctica. It was the highest, coldest, windiest and driest continent. Almost entirely covered with snow and ice with only 0.4% of it bare rock and therefore very little habitat for lichens. For example the Lower Taylor dry valley was one of the driest places on earth with 50 – 100mm of precipitation per annum. In this habitat the distribution of species like ***Buellia frigida*** was linked to the presence of water, this included the endolithic and chasmolithic communities. In contrast the Antarctic Peninsula has a much higher precipitation and is a different environment.

His studies were intended to see whether it was possible to predict changes in lichen distribution and communities resulting from global warming. He presented results from several New Zealand studies which had been carried out over a latitudinal range from 72° to 84° South. These were intended to answer questions (i) whether such a cline in biodiversity existed (ii) do the lichens show special adaptatios (iii)which environmental factors control distribution (iv) are populations in equilibrium with the climate. In order to answer these questions there had to be an understanding of distribution and physiological studies.

The studies on distribution did not support a cline with latitude within the Ross Sea region. One hundred species were recorded at 4 sites but only 4 were recorded at all 4 sites. There appeared to be a 'Garden of Eden' effect where each site represented a new combination of life. Indicating that factors such as chance colonisation and the survival of relict species, perhaps from Gondwanaland, might be important thus

reflecting historic rather than present situations. Physiological studies had also been difficult to apply to predict change because inter-annual variation at one site can exceed the latitudinal variation between sites. However, there was some evidence that the lichens and mosses showed little adaptation and may have just been surviving in suitable microclimates. He suggested that it how the lichens were able to handle their resources which were available.

Overall, it appears that the lichen biodiversity represents an unexpectedly complex situation rather than forming an orderly cline with latitude.

Saturday 13 January

MEETING

This meeting was held at The Natural Hi story Museum, London at 10:30am. At the outset, it was agreed that this meet ing did not qualify as the 2007 Annual General Meeting because members ha d not received the Winter 2006 BLS Bulletin (and, thus the Agenda and Items for the AGM within) four weeks beforehand.

Therefore, the AGM was adjourned to Thursday, 19 April 2007 at noon, at The Natural History Museum.

Present: Pat Wolseley (President in the chair) and 63 persons of the Society.

As she opened the Meeting the President was pleased to note that both Peter Lambley (Vice-President) and David Streeter (former Member) have both been honoured with an MBE by HM the Queen.

On a less happy note, the deaths of the following members (and former members) were duly noted: Fred Haynes (a founding member of the Society); Peter Malcolm Holt; Francis Rose. Pat Wolseley led one minutes silence in their memory.

1. ***Apologies for absence.*** Richard Brinklow, Peter James, Gill Stevens, Rebecca Yahr.

2. ***Minutes of the Annual General Meeting 2006.*** proposed by David Hill; seconded by David Richardson. Carried.

3. ***Matters arising from the Minutes.*** none.

4. ***BLS Constitutional amendments.*** Frank Dobson explained to the membership that due to the lateness of the Winter 2006 BLS Bulletin, the present Meeting did not qualify as the 2007 AGM. Therefore, voting on (1) the proposed Constitutional amendments; (2) nominated officers; and (3) the Treasurer's report (accounts) had to be approved at the Adjourned AGM. Frank proposed that we call the present meeting simply a "Meeting" of the BLS, and that the April 19 meeting be called the "2007 AGM". William Purvis seconded. Pat Wolseley and David Hill commended Frank on a job well done on the Constitution.

5. ***Secretary's Report.*** Scott LaGreca thanked the helpful Society members who dealt with Society enquiries which he had forwarded to them over the past year. Beyond this there was nothing new to add to with regards to his published report in the Winter Bulletin.

6. ***Treasurer's Report.*** Bob Hodgson expanded on his report in the Winter Bulletin by saying that there has been a significant reduction of Society income from sales and subscriptions. He further said that a total of £710 from the sale of Oliver Gilbert's books has been added to the Wallace-Burnet-Gilbert Fund. Bob finished his Report by announcing that he is stepping down as Treasurer, as is Mary Springham (Independent Examiner). Bob said that Andy Golden was going to be hired as the new Independent Examiner, and further that he has hired a book-keeper until a new Treasurer is found. Pat Wolseley, David Hill and Sandy Coppins all thanked Bob for his excellent service to the Society.

7. ***Website Report.*** David Hill explained that at the recent E&P meeting, a Website Committee (under the auspices of E&P) has been set up, with Jacqui Middleton as Committee Chair/Webmaster. He further explained that the website will be expanded, in time, to include committee meeting minutes; maps; and whatever else the members wished.

8. ***Editor's Report.*** Peter Crittenden stated that the past year was a record year with regards to the volume of submissions (600 pp. total pages published). He mentioned that an electronic backrun of The Lichenologist will be made available to members shortly. He also mentioned that, for the first time, submitters to the Lichenologist will have an electronic submission website for their use. He thanked Barbara Benfield, Tony Brathwaite, Brian Coppins and Alan Orange for all their help this year.

9. ***BioScience Federation/Institute of Biology Representative Report*** . Tony Fletcher reported that he had attended all but one of the BSF meetings this year. He praised the new Director, R. Dyer, as dynamic and engaging, and mentioned how Dr Dyer had visited the BLS Council this year (September Council meeting). Tony is also excited about botanist Richard Bateman being made Head of Policy. Tony suggested that all members visit the BSF website, and closed his report by thanking Peter Crittenden, David Hill and Barbara Hilton for their help this year.

10. ***Librarian's Report.*** Sandy Coppins thanked Tony Fletcher for his service in this capacity ("Acting Librarian") but enquired whether we will ever have a true BLS Librarian? She also wondered when the BLS book catalogue will be updated. Tony said there are no plans for someone to take over as Librarian, or to update the catalogue (which hasn't been updated since 1985). Sandy further wondered if the BLS Library's "Grey Literature" could somehow be converted to PDF format. Tony agreed to put forward a proposal to Council to fund this.

11. ***Flora Report.*** Tony Fletcher did not have anything to add to his Report published in the Bulletin. Don Palmer and Brian Green asked how many copies of the Flora would be printed, and where they would be stored; Tony replied that this has not yet been decided.

12. ***Herbarium.*** Richard Brinklow was absent but Brian Coppins reported that the BLS Herbarium had made some loans over the past year. He expressed concern about the future home of the Herbarium as Richard is retiring soon.

13. ***Conservation Committee chairman.*** Bryan Edwards announced that his 2006 Report will be published in the next Bulletin. He summarised by saying that his Committee is currently working on a threatened lichen list for Britain, and also a list of "top ten lichen" sites in Britain, to be managed in association with Plant Life. Bryan thanked Peter Lambley, who helped him so much when he was working for English Nature. Bryan stated that Mike Sutcliffe has succeeded Peter in that capacity. Bryan also thanked David Genney for all his help in association with SNH. Pat Wolseley and Ivan Pedley both thanked Bryan Edwards for his hard work.

14. ***Data Committee chairman.*** David Hill referred to his (Barbara Hilton's) report in the next Bulletin, and thanked Frank Dobson, Jeremy Gray, Janet Simkin for all their help over the past year. He stated that Janet will now be the Database Manager of the Society, and that she will demonstrate her

Scottish project database later in the afternoon for the membership. David thanked Janet again for all her wonderful work with the Scottish project, and said that all of these data will be available on the NBN website by March 2007—as will all future "New, Rare and Interesting Lichens" Records from the Bulletin. David finished by announcing that similar projects involving English records (headed by Peter Lambley) and Wales (headed by Ray Woods) are being developed for the near future.

15. ***Education and Promotions Committee chairman.*** Barbara Hilton promised that her 2006 Report will appear in the next Bulletin. She mentioned some highlights of her report, including the many FSC courses on lichens that were run this year, and on the work done on lichens in gardens. She said, "it has been a busy and happy hear, thank you to everyone for contributing"; Frank Dobson was thanked especially for his help. Pat Wolseley commended Barbara for a job well done.

16. ***Mapping Recorder.*** Mark Seaward reminded members that even though Janet Simkin has been made the Society's Database Manager, we should all still send records to him as well. He reported that he receives about two enquiries per week. He explained that he needs more validated records (hopefully identified by Brian Coppins). Mark praised Brian for his work in this regard. With regards to the BLS Archives, Mark said that he will be sorting through it this year in preparation for the 50th AGM next year, where he will (1) give a talk on the history of the Society and (2) be selling duplicate items from the Archives at that AGM's BLS auction/booksale.

17. ***Acharius Medal.*** David Richardson took the floor for a special presentation of the prized Acharius Medal to Mark Seaward. The Acharius Medal is awarded to individuals who have made lifelong important contributions to the field of lichenology. The award was actually bestowed at the IMC9 meeting in Australia in 2006, but Mark Seaward could not be present. Pat Wolseley congratulated Mark on behalf of the Society.

18. ***Ursula Duncan Award.*** Two awards were given this year. Peter Lambley presented an award to Jack Laundon in recognition for his lifelong contributions to lichenology worldwide, and Pat Wolseley presented an award to Sandy Coppins for her remarkable achievements in British lichenology.

19. ***Field Meetings.*** Simon Davey began by thanking David Hawksworth, and the Spanish Lichen Society, for all their help with the Spanish field trip. He also thanked Alan Orange, Peter James and Barbara Benfield for all of their

help, with the field meetings they led this year. He announced that the following field meetings/identifcation workshops will be held in 2007: Bacidia/Micarea (June 8-14...note that this is different from what is stated in the flyer accompanying the Winter 2006 Bulletin); Newfoundland (in conjunction with the Tuckerman group in North America); Charnwood Forest (October 5-7); and Charles Larbalastier Lichens (November 15-16; more details forthcoming). Simon ended his report by announcing that he was stepping down as Field Meetings Secretary, effective December, 2007.

20. ***Election of new members of Council.*** Tabled until the Adjourned AGM on April 19, 2007 at The Natural History Museum, London.

21. ***Any other business.*** John Douglass spoke briefly about the great success of his exhibition, The Secret Life of Lichens. He reported that over 17,000 persons had visited it so far (including many children). David Genney also stood up and thanked everyone involved with the Scottish Natural Heritage project for all their hard work over the past years.

22. ***The 2008 AGM.*** The 2008 AGM will be held in the 50th anniversary of the Society. Tentative date was set for 13 January. There was some discussion about holding this in February 2008, but this was not popular. Further discussion about the timing, and venue, of this important meeting was tabled until the Adjourned AGM.

THE MINUTES OF THE ADJOURNED MEETING THEN FOLLOW.

MINUTES of the ADJOURNED ANNUAL GENERAL MEETING
Thursday, 19th April, 2007

Owing to the late publication of the ***Bulletin*** members were unable to vote on matters concerning the constitution and the election of officers at the (Annual General) Meeting in January. In order to accommodate these issues an Adjourned Annual General Meeting was held in the Dorothea Bate room of the Natural History Museum, London SW7 5BD at 12 noon on Thursday, 19th April, 2007

AGENDA

1. 23 persons in attendance. The Secretary Scott LaGreca communicated the following apologies for absence:

Leslie Balfe, Richard Brinklow, Don Chapman, Brian Coppins, Sandy Coppins, Simon Davey, Brian Edwards, Chris Ellis, Joy Fildes, Anthony Fletcher, Jeremy Gray, Mark Seaward, Joy White, Becky Yahr

2. Minutes of the Annual General Meeting January 2006

Ray Woods proposed that the minutes be approved; Peter James seconded. Signed by The President, Pat Wolseley.

3. Minutes of the Meeting in January 2007

David Hill proposed; Scott LaGreca seconded; signed by Pat Wolseley.

4. Matters arising

No matters arising.

5. BLS Constitution amendments

Frank Dobson explained that since the amendments were already sent to the Membership 4 weeks prior to this AGM, we can now vote on them. He further explained that we may have to change the Consitution in the near future to adapt to changing rules set forth by the Charities Commission as we may wish to become a "Charitable incorporated organisation" in the future. Frank Dobson proposed that the amendments be accepted; Don Palmer seconded; everyone present agreed. Pat Wolseley and Scott LaGreca signed copies of the amendments; Frank said that he would send one copy to the Charities Commission, and the Secretary would keep the other copy. Everyone present thanked Frank for his hard work on these Constitutional amendments.

6. Approval of accounts

Bob Hodgson said there was nothing new to add to his report printed in the Winter 2006 BLS Bulletin. Peter Lambley proposed that the accounts be approved; Ishpi Blatchley seconded; everyone present approved.

7. Election of Officers and four members of Council

John Skinner was proposed as Treasurer by Retiring Treasurer Bob Hodgson. Pat Wolseley seconded. Bob Hodgson was thanked for all his hard work and received a round of applause from the floor.

Don Chapman was proposed by Pat Wolseley as Assistant Treasurer. Scott LaGreca seconded.

Pat Wolseley thanked the following Retiring members of Council: Gill Stevens, Alan Orange and John Skinner. She pointed out that Peter James has not retired—his name was inadvertently left off the back cover of the first 2007 issue of The Lichenologist.

Mike Sutcliffe was proposed as a Member of Council by Peter Lambley. Barbara Hilton seconded.

Ray Woods was proposed by Pat Wolseley as a Member of Council. Mary Hickmott seconded.

Heidi Doring was proposed as a Member of Council by Scott LaGreca. Peter James seconded.

The President Pat Wolseley welcomed all new Officers of the Society and Members of Council.

8. Any other business

No other business was brought to the attention of Council.

9. Date and place of the next AGM (the 50th anniversary of the BLS) was discussed. President Pat Wolseley presented two options (London and Nettlecombe) which were outlined in a separate mailing to the membership. President Wolseley said she was strongly in favour of Nettlecombe for various reasons. She also read out a postcard from member Joy Fildes who was in favour of Nettlecombe; the Secretary confirmed that all of the member correspondence received has been in favour of Nettlecombe. The membership voted for the AGM to take place at Nettlecombe (with only one dissenting vote) on Saturday 12th January 2008.

The afternoon session

There were three talks in the afternoon on theme of lichens in extreme environments.

Sitting gathering dust: lichens and nutrients
Peter Crittenden

Peter started by explaining that the main macro-elements in lichens were carbon, nitrogen with smaller concentrations of potassium, sulphur, phosphorus, magnesium and calcium. Of these nitrogen and phosphorous are the nutrients most likely to limit primary production in natural ecosystems. Generally nitrogen is the principal limiting factor for plant growth at higher altitudes and latitudes and phosphorous is typically limiting at lower altitudes and latitudes. According to David Read, this relationship between latitude/altitude, climate and soil conditions is reflected in the types of mycorrhizal associations formed by vegetation (mycorrhizas are mutualistic associations formed between fungi and the roots of green plants). Lichens might be considered a type of mycorrhizal association (mycorrhizal algae) which forms in extremely nitrogen and phosphorus poor habitats (e.g. rock) typical of the rocky terrain of Arctic fellfields and mountain summits.

Peter then considered evidence for and against the possibility that availability of nitrogen and phosphorus might limit the growth of lichens. He discussed work by Farrar and others regarding phosphate uptake. Farrar had concluded that ***Hypogymnia physodes*** could in general satisfy its phosphate requirements with 1 hour of rainfall per week, though more recent work suggested that a range from 3 to 14 hours per week was needed.

In the case of nitrogen most lichens when analysed in boreal-arctic regions had high carbon: nitrogen ratios which were similar to those of nitrogen-deprived fungal cultures. Productive mat-forming lichens such as species of ***Cladonia*** (subgenus ***Cladina***) show adaptations for the conservation of nutrients such as (i) high capture efficiency, (ii) internal recycling, (iii) low rates of loss and (iv) high nutrient use efficiencies. He then looked at the situations in Britain where nitrogen deposition is high in some areas and also in Antarctica where there are locally high sources of nitrogen associated with penguin colonies and demonstrated that lichens are highly physiologically responsive to nitrogen enrichment.

Peter summarised his findings by stating that:
1. Lichens occupy habitats that are N and P deprived.
2. The nitrogen status of many lichens equals that of nitrogen deprived fungal cultures.
3. Lichens have very high nitrogen (and P) use efficiency.
4. Lichens are highly physiologically responsive to N enrichment.

Lichens of extreme environ ments – Rocky Seashores
Dr Anthony Fletcher

Is the rocky shore an extreme environment?
This depends on one's viewpoint. An environment is extreme only to those lichens not adapted to it. I suggest that what we mean by extreme conditions are those which are abnormal and are rarely experienced by the lichen population. On the seashore we see lichens which are there for different reasons. Some seem to depend on the presence of seawater while others are merely able to tolerate it. However, there is no single environment on the seashore. I will deal mainly with the issue popularly called 'zonation' and unfortunately have no time to explore interesting micro-habitats such as bird perches and crevices and overhangs. Nor will I have time to detail some interesting work on physiology, monitoring and community dynamics.

Much of this talk will be based on experience in North Wales where I think rocky shore conditions are 'average'. Extreme conditions, for Britain, are found in the South West – the Scillies, and Northern Scotland.

Why do we think the rocky shore is 'extreme'? To most of us it's because of the presence of the sea. But the aerial environment is just as important, involving drought, water-logging, rapid changes in salinity, pH changes, light, physical abrasion, and biotic factors.

As a general introduction, I will present the factors affecting seashore lichens with some speculations on how they adapt (based on some data), with an emphasis on problems yet to be solved.

Zonation: related to tide levels? Although widely held this opinion is incorrect and has been known thus for many years. 'Exposure' to wind and wave action and degree of sunlight or shade raises levels of lichens so that on an exposed shore they may never be inundated, even by extreme spring tides.

Littoral Zone: that most affected by constant presence of sea water.

- It may be innundated daily by tides on very sheltered shores, so thalli undergo constant immersion
- It may be dry for weeks at a time in summer neap tide periods
- It suffers extremes of salinity in summer when salts crystallize on thalli,
- It can be covered by freshwater from rain or even by frost and snow in winter
- Seawater is alkaline at pH 8.4 but becomes acidic to pH 4 or less where flowering plants predominate or when it evaporates

Light levels change throughout the year. Levels are lowest in winter when temperatures are lowest but excess moisture is at its peak

- Grazing by marine animals such as limpets is a constant factor
- As is physical abrasion by shingle
- All lichens are endemic to this part of the shore

Littoral lichens are characterised by 3 cosmopolitan genera: ***Collemopsidium, Lichina and Verrucaria*** All have subgelatinous thalli, are basically black, their photobionts are filamentous, blue-green or ***Dilabifilum*** (Chlorophyceae:Chaetophorales) in ***Verrucaria.*** They are very similar to freshwater lichens.

Why are these littoral lichens black? The 'pigment' is not extractable with a variety of solvents. It seems to be structural like in the fungi ***Daldinia*** and ***Xylaria.*** But unlike ***Daldinia*** its amount varies with light intensity so seems to be metabolically controlled. In ***Verrucaria mucosa*** the black pigment is lost in winter and the thalli are black only in summer. So does it confer protection from light? Black pigment would also increase heat absorption, perhaps in the face of cooling due to high evaporation. The presence of non-extractable pigments in lichens would deserve further study but might involve expensive methods like mass spectrometry.

Mesic supralittoral. This is characterised by lichens with Trebouxioid photobionts. They have non -subgelatinous thalli with air spaces in the medulla. All are crustose but rarely are black or dark-coloured and often contain secondary chemicals. ie, they are the kind of lichens normally found in terrestrial environments.

- Not indundated by tides even on very sheltered shores
- Are dominated by splash and spray
- Experience high humidity so are adapted to non-immersed conditions
- Very tolerant of salt encrustation

Submesic supralittoral: Somewhat higher up than the Mesic.

- Thalli include foliose species – the lowest they can grow on the seashore
- Zone is less subject to abrasion so foliose thalli can keep a foothold

Xeric supralittoral:

- The most drought-prone part of the shore
- Is alkaline to neutral pH
- Often receives high insolation due to rock angle
- Community becomes dominant as the shore gets more exposed to wind action
- Has a high proportion of unique species
- Has few grazers or physical abrasion apart from wind action
- Lichen diversity greatly increases as the shore is ascended

- Littoral - all species endemic
- Xeric – the dryest part of the shore
- nearly 100 species are endemic to this zone
- These species can be encountered many miles inland where free-standing monuments, church towers, tree-twigs, etc., accumulate sea-salts from prevailing winds.

Terrestrial – halophilic

- Primarily contains species typical of inland but which tolerate a degree of direct seawater influence
- ***Flavoparmelia caperata***, gets more xeric as one goes south, disappears from seashores in N Scotland
- ***Flavoparmelia soredians*** common in the SW, gets rare N of Anglesey

Terrestrial – halophobic

- Typical inland lichens intolerant of seawater.

Some distributional anomalies

Sheltered Scottish sea-lochs often have oceanic woodland lichens on seashores. This is probably due to high rainfall and humidity ameliorating saltwater concentrations.

Ramalina siliquosa still poses unsolved questions. Several papers in the 1960's pointed to habitat selection of chemical and morphological races. But while ***R. siliquosa*** and ***R. cuspidata*** seem to be well distinguished, forms known as ***R. incrassata*** found in shelter beneath overhangs, seem to be equally distinctive in their morphology, habitat choice and aversion to seawater – they turn red in seawater due to decomposition of salazinic acid.

Ramalina polymorpha is exclusive to rocks subject to high concentrations of seabird lime from Gulls on Skomer. However, on Ramsey Island it is found on bird perches that are mostly used by insectivorous birds such as Rock Pipits and Wheatears rather than gulls. Therefore there may be some selection for differing nutritional contents of guano from different bird species. Both overhangs and bird perches show a zonation of lichen species as the shore is ascended but there are no published studies of this in Britain.

Soil on Seashores

Few accounts have considered the fascinating communities on the thin, hot, very dry soils on seacliffs which can resemble desert soils. Typically they are among rocks bearing xeric supralittoral communities. Some of these species are rare and declining.

Teloschistes flavicans in N. Wales is on thin, wind-swept, stony soil up to 150m, but is on rocks in Pembrokeshire and on trees as well in Devon and Cornwall, just like in the tropics. ***Heterodermia leucomelos*** grows amongst it in north Wales, but on Bardsey Island it occurs in two further habitats; maritime grassland dominated by ***Festuca ovina*** and ***Scilla verna***, and on salt pans dominated by ***Plantago maritima***. It is suggested that both of these lichens are poor competitors with flowering plants and don't need maritime conditions, but they do appreciate sunshine and low air pollution.

Acarospora benedarensis is found on glacial till overlooking rocky seacliffs, but only on soil on sheep walks. Does this rare species favour sheep dung or urine, or perhaps lanolin from wool?

Conclusions

Because all seashore lichens are adapted to varying amounts of seawater, it was concluded that the most extreme factor which seashore lichens have to face is physical abrasion. Most populations seem to have a very rapid turnover, though the standing crop remains the same. Drought and bird lime concentrations also play a large part in limiting seashore communities.

Some like it hot, lichens in tropical forests of southeast Asia

Pat Wolseley

This talk gave an overview of Pat's experiences of lichens in tropical forests in Thailand, Malaysia, and Borneo, in climates that varied from monsoon with a cool dry period to equatorial tropics where it is hot and wet most of the time, with almost 100% relative humidity. Lichens in the tropics have developed many strategies to cope with extreme conditions from producing waterproofing hydrophobins that cover the surface of internal hyphae and prevent wetting of the thallus, to the production of antiherbivore and antibacterial compounds to put off predators (e.g. termites and moths) or other fungi from attacking them. Lichens with ***Trentepohlia*** as photobiont are dominant in the evergreen tropical forests, while lichens with ***Trebouxia*** as photobiont are dominant in seasonal forests where there is a cool dry period. ***Trentepohlia*** species are abundant as free living green algae in tropical forests whereas ***Trebouxia*** species are not known in a free-living state. The result is that trentepohlioid lichens reproduce sexually, as germinating spores can easily obtain a photobiont, whilst trebouxioid lichens tend to reproduce vegetatively from soredia and isidia, so that the photobiont is dispersed with the fungus. In the tropics large muriform spores

are common, producing germ tubes from many cells allowing rapid colonization of a substratum.

Fire is a common feature of tropical forests and fire-adapted lichens are often brightly coloured containing heat-screen and sun-screen substances such as red anthraquinones (e.g. ***Pyxine coccifera***) and yellow usnic acid (e.g. ***Relicinopsis rahengensis***). Lichens are also good indicators of environmental changes in the tropics and the research in Thailand on the boundaries between fire-sensitive evergreen forest and fire-adapted deciduous dipterocarp forest shows that there has been a rapid loss of evergreen forest and an expansion of deciduous dipterocarp forest over the last 200 years (Wolseley & Aguirre-Hudson, 1997).

While lichens in these lowland forest types are very different to those of temperate climates, an interesting feature of tropical montane forests is the number of genera and sometimes species that they share with fagaceous forests in Europe. These include many genera which contain our NIEC and bonus species (Coppins & Coppins, 2002) such as ***Dimerella, Haematomma, Heterodermia, Leptogium, Lobaria, Megalospora, Nephroma, Parmeliella, Pertusaria, Phyllopsora, Pseudocyphellaria, Sticta, Teloschistes, Thelotrema*** and ***Usnea***. Some of these are more at home in the tropics and are surviving as relics of more tropical times in our European oak and beech forests!

A major problem for lichenologists working in the tropics is the availability of collections that were made in the nineteenth and early 20th centuries, which are now widely scattered, and this, combined with the paucity of recent taxonomic work, means that identification of specimens is often difficult. In a recent thesis on Thelotremataceae of Thailand and adjacent mainland Malaysia 21% were found to be new species (Homchantara & Coppins, 2002). An assessment of existing collections often produces many new records, as a recent investigation of Thai collections in the NHM showed, where c.300 species were added to the Thai checklist (Aptroot et al. 2007). Even in the macro lichens such as Parmeliaceae many new species are being found and described .

But this is happening very slowly compared to the rate of loss of tropical forests by man's activities which often happen on an industrial scale. Where this happens in a tropical climate a desert can be created very rapidly. Local projects for forest restoration are few and far between, but one exists in Thailand and is spreading rapidly to other countries in the region, so check out this website to see what the problems are and how they are overcoming them http://www.forru.org/home.htm . There is even a project on lichen recolonisation!

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Winter field meeting 2007 - Bookham Common

Changes to the lichens on Bookham Commons 1953 - 2007

Following on from a successful AGM, lecture meetings, and gourmet buffet, the society held a field meeting on Sunday 14 January 2007 in order to note changes to lichens near London. Bookham Commons, close to Leatherhead in Surrey, were chosen as the venue because these had been studied over a period of many years, since 1953 in fact. Sixteen persons attended in ideal weather on a sunny, mild, calm day, under the leadership of Jack Laundon and David Hawksworth. The area is in three parishes with Great Bookham Common in the parish of Great Bookham, Little Bookham Common in Little Bookham, and Bank's Common in Effingham. Great Bookham Common is the most important of the trio, and was the one studied on the excursion. It is bounded by a railway on the southern edge, where there are habitats for saxicolous lichens and for those which can tolerate heavy metals. Beyond are overgrown grassy plains, then a chain of historic fish ponds, to the north of which is ancient semi-natural oak woodland on damp acid London Clay.

The first lichen study was carried out from 1953 until 1956 (Laundon 1958). Then the boles in the south-west part of Central Wood were covered in ***Evernia prunastri, Flavoparmelia caperata, Hypogymnia physodes*** and ***Pertusaria amara***, whilst ***Hypogymnia physodes*** and ***Parmelia sulcata*** were abundant on the larger branches. A total of 73 species were found of which 48 were epiphytes. Especially noteworthy was ***Flavoparmelia caperata***, which formed large thalli on some 50 trees, helping to make Bookham the best area for corticolous lichens near London.

The second study was conducted from 1969 until 1973 (Laundon 1973). It was found that a dramatic decline in the epiphytic lichens had taken place. ***Evernia prunastri*** was now on only two trees in the woods, ***Flavoparmelia caperata*** had entirely disappeared from Central Wood, whilst ***Parmelia sulcata*** and ***Pertusaria amara*** were reduced to a few isolated thalli. This remarkable wipe out was attributed to increased local air pollution from a doubling of the population in Bookham and Fetcham as a result of substantial residential infilling. A further factor may have been the severe 1963 winter, when ***Flavoparmelia caperata*** communities on bark were decimated over large areas (see Laundon 1966), but this was not mentioned in the analysis. Only 36 epiphytic lichens now occurred, so a quarter had disappeared, whilst none of the existing species had increased in frequency. Terricolous lichens had completely gone because open vegetation had become overgrown because of the decline in rabbit grazing in the late 1950s due to the onset of the fatal viral disease myxomatosis. Fortunately saxicolous lichens remained undiminished.

A third survey was made in 1980 when little further change was reported (Laundon 1981). Then no ***Evernia*** was found, and there was still only a single thallus of ***Flavoparmelia caperata*** on the whole of the Commons. Between 1993 and 1996 five visits were made by Begoña Aguirre-Hudson, David Hawksworth, Jack Laundon, and the enigmatic Paulette McManus, who developed a crush on David after divorce from the late actor Mark McManus, who famously played Taggart on TV. It was evident that the epiphytic vegetation was now increasing again, and the first British record of ***Cresporhaphis wienkampii*** came to light, as well as the forest relict ***Cresponea premnea.***

This year's visit showed that the most sensational change had affected ***Lecanora conizaeoides***. In 1980 and earlier it was abundant on all trees and shrubs, but by 2007 it had gone from bark, but still grew on the wooden post of a footbridge. The young trunks and twigs which it formerly covered were now bare. Its demise has been attributed to a decline in acid rain (Laundon 2003). ***Lepraria incana*** had increased on boles to compensate. Some nitrophilous lichens were now colonizing trees on the plains and nitrophobous lichens were increasing in the woods, but were still not as abundant as they were in 1953. Twenty-five species, namely ***Agonimia tristicula, Arthonia punctiformis, Aspicilia calcarea, Caloplaca crenulatella, C. flavocitrina, Candelariella aurella, C. xanthostigma, Cyrtidula quercus, Enterographa crassa, Fuscidea lightfootii, Lecanactis abietina, Lecania erysibe, Lecanora albella, L. carpinea, L compallens, L. confusa, Lecidella stigmatea, Lepraria lobificans, Micarea lignaria, Opegrapha atra, Porina aenea, Punctelia ulophylla, Usnea wasmuthii, Verrucaria elaeina*** and ***Xanthoria ucrainica*** were new to the Commons.

I thank Pat Wolseley for providing species data and maps to the participants and Ivan Pedley for sending me a detailed list and for tolerating a bloody nose as a result of hugging a hawthorn. Everyone had an enjoyable day, despite the frequent use of a whistle in a vain attempt to keep the party together.

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Jack Rodney Laundon

RECIPIENTS OF THE URSULA DUNCAN AWARD AT 2007 AGM

Jack Laundon

It is surprising that Jack has not been proposed before since he is an institution – in fact almost part of the fabric of the Society. He deserves this award not only on the basis of his contribution to this Society but also to lichenology in general. Jack's record is second to none in holding office: he was made Acting Secretary in 1963 (when Arthur Wade was ill) and was elected Secretary in 1964, an office he held continuously for 23 years until he became President, 1984-1985. In addition to being Secretary, he was Editor of the ***Bulletin*** from 1963 until 1979 when Oliver Gilbert took over. Jack made it readable and accessible to large number of members and therefore widened the appeal of the Society. During his time as Editor, the ***Bulletin*** took a strong stand on issues varying from the experiment to extend summer time throughout the year, on the grounds that it reduced fieldwork time, to threats to sarsen stones.

Jack worked at the Natural History Museum for many years and has written very many papers since his first published in 1954 on the lichens of Bookham Common to his latest (2005) on the typification of Sir James Edward Smith's lichens in ***English Botany***. He has always had an interest in urban lichens, especially those of London and

his studies are a strong basis for monitoring the changes which have taken place over the past half century. He has a meticulous approach to investigating the correct names of lichens which has resulted in the renaming of many, hence the use of the term 'Jacked' to describe this process. He has enjoyed tackling the difficult crusts and helped to elucidate difficult genera such as ***Lepraria.***

Jack has a lovely dry sense of humour, and has a quiet and unassuming personality. There can be few members of the Society more deserving of the Ursula Duncan Award. I therefore have great pleasure in proposing Jack for this Award.

Peter Lambley

Sandy Coppins

Sandy has been a member of the BLS since 1981 after she joined an adult education course on lichens with David Hill at Bristol, but we first met when I persuaded her (she says!) to join me on a survey of woods in Exmoor National Park 1987-88. Sandy (then O'Dare) living in Cheddar came every week to do the field work. We surveyed umpteen woods, as usual often in winter and developed this strategy of doing opposite sides of the valley but keeping in touch through whistles. In my usual way at the end I was leaving for my first tropical trip in Sept 1988 to Sarawak and I left Sandy with a pile on manuscripts and maps that had to be compiled into the 211 page Exmoor Woodland survey for the Somerset Wildlife Trust.

In 1987 Sandy, together with Paulette McManus, joined the excursion of the XIV International Botanical Congress to Sardinia to hunt for lichens with leaders Joseph Poelt and Pier Luigi Nimis, and as you can read in her delightful account in the 1988 summer Bulletin they never lived down Pier Luigi's greeting; Ah, the English Lady Lichenologists! Her diary also includes good descriptions of lichens, landscapes and lichenologists!

In those days she was also selling Claire Dalby cards to members and I remember stacks of them in the little room that she used as her office in Springfield Rd., Cheddar. She was also working with Jack Laundon on the sarsen stones of Pewsey and Fyfield Down.

She now lives in Scotland but her contributions to British Lichenology are legion, not least in the huge mountain of site dossiers that she has completed, often based on sites across Britain that she and Brian have surveyed over the years. She was instrumental in starting the grey literature section of the BLS website. In this area alone either as O'Dare or A.M. Coppins she has authored or co-authored 174 reports of which a mere 58 are in Scotland and the rest being far flung in the UK from the west Country to

Northern Ireland. These reports are a milestone in species and site recording and in setting up monitoring standards for the future assessment of changes in species and sites of conservation importance. She has certainly followed in Ursula Duncan's footsteps and has earned the Award for this alone. Her partnership with Brian has led to an evergrowing contribution to lichenology.

She has worked in almost every region of Britain but in Scotland she has achieved something else. After negotiating funding from Scottish Natural Heritage she has revitalised Scottish lichenology with the lichen apprentices scheme. The results of this project are obvious everywhere, without and within the BLS, from their contribution to field meetings, to BLS council and to the creation of the lichen exhibition by John Douglass at Chatelherault Park. This project also took on board the creation of a validated lichen database for sites and species in Scotland and putting together a programme of site condition monitoring, all of which have paved the way for the development of similar projects in other regions of the UK. It has been a mega achievement that will form the basis of lichen recording in Scotland for many years to come. Finally I am sure that Ursula Duncan would approve of the nomination of another female lichenologist in Scotland! For this reason it will also mean a lot to Sandy, and I have great pleasure in proposing Sandy for an Ursula Duncan award.

Pat Wolseley

ACHARIUS AWARD FOR 2006: MARK SEAWARD

The Acharius Medal is awarded to individuals who have made lifelong important contributions to the field of lichenology. The award was actually bestowed at the IMC9 meeting in Australia in 2006, but Mark Seaward could not be present. David Richardson gave an address at the January meeting which is reproduced below.

Over the last forty years Professor Mark Seaward has touched the lives and careers of a great many lichenologists around the world. Mark carried out pioneering studies on lichen ecology of industrially contaminated land. This brought him into contact with a great many botanists and developed his genuine interest in people. Now, he has an enormous circle of correspondents that includes students, amateurs and professional lichenologists. Indeed, Mark does not limit himself to the living, but has researched and written about lichenologists and botanists of the past providing fascinating details and insights. He has also examined their collections in under-studied herbaria, like the one at Oxford University, doing handwriting and other detective work to identify specimens, collectors and locations.

In 1977, Mark Seaward edited '***Lichen Ecology***', which provided the framework for modern lichen ecology, and he has written or contributed to over 400 articles, research papers, conference proceedings, editorials and book chapters. In the last three years alone, he has made more than 40 contributions. In sharing his research results with others, he has been an outstanding lecturer at many international conferences.

Mark played a major leadership role in the development of the first effective national lichen mapping programme, the British Lichen Society Mapping Scheme Data Base, and has kept it growing over the past 43 years providing anyone interested with maps for research papers or popular books such as Frank Dobson's '***Lichens: An illustrated Guide***'. He still spends at least an hour each morning entering new records received from lichenologists into the mapping data.base. The result of this huge mapping effort has been a continued enthusiasm for field work in the UK and a well documented basis for investigating new sites and particular lichen taxa. It is hard to imagine how Mark manages all of this, when there are only 24 hours in a day.

Born and raised in Lincolnshire, England, Mark migrated progressively northwards in his academic career from Birmingham to Nottingham and finally to Bradford University in Yorkshire, where he was awarded his PhD and DSc. His contributions to lichenology have been recognised by being presented with the Ursula Duncan Award from the British Lichen Society and an honorary degree fro the University of Wroclaw in Poland. The latter rewarded achievements for more than 20 years of research collaboration and Mark's role in fostering lichenology in that country. Indeed, Mark has been the source of help and support for lichenologists in many other countries, especially those with limited lichenological resources.

Mark recently retired from Bradford University but has been invited to continue there as Honorary Research Professor in Environmental Biology. As the focus of his career changes from lecturing and supervising, to doing unencumbered personal research, it is a fitting moment to recognise Mark Seaward's tremendous contribution on the field of lichenology over the past four decades. Today we celebrate this achievement by awarding him an Acharius medal. He is a friend to many, a most distinguished colleague, and we wish him many more productive years in lichenology.

ENTEROGRAPHA ELABORATA: CANOPY COLLAPSE AND LICHEN DIVERSITY IN NEW FOREST BEECH WOODS

Enterographa elaborata was a species facing extinction again after the only known colony on a single Beech in the east of the New Forest died. This tree was first refound in 1993 in the Busketts Wood area, the first record since the 19th century. Since then, in spite of much searching, no other trees with this Critically Endangered (CR) species have been found until this winter. This thirteen year famine ended with the discovery of ***Enterographa elaborata*** in two in separate woods (see New and Interesting). The two Beech trees on which this lichen was found shared several characteristics, both were damaged trees standing in areas of formerly dense Beech – Oak pasture woodland which had relatively recently suffered from large-scale collapse of the canopy. Both trees supported small thalli of ***Enterographa elaborata*** which appeared to be colonising former wound tracks cased by damage to the trees. In both cases the ***Enterographa*** appeared to be a relatively recent arrival on the trees, with no thallus over 2.5cm wide, and post dating the damage. At James Hill the canopy collapse apparently mainly originating from wind blow during the 1987 tempest and the Denny Wood site is a long term and expanding canopy collapse thought to originate in the 1976 drought. The ***Enterographa*** appeared to be colonising into former wound tracks as they 'cooled down' and converted into more conventional rain track communities. The Denny wood tree was particularly impressive: the centre of the track was dominated by ***Caloplaca ulcerosa*** (Quadrat 1) with a fringe of a pioneer ***Opegrapha vulgaris – Porina aenea*** community being invaded by mature rain track species such as ***Pyrenula chlorospila*** and ***Enterographa elaborata*** (Quadrat 2). In addition at the base of the wound track there was a small amount of the Vulnerable (VU) ***Bacidia incompta***

Quadrat 1	
Species	***Domin***
Caloplaca ulcerosa	7
Candelariella vitellina	1
Porina aenea	6
Bare	4

Both quadrats 20 x 20cm

Quadrat 2	
Species	***Domin***
Caloplaca ulcerosa	3
Enterographa elaborata	4
Opegrapha multipuncta	3
Opegrapha vulgata	6
Pertusaria hymenea	5
Porina aenea	5
Pyrenula chlorospila	2
Bare	5

Recorded 27/1/07, N A Sanderson & A M Cross

It is interesting to compare these trees with the original tree in the Busketts Wood area. This old Beech had had its top broken off probably several decades before 1993 but rather than dying, had actually managed to regrow as a sort of natural pollard. The ***Enterographa elaborata*** dominated several square meters in mosaic with ***Pyrenula chlorospila*** and ***Enterographa crassa*** with a small amount of ***Cryptolechia carneolutea*** (VU). The tree appeared to be a late succession example of a lichen community developed after severe damaging to the tree. The main difference was that the broken tree was in otherwise relatively intact woodland. The subsequently death of the tree was probably partly due to overtopping from adjacent intact trees.

Over the last few years I have been become increasingly aware of the significance of the phenomenon canopy collapse within Beech dominated pasture woodlands as a factor in promoting the occurrence of rare and threatened lichens. Canopy collapse occurs in old growth Beech woods from the expansion of initial glades created through the loss one or two trees by wind blow or dying. In what appears to be the operation of a feed back mechanism Beeches at the edge of the glade become more vulnerable to diseases or windblow. The result is sizable areas of open canopied woodland with a scatter of largely unaffected Oak trees expanding their canopies from epicormic growth, standing dead Beech trees and surviving battered live Beech trees. The latter are characterised by frequent new wound tracks developed tracks damaged branches and broken tops.

On those Beeches that do not die, the wound heals and a new rain track develops. This seems to initiate a succession in which numerous now rare and threatened lichens are involved. Early species are typical wound track species including the Red Data Book species ***Bacidia incompta*** (VU), ***Bacidia circumspecta*** (VU) and ***Collema fragrans*** (Endangered, EN) along with species such as ***Bacidia friesiana***, ***Caloplaca obscurella***, ***Caloplaca ulcerosa***, ***Catillaria nigroclavata***, ***Lecania cyrtellina*** and ***Opegrapha multipuncta*** Even the urban weeds ***Caloplaca citrina***, ***Candelariella vitellina*** and ***Lecanora dispersa*** turn up occasionally. As these are ephemeral communities the assemblages in individual rain tracks are extremely variable, with individual species very erratic in their occurrence. Seeing a colony of ***Collema fragrans*** covering about five square meters of a wound track, with hundreds of fruit per square centimetre pumping goodness knows how many millions of spores out, with only a few of these with much chance of finding another short lived wound track, is to realise this species has life strategy poorly adapted to modern Britain. Although interesting wound tracks can occur on isolated damaged trees, the concentration of damaged trees found in canopy collapse areas is probably a significant factor in the long term survival of the meta populations of these rare wound track species in the New Forest.

Currently the best sites for this type of assemblage are woods affected by the 1987 tempest or glades still expanding from the 1976 drought. Possibly there is some thing like a 15 year lead in time before wound tracks start to 'cool down' and become colonised by lichens. The succession clearly continues beyond the habitat of the wound track specialists with pioneer rain tack species following if the wound heals (alternately the tree dies; Beeches have poor resistance to fungi invasion). These typically include thin thallus species such as ***Porina aenea***, ***Opegrapha varia***, ***Opegrapha vulgata*** and ***Strigula taylorii***. The example at Denny suggests that these pioneer species are then overgrown by slower colonising but thicker thallus species, especially ***Pyrenula*** and ***Enterographa*** species eventually producing mature rain track communities. Monitoring of the rare rain track species ***Megalaria laureri*** (EN) has shown that, once established, mature rain track communities become locked into to immobile mosaics with no change over five years (Sanderson, 1994 & 1999). It is likely that early colonisation determines what grows in the mature rain tracks for as long as the survival of the rain track. As well as ***Enterographa elaborata*** (CR) and ***Megalaria laureri*** (EN) Red Data Book species that are characteristic of this habitat are ***Pyrenula nitida*** (VU) and ***Cryptolechia carneolutea*** (VU), with uncommon species including ***Enterographa hutchinsiae*** ***Porina borreri***, ***Strigula phaea*** and ***Strigula jamesii***.

The phenomenon of canopy collapse is generally an alarming one to observers used to managed woods and often with a forestry training. There have been pessimistic predictions about the disappearance of Mark Ash Wood to this phenomenon since the 19th century (Tubbs, 2001) but the wood still has the most impressive examples in the New Forest of canopy collapse. One can only assume that those areas collapsing in the 19th century are now the areas with dense 19th century Oak and Beech trees with scatter older trees. An important feature of canopy collapse in the New Forest is that the resulting glades are grazed by the commoner's cattle and ponies and wild deer and therefore tend not to rapidly infill with regeneration. As a result the trees remain well lit, to the benefit of the lichens, as the trunks of the surviving old trees are not rapidly subjected to deep shade from thicket regeneration. Studies of old maps (Small & Haggett, 1978), however, suggests that glade infill usually does occur but at a time scale of 50 to 100 years. At this is a time scale that is difficult for land managers to relate to. It is only the land use inertia on the New Forest produced by its complex legal position as multi-use common land, that prevented drastic action to rapidly regenerate areas of canopy collapse in the past (Passmore, 1977). The land managers, Forest Enterprise, are still very nervous about doing nothing in the face of significant areas of canopy collapse.

The New Forest is a striking illustration that a combination of minimal intervention and significant grazing levels by a near natural mixture of grazers including cattle,

probably a keystone native species in these woodlands, can promote high levels of biodiversity (Vera, 2000). The long time scale of woodland dynamics in such woods, however, needs to be appreciated if such natural process are to be allowed proceed uninterrupted.

N A Sanderson & A M Cross

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REQUEST FOR INFORMATION

I am currently writng a Lichen Flora of Jersey and preparing an Annotated List of Lichens of Sussex. I would be most grateful for any records or information concerning either Jersey or Sussex.

Simon Davey
Email srdavey@globalnet.co.uk

BLS CHURCHYARD LICHEN SUB-COMMITTEE WORKSHOP SOUTH SOMERSET (VC5) 8-10 SEPTEMBER 2006

Based in the South Somerset market town of Crewkerne, members of the BLS Churchyard Lichen Sub-Committee surveyed a number of nearby Somerset churchyards on a sunny weekend in September 2006. Somerset is noted for its many different stones, quarried and used locally in the construction of parish churches and attractive villages of outstanding architectural merit. Ham Hill stone, a lovely biscuit-coloured calcareous stone, is justly famous and has been quarried near Montacute in south-western Somerset for centuries. This area, relatively unrecorded for lichens, provided us with the opportunity of recording lichens on this particular stone which is a common feature of both church and boundary walls, square-topped towers and the older memorials. Only a little further north did we run into some blue lias limestone intermixed. This, as its name suggests, is blue-grey and in the grander churches, its difference in colour was used to decorative effect.

A full spreadsheet (available from Ivan Pedley) provides details of our recording for the seven churchyards visited. The table summarises our findings and enables us to draw conclusions about the impact of the Ham Hill stone on the lichen flora and to consider conservation issues.

Table: Comparison of Lichens in Seven South Somerset Churchyards

Church	*Total no. Lichens*	*Number of corticolous*	*Number of lignicolous*	*No. of acid saxicolous*
Huish Episcopi ST426 266	61	1	0	15
Long Sutton ST470 253	64	2	0	5
Kingsbury Episcopi ST436 211	101	3	8	1
Tintinhull ST498197	95	8	14	9
Montacute ST497169	115	16	0	7
Odcombe ST507155	92	16	0	15
Brympton ST518153	64	5	0	4

The mean total number of lichen species for the seven churchyards is ***85*** with low percentages of corticolous species (8%), saxicolous species on acid rock (9%), and lignicolous species (4%), and no terricolous species recorded, although a few species (eg ***Bilimbia sabuletorum***) are associated with bryophytes. Most of these churchyards are open, well-maintained, with a tendency to be dry. These conditions limit the microhabitats available and diversity, leading to a fairly constant, but distinctive, lichen flora of local calcareous substrates.

In many south-western churchyards in Devon and Cornwall, where the local building stone and many of the memorials are of granite, slate and shale, there are also a number of old memorials of limestone and marble. The reverse does not hold for these Somerset churchyards. The proportion of acid stone is very low and sometimes limited to a few headstones of polished granite with the early colonisers, ***Buellia aethalea*** and ***B. ocellata***.

A total of 25 lichen species was common to all seven churchyards and, apart from ***Buellia aethalea***, all were found on Ham stone; 47 species were in at least six of the seven. Although no lichen species was found exclusively on Ham Hill stone across the seven churchyards, we can conclude that there is a constant and characteristic lichen flora associated with this stone in these churchyards.

Of particular interest are some more unusual or rare species which were recorded, often on the Ham Hill stone:
Baeomyces rufus on headstone propped against church wall, Odcombe
Caloplaca chlorina: on Ham stone kerb, Huish Episcopi
C. lactea: on limestone string course, Huish Episcopi
C. ochracea: on marble cross at Brympton, and at Montacute
Catypyrenium squamulosum on Ham stone, Kingsbury Episcopi also at Odcombe
Gyalecta genensis: on limestone, church wall, Kingsbury Episcopi
Lecanographa grumulosa Ham stone, church wall, Kingsbury Episcopi
Opegrapha parasitica: on ***Dirina massiliensis*** f. ***sorediata***, Long Sutton, Odcombe, Brympton (The ***Dirina*** was on Ham stone.)
Protoblastenia calva: on Ham stone font, Brympton
Ramalina canariensis abundant on Ham stone tower, Kingsbury Episcopi; also at Long Sutton
R. lacera: on the tower, Huish Episcopi
Rinodina calcarea Ham stone headstone, Kingsbury Episcopi
Toninia verrucarioides with ***Verrucaria nigrescens*** on Ham stone chest tomb, Tintinhull; on Ham stone, Brympton; also recorded at Odcombe

Bearing in mind the historic and architectural significance of these South Somerset Ham Hill stone churches which are tourist attractions, and the characteristic lichen flora of the stone, these churchyards strongly merit conservation status. This necessitates making any repairs to church walls sympathetically with appropriate advice and maintaining churchyards with headstones and memorials retained in situ. There was some evidence in the area, regretfully, of recent maintenance changes involving shortcuts which could have long-term unfortunate consequences for this heritage. Replacement of headstones, for example, not only leads to a loss of lichens, but the loss of the ambience of churchyards. Rendering of decaying church walls should be regarded as a last resort.

Lichen churchyard recorders will appreciate that accurate recording of the lichen substrates provides valuable data for future reference and comparisons. This can be confusing at the time when, for example, Ham Hill stone is often referred to as sandstone but is distinctly calcareous and there may be present acidic sandstone in the same churchyard!

Ann Allen
Ivan Pedley

TAVISTOCK, DEVON AUTUMN 2006

"It is impossible to do any act not in itself morally wrong for the last time without feelings of regret"

This was likely to be Peter's last Workshop and the end of an important chapter in the history of The Society. With it, of course, went feelings of real loss—of something irreplaceable taken away—and the realisation that we would no longer be able to listen to his precise descriptions, to his finely modulated voice, and to no longer have at hand his immense knowledge and support on field meetings were not comfortable thoughts. Yet these extraordinary last days, shared with the "dream-team" of James and Benfield, stand as a fitting conclusion to all his Workshops that have gone before; they were a triumph of organisation and discovery and, better still, of warmth and fellowship.

The setting for the meeting was similarly fitting; a hotel of grey granite and genteel antiquity, with rooms of high ceilings and mahogany doors, decorated with coach horns, copper measures, and bronze figurines and with dark oil paintings of important Tavistock worthies staring down sternly from the walls. The market town of Tavistock

itself was a perfect venue, set in unspoilt countryside, but with an "upmarket" feeling that still reflected its previous importance both as a "Stannary Town", where miners in the sixteenth century brought their ingots of tin for assaying and stamping, and also as the site of the most powerful Benedictine abbey in South West England. With such a lovely and historic base to work from, this meeting could hardly be less than remarkable.

Thursday 5th October Tavistock SX 480745.

It never ceases to amaze me that, when a pin is stuck into a map, a venue decided upon and a date set, colleagues, with unerring skill, are able to converge from all parts of the UK, and even from Europe, and meet as if it were the commonest of occurrences. The warm greetings are always the same and the horrors of the journey, once told, soon forgotten. It was just so today. Even the rain was suitably impressed by our commitment and abated for a few hours. The early arrivals, eager to squeeze every scrap of knowledge from the leaders, decided to survey the lane adjacent to the hotel (including the West Gatehouse of the old abbey) and a wall running by the river Tavy. All the lichens were wet, all were difficult to identify and many were left for another time, but a few records —***Arthopyrenia analepta, Bacidia arceutina, Hyperphyscia adglutinata,*** and ***Punctelia borreri,*** growing mainly on ***Acers***—formed a prelude to a week end of great interest.

Friday 6th October Morwellham Quay and Poplar Wood SX 445695

A disturbed night for many. Torrential rain together with the effects of a very good, but perhaps too substantial an Indian meal, meant that sleep was all but impossible. For two members it involved much ingenuity trying to stem the tide of a leaking roof and ceiling! The grey dawn, the grey town and the grey faces at breakfast did not encourage an early start to the day ahead, but our leaders were cheerful and, as the first site was only a few miles distant, so our spirits rallied.

The morning lecture by Peter (on the genus ***Ramalina***) was an inspired hour. It followed a now familiar format to all his workshops—brilliantly sharp descriptions of species coupled with spontaneous vignettes of key characteristics drawn, on this occasion, with the aid of a flip-chart—in all a wonderful distillation of his many years of experience with this group. It not only clarified this interesting genus but also increased our enthusiasm to be up and out!

Morwellham Quay reflects the recent upsurge of interest in our industrial past—here a Trust is converting an ore shipping site into a heritage centre for the local mining industry and, with its quays, workshops and tramways, it presents a picturesque sight

and one full of different habitats to interest the lichenologist. A mature poplar woodland ***Populus*** sp. –planted early last century for the manufacture of matches, and now saved because of its extraordinary lichen flora—proved to be of great importance. We found nine species of ***Usnea***, almost half the British list, and also a number of other scarce lichens, including ***Heterodermia japonica*** and ***Graphina ruiziana*** and, as a wonderful finale, a ***Phaeocalicium*** new to England –but more of that later!

The quay was enclosed within an interesting stonewall capped by huge pale granite slabs. These were the substratum for an important acid flora that included large thalli of ***Xanthoparmelia conspersa*** and ***X. mougeotii*** juxtaposition and battling it out for space, with ***X conspersa*** winning the contest! The major effects of pollution in this picturesque valley ended with the closure, early last century, of the copper mines, limekilns and arsenic production on the hills above the River Tamar. ***Lecidella scabra***, also growing on the wall, exhibited an interesting morphology by forming discrete granules occupying the small hollows between the quartz crystals. Inflated by the overnight rain it was not the easiest of species to recognise at first glance and, of course being wet, the distinctive C+ orange colouration was weakened. Other species of interest were the two species of ***Buellia*** commonly found on granite, ***B. aethalea*** and ***B. ocellata***, but here growing adjacent to each other and along the "push and shove" conditions of the contact zone neither showing any signs of a different growth rate or competitive advantage. The dark gyrose fruits of ***Polysporina simplex*** were also beautifully presented on the pale coloured granite.

Large areas of the Quay floor were covered with engineering tiles, laid perhaps to prevent the loss of valuable copper and manganese ores into the subsoil but also to limit the effect of an even more insidious by-product of the mining industry—arsenic! Here in the mid 19th century, amongst the heaps of heavy metals, to quote from that time, "enough arsenic was pilled up to poison the world!" The poison has now gone—although I am not sure if members would have been so willing to get onto their hands and knees on these tiles had they known of their former use. The tiles are being colonised by a number of lichens including ***Lecidea lithophila*** and ***Trapelia glebulosa,*** the latter species beautifully fertile.

Mine spoil, tipped in mounds beside the slipways (presumably to reflect its original appearance), had fortuitously provided an unusual and interesting lichen habitat and most of the group were soon prospecting these tips, but not for heavy metals! The genus ***Cladonia*** was well represented including a candidate for ***C. monomorpha,*** previously recorded from a similar metal rich site in the Lake District. Large swathes of ***Stereocaulon nanodes*** with ***S. evolutum*** and ***S. vesuvianum*** caused great excitement, and brought out the protective nature of a number of members with comments such as, "Mind where you are putting your feet!" and, "You're standing on the best bit!" etc.

snapped out by people who are usually a little retiring—and as such were obeyed immediately by the offenders!

With rain threatening and the offensive discord of stomachs rumbling with inanition, many of the party headed off to a local soup kitchen. A small splinter group had their meal al-fresco on a bench overlooking the Quay and was entertained by one of the Trust's guides. I forgave him his rather ridiculous period costume when I watched him organise two groups of local children into the task of spinning a rope on a ropewalk arranged between the trestles of an overhead tramway. No health and safety here; no warning notices to offend the intellect and no loss of fingers! There was only an excited group of children absorbed in an ancient skill and enjoying every minute. I forgave him even more when he allowed me to "blag" the use of his forge (he was the Trust's blacksmith) to sharpen my chisels blunted on the recent Pyrenocarps Workshop. I even considered the purchase of a beautiful rams-head fire poker from his trade store but that was taking forgiveness a little too far and my money stayed firmly in my pocket!

The afternoon was spent in the poplar wood. ***Usnea*** species are re-colonising the Midlands—the charge is being led by ***U. subfloridana, U. wasmuthii*** and ***U. cornuta***—but they are poor small things at the moment, and so to see the abundance of this Genus in this remarkable wood was very impressive. Nine species were recorded, many of them dramatically exuberant, and covering virtually every tree branch and leaning bole. The scarcer species were, of course, given more attention, ***U articulata*** hung from trees in festoons –a sample found on a fallen tree had "sausages" 8mm in diameter—***U. esperantiana*** (tips appearing like "skeletal fingers") was also common. Even the "everyday species" were so large that they demanded attention and admiration, and the lichenicolous fungus ***Endococcus apiciicola*** was frequently found on ***U. subfloridana*** and perhaps on other species.

Torrential rain showers did not seem to dampen enthusiasm; indeed many of the party were so engrossed in their surveys, that I suspect that the deluge went unnoticed. We explored deeper into the woodland in spite of the floor being under a few cm of water. ***Graphina ruiziana*** and ***Phaeographis dendritica*** were present on a number of trees and the less frequent members of the genus ***Lecanora –L. albella*** and ***L. carpinea***—were found on number of the boles. ***Phlyctis argena*** was found with apothecia and Frank Dobson was thrilled to take the first photograph of this species fertile. Peter was consulted about a thin grey species with punctiform bright yellow-green soralia. With a twinkle in his eye and looking distinctly mischievous he pronounced it to be a "most unusual and distinctive species" (he might even have said "distinguished"). The entity was of course ***Lecanora jamesii***; this species was also later discovered fertile.

A recently fallen poplar with leaves still fresh gave access to a fascinating upper canopy flora that displayed a successional change with time and space. The tips of this year's growth, just below the waxy leaf buds, had the initials of crustose species and some were recognisable even at this early stage (***Amandinea punctata*** and ***Lecidella elaeochroma***). ***Lecanora chlarotera*** and ***L. albella*** followed this (after two years, counting the leaf scars), ***Parmelia sulcata*** (three years), ***Melanelia fuliginosa*** subsp. ***grabratula*** and ***M. exasperata*** (four years, but their size perhaps indicating an earlier start) and ***Usnea cornuta,*** after five years. Within ten years lichens of all morphologies, crustose, foliose, fruticose etc. were abundant and fighting for space to colonise. I was loath to leave this fine tree knowing that, with death and decay, its story of lichen succession and colonisation rates would soon be lost and there was so much still to learn, but this lovely wood had more jewels for us to admire. ***Heterodermia japonica*** was found on several trees at the very end of our survey. It was common as small patches low down on the boles of poplars but frustrated the photographers by also growing at its very best, and as a great swathe perhaps 40 cm by 20cm in size, 4metres above the ground and unreachable! Oh for a stepladder or for a "Titan" who could support on his shoulders the prodigious mass of our photographers! And what of the ***Phaeocalicium***? Briget Ozanne's sharp eyes located an unusual ***Caliciales*** on a poplar twig. Sheila Street suggested ***Phaeocalicium populneum,*** a rare species from the Scotland. A male member of the party was dismissive. The ladies closed ranks—as only the female of our species can when slighted—and Barbara Benfield "worried" at the specimen during the evening with microscope and flora. The result, and a resounding feminine triumph, WAS ***Phaeocalicium populneum,*** (confirmed by Brian Coppins) and a record new to England!

This had been a lovely and instructive day and it was a weary group that headed back to the hotel. Tiina Randlane, one of a trio of delightful Estonians who had joined us on the Workshop, offered an interesting comment during the journey: ***Usnea wasmuthii*** had been named after an Estonian, and that yes, Estonians have just as much difficulty in distinguishing this species from ***U. subfloridana***!

Saturday 7th October Dartmoor--Walkham Valley and Longash Woodland SX 548740

A day of wonderful early autumn sunshine enhanced by the dramatic scenery of "The Moor." Up early, partly to instil some order into the chaos of my vehicle boot—you will be familiar with the phrase "everything on top and nothing to hand"—but also to explore the town when at its very best, in the silence and peace of early morning. Today was to include a visit to Dartmoor and, with all the preconceptions of its deep mires, stygian mists and lost bearings that the word inspired, so breakfast was a time for packing in the calories; it became almost sybaritic in its quality, with several

different cereals and dried fruits, a "Full English" followed by toast and a number of jams and conserves to finish with and to "liberate" for later use (the miniature glass containers make excellent insect collecting jars). The morning lecture was once more outstanding, this time covering the genus ***Usnea*** and delivered with such clarity and confidence by Peter that I started to wonder why I have such trouble with the group as a whole—a confidence all too soon dashed by the first specimen encountered during the day!

It was then on to Merrivale, a few miles east of Tavistock. This area is famous for its remains of Bronze Age settlement, its hut circles and stone rows, and a map covered with enigmatic phrases such as "Rock Basins." We took the path up to Longash Farm from Hillside where the headstream of the River Walkham cuts below the road. The path runs through the finest of scenery with the moor extending bleakly upwards to granite tors and outcrops, and to the west falling to the lush woodlands of the Walkham valley and to breathtaking vistas. Looking back towards Merrivale, with its inn sheltering below the brooding swell of Cox Tor and the southern slopes of Dartmoor, it was easy to sympathise with that great trencherman Samuel Johnson's view of wilderness. "There is no view that is not improved by a hostelry in the foreground"

The concrete parapet to the older bridge at Merrivale was adorned with fine yellow-green rosettes of ***Caloplaca flavovirescens***, many of them well over 10cm in diameter, together with equally impressive thalli of ***Aspicilia calcarea*** and ***Lecanora campestris.*** From this point the path is defined by granite "clitters," large boulders collected from the moor and set up on end as primitive stonewalls. These were covered with an interesting acid flora that included ***Cetraria aculeata, Neofuscelia loxodes*** and ***Rinodina atrocinerea.***

Luncheon was eaten with wonderful views down the Walkham Valley, with the distinctive outline of Vixen Tor opposite. This conspicuous outcrop is now closed to the public but not before ***Cladonia azorica*** had been found there and a species list made by Barbara Benfield. I am sure that The Tor will welcome the rest from the boots and detritus dropped by tourists; the flora might improve as a result of its isolation, and its imposing bulk is atmospheric enough to be just as impressive at a distance.

The stone barns at Longash were of considerable interest offering lime mortar as a substratum, a rare habitat in this acid rock landscape. Notable finds included ***Lecania turicensis*** in addition to several species common on basic substrates but still recorded at only this one site during the day.

The wood just to the south of the barns and farmyard was a revelation as well as an abrupt change in habitat. From the open moor we stepped into a humid world of moss covered rocks and trees festooned with lichens. Huge granite tors reared out of a jumble of "clitter" but were hidden amongst the trees like the ancient mausoleums of a great past civilisation. Here and there were decayed remnants of old walling systems indicating that man has valued this woodland for countless years. Within the first 50 metres we found ***Cetrelia olivetorum, Sticta fuliginosa, S limbata*** and ***S. sylvatica,*** together with scarcer members of the ***Graphidion*** community. Jeremy Gray was to be seen purposefully at work photographing ***Graphina pauciloculata*** and ***G. ruiziana,*** and had assumed that "not to be disturbed" look. ***Usnea florida*** was found on a fallen branch. It was not the best of specimens but was received with delight by our Estonian colleagues.

The excursion ended at a gate between two granite tors—the biggest gateposts I have ever seen and symbolically marking the boundary of the "wild-wood" and the more open countryside to the south. It was a very weary group that returned to the comfort of the vehicles and to the hotel but all uplifted by very special memories of this day. The evening ended with a final meal at our adopted Indian restaurant, the hottest of curries were tried—the type needing a wet "stokers towel" about the neck to be fully comfortable with the experience, together with flagons of iced water close at hand—and afterwards time was spent in the work room with the day's trophies and the B.M specimens. A toast was given to Peter James with glasses of "bubbly" and the workshop ended with speeches and an atmosphere thick with the aroma of ethanol and its associated benevolence, and with not a little sadness at the thought that this was the end of an era.

Sunday 8th October Tavistoc k – walls and t rees. SX 480743

The final morning and for many an early start for home, for others there was a promising forecast and a feeling that the town of Tavistock still had plenty to interest the party.

Breakfast produced one more delightful cameo. Amid the bedlam of a walking party "breaking bread together", noisy and excited at the day ahead and, judging from the flushed faces and ribald comments, the indiscretions of the night past! a Society member appeared at breakfast in a blue sweatshirt and with a neck bedecked with a rope of fine pearls. Both were worn with a grace and gentility that put all the paste, pastiche, and painted faces on the other tables to shame. Sadly the adornment was not worn to attract any particular lichenologist but "to keep them polished" for a worthier occasion!

The walled lane adjacent to the hotel was looked at again, this time in the dry, as well as the river wall and trees in an adjacent park. A fair had come to town and the open car park and river walks, so clear and peaceful on the first day, were now filled with mechanical rides and coloured stalls that were too nauseous even to contemplate! The mobile homes produced much open mouthed admiration from the party; not for these travellers the miserable poky and rusty box that I tow behind on holiday and offend my neighbours for the remainder of the year by displaying it on my front drive, their's were converted pantechnicons, enormous and palatial, equipped with extending bedrooms, fitted kitchens and "wind out" conservatories, with the best view in the town—the River Tavy.

We escaped along the riverbank to an open park and an interesting group of trees. There followed a lovely hour finding ***Opegrapha ochrocheila,*** and the yellow crust of ***Lecanora barkmaniana*** on an old ***Quercus,*** together with ***Anisomeridium biforme, Bacidia arceutina, Catillaria nigroclavata,*** (on young twigs) ***Punctelia borreri, Tuckermanopsis chlorophylla, Hypophyscia adglutinata, Ramalina fraxinea,*** and ***R. calicaris*** on ***Acer. Bacidia adastra*** and ***B. neosquamulosa*** were on the bases of ***Pinus*** sp., both perhaps recent 'invaders' in the U.K., and ***Micarea prasina*** was also present. The walls close by had in parts a parging of lime mortar and, buoyed up with confidence from the Pyrenocarps workshop a few weeks previously, a number of the genus ***Verrucaria*** were identified including ***V. fusconigrescens V. hochstetteri, V. muralis*** and ***V. viridula.*** Even the dog-poo bins felt the need to disguise their unsavoury contents and were clothed in ***Flavoparmelia caperata, Parmotrema perlata, Melanelia subaurifera, Amandinea punctata*** and ***Caloplaca citrina.*** A garden seat was a substratum for ***Xylographa vitiligo.***

And so the workshop ended, as all seem to do, with minds filled with the images of lichens to look out for in the future and with the fondest farewells, but also with obvious regrets at leaving. Thanks must be given to all of our good friends who made this such an exhilarating meeting.

To our Estonian colleagues we offer thanks for sharing their understanding of the genus ***Usnea*** and for being so patient with our humour and our odd pronunciation of Latin, and, in my case, for their touching generosity. We thank Simon, of course, for his efforts as field meetings secretary.

Because of the special nature of this Workshop, with our minds naturally fixed upon the fact that this was Peter's last meeting as leader, Barbara Benfield did not receive our full appreciation at the time. Toasts were given to another; thanks were given to another, but Barbara was very much passed over. Now is the time to set the record straight. Her enthusiasm, boundless energy, and attention to detail throughout the

weekend were an inspiration, as was her extraordinary knowledge of the lichen flora of Devon. The sites she had chosen were delightful and did much to make the Workshop the great success it turned out to be. I am able to think of no one more fitting to partner Peter James during this his final workshop and can only offer our sincere thanks for all her efforts in organising this unique experience.

To Peter James thanks are completely inadequate. His Herculean labours on so many previous meetings have gone unnoticed by most of The Society but it is impossible to quantify the effect that these have had on the general understanding of the more difficult groups in our flora. He is now at an age when muscles and joints after a long day in the field clearly cry out for younger members to take up the torch and yet his determination and general good spirits when discomforted, and his patience with our repeated misidentifications are examples to us all. His talks are still unsurpassed and sitting listening to him I am often reminded of the quotation "what he does not know is not knowledge". I have little faith in any of the Gods but at my age I am prepared to hedge my bets! Should in the future I find myself being weighed in the scales before the gates of lichen paradise and there be asked to give a reason for gaining admission, I will merely reply, "I attended Peter James workshops!"

Ivan Pedley

Members attending the course:
Peter James and Barbara Benfield (joint leaders), Simon Davey, Bob Hodgson, Ann Allen, Barbara Hilton, Ishpi Blatchley, Tiina Randlane, Andres Saag, Tiiu Tõnra, Peter Lambley, Frank Dobson, Jeremy Gray, Sheila Street, Brian and Fiona Gale, Clare and Mark Kitchen, Mary Hickmott, Andrew Hodgkiss, Bridget Ozanne, Lesley Balfe, David Hill, Paul Smith, Robin Crump, Ivan Pedley

Table 1 Species list from Ramalina and Usnea workshop, Autumn field meeting 2006

Key gr = granite sd = sandstone ter = terricolous mo= mortar lig = lignicolous ti = tiles co = concrete aq = aquatic B = barb Br = Merrivale Bridge wd, w = wall in Longash wood w= wall (elsewhere). Previous record = · Po = poplar sp Ac = Acer Cr = ***Crataegus monogyna*** Q = ***Quercus*** sp. C = ***Corylus avellana*** Pr = ***Prunus spinosa*** P = ***Pinus*** sp.

	Morwellham Quay		***Walkham Valley& Longash Woodland***	***Tavistock***
	Quay	***Poplar Wood***		
Acarospora fuscata			w	
Acarospora smaragdula	gr			
Acrocordia salweyi				mo
Agonimia tristicula	w			
Amandinea punctata		P	Cr	
Anisomeridium biforme				Ac
Anisomeridium polypori		·		
Anisomeridium ranunculosporum				
Arthonia cinnarbarina		C	C	
Arthonia elegans			C	
Arthonia radiata		P	C	
Arthonia spadicea			C	
Arthonia stellaris			C	
Arthopyrenia analepta				Ac
Arthopyrenia punctiformis		P		
Arthothelium ruanum			C	
Aspicilia calcarea			Co,Br.+B	mo,walls
Bacidia adastra				Ac, P
Bacidia arceutina				Ac
Bacidia inundata			aq	aq
Bacidia laurocerasi		P		
Bacidia neosqamulosa				P

Baeomyces rufus			gr	
Bilimbia sabulatorum				River wall
Buellia aethalea	gr		w	
Buellia disciformis				
Buellia griseovirens				Ac
Buellia ocellata	gr		gr	
Caloplaca ceracea	sd			
Caloplaca cerina		P		
Caloplaca citrina			B	mo
Caloplaca crenulatella			co, bridge	
Caloplaca flavescens			B,mo	River wall
Caloplaca flavocitrina	sd		B,mo	
Caloplaca flavovirecens			B,mo+Br,co	
Candelariella aurella			B+w	
Candelariella reflexa			Q	
Candelariella vitellina f. vit	gr		gr	
Catillaria chalybeia v. chal	gr			
Catillaria nigroclavata				Q
Cetraria aculeata			gr	
Cetraria muricata			ter. off the path	
Cetrelia olivetorum				
Chrysothrix candelaris				
Cladonia caespiticia			ter	
Cladonia cervicornis sub. cerv.			ter	
Cladonia chlorophaea	sd			
Cladonia coniocraea		P	C	
Cladonia diversa	sd		gr	
Cladonia fimbriata	ter		gr	
Cladonia floerkeana			ter	
Cladonia furcata			wd,w	
Cladonia humilis	t			
Cladonia glauca	ter. UV +white			
Cladonia macilenta		P	gr	
Cladonia monomorpha	ter			
Cladonia polydactyla			bry,gr	
Cladonia portentosa	ter		ter	
Cladonia pyxidata		P	gr	

Cladonia ramulosa	ter			
Cladonia squamosa v. squa		·	gr	
Cladonia squamosa v. subs.			C	
Cladonia subcervicornis			ter	
Cladonia subulata	ter			
Cliostomum griffithii		P	Cr	
Cyrtidula quercus			Q twigs	
Dimerella lutea			Q	
Dimerella pineti			Pr	
Diploicia canescens				River wall
Evernia prunastri		P	Q	Ac
Flavoparmelia caperata		P	C	Ac gr
Fuscidea cyathoides v. cyat.			gr	
Fuscidea lightfootii		P		Ac
Graphina anguina			C	
Graphina pauciloculata			C,Q	
Graphina ruiziana		P	C,Q	
Graphis elegans		·	C	
Graphis scripta		C	C	
Herteliana gagei			C	
Heterodermia japonica		P		
Hyperphyscia adglutinata				Ac
Hypogymnia physodes		P	Pr	
Hypogymnia tubulosa		·	Pr	
Hypotrachyna laevigata			C	
Hypotrachyna revoluta		·	Cort.var+Pr	Ac
Japewiella tavaresiana		·		
Lecania erysibe			B,mo	
Lecania turicensis			B,mo	
Lecanora albella		P		Ac
Lecanora albescens			B,mo	mo
Lecanora campestris sub. camp			B,mo	mo
Lecanora carpinea		P		
Lecanora chlarotera		P		
Lecanora conferta	mo/sd			
Lecanora confusa		P	Cr	Ac
Lecanora dispersa	gr		B,mo	mo

Lecanora expallens		Q		River wall
Lecanora flotoviana				River wall
Lecanora jamesii		P	Cr	
Lecanora polytropa	gr		gr	lig
Lecanora symmicta			lig	lig
Lecidea auriculata				
Lecidea lactea			sax	
Lecidea lithophila	ti		sax	
Lecidella elaeochroma f. elae		P	Cr	Ac
Lecidella elaeochroma f. sora		·	Cr	
Lecidella scabra	gr			River wall gr
Lepraria caesioalba			gr	
Lepraria incana			wd,w	River wall
Lepraria lobificans		P	C	mo
Loxospora elatina		·		
Megalaria pulverea		·	Q	
Melanelia exasperata		P		
Melanelia exasperatula			Pr	
Melanelia fuliginosa s. fulig	gr		gr	River wall
Melanelia fuliginosa s. glab		P		Ac
Melanelia laciniatula		·		
Melanelia subaurifera		·	Pr	
Micarea lignaria	gr			
Micarea peliocarpa			lignum	
Micarea prasina				P
Mycoblastus caesius			Q	
Neofuscelia loxodes			gr	
Normandina pulchella		P	C	
Ochrolechia androgyna			Q	
Ochrolechia parella			B.gr	
Opegrapha atra		P	Q	
Opegrapha gyrocarpa			wd,w	
Opegrapha multipuncta		P		
Opegrapha ochrocheila				Q
Opegrapha zonata			wd,w	
Parmelia omphalodes			gr	

Parmelia saxatilis		·	W by st+Pr	
Parmelia sulcata		P	gr	Ac
Parmelinopsis minarum		·		
Parmotrema perlatum		P	gr	
Peltigera collina			C	
Peltigera didactyla			ter	
Peltigera hymenina			ter	
Peltigera membranacea		·	ter+st sd	
Peltigera praetextata		·		
Pertusaria albescens var albescens		·		
Pertusaria aspergilla			gr	
Pertusaria amara f. amara		P		Ac
Pertusaria corallina			gr	
Pertusaria hymenea		·	Q	
Pertusaria lactea			gr	
Pertusaria multipuncta		P	Q	
Pertusaria pertusa		P	Q	
Phaeographis dendritica		P		
Phaeophyscia orbicularis		·		Ac
Phlyctis argena		P fert	Q	Ac
Physcia adscendens				Ac
Physcia aipolia		P	C	lig
Physcia tenella		P	C	
Placynthiella dasaea		·		
Placynthiella icmalea	gr		lig	
Platismatia glauca		P	Pr	
Polysporina simplex	gr			
Porina aenea		P		
Porina chlorotica			gr	
Porina lectissima			gr	
Porpidia crustulata			gr	
Porpidia tuberculosa			gr	
Protoblastenia rupestris				River wall
Psilolechia lucida				River wall
Punctelia borreri			·	Ac
Punctelia reddenda			·	
Punctelia subrudecta		P	Pr	Ac
Pyrenula chlorospila		C		
Pyrrhospora quernea		P		

Ramalina calicaris		P		Ac
Ramalina farinacea		P	Cr	Ac
Ramalina fastigiata		P	Pr	
Ramalina fraxinea				Ac
Ramalina subfarinacea			Pr	
Rhizocarpon geographicum			gr	
Rhizocarpon reductum	gr		gr	
Rinodina atrocinerea			gr	
Sarcogyne privigna			B,gr quoin	
Schismatomma decolorans				Q
Scoliciosporum chlorococcum			Lig. pailings	
Scoliciosporum umbrinum			gr	
Sphaerophorous globosus			gr.fertile	
Stereocaulon dactylophyllum	ter		path	
Stereocaulon evolutum			pathside	
Stereocaulon nanodes	ter			
Stereocaulon vesuvianum var. ves	ter		gr	
Sticta fuliginosa			C	
Sticta sylvatica			Q,C	
Strigula taylorii			C	
Tephromela atra				River wall
Toninia aromatica	mo			
Trapelia coarctata			gr	
Trapelia glebulosa	gr/ti		gr	
Trapelia placodioides				wall
Trapeliopsis flexuosa	lig			
Trapeliopsis granulosa			wd/w	
Trapeliopsis pseudogranulosa			gr	
Tuckermanopsis chlorophylla				Ac
Umbilicaria polyphylla				
Usnea articulata		P	Cr	
Usnea ceratina		P	Q	
Usnea cornuta		P	Cr	
Usnea esperantiana		P	Cr	

Usnea flammea		P	Q	
Usnea florida		·	Q	
Usnea fragilescens v.mollis		P		
Usnea rubicunda		P	Q	
Usnea subfloridana		P	C	
Usnea wasmuthii			Cr,Pr	
Verrucaria fusconigrescens	gr			River wall
Verrucaria hochstetteri				mo wall
Verrucaria muralis				River wall mo
Verrucaria nigrescens			B,mo	mo
Verrucaria viridula				mo.wall
Xanthoparmelia conspersa	gr		gr	
Xanthoparmelia mougeotii	gr		gr	River wall gr
Xanthoria parietina		P	Pr	
Xanthoria polycarpa		·	Pr	
Xylographa parallela			Pr	
Xylographa viteligo				seat

WEEKEND ON THE LLEYN PE NINSULA, NORTH WALES 23-25 JUNE 2006

This short report is produced by way of thanks to the BLS who kindly funded my participation in the Welsh Lichen Weekend held at Nant Gwrtheyrn on the Lleyn Peninsula and by way of appreciation and thanks to my fellow recorders of the weekend who patiently supported my learning and shared a memorable weekend.

Nant Gwrtheyrn today describes the recently renovated granite-quarrying village, now a major centre of Welsh learning which huddles at the foot of a sheer quarry facing out to the Irish Sea. The approach to the village on a single track road challenges the brakes and the driver but the view that opens out before you is worth the descent.

The Lleyn is acknowledged as an under-recorded area and so our task for the weekend was to address this and collect records from a number of selected sites. The party of recorders included experienced recorders and a couple of beginners. The sites provided a range of habitats and interesting species, the days provided a range of weather conditions, the nights good home-baked food, discussions of the day's findings and great companionship and laughter.

The most significant finds of the weekend (evaluations from Woods & Coppins, 2003) included ***Amandinea lecideina*** (?NS), ***Arthonia phaeobaea*** (NS), ***Arthonia varians*** (NS), ***Bacidia viridescens*** (NS), ***Buellia stellulata*** (?NS), ***Caloplaca britannica*** (DD, NR,(?E), IR), ***Caloplaca crenulatella*** (DD; NS), ***Caloplaca maritima*** (NS), ***Catillaria atomarioides*** (NS), ***Diploschistes caesioplumbeus*** (NS), ***Heterodermia japonica*** (NT, E (D), NS), ***Lecidea fuliginosa*** (NS), ***Lecidea swartzioidea*** (NS), ***Lecidella meiococca*** (NS), ***Lobaria amplissima*** (IR), ***Micarea lithinella*** (NS), ***Micarea subviridescens*** (NR), ***Moelleropsis nebulosa*** (NS), ***Teloschistes flavicans*** (Vulnerable (A), NS, Sch. 8), ***Verrucaria fuscella*** (DD; NR), ***Verrucaria internigrescens*** (NS).

All concluded that it was a very enjoyable and successful weekend and we take our hats off to Joy for organising the weekend (and us!) and thanks to Emily for organising sites for us to record and for the detailed sites packs we were all provided with. A big thanks to both. This year's weekend is already booked for September 14-16, 2007 also at Nant Gwrtheyrn, combining our visit with the Churchyard recorders group. This year we will be joined by some experienced bryologists. In addition to recording new sites, we will re-visit Myndd Penarfynnydd to collect further detailed records of ***Teloschistes flavicans***

In summary, I gained much from spending time in the field with such experienced lichenologists and received much encouragement and support which I have taken back with me. I continue to feel both inspired and rewarded through field recording as I work towards completing my MSc study on the wayside lichens of Cwm Einion, Ceredigion.

Tracey Lovering

References

Woods, R.G. & Coppins, B.J. 2003. ***A Conservation Evaluation of British Lichens*** British Lichen Society: London.

Species recorded during Welsh Lichen weeke nd 23-25 June 2006 listed by site. All records kindly collated by Joy Ricketts .

1. Nant Gwrtheyrn. Caernarfon. VC 49. SH 349448. June 24 2006 .
Recorders: Lesley Balfe, Joy Ricketts, Ishpi Blatchley, Heather Colls, Alan Orange, Steve Chambers, Tracey Lovering, Emily Meileur.

Boundary granite walls with lime mortar

10	*Acarospora fuscata*	LC
5	*Acarospora impressula*	LC
21	*Acarospora rufescens*	LC
25	*Acarospora smaragdula*	LC
176	*Baeomyces rufus*	LC
200	*Buellia aethalea*	LC
219	*Buellia ocellata*	LC
247	*Caloplaca citrina s.lat*	LC
253	*Caloplaca crenularia*	LC
259	*Caloplaca flavescens*	LC
298	*Candelariella vitellina f. vitellina*	LC
306	*Catillaria chalybeia*	LC
496	*Diplotomma alboatrum*	LC
515	*Fuscidea cyathoides*	LC
527	*Fuscidea lygaea*	LC
635	*Lecanora campestris*	LC
653	*Lecanora gangaleoides*	LC
656	*Lecanora intricata*	LC
667	*Lecanora polytropa*	LC
724	*Lecidea fuscoatra*	LC
743	*Lecidea lithophila*	LC
603	*Lecidea swartzioidea*	LC; NS
802	*Lecidella scabra*	LC
1629	*Lepraria lobificans*	LC
998	*Melanelia fuliginosa subsp. fuliginosa*	LC
926	*Ochrolechia parella*	LC
947	*Opegrapha gyrocarpa*	LC
1015	*Parmelia saxatilis*	LC
1066	*Pertusaria corallina*	LC
1089	*Pertusaria pseudocorallina*	LC

572	***Porpidia tuberculosa***	LC
1189	***Protoblastenia rupestris***	LC
1257	***Rhizocarpon geographicum***	LC
1267	***Rhizocarpon oederi***	LC
1266	***Rhizocarpon reductum***	LC
630	***Tephromela atra var. atra***	LC
1415	***Toninia aromatica***	LC
1431	***Trapelia coarctata***	LC
1432	***Trapelia involuta***	LC
1492	***Verrucaria fuscella***	DD;NR
1495	***Verrucaria hochstetteri***	LC
1502	***Verrucaria macrostoma f. macrostoma***	LC
1507	***Verrucaria muralis***	LC
1510	***Verrucaria nigrescens***	LC

2. Nant y Gadwen, Caernarfon. VC 49. SH 211266. 24 June 2006.
Recorders: Lesley Balfe, Ishpi Blatchley, Steve Chambers, Heather Colls, Tracey Lovering, Alan Orange, Ivan Pedley, Cliff Smith, Joy Ricketts, Ray Woods and Emily Meileur.

Manganese mine, spoil heaps, ***Salix***

5	***Acarospora impressula***	LC
10	***Acarospora fuscata***	LC
25	***Acarospora smaragdula***	LC
212	***Amandinea punctata***	LC
69	***Arthonia radiata***	LC
104	***Aspicilia cinerea s.lat.***	LC
1623	***Bacidia viridescens***	LC;NS
1583	***Bacidia viridifarinosa***	LC
176	***Baeomyces rufus***	LC
219	***Buellia ocellata***	LC
263	***Caloplaca chlorina***	LC
247	***Caloplaca citrina s.lat***	LC
253	***Caloplaca crenularia***	LC
249	***Caloplaca crenulatella***	LC
255	***Caloplaca flavovirescens***	LC
261	***Caloplaca holocarpa***	LC
292	***Candelariella coralliza***	LC

298	*Candelariella vitellina f. vitellina*	LC
1609	*Catillaria atomarioides*	LC;NS
306	*Catillaria chalybeia*	LC
369	*Cladonia cervicornis subsp. cervicornis*	LC
370	*Cladonia cervicornis subsp. verticillata*	LC
371	*Cladonia chlorophaea s.lat.*	LC
1749	*Cladonia diversa*	LC
389	*Cladonia furcata subsp. furcata*	LC
376	*Cladonia humulis*	LC
396	*Cladonia macilenta*	LC
409	*Cladonia portentosa*	LC
410	*Cladonia pyxidata*	LC
359	*Cladonia ramulosa*	LC
416	*Cladonia squamosa s.lat.*	LC
495	*Diploschistes scruposus*	LC
511	*Evernia prunastri*	LC
987	*Flavoparmelia caperata*	LC
1013	*Hypotrachyna revoluta*	LC
613	*Lecania cyrtella*	LC
639	*Lecanora chlarotera*	LC
646	*Lecanora dispersa*	LC
1995	*Lecanora ecorticata*	LC
653	*Lecanora gangaleoides*	LC
667	*Lecanora polytropa*	LC
674	*Lecanora rupicola var. rupicola*	LC
783	*Lecanora sulphurea*	LC
797	*Lecidella elaeochroma f. elaeochroma*	LC
802	*Lecidella scabra*	LC
803	*Lecidella stigmatea*	LC
1974	*Lepraria incana s.s.*	LC
1629	*Lepraria lobificans*	LC
997	*Melanelia fuliginosa subsp. fuliginosa*	LC
1020	*Melanelia subaurifera*	LC
873	*Micarea bauschiana*	LC
1613	*Micarea lithinella*	LC;NS
2361	*Micarea subviridescens*	LC;NR
906	*Moelleropsis nebulosa*	LC;NS
926	*Ochrolechia parella*	LC
947	*Opegrapha gyrocarpa*	LC

1636	*Opegrapha multipunctata*	LC
1006	*Parmelia omphalodes*	LC
1043	*Peltigera hymenina*	LC
1047	*Peltigera membranacea*	LC
1089	*Pertusaria pseudocorallina*	LC
1113	*Physcia aipolia*	LC
1120	*Physcia tenella*	LC
1167	*Polysporina simplex*	LC
1171	*Porina chlorotica f. chlorotica*	LC
1180	*Porina lectissima*	LC
562	*Porpidia cinereoatra*	LC
1690	*Porpidia soredizodes*	LC
572	*Porpidia tuberculosa*	LC
1189	*Protoblastenia rupestris*	LC
1200	*Psilolechia lucida [fertile]*	LC
1234	*Ramalina farinacea*	LC
1235	*Ramalina fastigiata*	LC
1266	*Rhizocarpon reductum*	LC
1322	*Scoliciosporum umbrinum*	LC
630	*Tephromela atra var. atra*	LC
1415	*Toninia aromatica*	LC
1431	*Trapelia coarctata*	LC
1432	*Trapelia involuta*	LC
1434	*Trapelia obtegans*	LC
1595	*Trapelia placodioides*	LC
1437	*Trapeliopsis wallrothii*	LC
1476	*Verrucaria aquatilis*	LC
1491	*Verrucaria fusconigrescens*	LC
1513	*Verrucaria praetermissa*	LC
1530	*Xanthoria parietina*	LC

3. Nant y Gadwyn. Caernarfon. VC 49SH 210263. 24 June 2006
Recorders: Lesley Balfe, Ishpi Blatchley, Steve Chambers, Heather Colls, Tracey Lovering, Alan Orange, Ivan Pedley, Cliff Smith, Ray Woods, Joy Ricketts and Emily Meileur.

Cloddiau (earth and stone banks)

47	*Anaptychia runcinata*	LC

112	*Aspicilia grisea*	LC
200	*Buellia aethalea*	LC
219	*Buellia ocellata*	LC
216	*Buellia stellulata*	LC;?NS
1644	*Caloplaca ceracea*	LC
2351	*Caloplaca citrina s.s*	LC
253	*Caloplaca crenularia*	LC
249	*Caloplaca crenulatella*	LC;DD;NS
292	*Candelariella coralliza*	LC
298	*Candelariella vitellina f. vitellina*	LC
667	*Lecanora polytropa*	LC
674	*Lecanora rupicola var. rupicola*	LC
783	*Lecanora sulphurea*	LC
926	*Ochrolechia parella*	LC
964	*Opegrapha varia [on dead bracken stem]*	LC
1043	*Peltigera hymenina*	LC
1171	*Porina chlorotica f. chlorotica*	LC
1234	*Ramalina farinacea*	LC
1240	*Ramalina siliquosa*	LC
630	*Tephromela atra var. atra*	LC
1431	*Trapelia coarctata*	LC

4. Mynydd Penarfynnydd. Caernarfon . VC 49. SH 218261. 25 June 2006.
Recorders: Ishpi Blatchley, Lesley Balfe, Steve Chambers, Heather Colls, Tracey Lovering, Alan Orange, Ivan Pedley, Joy Ricketts, Cliff Smith, Ray Woods and Emily Meileur.

Native outcrops on a headland.

47	*Anaptychia runciata*	LC
102	*Aspicilia caesiocinerea*	LC
292	*Candelariella coralliza*	LC
298	*Candelariella vitellina f. vitellina*	LC
389	*Cladonia furcata subsp. furcata*	LC
495	*Diploschistes scruposus*	LC
509	*Ephebe lanata*	LC
987	*Flavoparmelia caperata*	LC
515	*Fuscidea cyathoides var. cyathoides*	LC
560	*Heterodermia japonica*	NT;EN D;NS;X;N

582	***Hypogymnia physodes***	LC
986	***Hypotrachyna brittannica***	LC
1013	***Hypotrachyna revoluta***	LC
653	***Lecanora gangaleoides***	LC
721	***Lecidea fuliginosa***	LC;NS
1629	***Lepraria lobificans***	LC
855	***Lobaria amplissima***	LC;IR
1003	***Neofuscelia loxodes***	LC
921	***Ochrolechia androgyna***	LC
926	***Ochrolechia parella***	LC
947	***Opegrapha gyrocarpa***	LC
1006	***Parmelia omphalodes***	LC
1015	***Parmelia saxatilis***	LC
1022	***Parmelia sulcata***	LC
1008	***Parmotrema perlatum***	LC
1066	***Pertusaria corallina***	LC
1114	***Physcia caesia***	LC
1690	***Porpidia soredizodes***	LC
572	***Porpidia tuberculosa***	LC
1234	***Ramalina farinacea***	LC
1240	***Ramalina siliquosa***	LC
1241	***Ramalina subfarinacea***	LC
1257	***Rhizocarpon geographicum***	LC
1266	***Rhizocarpon reductum***	LC
1381	***Teloschistes flavicans***	***VU A***, NS, S8
988	***Xanthoparmelia conspersa***	LC
1526	***Xanthoria calcicola***	LC
1530	***Xanthoria parietina***	LC

5. Trefor. Caernarfon. VC 49. SH 371474. 25 June 2006.
Recorders: Alan Orange, Steve Chambers, Ray Woods, Ivan Pedley, Lesley Balfe, Heather Colls, Ishpi Blatchley, Tracey Lovering and Joy Ricketts.

Rocky shore and cliff.

21	***Acarospora rufescens***	LC
1689	***Caloplaca britannica***	DD, NR,?E, IR
280	***Caloplaca maritima***	LC, NS

268	*Caloplaca microthallina*	LC
282	*Caloplaca thallincola*	LC
369	*Cladonia cervicornis ssp. cervicornis*	LC
389	*Cladonia furcata ssp. furcata*	LC
616	*Lecania erysibe*	LC
624	*Lecanora actophila*	LC
851	*Lichina confinis*	LC
852	*Lichina pygmaea*	LC
926	*Ochrolechia parella*	LC
1232	*Ramalina cuspidata*	LC
1240	*Ramalina siliquosa*	LC
1266	*Rhizocarpon reductum*	LC
1250	*Rhizocarpon richardii*	LC
630	*Tephromela atra var. atra*	LC
1415	*Toninia aromatica*	LC
1504	*Verrucaria maura*	LC
1538	*Xanthoria ectaneoides*	LC
1530	*Xanthoria parietina*	LC

On posts

247	*Caloplaca citrina s.lat.*	LC
646	*Lecanora dispersa*	LC
690	*Lecanora varia*	LC

6. National Trust Land. Caernarfon. VC 49. SH 371474. 25 June 2006.

Acidic Rocky outcrops

5	*Acarospora impressula*	LC
10	*Acarospora fuscata*	LC
1292	*Amandinea lecideina*	LC, ?NS
47	*Anaptychia runcinata*	LC
67	*Arthonia phaeobaea*	LC, NS
714	*Arthonia varians*	LC, NS
200	*Buellia aethalea*	LC
204	*Buellia disciformis*	LC
219	*Buellia ocellata*	LC

216	***Buellia stellulata***	LC, ?NS
217	***Buellia subdisciformis***	LC
1644	***Caloplaca ceracea***	LC
253	***Caloplaca crenularia***	LC
292	***Candelariella coralliza***	LC
298	***Candelariella vitellina f. vitellina***	LC
306	***Catillaria chalybeia***	LC
369	***Cladononia cervicornis ssp. cervicornis***	LC
371	***Cladonia chlorophaea s.lat.***	LC
387	***Cladonia foliacea***	LC
389	***Cladonia furcata ssp. furcata***	LC
412	***Cladonia rangiformis***	LC
421	***Cladonia subcervicornis***	LC
495	***Diploschistes caesioplumbeus***	LC, NS
573	***Ionaspis lacustris***	LC
624	***Lecanora actophila***	LC
646	***Lecanora dispersa***	LC
652	***Lecanora fugiens***	LC
653	***Lecanora gangaleoides***	LC
667	***Lecanora polytropa***	LC
674	***Lecanora rupicola var. rupicola***	LC
783	***Lecanora sulphurea***	LC
724	***Lecidea fuscoatra***	LC
804	***Lecidella asema***	LC
800	***Lecidella meiococca***	LC, NS
802	***Lecidella scabra***	LC
823	***Lepraria caesioalba***	LC
998	***Melanelia fuliginosa subsp. fuliginosa***	LC
1003	***Neofuscelia loxodes***	LC
1026	***Neofuscelia verruculifera***	LC
959	***Opegrapha calcarea***	LC
1006	***Parmelia omphalodes***	LC
1015	***Parmelia saxatilis***	LC
1022	***Parmelia sulcata***	LC
1043	***Peltigera hymenina***	LC
1066	***Pertusaria corallina***	LC
732	***Placynthiella icmalea***	LC
1167	***Polysporina simplex***	LC
562	***Porpidia cinereoatra***	LC

571	***Porpidia platycarpoides***	LC
1240	***Ramalina siliquosa***	LC
1257	***Rhizocarpon geographicum***	LC
1266	***Rhizocarpon reductum***	LC
1250	***Rhizocarpon richardii***	LC
1281	***Rinodina atrocinerea***	LC
1293	***Rinodina luridescens***	LC
630	***Tephromela atra***	LC
1432	***Trapelia involuta***	LC
1437	***Trapeliopsis wallrothii***	LC
1491	***Verrucaria fusconigrescens***	LC
1498	***Verrucaria internigrescens***	LC, NS
988	***Xanthoparmelia conspersa***	LC

REVIEW
LICHEN IDENTIFIER VERSION 3. F S DOBSON

The Lichen Identifier is a multi-access key designed to allow for the identification of your specimen by a process of elimination. The key is supplied as a CD which is easily installed on your PC. The starting point for the key is the Search page. Here there is a list of morphological features; 20 field characters and 9 microscopical characters, each with a drop-down list. You pick an attribute from the list for as many features as you feel confident about and then click the list button. For example, if you select the following: substrate; ***acid rocks***, thallus type; ***squamulose***, cortex; ***P+ yellow***, fruiting body; ***lecideine***, and fruit colour; ***black/dark grey*** then you will get a list of six species.

Each species has brief notes about it and a map button where you can see its distribution map. About 750 species have a photo which can be brought up as well. Using this information you can de-select (by un-ticking a box) any species which you know can't be right and further narrow down the possibilities. There will inevitably be species in the list which do not fit and this is because the programme (sensibly) does not discard a species if there is a blank in the character field. So species which are never found fertile may turn up even though you have selected features for the fruiting body. This is easily remedied by de-selecting those species.

There is a useful data key which reveals the full character list for a given species. You can check this list to see if there are any other features that should be present in your

specimen - maybe a chemical test you have not carried out – in order to confirm or reject your diagnosis.

The Identifier comes with a user manual and it is important to read this in order to get the most out of the programme. In the introduction the author makes it very plain that he welcomes feedback and constructive criticism. With this in mind I will mention that the main area of possible improvement lies in the reproduction quality of the photos. Most of them are alright; however, they all show pixilation effects and quite a few are hard to make out. This may be due to scanning from the original slides and possibly over-compressing the JPEG to save file space. On the search page it might also be useful to have the option to select all types of isidia or rhizinae rather than have to select between the several different types, in case you have an aberrant specimen or just get it wrong.

As the manual points out you can use the identifier to create species lists for a given habitat type e.g. a conifer substrate yields 158 species, and this list can be printed out if desired.

The Identifier is particularly useful when you have immature or no fruits. When you are a struggling intermediate, or working in new territory, and you find a grey, C+ orange crust with soredia on acid rock, but with no fruits, the Identifier allows you to quickly reduce the possibilities to 10 species, of which 6 have photos. Then if you are still stuck you can use your identification books to look those up. Just using the books would be a lot harder in this situation. The Identifier also gives me some peace of mind because it searches every lichen species which is known in the UK, rather than just those that I might stumble across in my sometimes haphazard perambulations through the dichotomous keys of the Flora.

I tend to avoid relying on subtle colour descriptions with the Identifier because I sometimes get it wrong so I stick to morphological features first. Having said that, the programme is very quick and flexible so you can make a search with one or two colour choices included and then take them out again if it does not help.

I have used the identifier on a regular basis for a couple of years now (starting with version 2) and I consider it to be a really useful weapon in my armoury. It doesn't always give me the answer – but then lichens (and lichenologists?) display such variability that this is only to be expected. But it certainly helps me often enough to be well worth the relatively small cost (compared to the immense amount of effort that has gone into it) and there is nothing else out there that does quite the same job. I can certainly recommend it.

Mike Sutcliffe

THE C-TEST

Now that most, and possibly all, commercial bleaches contain a number of, usually unspecified, additives it is doubtful if any of them can safely be used for the 'C-Test'.

All is not lost, however. I have carried ot the 'C-Test' with the antiseptic Milton on the medulla of ***Parmelia sulcata***, in parallel with a cheap supermarket brand, repeating several times with each to be sure of the results, and can be reported that , whereas the commercial bleach consistently gave a strong C+ result, the results with Milton were C-.

F D Kelsey

'LICHENOLOGIST' FOR SALE

Unbound (with title-pages), in very good condition
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Vol. 8, pts 1 & 2 (1976); Vol. 9, pts 1 & 2 (1977); Vol. 10, pts 1 & 2 (1978); Vol. 11, pts 1, 2 & 3 (1979); Vol. 13, pts 1 & 2 (pt 3 missing) (1981); Vol. 14, pts 1, 2 & 3 (1982); Vol. 15, pts 1, 2 & 3 (1983); Vol. 16, pts 2 & 3 (pt 1 missing) (1983); Vol. 19, pts 1, 2, 3 & 4 (1987); Vol. 20, pts 1, 2, 3 & 4 (1988)

Price negotiable.

Contact: Prof. Mark Seaward, University of Bradford, Bradford BD7 1DP
tel: 01274-234212; e-mail: m.r.d.seaward@bradford.ac.uk

Three parts of the ***Lichenologist*** vol 1 part 4, 5 and vol 2 part 1, have been found in a charity shop and are available to the highest bidder.

Contact Peter Lambley at plambley@aol.com for details. Proceeds will go to the charity concerned.

SLOVAK LICHENOLOGY IN 2005 AND 2006

On March 10, 2005 an international conference "***Diversity of lichens – knowledge, changes and trends***", took place in Bratislava, in honour of the 70th anniversary of Ivan Pišút, organized by the Institute of Botany and Slovak Botanical Society. Colleagues from the Czech Republic (Š. Bayerová-Slavíková, J. P. Halda, J. Liška, Z. Palice) and Poland (U. Bielczyk, W. Faltynowicz, B. Krzewicka, L. Śliwa) participated, covering a broad field of topics (e. g. lichen diversity, distribution, new species, lichens on metal heaps, bio indication, etc.).

In August 2005, together with the lichenologists from the W. Szafer Institute of Botany, Polish Academy of Sciences, Kraków, we visited the Tatry National Park. In November 2004 there was a strong windstorm, which destroyed 12 -13000 hectares (ca. one third) of the Park's forest. The field work focused to collect as much epiphytic lichens as possible (to save them, at least, in herbaria) because the broken timber was removed from the field extremely quickly, the authorities arguing with the danger of spruce bark beetle infestation. The members of our team (alphabetically): U. Bielczyk, A. Flakus, B. Krzewicka, Z. Kyselová, A. Lackovičová, E. Lisická, L. Śliwa, K. Wilk.

Until the end of 2005 we worked on the project "***Change dynamics in lichen diversity of Slovakia***" (principal investigator: A. Lackovičová, research team: A. Guttová, E. Lisická, I. Pišút, J. Krištín). A survey of several regions of Slovakia brought new and interesting contributions on lichen diversity:

The Tatry Mountains An annotated checklist was published (LISICKÁ, 2005, for a review see e. g. ILN 2006, 38: 7).

Further large scale protected areas of Slovakia New entries on lichen flora of the Veľká Fatra Mts. (380 taxa), Strážovské vrchy Mts. (350 taxa), Kysucká vrchovina Mts. (156 taxa), Zoborské vrchy Mts. (169 taxa) were collected; an analysis of lichen diversity of 8 primeval forests in Slovakia was completed.

To evaluate current environmental conditions of several areas, Index of Ecological Continuity (IEC) was calculated. High environmental quality (IEC > 25) was confirmed in the Tatry National Park, NP Poloniny and in Biosphere Reserve Poľana.

At the end of 2006 a monograph "***Central European Lichens – Diversity and Threat***" was published by Mycotaxon and Institute of Botany, Slovak Academy of Sciences, dedicated to Ivan Pišút, the founder of Slovak lichenology. I. Pišút was the former curator of lichenological and bryological collections in the Slovak National Museum – Natural History Museum and Senior Research Fellow of the Institute of Botany SAS (see Fig. 1.). Lichenologists from Austria, the Czech Republic, Estonia, Germany, Poland, Slovenia and Slovakia contributed to the Festschrift. Their contributions covered, besides the local diversity and threat, also other themes, eg. ecology,

distribution, conservation, taxonomy, identification key (cetrarioid lichens), etc. [More about the book see at the web sites: www.mycotaxon.com/publications.html. or www.sav.sk/index.php?lang=sk&charset=&doc=services-news&news_no=1246]

In December 2006 the project '***Characterization of lichen-diversity within selected biocenters in Slovakia*** ended, (principal investigator: A. Guttová, research team: A. Lackovičová, E. Lisická). The project aimed to gather original knowledge on character of epiphytic lichen diversity of oak forests in the selected biocentres and adjacent bioareals within the eight orographical units in Slovakia. The relevés of frequences of epiphytic lichens were sampled allowing identification of components of epiphytic lichen diversity. Based on the relevés the values of Lichen Diversity Value indices were calculated for the particular study areas. An interpretation scale for the indices was elaborated, for the first time in Slovakia, to classify the studied oak forests. The scale enables identification of the level of deviation of lichen diversity from naturality within the area. The results show, that the boundary values of the scale are comparable with the scales established for industrial or urban areas of the countries of Western and Southern Europe, where the method is being actively used. The studied areas were attributed the following classes of environmental alteration: very high, high, moderate, low and negligible.

Currently (May 2006 – April 2009) there is one on-going project our team works on: '***Impact of changes in air quality of urban agglomeration Bratislava on lichèn*** (principal investigator: A. Lackovičová, research team: A. Guttová, E. Lisická, I. Pišút, P. Pišút). The aim of the project is monitoring the impact of changes in air pollution after 1989 (decrease of industrial production and changes of technologies after the so called 'Soft Revolution') on epiphytic lichens in the capital of Slovakia (ca. 460, 000 inhabitants). In May 2006 we began with the mapping of epiphytic lichens to know their actual diversity. Until now we gathered data about 41 species from 150 trees. An amelioration of vitality and increase of the abundance of nitrophilous taxa from the genera ***Physcia*** and ***Physconia*** was noticed.

At the time there are two PhD students in lichenology in Slovakia:
Zuzana Kyselová: ***'Calicioid lichenized and non-lichenized fungi of the Tatry Mts.'*** (Technical University Zvolen, Faculty of Forestry, supervisor Prof. Ján Gáper) and
Alica Dingová: ***'Lichen synusia in the pine forests of the Borská ní•ina lowland'*** (Institute of Botany SAS, supervisor Dr Milan Valachovič, consultant: Dr Jiří Kolbek).

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[Complete Slovak lichenological bibliography 2005-2006, see LIŠKA J, ***Bryonora***, Praha, 2005, ***36:*** 43-44; 2006, ***38:*** 62-63.]

E Lisická &A Guttová

THE LOSS OF PRACTICAL SK ILLS: THE CONCERN OF THE BIOSCIENCES FEDERATION

(An article contributed by the Chief Execut ive of the Biosciences Federation with which has a particular reson ance for lichenologists)

The Biosciences Federation is seriously concerned about the loss of practical skills across the full range of the biosciences. That is, from ecology to ***in vivo*** pharmacology and from taxonomy to biochemistry. The biosciences are practical subjects, and yet in our schools and universities the amount of practical experience that students acquire continues to diminish. This decline is likely to continue because we have lost and are losing teachers with practical skills.

For my A levels we went out into the fields and threw metre squares "randomly" on patches of grass and then proceeded to count the number of certain plants and insects within the square. Many of you will have had a similar experience at school or

university and will probably remember, as I do, the enjoyment of these outings – and not just for getting your square around someone's neck! But this is now a rare educational activity. And the loss of training in field work is important because, for example, the subtle change in the distribution of lichens is an indicator of climate change. We have lost many lichenologists, and many of those who remain are close to retirement. To embark on a project in the field in this area now requires more than the usual attention to the competence of your supervisor: you could find yourself working on wrongly identified lichens.

The same is true for scientists with ***in vivo*** skills. Once again, I have fond memories of tracing dogfish cranial nerves – well, perhaps not so fond because I was not addicted to formaldehyde! But it was an introduction to animal work and developed a real awareness of how nerves pass through tissue and bone. The work brought a three dimensional understanding of line drawings and excited interests that I suspect would not have been ignited without this experience. Some will argue that a prosected dogfish can provide nearly all these educational elements – it is a debate that those involved in medical education know well. Nonetheless, some practice on cadavers seems preferable to the alternative for veterinarians, doctors and those using animals for research. Today, the pharmaceutical industry has great difficulty in recruiting in this area because few are qualified for the work.

Of course, not all bioscientists need to throw metre squares and cut up dogfish in order to make a research or teaching career in one of our disciplines. However they are likely to need to make up reagents correctly and this is not a skill that one can anticipate today in all graduate students. The point is, the decline in practical skills threatens the strength of the biosciences.

How has the present situation arisen? There is no single answer to this question, but the expansion of university bioscience courses is an important component of the answer. With doubling, trebling and quadrupling of student numbers in the biosciences, it has often proved too difficult to find and pay for the space and staff to enable practical work of a high standard to continue. Indeed, as you will know, many courses are structured to minimise the need for practical training. It is possible today to do an Honours degree in Pharmacology and, if you are predicted to obtain a lower second class degree, your Honours project will be in the library. Graduates lacking practical skills will not usually attempt to find the time for more practical work when teaching in secondary schools.

What can be done to reverse this deteriorating situation? Clearly, motivation and money are needed. Motivation comes from need and leads to money. The ecological and ***in vivo*** examples given above were chosen because they are in areas where the

need is real and so is the possibility of extra resource. We do not think that we can usefully argue for an all-embracing single step solution to this problem, but we do think that we can target areas and work with others to achieve change. Indeed, we are quietly achieving significant success. The loss of practical skills is now part of the national agenda and resolution of particular needs is being discussed in a positive way

Richard Dyer

LICHEN QUIZ??

At a recent ***ad hoc*** gathering of lichenologists in Scotland, David Hawksworth challenged the assembled group with a Lichen Quiz. The lichenologists present duly furrowed their brows, sucked their pencils, muttered amongst themselves and peered over Brian Coppins' shoulder as they struggled to come up with the answers. However, there was in the group, a small core of non-lichenologists, who looked at the quiz questions with mild amazement, and then gamely provided this amusing contribution of spoof answers (the degree of desperation and inebriation becoming apparent, certainly by Question 11).

1. Why can you never name a "lichen"?
   A: because we don't know our Latin and have poor memories
2. What lichen featured in John Wyndham's "Trouble with Lichen"?
   A: ***Triffidiaegigantus***
3. If you were making "snow tea" what lichen would you use?
   A: ***Coldicus typhooiae***
4. Which lichenologist worked at the Murray Royal Asylum for Lunatics?
   A: They all do – prerequisite training
5. Why did ***Toniniaaromatica*** get its name?
   A: It was what Marie Antoinette sniffed....?
6. What is the "manna lichen"?
   A: Manor-born, the one from high society, or the right side of the tracks
7. If you wanted to stuff a mummy or make bread that would last, what lichen would you chose?
   A: Sage-and-onion
8. What is "phycosymbiodeme"?
   A: a piece of material, padded, to keep tea-pots warm

9. How many "genera" was ***Parmelia*** split into in the 1980s?
A: It doesn't matter, they re-grouped later in the early 90s for a comeback tour. [Oh so nearly true!]

10. Who first realized that lichens could be used as an indicator of air quality?
A: Mary Woolstoncraft (Chapter 6, footnote 3)

11. Why is the Committee for Fungi established by International Botanical Congresses important for lichenologists?
A: 'cos they are the bean-counters and have the money

12. Which lichenologist celebrated his 90th birthday on 19 May 2006?
A: David Hawksworth – ageing well!!

13. What is a "hyphophore"?
A: something you water the garden with

14. If in the perfume industry what lichen would you want supplies of?
A: Anais-anais

15. What do caribou and reindeer eat when the ground is frozen?
A: Ice-cream

16. What is the most potent antibiotic known from lichens?
A: tea-tree, or Dettol

17. When did David Hawksworth publish his first paper in ***The Lichenologist***?
He hasn't done it yet!

18. What do you call a lichen that lives inside another?
A: Lichenous-cohabitee

19. Which genus forms lichens or lives as a saprobic fungus depending on whether its ascospores land on bark or wood?
A: Imperial leather

20. Which famous British lichenologist was a schoolmaster in Taunton?
A: Hagrid, now teaching at Hogworts.

So, could you have done better? And what of the "real" answers? See next ***Bulletin***. Thanks go to Liz McDonnell and Tish Watts for providing the 'spoof' answers.

Sandy Coppins

THE WRONG KIND OF SHEEP

In 1990 a colleague of mine, Lindsay Moore whilst undertaking a botanical survey of chalk grasslands in East Anglia for the Nature Conservancy Council discovered a chalk pit on Weeting Heath in Norfolk with an interesting lichen flora. The south facing slope had ***Toninia sediifolia, Diploschistes muscorum, Catapyrenium***sp and was the only locality for ***Psora decipiens*** in Norfolk. As with most of the Breckland sites at the time, the turf was broken with micro-hummocks. Also on the site but not in the same area is one of the few remaining colonies of ***Squamarina lentigera***and in the mid 1970s there were also one or two thalli of ***Buellia asterella.***

Weeting Heath has been a Norfolk Wildlife Trust Reserve for many years and is notable for ***Veronica spicata*** and stone curlew. For some years now, the Norfolk Wildlife Trust has been managing a flying flock of sheep to graze their many reserves. Weeting was no exception and sheep grazed the site with no apparent effect on the lichens. However two years ago I went onto the heath and was surprised to discover no trace of the lichens in the pit though the hummocky micro-terrain looked as before. I rather naturally jumped to the conclusion that lichenologists make in these circumstances that there had been a major pollution event of some kind. However, a conversation with the Warden of the time, Bev Nicholls gave a simpler answer. It seemed one winter young lambs had been on the site for the first time and they had taken particular pleasure in gambolling around in the pit. It was only when Bev visited the pit one day that he witnessed the trampled muddy mess that the flock of exuberant lambs had caused.

I guess there are several lessons to be learnt from this incident, most particularly don't blame disappearances on pollution events every time, secondly be more wary of changing long standing grazing regimes.

Peter Lambley

LICHENS IN LITERATURE:13

But he the man of science and of taste
Sees wealth far richer in the worthless waste
Where bits of lichen and a sprig of moss
Will all the raptures of his mind engross

John Clare (1793 – 1864), ***Shadows of taste***

EXTRACT FROM AN ARTICLE BY MICHAEL VINEY, IRISH TIMES, APRIL 2006.

In the 30 years since the last big outbreak of Dutch Elm Disease, the European family of elms has received close genetic scrutiny in the search for resistant strains. This has revealed that the so-called English elm, Ulmus procera, planted plentifully also in Irish estates and hedgerows, is actually the product of a single clone carried abroad by the Romans, first to Spain and thence to England. The species doesn't set seed in the north, but suckers readily, and so guaranteed the Romans a supply of stakes for their grapevines.

This lack of genetic diversity helps to explain the rapid spread of the disease, but DED affected all elms. In Ireland trees sickened and died wholesale in the 1970s and after, but the post-mortem suckers of English elms still provide viable hedges in many parts of the country.

Teagasc's Dr Gerry Douglas, writing in the current issue of Crann, the tree magazine, explains that the Scolytus beetles are attracted only to trees higher than 1.5 metres, with well-developed bark in which to plant their eggs.

Dr Douglas is the latest Teagasc scientist at the Kinsealy Research Centre in Dublin to take up the cause of conserving elms in Ireland. His home town is Ardee, Co Louth, where, amazingly, 11 mature elms of 2-3metre girth are surviving in a single two-acre rectory garden. One is the tallest and fattest English elm in Ireland, listed among the island's "champion trees" by the Tree Council of Ireland; the others are smooth-leaved elms, which are also reported from the Blackwater and Bandon valleys.

With the help of the Tree Council of Ireland, Teagasc researchers have located 29 mature elm trees in Ireland. Some are clearly the "wild" native wych elm, Ulmus glabra, but others fall uncertainly into a group of hybrids with English and smooth-leaved elms [now collectively regarded as Ulmus minor]. Telling elms apart can get very complicated.

What matters is finding as many healthy and genetically different survivors in as many locations as possible. Seed production and natural regeneration of all elms is erratic, so that growing from cuttings is the best way forward in conservation. At the Kinsealy research centre, more than 1,200 cuttings have been planted and some have rooted for each of the 29 trees found so far. The off-spring will be cloned into hedges, with some saplings being returned to the tree-owners and more planted out at field boundaries and in mixed woodlands. Some may be challenged with live fungus, in research

conditions, to test if they are, in fact, resistant strains, or if their parents were just lucky in dodging DED.'

Contributed by Stephen Ward

LITERATURE PERTAINING TO BRITISH LICHENS - 40

Lichenologist 38(6) was published on 1 November 2006, ***39***(1) on 19 January 2007, and ***39***(2) on 1 March 2007.

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

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

ARUP, U 2006. ***Caloplaca sorediella*** Arup, a new sorediate species from western Britain. ***Lichenologist 38:*** 499–502. Modern British records of ***C. chrysophthalma*** belong to ****Caloplaca sorediella***, with records from coastal sites in the Scilly Isles, W Cornwall, Caernarvonshire, Pembrokeshire, Anglesey and W Sutherland.

CALATAYUD, V, TRIEBEL, D & PÉREZ-ORTEGA, S 2007. ***Zwackhiomyces cervinae***, a new lichenicolous fungus (***Xanthopyreniaceae***) on ***Acarospora***, with a key to the known species of the genus. ***Lichenologist 39:*** 129–134. Includes a key to 22 known species of the genus.

COPPINS, B J & COPPINS, A M 2006. Lichens – the biodiversity value of western woodlands. ***Botanical Journal of Scotland 57:*** 141–153. An overview of the Atlantic broad-leaved woodlands of Britain as a habitat for lichens. It is stated that 517 epiphytic lichen taxa have been recorded from these woods, with about 165 being mainly confined to them. There is also a list of lichenicolous fungi that have this attribute. Within these Atlantic woods only 30 lichens show a preponderance for oak. The life-history of an oak tree is considered in relation to the niches it offers for lichen colonization, and some management scenarios are provided.

ELLIS, C J & COPPINS, B J 2006. Contrasting functional traits maintain lichen epiphyte diversity in response to climate and autogenic succession. ***Journal of Biogeography 33:*** 1643–1656. Using data from 12 aspen stands in Scotland, large scales trends in epiphyte diversity are explained as the local response of species with contrasting functional traits to climate and autogenic succession.

ELLIS, C J & COPPINS, B J 2007. 19th century woodland structure controls stand-scale epiphyte diversity in present-day Scotland. ***Biodiversity Research 13:*** 84–91. Using 93 study sites, the richness of epiphyte species in smaller-scale habitat units (aspen stands) to larger-scale woodland structure (extent and fragmentation) measured at two spatial scales and for two time-frames, modern (1990s to 2000s) and historic (1860s to 1880s). Species richness was positively related to woodland extent and negatively related to woodland fragmentation; however, richness was better explained by historic woodland structure at a 1 km^2 scale, than by modern woodland structure.

ELLIS, C J & COPPINS, B J 2007. Predicted response of the lichen epiphyte ***Lecanora populicola*** to climate change scenarios in a clean-air region of northern Britain. ***Biological Conservation 135:*** 396–404. Model predictions suggest an overall increase in the potential range of ***L. populicola***, and, by association, several other 'Boreal' British lichens. Projected increases in the occurrence of ***L. populicola*** are associated with predicted summer drying, and indicate a putative threat to negatively associated 'oceanic' lichens.

ETAYO, J 2000. Aportación a la flora liquénica de las Islas Canarias. VI. hongos liquenícolas de La Palma. ***Bull. Soc. Linn. Provence51:*** 153–162. Includes original description of ***Catillaria usneicola*** Etayo, reported as new to the British Isles in 'New, Rare and Interesting' in this ***Bulletin***.

EVANS, I M 2006. Lichens. In SCOURIE WILDLIFE GROUP, ***Wildlife of Scourie*** pp 71–74. Scourie: Scourie Wildlife Group [no ISBN number given]. About 70 species are reported from in and around the village of Scourie in West Sutherland (VC 108; GR NC14).

FLETCHER, A 2007. Lichens. In ROGART WILDLIFE GROUP, ***Wildlife of Rogart*** pp 116–128. Rogart: Rogart Wildlife Group, ISBN 978-0-9552211-1-8. About 210 species are reported from in and around the village of Rogart in East Sutherland (VC 107; GR NC70).

HAFELLNER, J & JOHN, V 2006. Über Funde lichenocoler nicht-lichenisierter Pilze in der Türkei, mit einer Synopsis der bisher im Land nachgewiesenen Taxa. ***Herzogia***

19: 155–176. ***Muellerella pygmaea*** var. ***athallina*** is treated at species rank as the new combination ***M. erratica*** (A. Massal.) Hafellner & V. John (2006). ***Endococcus parietinarius*** is transferred to ***Sphaerellotheciumas S. parietinarium***(Linds.) Hafellner & V. John.

HAFELLNER, J, OBERMAYER, S & OBERMAYER, W 2005. Zur Diversität der Flechten und lichenicolen Pilze im Hochschwab-Massiv (Nordaplen, Steiermark). ***Mitt. naturwiss. Ver. Steiermark 134:*** 57–103. ***Sphaerellothecium araneosum*** var. ***cladoniae*** Alstrup & Zhurb. is afforded specific rank as ***S. cladoniae*** (Alstrup & Zhurb.) Hafellner.

HÖGNABBA, F 2006. Molecular phylogeny of the genus ***Stereocaulon. Mycological Research 110:*** 1080–1092. The results support the inclusion of the crustose species (e.g. ***S. cumulatum S. leucophaeopsis*** and ***S. tornense***) within ***Stereocaulon.*** Within the genus, eight large monophyletic groups are distinguished, most of which do not coincide with Lamb's infrageneric classification.

KANTVILAS, G & ELIX, J 2007. The genus ***Ramboldia*** (***Lecanoraceae***): a new species, key and notes. ***Lichenologist 39:*** 135–141. Includes a key to the 11 accepted species [only one from British Isles].

KASCHIK, M 2006. Taxonomic studies on saxicolous species of the genus ***Rinodina*** lichenized Ascomycetes, Physciaceae) in the Southern Hemisphere with emphasis in Australia and New Zealand. ***Bibliotheca Lichenologica 93:*** 1–162. ***Rinodina gennarii*** is treated as a synonym of ***R. oleae***.

LAUNDON, J R 2006. The importance of Northamptonshire's reservoirs. ***Northamptonshire Past and Present 59:*** 73–81. A history and natural history of canal and water-supply reservoirs in the county. Thirteen lichens are reported from grass-heath, including ***Cladonia ramulosa*** and ***Dibaeis baeomyces*** for the first time from the county. However, these records were made in 1953–56, and today the grass-heath is a dense stand of bracken.

SEAWARD, M R D 1994. Vice-county distribution of Irish lichens. ***Biology and Environment: Proc. Roy. Irish Acad 94B***(2)***:*** 177–194. An update of the the author's census catalogue of 1984. Enumerated are 1050 lichens and 25 lichenicolous fungi and non-lichenized fungi. A table gives the total number of taxa recorded for each of the 40 vice-counties, ranging from only 90 for Monaghan to 626 for West Galway.

SEAWARD, M R D 2006. Mosses, liverworts and lichens. ***Trans. Lincs. Nat. Un.26:*** 185–188. Enumeration of new county and divisional records for Lincolnshire.

SÉRUSIAUX, E, COPPINS, B J & LÜCKING, R 2007. ***Phylloblastia inexpectata*** (***Verrucariaceae***), a new species of foliicolous lichen from Western Europe and Madeira. ***Lichenologist 39:*** 103–108. ***Phylloblastia inexpectata*** Sérus., Coppins & Lücking is described from ***Prunus laurocerasus*** leaves in Wigtownshire, with additional records from E Suffolk (on ***Buxus***) and E Lothian (on ***Rhododendron***), as well as from Madeira and Italy. [Further British records will be reported in the next ***Bulletin***].

SLAVÍKOVÁ-BAYEROVÁ, S & ORANGE, A 2006. Three new species of ***Lepraria*** (Ascomycotina, ***Stereocaulaceae***) containing fatty acids and atranorin. ***Lichenologist 38:*** 503–513. Includes descriptions of ****Lepraria humida*** Slavíková & Orange and ***L. sylvicola*** Orange, both of which require TLC to separate them from ***L. jackii***. A key and a diagram of chromatograms are provided.

Brian Coppins

NEW, RARE AND INTERESTING LICHENS

Contributions to this section are always welcome. Submit entries to Chris Hitch, Orchella Lodge, 14, Hawthorn Close, Knodishall, Saxmundham, Suffolk, IP17 1QY, in the form of species, habitat, locality, VC no, VC name, (from 1997, nomenclature to follow that given in the appendix, see BLS ***Bulletin*** 79, which is based on the Biological Record Centre for instructions for Recorders, ITE, Monks Wood Experimental Station, Abbots Ripton, PE17 2LS, 1974). Grid Ref (GR) (please add letters for the 100km squares to aid BioBase and Recorder 2000 users), altitude (alt), where applicable in metres (m), date (month and year). NRI records should now include details of what the entry represents, eg specimen in Herb. E, Hitch etc., with accession number where applicable, field record or photograph, to allow for future verification if necessary or to aid paper/report writing. Determined/confirmed by, Comments, New to/the, Finally recorder. An authority with date after species is only required when the species is new to the British Isles. Records of lichens listed in the RDB are particularly welcome, even from previously known localities. In the interests of accuracy, the data can be sent to me on e-mail, my address is ***cjbh.orchldge@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 colombiana Etayo (2002): (i) on 'bleached' podetia of ***Cladonia squamosa*** on ***Betula*** trunk, woodland by access road to Kinloch Lodge Hotel, Kinloch & Kyleakin Hills, SSSI, Skye, VC 104, North Ebudes, GR 18(NG)/704.159, alt 10m, April 2005. Herb. Coppins 21508 in E; (ii) on 'bleached' squamules of ***Cladonia*** sp. on ***Alnus*** trunk in riverside woodland, northeast of Suadalen, by Glenmore River, VC 105, West Ross, GR 18(NG)/88-17-, alt 90m, June 2005. Herb. Coppins 22225 in E. New to Europe, previously known only from Colombia. This species has convex apothecia, 0.1–0.22 mm diam., an orange K+ purple epithecium, and 1-septate spores, 12–15 × 4.5–5.5 µm, that become warted when old. These characteristics are reminiscent of the corticolous (or occasionally lignicolous) ***A. vinosa***, but the apothecia are much smaller (0.2–0.5 mm diam. in ***A. vinosa***). Microscopical examination of the host tissue in the Scottish collections revealed cells of ***Trentepohlia*** within the chlorotic tissue, and it seems likely that ***A. colombiana*** is a lichenicolous lichen. For original description and illustrations see Etayo (2002) in ***Bibliotheca Lichenologica*** 84: 23–28. ***BLS No. 2463*** B J & A M Coppins

Catillaria usneicola Etayo (2000): (i) on ***Usnea filipendula***, Hell's Glen SSSI, VC 98, Argyll Main, GR 27(NN)/190.050, December 1992. Herb. Coppins 15578 in E; (ii) on main branches of ***Usnea wasmuthii*** in humid valley, Reelig Glen, Moniack Gorge SSSI, 5 km southwest of Beauly, VC 96, East Inverness-shire, GR 28(NH)/55-42-, alt 50m, February 1997. Herb. Coppins 18225 in E. The minute apothecia (to 0.1 mm diameter) of this species have the internal anatomy (outer cells of exciple and paraphysis apices with dark caps, uniformly I+ dark blue tholus) typical of ***Catillaria*** s.str., but the ascospores are simple, although some are biguttulate. The ascospores are 4.5–6 × 1.5–2 µm, the hymenium is 20–25 µm tall, and the hypothecium is hyaline. This species is known elsewhere from Central and South America (Panama, Colombia and Ecuador) and the Canary Islands. For full description and illustrations see Etayo (2000) in ***Bull. Soc. Linn. Provence 51:*** 153–162. ***BLS No. 2465.***

B J & A M Coppins

Endococcus fusiger Th. Fr. & Almq. (1867): All on thalli of ***Rhizocarpon lavatum*** (i) on rocks in burn, Burn of Corriedoune, Glen Effock, VC 90, Angus, 37(NO)/43-76-, alt *c.* 400m, September 1967. Leg. P B Topham in E; (ii) on west-facing flush zone, 200m east of the source of the Red Burn, Ben Nevis, VC 97, West Inverness-shire, 27(NN)/1571.7169, alt 1155m, September 2006. Leg. J R Douglass in E; (iii) on east-facing side of Emergency shelter wall, 27(NN)/1669.7125, alt 1342m, September 2006. Leg. J R Douglass in E. Characterized by ½-immersed to superficial perithecia, 0.14–0.25 mm diameter, 8-spored asci, and brown, 1-septate ascopores, 13–16 × (5–)

6–7 µm, with rather pointed apices. Very similar in appearance on ***R. lavatum*** is ***Muellerella pygmaea***, but that species has multi-spored asci. ***E. fusiger*** was originally described from Scandinavia on ***Rhizocarpon geminatum*** but examination of British specimens in E of this host has revealed no lichenicolous fungi. ***BLS No. 2467***.

B J Coppins

Hypotrachyna afrorevoluta (Krog & Swinscow) Krog & Swinscow (1987) [syn: ***Parmelinopsis afrorevoluta*** (Krog & Swinscow) Elix & Hale (1997)]: on rough bark on trunk of ***Betula pendula*** in wood above gorge of the Afon Rheidol, VC 46, Cardiganshire, GR 22(SN)/730.780, alt 100m, September 2003. Herb. SPC. Determined by D. Masson. Separated from ***H. revoluta*** in the field by the shiny ('brillante') brown-black underside of the young lobes, somewhat resembling wet tar. The rhizines are similarly glossy, simple or irregularly branched (dull and mostly forked or dichotomously branched in ***H. revoluta***). The ascospores of ***H. afrorevoluta*** are larger (statistically significant) than those of ***H. revoluta***, though fertile thalli are rare. In Europe the species has a more oceanic distribution than ***H. revoluta*** and in Wales appears occasionally in Atlantic woodlands, often in ***Parmelion laevigatae***-type communities on trees and rockfaces. ***BLS No 2468***. S P Chambers

Other records

Absconditella celata growing on china clay spoil at Tresayes Down, VC 2, East Cornwall, GR 10(SW)/996.586, February 2007. Determined by S Chambers. February 2007. B Benfield

Absconditella pauxilla on attached, dead twig of ***Picea sitchensis***, at edge of fire-break, Upper Monynut Forest, VC 82, East Lothian, GR 36(NT)/672.670, alt 325m, January 2007. Herb Coppins 22245 in E. Perhaps an overlooked niche for this little-recorded, diminutive species. B J Coppins

Anaptychia ciliaris ssp. ***mamillata:*** recorded from thin seams of siliceous rock outcropping among limestone near the Great Orme tramway terminus (about six plants seen), Great Ormes Head, VC 49, Caernarvonshire, GR SH/767.833, alt 195m, December 2006. This extremely localised occurance of acid rock about 150 m from the summit trig point had gone unnoticed until now. Other species at the same site include ***Fuscidea lygaea, Ramalina siliquosa, R. subfarinacea Rhizocarpon geographicum*** and ***R. richardii***. None of these occur elsewhere on this limestone headland. V Giavarini

Arthonia apotheciorum in apothecia of ***Lecanora varia***, on gate post, Wide Hope, Lammermuir Hills, VC 82, East Lothian, GR 36(NT)/7134.6982, alt 200m, July 2006. Herb. Coppins 22065 in E. An unusual occurrence – usually in apothecia of ***Lecanora dispersa*** agg. B J Coppins

Arthonia digitatae on ***Cladonia polydactyla*** on side of large stump, Glencoe Lochan, Glencoe, VC 98, Argyll Main, GR 27(NN)/106.597, alt 60m, October 2006. Herb. Coppins 22046 in E. As with previous British records, closely associated with ***Milospium lacoizquetae*** New to Argyll. B J & A M Coppins

Arthonia phaeophysciae on ***Phaeophyscia orbicularis*** on calcareous headstone, Capel Church, VC 16, West Kent, GR 51(TQ)/636.445, alt 30m, August 2005. Herb. Coppins 22131 in E. New to Kent. B J Coppins

Arthonia varians on thallus and in apothecia of ***Lecanora muralis***, top of ridge, Traprain Law SSSI, VC 82, East Lothian, GR 36(NT)/583.747, alt 210m, September 2006. Herb. Coppins 22066 in E. An unusual occurrence – usually found in apothecia of ***Lecanora rupicola*** B J Coppins & N G Hodgetts

Arthothelium dictyosporum on ***Sorbus***, upper part of Allt na Luib valley (west side), Coulin Pinewood SSSI, VC 105, West Ross, GR 18(NG)/995.554, alt *c.* 220m, February 2007. Herb. Coppins 22263 in E. Previously known from this valley (in 2004), but lower down at *c.* 190m altitude. B J Coppins, Acton & A Griffith

Arthrorhaphis muddii on ***Dibaeis baeomyces***, Trelavour Down, St Dennis, VC2, East Cornwall, GR 10(SW)/962.569. February 2007. B Benfield

Bacidia arceutina near base of trunk of young ***Fraxinus*** in mixed, ***Quercus - Fraxinus*** planted stand of woodland, southeast part of Binning Wood, VC 82, East Lothian, GR 36(NT)/60-79-, alt 15m, January 2007. Herb. Coppins 22241 in E. New to the Lothians. B J Coppins

Bacidia laurocerasi on branch of ***Sambucus*** by path, Southend-on-Sea, VC 18, South Essex, GR 51(TQ)/903.872, August 2006. Herb. STD. Determined by B J Coppins. New to East Anglia. P M Earland-Bennett

Bacidia trachona on vertical rock of dry gully in small, east-facing cliff within coastal woodland, Compartment 16, Taynish NNR, VC 101 Kintyre, GR 16(NR)/741.852, May 2006. Herb. Coppins 21969 in E. Unusual in having apothecia.
B J & A M Coppins

Biatora britannica (i) with apothecia, on young mature ***Fraxinus*** trees in bottom of valley woodland, Clovelly, Marsland to Clovelly Coast SSSI, VC 4, North Devon, GR 21(SS)/308.256, alt. 60m, October 2005. Herb. Coppins 22036 & 22037 in E; (ii) with a single apothecium, on young ***Fraxinus*** in woodland on north-facing slope, Brownsham, Marsland to Clovelly Coast SSSI, VC 4, North Devon, GR 21(SS)/290.258, alt 80m, October 2005. Herb. Coppins 22003 in E.

B J Coppins & C J E Hope

Biatora britannica with apothecia, on ***Fraxinus*** in humid valley, Ashclyst Forest, VC 3, South Devon, GR 30(SY)/001.989, March 2007. Herb. Benfield. Determined by B J Coppins. New for South Devon. B. Benfield & B Edwards

Biatora epixanthoides on ancient ***Salix caprea sphacelata*** in relic high altitude ***Betula – Salix*** boreal broadleaved woodland, Coill a' Choire, Creag Meagaidh SAC, VC97, West Inverness-shire GR 27(NN)/46-89-, alt 600m, June 2006. Perhaps an altitude record for this species? N A Sanderson

Biatorella fossarum on compacted soil of track skirting Bishops Quarry, Great Ormes Head, VC 49, Caernarvonshire, GR 23(SH)/767.830, alt 170m, November 2006. Herb.NMW. New to Wales and third British site. V Giavarini

Bryophagus gloeocapsa on hepatics on north-facing outcrops by River Barle, west of Landacre Bridge, Exmoor, VC 5, South Somerset, GR 21(SS)/81-36-, alt 270m, July 2005. Herb. Coppins 22089 in E. New to Somerset. B J & A M Coppins

Buellia badia on slate roof amongst species of ***Neofuscelia*** and ***Xanthoparmelia***, Piles Mill, Porlock, VC 5 South Somerset, GR 21(SS)/90-46-, January 2006. Herb. Coppins 21920 in E. New to Somerset. B J & A M Coppins

Buellia (Tetramelas) insignis overgrowing mosses on schistose boulder east of Meall Cumhann, Ben Nevis, VC. 97, West Inverness-shire, GR NN(27)/183.696, September 2005. Herb. V Giavarini. Determined by B J Coppins. This species has a characteristic C+ yellow reaction to the thallus, but is small and easily overlooked. Only once collected from near the summit of Ben Lawers (1200m), Perthshire since 1960. This collection is from considerably lower down (470 m) demonstrating that sheltered boulders can provide ideal alternative habitats for bryophilous montane lichens. V Giavarini

Buellíella physciicola: on thallus of ***Phaeophyscia orbicularis,*** on top of concrete blocks by footpath, Southend-on-Sea, VC 18, South Essex, GR 51(TQ)/893.878. December 2006. Herba.STD & P M E-Bennett. New to Essex P M Earland-Bennett

Calicium salicinum: on ancient ***Quercus*** in deer park woodland, Staverton Park, VC 25, East Suffolk, GR 62(TM)/35-50/51, March 1978. Herb. Hitch. Determined by B J Coppins. New to Suffolk. C J B Hitch & P W Lambley

Caloplaca asserigena: on wooden rails around oak, tagged 02088, with ***Amandinea punctata, Candelariella reflexa, Japewia tavaresiana, Lecanora chlarotera, L. persimilis, L. symmicta, Lecidella elaeochroma, Rinodina sophodes & Physcia aipolia***, Clovelly Park, Marsland to Clovelly Coast SSSI, VC 4, North Devon, GR 21(SS)/308.251, alt. 100m, July 2005. Herb. Coppins 22044 in E. An interesting assemblage presumably derived from the canopy twigs above. According to B Benfield (pers. com. March 2007), the rails had been heavily grazed by horses and the material could not be refound. B J & A M Coppins

Caloplaca ceracea: on sandstone ledger, West Peckam Church, VC 16, West Kent, GR 51(TQ)/644.525, alt. 75m, September 2005. Herb. Coppins 22126 E. New to Kent B J Coppins

Caloplaca cerinella: on shady algalised rotting branch of fallen ***Fraxinus*** in car park Flatford Mill Field Centre VC 25, East Suffolk, GR 62(TM)/07-33-, March 2007. Herb Hitch in E. Determined by B J Coppins. An unusual habitat for this species which prefers sunny twigs of ***Sambucus.*** J F Skinner & C J B Hitch

Caloplaca obscurella: on bark of ***Sambucus*** and on rain tracks of ***Fraxinus*** in scrubby fringe to drained old canal, Steventon, VC 22, Berkshire, 41(SU)/43-92- and 41(SU)/45-93-, December 2006. Herb.Henderson 975. New for Berkshire. N A Sanderson

Cavernularia hultenii on ancient ***Salix caprea sphacelata*** in relic high altitude ***Betula – Salix*** boreal broadleaved woodland, Coill a' Choire, Creag Meagaidh SAC, VC97, West Inverness-shire, GR 27(NN)/46-89-, alt 580m,June 2006. Appears to be only the third record for the central Highlands and may also be an altitude record N A Sanderson

Chaenotheca hispidula: on shady side of mature ***Fraxinus*** in low boggy area, Jimmy's Farm, Wherstead, VC 25, East Suffolk, GR 62(TM)/14-40-, August 2006. Herb. Hitch N1/B(2). Determined by B J Coppins. New to Suffolk. C J B Hitch

Chaenotheca trichialis on dry bark of old ***Fraxinus*** by ditch in field on enclosed common., Cow Common, Steventon, VC 22, Berkshire GR 41(SU)/43-92-, December 2006, Herb. Sanderson 972. Second record for Berkshire. N A Sanderson

Cladonia monomorpha on humus-rich detritus overlying soil in disused quarry, Berry Head, VC 3, South Devon, GR 20(SX)/944.566, September 2006. Herb. Hitch R14. Confirmed by Leo Spier. Third British record and new for Devon

C J B Hitch & B Benfield

Collema fragrans on old ***Fraxinus*** (girth 3.45 m), Whiddon Deer Park, VC 3, South Devon, GR 20(SX)/7242.8933, January 2006. Herb. Coppins 22073 in E. Form lacking apothecia, but with numerous isidia-like papillae. B J & A M Coppins

Cyphelium notarisii covering wooden seat on Marine Drive opposite Mares Well, Great Ormes Head, VC 49, Caernarvonshire, GR 23(SH)/753.840, alt 130m, January 2007. Herb. NMW. New to Wales and first record of the species from the west coast of England. Because of its now disjunct distribution it should be searched for on the hard wood batons fastened to concreted seat supports in municipal parks and recreation grounds near the sea in western areas. These horizontal batons are rarely tannalised or creosoted. More usually they are varnished which appears to be no deterrent to the colonisation of this species. The peeling varnish of such seats (which suggests several years of weathering) also opens up the wood to colonisation by companion species such as ***Amandinea punctata, Buellia griseovirens, Fuscidea lightfootii, Lecidella elaeochroma, Lecanora aitema*** and ***L. pulicaris***.

V Giavarini

Cyphelium notarisii three patches on wooden seat in Poole Park, Poole, VC 9, Dorset, GR 40(SZ)/025.912, just 200 m from the recorders home address, February 2007. The seat is one of over 20 that have been under regular surveillance for the last 15 years. This may suggest a new westerly expansion of the species. The nearest site to Poole is Keyhaven in Hampshire a distance of 17 miles. V Giavarini

Dirina massiliensis f. ***massiliensis***: abundant and co-dominant with f. ***sorediata*** on N-facing cliffs above the Marine Drive opposite track entrance to famous lighthouse, Great Ormes Head, VC 49, Caernarvonshire, GR 23(SH)/758.844, November 2006. An important rediscovery of this species last recorded from the Orme in 1919 by W. Johnson in the year of his death. At this site (one of three located) the cover is so extensive the lichen colours the cliffs white. V Giavarini

Endococcus parietinus on ***Xanthoria parietina*** on flint in south-facing wall of derelict chapel in pasture, VC 25, East Suffolk, GR 62(TM)/473.659, August 2006. Herb. Hitch I 3. New to Suffolk. C J B Hitch

Enterographa elaborata (i) a single thallus 2 x 1cm on edge of rain track dominated by ***Opegrapha varia***, with an ***Enterographa crassa*** mosaic on the other side of the thallus, on wind damaged ancient ***Fagus*** at edge of area of ***Fagus – Ilex – Quercus*** pasture woodland, with large scale canopy collapse to west, but intact wood to the east, west side of James Hill, New Forest, South Hampshire, VC 11, GR 41(SU)/28-08-, October 2006. The ***Enterographa elaborata*** is actively spreading over the ***Opegrapha varia*** ; (ii) two thalli 1.5-2.5cm diameter on drying out wound track,with pioneer community of ***Caloplaca ulcerosa***, ***Porina aenea*** and ***Opegrapha vulgata***, being invaded by mature rain track community with young thalli of ***Pyrenula chlorospila*** and ***Enterographa elaborata,*** on old ***Fagus*** at edge of large scale canopy collapse area in ***Fagus – Quercus*** pasture woodland, Denny Wood, New Forest, South Hampshire, VC 11, GR 41(SU)/33-05-, January 2007. Herb. Sanderson 979. Very exciting records of a species that appeared to be facing extinction, as the only other know tree in the New Forest died recently. The species may have a relationship with the long-term dynamics of old growth ***Fagus*** stands. Both new sites were in sections of woodland where ***Fagus*** dominated stands were undergoing large scale canopy collapse. N A Sanderson & A M Cross

Epigloea grummannii on soily crevices in boulders by tributary stream above Inverinain, Glen Lyon, VC 88, Mid Perthshire, GR 27(NN)/658.464, alt 400m, May 2006. Herb. Giavarini. Confirmed by B J Coppins. This watercourse drains part of the Ben Lawers NNR but lies approximately 800 m downslope of the SSSI/SAC boundary. V Giavarini

Epigloea medioincrassata on Corylus lining the upper course of the Allt Girnaig, VC 88, Mid Perthshire, GR NN/927.652, alt 250m, May 2006. V Giavarini

Epigloea renitens scattered on mossy soily crevices in boulders, by tributary stream above Inverinain, Glen Lyon, VC 88, Mid Perthshire, GR NN/658.464, alt. 400m, May 2006. Herb. Giavarini. Determined by B J Coppins. The site lies immediately north of the Ben Lawers NNR. V Giavarini

Fellhaneropsis myrtillicola on twigs and needles of ***Pseudotsuga menziesii*** at edge of open area with southerly aspect, Upper Monynut Forest, VC 82, East Lothian, GR 36(NT)/694.670, alt 300m, January 2007, Coppins 22243 (E). New to East Lothian. B J Coppins

Fuscopannaria ignobilis on old ***Quercus*** and ***Fraxinus*** in ***Betula*** dominated ancient woodland, north shore of Loch Rannoch, Annat, VC 88, Mid Perthshire, GR 27(NN)/63-59-, alt 210m, June 2006. This Vulnerable and Schedule 8 species is new to the Rannoch - Tummel area. N A Sanderson & A M Cross

Gelatinopsis ericatorum on ***Dibaeis baeomyces*** on clay spoil at Tresayes Down, VC 2, East Cornwall, GR 10(SW)/996.586, February 2007. B.Benfield

Gomphillus calycioides on ***Fraxinus*** in stream gully in acidic ***Quercus – Betula*** woodland, north shore of Loch Leven, VC 97, West Inverness-shire, GR 27(NN)/13-61-, alt 80m, June 2006. A new 10km record for this Near Threatened species. N A Sanderson

Gregorella humida on china clay spoil at Trelavour Downs, St Dennis, VC 2, East Cornwall, GR 10(SW)/962.569, February 2007. Determined by S P Chambers B Benfield

Gyalideopsis scotica: on mosses growing on marginal rocks of tributary stream above Inverinain, Glen Lyon, VC 88, Mid Perthshire, GR 27(NN)/658.464, alt 400m, May 2006. This species may originate from melt water streams higher up on the Ben Lawers NNR. This is the third occasion of ***Gyalideopsis scotica*** being collected from upland streams in Scotland. V Giavarini

Japewia tavaresiana: for details see under ***Caloplaca asserigena***.

Lecanactis dilleniana on north-facing underhang of small basalt outcrop, with ***Opegrapha gyrocarpa*** & ***O. zonata***, Traprain Law SSSI, VC 82, East Lothian, GR 36(NT)/5819.7486, alt 150m, February 2007. Herb. Coppins 22246 in E. New to southeast Scotland. B J Coppins & C J Ellis

Lecanactis latebrarum on north-facing outcrops by River Barle, west of Landacre Bridge, Exmoor, VC 5, South Somerset, GR 21(SS)/81-36-, alt 270m, July 2005. Herb. Coppins 22088 in E. New to Somerset. B J & A M Coppins

Lecanora farinaria fertile on trunk of youngish ***Fraxinus*** on east-facing wooded slope, Cheddar Gorge, VC 6 North Somerset, GR 31(ST)/48-54-, October 1991. Herb. Coppins 14528 in E. With atranorin and roccellic acid by TLC. New to Somerset. B J Coppins

Lecidea alpestris: on top of large boulder, by Carrifran Burn, White Coomb, northeast of Moffat, VC 72, Dumfriesshire, GR 36(NT)/15-13-, alt *c.* 300m, April 1992. New to

southern Scotland and third British record. See ***BLS Bulletin 94:*** 84 for details of previous records. B J & A M Coppins

Lecidella scabra: on ***Corylus*** twig by stream, Southend-on-Sea, VC 18, South Essex, GR 51(TQ)/903.872, August 2006. Determined by B J Coppins. Herb. STD. An unusual habitat for this taxon, but see below. P M Earland-Bennett

Lecidella scabra: on large buttress roots of ***Fagus***, with ***Candelariella vitellina***, ***Melanelia fuliginosa*** var, ***glabratula*** and ***Physcia tenella***, in castle grounds, Skipton Castle, VC 64, Mid-west Yorkshire, GR 34(SD)/991.519, September 2006. Herb. Hitch, A16. An unusual habitat for this taxon, but see above. C J B Hitch

Lemmopsis oblongans on Portland Sand on soft cliff, Emmetts Hill, St Aldhem's Head, Worth Matravers, VC 9, Dorset, GR 30(SY)/9587.7601, alt 65m, January 2005. Herb. Edwards in E. Determined by B J Coppins. First discovery since the type collection from Cumbria in 1870. B Edwards

Leptogium biatorinum on bare soil of verge of urban road, Newington Avenue, Southend-on- Sea, VC 18, South Essex, GR 51(TQ)/899.868, August 2006. Herba. STD and P M E-Bennett. Confirmed by B J Coppins. Second Essex record, having previously been found by me on Canvey Island. P M Earland-Bennett

Leptogium hibernicum rare on ***Corylus*** in ***Corylus – Fraxinus*** woodland, Dubh-ghlas, Onich to North Ballachulish Woods SAC, VC 97, West Inverness-shire, GR 27(NN)/02-62-, alt 50m, June 2006, Herb Sanderson 978. Appears to be the first record for the Lochaber area for this Near Threatened species.
N A Sanderson & A M Cross

Leptoraphis maggiana on bole of young ***Corylus*** in copse, Priory Park, Prittlewell, Southend-on-Sea, VC 18, South Essex, GR 51(TQ)/878.875, March 2007. Herba. STD & Earland-Bennett P M Earland-Bennett

Lichenothelia convexa on flint pebble on wasteland area, Tilbury Power Station, VC 18, South Essex, GR 51(TQ)/65-.76-. September 2006. Herb. STD. Determined by B J Coppins. New to Essex. P M Earland-Bennett

Lithothelium phaeosporum on trunk of large ***Fraxinus,*** just northeast of Cumhann-leum Bridge, Glen Tilt, VC 89, East Perthshire, 27(NN)/881.685, alt 190m, April 2006. Herb. Coppins 22106 in E. B J & A M Coppins

Lobaria amplissima on leaning ancient ***Salix caprea sphacelata*** of 2.20m girth, in relic boreal ***Betula – Salix – Anus*** woodland, east side of Loch Ericht, below Creag a' Chais, Coire Bhachdaidh SSSI, VC 88, Mid Perthshire, GR 27(NN)/51-67-m, alt 460m, June 2006. A new 10km grid square record on the eastern edge of the range of this species. The site is very high and perhaps an altitude record?

N A Sanderson & A M Cross

Lobaria scrobiculata: on ancient ***Salix caprea sphacelata*** in relic high altitude ***Betula – Salix*** boreal broadleaved woodland, Coill a' Choire, Creag Meagaidh SAC, VC 97, West Inverness-shire, GR 27(NN)/46-89-, alt 600m, June 2006. Perhaps an altitude record for this species?

N A Sanderson

Macentina stigonemoides on bark of several ***Sambucus*** scrub in arable landscape, Steventon, VC 22, Berkshire, GR 41(SU)/45-93-, 41(SU)/45-92- and 41(SU)/43-92-, December 2006. Herb. Sanderson 974 and 976. All sterile. New for Berkshire.

N A Sanderson

Melanelia laciniatula abundant on branches of a rowan (***Sorbus aucuparia***), near the 'tea-house', Easan Dorcha, Coulin Pinewood SSSI, VC 105, West Ross, GR 28(NH)/011.525, alt 180m, February 2007. Herb. Coppins 22259 in E. Finds such as this in a remote Highland valley, and others (e.g. on branches of a 'granny pine' in Abernethy Pinewood), lead to a questioning of the suggestions that this species was an early 20th century introduction via southeast England (see Gilbert, ***The New Naturalist Lichens***, p. 169, 2000). Perhaps it has been with us for much longer in the Highlands, but spread south into SO_2 affected areas, along with species such as ***Parmeliopsis ambigua*** and ***P. hyperopta***?

B J Coppins, A Acton & A Griffith

Micarea hedlundii on fallen decorticate trunk of ***Quercus*** in valley woodland, Marsland to Clovelly Coast SSSI, VC 4, North Devon, GR 21(SS)/309.255, alt 60m, October 2005. Herb. Coppins 22035 in E. New to Devon.

B J Coppins & C J E Hope

Micarea inquinans growing on ***Dibaeis baeomyces*** on Trelavour Downs, St Dennis, VC 2, East Cornwall, GR 10(SW)/962.569, February 2007. Confirmed by B Coppins.

B Benfield

Micarea nigella: on ***Juniperus*** lignum with pycnidia only, in ***Juniperus – Betula*** woodland on northeast slope of Harestone Hill, Hopes, Lammermuir Hills, VC 82, East Lothian, GR 36(NT)/56-62-, April 2005. Herb. Coppins 22137 in E. New to the Lothians

B J Coppins & C J Ellis

Milospium lacoizquetae for details see under ***Arthonia digitatae.***

Mniacea nivea on liverworts on china clay spoil at Ruddlemoor, VC 2, East Cornwall, GR 20(SX)/0145.52, February 2007. Determined by B J Coppins. B Benfield

Moellerospis nebulosa abundantly fertile on soil and low vegetation on northwest-facing Old Red Sandstone conglomerate cliff, Upper Monynut Forest, by Monynut Water, VC 82, East Lothian, GR 36(NT)/696.671, alt 275m, January 2007. Herb.Coppins 22242 in E. New to East Lothian. B J Coppins

Mycomicrothelia atlantica on ***Corylus*** in coastal woodland, Compartment 18, Taynish NNR, VC 101 Kintyre, GR 16(NR)/748.862, May 2006. Herb. Coppins 21988 in E. New to Kintyre. B J & A M Coppins

Nectriella tenuispora (i) on ***Peltigera hymenina*** on grassed-over china clay tip, Trelavour Downs, St Dennis, VC 2, East Cornwall, GR 10(SW)/962.569, January 2007. Determined by C J B Hitch, confirmed by B J Coppins; (ii) on ***P. hymenina*** on grassy slope, Braunton Burrows VC 4, North Devon, GR 21(SS)/461355, March 2007. Previously known from a single Scottish gathering. These entries represent the first and second English records for this species. B. Benfield

Neofuscelia pulla on slate roof, Piles Mill, Porlock, VC 5 South Somerset, GR 21(SS)/90-46-, January 2006, Coppins 21920 (E). New to Somerset.
B J & A M Coppins

Nephroma laevigatum: on ancient ***Salix caprea sphacelata*** in relic high altitude ***Betula – Salix*** boreal broadleaved woodland, Coill a' Choire, Creag Meagaidh SAC, VC 97, West Inverness-shire, GR 27(NN)/46-89-, alt 600m, June 2006. Perhaps an altitude record for this species? N A Sanderson

Opegrapha physciaria: on ***Xanthoria parietina*** flint in south-facing wall of derelict chapel in pasture, Minsmere Nature Reserve, VC 25, East Suffolk, GR 62(TM)/473.659, August 2006. Herb. Hitch I 40. New to Suffolk C J B Hitch

Opegrapha physciaria: on ***Xanthoria parietina*** on trunk of ***Acer pseudoplatanus*** at edge of river marsh, Caerhun, Conwy Valley, VC 49, Caernarfonshire, GR 23(SH)/776.703, alt 10m, October 2006. Herb. SPC. New to Caernarvonshire.
S P Chambers

Opegrapha sphaerophoricola on ***Sphaerophorus globosus*** on ***Betula*** on steep side of ravine, west side of upper Allt na Luib valley, Coulin Pinewood SSSI, VC 105, West Ross, GR 18(NG)/9955.5543, alt *c.* 280m, February 2007. Herb. Coppins 22265 in E. Third British record. The only other Scottish record is also from Coulin, but in the adjacent, eastern hectad.
B J Coppins, A Acton, & A Griffith

Opegrapha xerica: on dry, dead ***Rubus*** stems in rock crevice of west-facing cliff within woodland, Compartment 13, Taynish NNR, VC 101 Kintyre, GR 16(NR)/736.860, May 2006. Herb. Coppins 21943 in E. The species was found in the adjacent Compartment 17 in its more normal habitat of dry bark of an old oak.
B J & A M Coppins

Parmeliella triptophylla: on ancient ***Salix caprea sphacelata*** in relic high altitude ***Betula – Salix*** boreal broadleaved woodland, Coill a' Choire, Creag Meagaidh SAC, VC 97, West Inverness-shire, GR 27(NN)/46-89-, alt 600m, June 2006.
N A Sanderson

Parmelina quercina two thalli on trunk and abundant on main ascending bough of mature ***Fraxinus excelsior*** in small paddock, Minffordd, VC 48, Merionethshire, GR23(SH)/601.386, alt 10m, March 2007. Herb. SPC. New 10km square for this RDB species and in surprising abundance here only 0.5km short of its known northern limit in Britain.
S P Chambers

Pertusaria lactescens: on sandstone gravestone in churchyard, Christow, VC 3, South Devon, GR 20(SX)/836.850, January 2007.
B Benfield

Pertusaria melanochlora on big boulder by fast-flowing upland stream, Allt Essan, VC 88, Mid Perthshire, GR 27(NN)/434.286, alt 350m, May 2006.
V Giavarini

Pertusaria melanochlora on several huge schist boulders by upland stream, Inverhaggernie Burn, VC 88, Mid Perthshire, GR 27(NN)/384.284, alt 380m, May 2006.
V Giavarini

Pertusaria melanochlora on southwest-facing vertical side of large schistose boulder near upland stream east of Meall Cumhann, Ben Nevis, VC 97, West Inverness-shire, GR 27(NN)/183.696, September 1995. This is the classic habitat for the species which requires damp, slightly basic rock surfaces. Large boulders lining upland streams are key habitats. In my experience and I have only seen this species on schists (Scotland) or on dolerite (Dartmoor).
V Giavarini

Pertusaria ophthalmiza on old ***Alnus*** in relic boreal ***Betula – Salix – Alnus*** woodland, east side of Loch Ericht, below Creag a' Chais, Coire Bhachdaidh SSSI, VC 88, Mid Perthshire, GR 27(NN)/51-65-, alt 450m, June 2006. Herb. Sanderson 977. A new 10km grid square record on the eastern edge of this species range.

N A Sanderson & A M Cross

Phaeographis smithii on shady rotten twigs of fallen ***Fraxinus*** at edge of car park, Flatford Mill Field Centre, VC 25, East Suffolk, GR 62(TM)/07-33-, March 2007. Herb. Hitch G1. Determined by B J Coppins. Not recorded in this area for more than 100 years.

C J B Hitch & J F Skinner

Phyllopsora rosei: on ***Quercus*** in ***Quercus – Betula*** woods, north shore of Loch Leven, VC 97, West Inverness-shire, GR 27(NN)/16-62- and 27(NN)/15-62-, 8 June 2006 and 10 June 2006 respectively. Appears to be the first record for the Lochaber area.

N A Sanderson & A M Cross

Physcia stellaris: on trunk of ***Populus*** at edge of golf course, Garon Park, Southend-on-Sea, VC 18, South Essex, GR 51(TQ)/ 898.878, December 2006. Herb. Earland-Bennett. Second record for East Anglia (both in the same 10 x 10km square). Both on ***Populus*** and both without apothecia.

P M Earland -Bennett

Pleopsidium chlorophanum:on west-facing vertical face of sandstone headstone in churchyard, Seave Green, Bilsdale, VC 62, North-east Yorkshire, GR 45(NZ)/567.007, July 1990. Determined by C Roux. In fact this was New to the British Isles and superceded the second record by nearly five years.

D H Smith

Polyblastia quartzina: parasitic on ***Verrucaria latebrosa*** and killing the host, Nant Pennig, Brecon Beacons, VC 42, Breconshire, GR 22(SN)/9832.1885, alt 430m, September 2003. Herb. A Orange 14788 in NMW.

A Orange

Porina ahlesiana on vertical rock of dry gully in small, east-facing cliff within coastal woodland, Compartment 16, Taynish NNR, VC 101 Kintyre, GR 16(NR)/741.852, May 2006. Herb. Coppins 21970 in E. New to Kintyre.

B J & A M Coppins

Porina byssophila: with ***Caloplaca citrina*** on basic rock of wall by roadside, Lee Bay area, VC 4, North Devon, GR 21(SS)/477.465, August 2005. Confirmed by A Orange.

C J B Hitch, B Benfield, M A Allen & B P Hinton

Porina effilata (i) on old ***Quercus*** by track, Deer Park Wood, Clovelly, Marsland to Clovelly Coast SSSI, VC 4, North Devon, GR 21(SS)/304.259, alt 60m, July 2005. Herb. Coppins 22042 in E; (ii) another old ***Quercus*** nearby at GR 21(SS)/303.258, alt 55m, October 2005. Herb. Coppins 22033 in E. Both collections are sterile, but with pale yellowish pycnidia that contain needle-shaped conidia *c.* 11.5–19 × 0.8 µm. A specimen with perithecia had previously (1994) been collected from Clovelly (Coppins 16465, E). B J & A M Coppins and J C E Hope

Porina rosei: on base of a single ancient ***Quercus*** stool on cliff ledge, in uneven aged ***Quercus*** dominated woodland, east of Allt Nathrach on the north shore of Loch Leven, VC 97, West Inverness-shire, GR 27(NN)/16-62-, alt 50m, June 2006. Appears to be the first record for West Inverness-shire N A Sanderson & A M Cross

Porocyphus leptogiella: (i) on shore of freshwater loch, south side of Loch Tay, near Shenlarich, VC 88, Mid Perthshire, GR 27(NN)/706.409, alt 100m, September 2001. Herb. A Orange 13186 in NMW; (ii) on ± level surface of unshaded siliceous rock in stream, Trout Beck, Troutbeck Park, north-east of Ambleside, VC 69, Westmorland, GR 35(NY)/418.069, alt 200m, August 2006. Herb.A Orange 16638 in NMW.
A Orange

Protoparmelia atriseda: on south-facing, slab-like basalt outcrop, Traprain Law SSSI, VC 82, East Lothian, GR 36(NT)/583.747, alt 200m, February 2007. Herb. Coppins 22247 in E. New to southeast Scotland and third Scottish record.
B J Coppins & C J Ellis

Pseudocyphellaria crocata: on ***Corylus avellana*** in mature ***Corylus woodland***, the Burren, Berneens, Ballyvaghan, VC 9, County Clare, GR 12(M)/12755.02930, alt 140m, September 2006. Herb. S L Parr. Confirmed by R G Woods. Landowner was informed and supportive. S L Parr

Ptychographa xylographoides on lignum of old ***Salix caprea sphacelata***, in relic boreal ***Betula – Salix – Anus*** woodland, east side of Loch Ericht, below Creag a' Chais, Coire Bhachdaidh SSSI, VC 88, Mid Perthshire, GR 27(NN)/51-66-, alt 420m, June 2006. Herb. Sanderson 964. Determined by B J Coppins. A new 10km record for this Near threatened species. N A Sanderson & A M Cross

Pycnora leucococca: on bark plate of mature ***Pinus***, near upper edge of woodland, upper part of Allt na Luib valley (east side), Coulin Pinewood SSSI, VC 105, West Ross, GR 18(NG)/996.551, alt *c.* 300m. February 2007. Herb. Coppins 22266in E.

Second British collection. The first was also from this valley (in 1984), but lower down at *c.* 190m alt. B J Coppins, A Acton & A Griffith

Pycnora sorophora: (i) on lignum of standing dead ***Pinus sylvestris***, in heathland on edge of valley mire, Burnt Axon, New Forest SAC, VC 11, South Hampshire, GR 41(SU)/19-02-, 12 June 2006. Herb. Sanderson 967; (ii) on lignum of standing dead ***Quercus***, in glade in pasture woodland, Busketts Wood, New Forest SAC, VC 11, South Hampshire, GR 41(SU)/30-11-,13 June 2006, Herb Sanderson 968. This sorediate crustose species is very easy to overlook for sterile ***Lecanora conizaeoides***, but has a PD + yellow reaction and is fleetingly C + red. It may be quite widespread in the New Forest and should be looked for elsewhere in England. Second- and third-time recorded in Hampshire N A Sanderson

Ramonia dictyospora on trunk of old ***Quercus*** in pasture woodland, Talladale Gorge SSSI, VC 105, West Ross, GR 18(NG)/91-70-, alt 15m, February 2007. Herb. Coppins 22269 in E. New to West Ross. A M Coppins

Rinodina isidioides locally frequent on old ***Quercus*** in uneven aged ***Quercus*** dominated woodland, east of Allt Nathrach on north shore of Loch Leven, VC 97, West Inverness-shire, GR 27(NN)/17-62- and 27(NN)/16-62-, alt 40m, June 8 2006. A significant new site for a Near Threatened species that appears very infrequent in the west Highlands. N A Sanderson & A M Cross

Roselliniella cladoniae on ***Cladonia polydactyla*** on side of large stump, Glencoe Lochan, Glencoe, VC 98, Argyll Main, GR 27(NN)/106.597, alt 60m, October 2006. Herb. Coppins 22047 inE. New to western Scotland. B J & A M Coppins

Schismatomma graphidioides on old ***Fraxinus*** in west-facing wood, Sowton Mill, Dunsford, VC 3, South Devon, GR 20(SX)/826.886, January 2007. Confirmed by B J Coppins. B Benfield

Sclerococcum normandinae on ***Normandina pulchella***, Compartment 12, Taynish NNR, VC 101 Kintyre, GR 16(NR)/731.840, April 2006. Herb. Coppins 21933 in E. Sporodochia mainly forming around the ostioles of the perithecia of ***Lauderlindsaya borreri***. Second Scottish record. B J & A M Coppins

Sclerophora peronella (i) on lignum inside old hollow ***Betula pubescens tortuosa*** in relic boreal ***Betula – Salix – Anus*** woodland, east side of Loch Ericht, below Creag a' Chais, Coire Bhachdaidh SSSI, VC 88, Mid Perthshire, GR 27(NN)/51-67-, alt 460m, 5 June 2006; (ii) same habitat, east side of Loch Ericht, below Stob an Aonaich

Mhóir, Coire Bhachdaidh SSSI, VC 88, Mid Perthshire, 27(NN)54-70-, alt 428m, 6 June 2006. Two new 10km grid square records for this Near Threatened species.
N A Sanderson & A M Cross

Stenocybe bryophila parasitising a small ***Plagiochila*** species, on ***Betula***, in ***Betula – Corylus*** woodland in ravine, Teanga Mheadhoin, Onich to North Ballachulish Woods SAC, VC 97, West Inverness-shire, 27(NN)/062.611, alt, 140m, June 2006. Appears to be the first record for the Lochaber area. N A Sanderson & A M Cross

Strangospora ochrophora on bark of ***Sambucus*** in scrubby fringe to drained old canal, north of Willow Bank Farm, Steventon, VC 22, Berkshire GR 41(SU)/45-93-, December 2006. Herb. Sanderson 975. New for Berkshire, of a rare species in eastern England. N A Sanderson

Strangospora pinicola on wooden fence-rail of leisure centre car park, Garon Park, Southend-on-Sea, VC 18, South Essex, GR 51(TQ)/898.875, December 2006. Herba. STD, Earland-Bennett & Hitch. This species which is rare on wood, also had abundant pycnidia, which are also normally rare. P M Earland-Bennett

Strigula phaea with macroconidia-containing pycnidia on trunk of old ***Ulmus glabra*** in coastal woodland, Compartment 18, Taynish NNR, VC 101 Kintyre, GR 16(NR)/748.862, May 2006. Herb. Coppins 21986 in E. New to Kintyre.
B J & A M Coppins

Telogalla olivieri: on ***Xanthoria parietina*** on limestone headstone, West Peckam Church, VC 16, West Kent, GR 51(TQ)/644.525, alt 75m, September 2005. Herb. Coppins 22122 in E. New to Kent. B J Coppins

Thelidium fontigenum on flint pebble, Heyshott Down, VC 13, West Sussex, GR 41(SU)/89-16-, alt 210m, April 1958. Collected by F H Brightman. Determined by A Orange. C J B Hitch

Thelidium fontigenum on shard in overgrown chalk quarry, Burton Leonard, VC 64, Mid-west Yorkshire, GR 44(SE)/20-64-, September 2005. Determined by A Orange.
C J B Hitch & A Henderson

Thelidium methorium on small steep surface of siliceous rock in unshaded stream, Allt Tarsuinn, Beinn Heasgarnich, VC 88, Mid Perthshire, GR 27(NN)/4440.3942, alt 500m, June 2006. Herb. A Orange 16560 in NMW. Second British record.
A Orange

Thelocarpon olivaceum on basalt stones, on north-facing slope of road cutting, with ***Verrucaria dolosa***, ***Porpidia crustulata*** & ***Lecanora dispersa*** , new road to Traprain Farm, East Linton, VC 82, East Lothian, GR 36(NT)/5942.7664, alt 60m, February 2007. Herb. Coppins 22248 in E. New to Scotland. B J Coppins

Thelopsis rubella on trunk of old ***Quercus*** in pasture woodland, Talladale Gorge SSSI, VC 105, West Ross , GR 18(NG)/91-70-, alt 15m, February 2007. Herb. Coppins 22268 in E. Most northerly British record. A M Coppins

Toninia plumbina on thalli of ***Degelia plumbea*** on old ***Quercus*** in pasture woodland, Talladale Gorge SSSI, VC 105, West Ross , GR 18(NG)/91-70-, alt 15m, February 2007. Herb. Coppins 22270 in E. Host thalli heavily infected by ***Stigmidium degelii*** One of only four known British localities, and persisting here since it was originally found in 1984. A M Coppins

Verrucaria cyanea on limestone pavement, northwest end of Great Orme, VC 49, Caernarvonshire, GR SH/756.839, alt 161m, December 2006. Herb.V Giavarini in NMW. Determined by A Orange. A virtually unmistakable ***Verrucaria*** of limestone; its distinctive pin-pricked thallus and micro-geometry of conspecific thalli forming mosaics separated by numerous black lines, draw the attention of the observer.
V Giavarini

Verrucaria funckii on flat Silurian gritstone slab in clean stream at edge of rhos pasture, with ***V. aquatilis***, both lichens being grazed by 'herds' of river limpets (***Ancylus fluviatilis***), Rhos Fullbrook SSSI, VC 46, Cardiganshire, GR22(SN)666.628, alt 180m, September 2006. Herb. SPC. Confirmed by A.Orange. New to Cardiganshire. S P Chambers

Verrucaria latebrosa on submerged rock of upland stream, the Allt Ghallabhaich, near Innerwick, Glen Lyon, VC 88 Mid Perthshire, GR 27(NN)/583.492, alt 370m May 2006. Herb. V Giavarini. Confirmed by A Orange. V Giavarini

Wadeana minuta: on old ***Quercus*** in pasture woodland, Talladale Gorge SSSI, VC 105, West Ross , GR 18(NG)/91-70-, alt 15m, February 2007. Herb. Coppins 22273 in E. Most northerly British collection. Also seen (two days previously by A M Coppins) a little further north at the same locality in 18(NG)/91-80-, but specimen (with only one apothecium) not retained.
B J & A M Coppins, A Acton & J R Douglass

Xanthoparmelia tinctina on southwest –facing pitch of redbrick pantiles, Forge Cottage, Theberton, VC 25, East Suffolk, GR 62(TM)/437.657, March 2002. Herb.

Hitch Z45(2). Determined by B J Coppins, with usnic, norstictic and salazinic acids by TLC. A second site in Suffolk for this rare species usually restricted to southwest England and the Channel Isles C J B Hitch & P M Earland-Bennett

SOCIETY BUSINESS

THE 50TH ANNIVERSARY MEETING AND AGM ON 11-13 TH JANUARY 2008

The increased expense of holding an AGM in London, the difficulty of finding a place to have a dinner at a reasonable cost, or a venue for 'the Secret Life of Lichens' made us reconsider the offer from Mark Bolland to hold the 50th Anniversary Meeting and AGM at the Field Studies Centre at Nettlecombe Court in Somerset. Following the notices sent out prior to the Adjourned AGM held at the Natural History Museum on 19th April, there was overwhelming support for this at the Adjourned AGM.

Why Nettlecombe?

Nettlecombe Court offers several advantages over London. There is ample space to have committee meetings, have the exhibition, make tea and coffee in the students' pantry, and sit in the bar with a drink in the evenings. In addition it is surrounded by ancient parkland containing remnants of wild wood that is a Site of Special Scientific Interest (SSSI) for its lichen communities and beetles.

Where is it?

The field centre at Nettlecombe Court lies in a secluded valley on the eastern edge of Exmoor National Park. The nearest railway station is Taunton and we can arrange to collect you if you are coming by train. There is ample parking space if you are coming by car, so I hope that this notice gives you time to make arrangements to share transport.

Mark Bolland will take bookings individually so that you can get the accommodation that you want. There are few single rooms but plenty of double or triple rooms where perhaps you can arrange to share with another person. You can contact the centre by e-mail enquiries.nc@field-studies-council.org or by telephone 01984 640320. All information and booking forms are downloadable from the FSC website at www.field-studies-council.org If you would prefer outside accommodation this can be arranged, but this is easier for people with a car.

The price at full board from Friday evening until Sunday afternoon is £158.63.

For those who are prepared to share in a student dormitory and don't mind sleeping in bunk beds there is a 15% discount which works out at £134.83. We will probably have 2 committee meetings on the Thursday and those people will need to book for Thursday night which will cost an extra £56.23. There is a bar at Nettlecombe where you can also buy wine by the bottle to have with your evening meal. We will have a special dinner on the Friday evening for which there will be an extra charge of £10.

Members please remember to bring exhibits of your projects, or of past events in the BLS. Mark Seaward will be talking about the history of the BLS and I hope that you can provide some extras towards this – comic or serious! It will be a good opportunity to share past, present and future projects!

FLORA COMMITTEE REPORT 2006.

Steady progress has been maintained. The Flora Committee met monthly throughout the year and a close eye was maintained on progress, generally discussing and solving problems as they arose.

Drafts of 98% of the genera are now complete and 96% of the species. All have received a preliminary editing. Those outstanding genera are almost complete. All edited accounts have been returned to the original authors and should have been returned by December 31st. The next task is to complete the final editing and provide a page-copy ready for submission to publishers. After considerable discussion we expect the book to be of the same size as last, but somewhat thicker, on thinner paper, and with a substantial binding. It is envisaged that the forthcoming flora will have many more illustrations than the 1992 edition so many further plates are in preparation. There will also be character tables for some genera and species groups which are better dealt with that way than by dichotomous keys.

Attendances at the keys testing workshops were disappointing and, with apologies to Alan Orange, the Cardiff one had to be abandoned through lack of support. However, the very enjoyable workshops at Leicester and Edinburgh provided valuable insights and opinions on how members thought our next Flora should look.

The committee would like to congratulate all authors of accounts for their work so far and promptness in dealing with editorial points. It also warmly thanks Dr André Aptroot for doing some contract work in obtaining publications and editing some critical genera. We are grateful to English Nature for providing the funding. Finally I would personally like to thank the Flora Committee of Peter James, Ms Pat Wolseley,

and particularly Prof. Cliff Smith, for their dedication and hard work throughout the year.

Anthony Fletcher

LIBRARY REPORT 2006

There has been a slow trickle of requests for loans and a low number of visitors used the library during the year. However, it proved invaluable in serving the needs of participants at the Flora Keys testing workshop held in an adjacent room in July. I am indebted to Ivan Pedley who did some reorganisation work during the year.

Members are reminded that the library is very large and diverse, with many scarce and classic works. There are also large numbers of reprints of hard-to-get papers and 'grey 'literature' unpublished reports. Visitors are welcome to the site just north of Leicester. Loans and visits can be arranged at anytime; contact afletcher@leics.gov.uk., or 01509-815514.

Anthony Fletcher

BIOSCIENCES FEDERATION REPORT FOR 2006.

A new Chief Executive was appointed, Dr Richard Dyer, now OBE in the 2007 New Years Honours for services to biological sciences. Two new posts were also created. Dr Caroline Wallace, formerly Policy co-ordinator for the Institute of Biology now does the job for the BSF. The head of policy is Prof. Richard Bateman, late of the Natural History Museum.

Dr Dyer visited BLS Council on 21st September to outline the newly coined BSF Business Plan 2006-8, and as this entailed a substantial increase in member societies fees, to talk us into continuing membership. Council happily agreed and I was able to negotiate a reduced fee on the basis of our peculiar membership breakdown being a small society of mostly amateurs with 50% living overseas. It should be remembered that most other societies in the BSF have much larger memberships of professionals, some of 50,000 +, with huge subscription fees. I feel it is a privilege for our small

society to be listened to on an equal basis with all other 50+ member societies. The BSF expects to recruit 15 further member societies in 2007.

Our BLS input continues to be mainly on the issues of the future of biology in this country, the decline in biology training, and the dearth of qualified staff in our main areas of interest in systematics and environmental studies. The BSF is now revising its Environment and Sustainability Committee and I'm assured that our particular concerns will form the backbone of its work programme. Fortunately our own Dr David Hill is continuing to serve on this committee. David was invited to the Genomics Forum to discuss applications of Genomics to the environment. He also contributed to the BSF response to the Treasury's Comprehensive Spending Review. As a member of the Environment committee he is pursuing our BLS initiatives started in 2001, in writing to and pressuring Sir David King (Chief Scientific Advisor to HM Government). As a result the BSF is hoping to get a meeting with the Scientific Adviser of DEFRA whose organisation was charged with the task of following up the House of Lord's report 'What on Earth' in 2002! Dr Peter Crittenden attended a meeting on the 'Peer Review Process'. The most recent contribution by me was to the House of Commons Select Committee on 'Marine Research'. Most of these responses are issued at very short notice, sometimes of only a few days.

Another area which the BSF is strongly pursuing is the declining quality of science education in the UK. It notes that Biology teaching in schools and universities is just as problematical as in the better publicised disciplines of chemistry and physics. In the members meeting in October, a participant revealed that 30% of schools lack a qualified science teacher, rising to 40% in London. The Royal Society issued a press release on its concerns about this on 26th September quoting both the BSF and Institute of Biology. The BSF report 'Enthusing the next generation' has been very well received.

Over 10 consultations were responded to in the first 6 months of 2006. The BLS was properly consulted on our opinions. I responded to three of them. Because of the very short timescale of many consultations, a more efficient system of ad-hoc task forces has been set up, where individuals with special expertise are invited to participate.

The Federation now has a much improved website with interesting links to other sites (www.bfs.ac.uk). Of especial interest is its postgraduate jobs pages. It is organising the biological sciences part of the British Association Science Festival in York in September 2007. I expect that the BLS will be invited to contribute.

The Members Meeting, 16th November, presented Science Communication Awards to two fascinating speakers. Dr Chris Smith runs the BBC Local Radio programme on

popular science, 'Naked Scientists' and associated website (www.nakedscientists.com). The programme is getting 1m listeners at 6-7pm on Sunday evenings. Dr Mark Lythgoe showed his work in popularising science among the art community. He will be at the Cheltenham Science Festival 6-10 June 2007. All of us in the business of teaching and lecturing were urged to call ourselves 'Science Communicators'.

Thanks to Ms Barbara Hilton, Dr Peter Crittenden and Dr David Hill for helping with responses during the year.

Anthony Fletcher

INSTITUTE OF BIOLOGY REPORT FOR 2006

The BLS is an affiliated society and I serve on the IoB Enviromnment Committee which meets twice annually. In addition, there are two affiliated society forums each year.

The committee and fora allow member societies to discuss issues relevant to them so that the institute can take action, pressuring government agencies where necessary. While the IoB serves as a member of the Biosciences Federation, it continues to prepare its own responses to consultations and acts as an independent pressure group. It has a high reputation among stakeholders for its advice. About 20 responses were sent out during the year and affiliated societies, such as the BLS were appropriately consulted. As a result, HEFCE was persuaded to not lower the funding for undergraduate teaching, Tony Blair, Gordon Brown and Lord Sainsbury were persuaded to acknowledge that 'biology is the science for the 21st century', and the former has also acknowledged that more needs doing to recruit science teachers. Gordon Brown allocated a larger budget to the provision of school equipment in the last budget. The committee continues to apply pressure on the lack of action following the House of Lords 'What on Earth' report. It also responded strongly to the drastic programme of closures of Centre for Ecology and Hydrology research stations. I am indebted to Brian Edwards and members of the Conservation Committee for help with this.

Boris Johnson MP personally replied to a letter of concern on the formula for funding science teaching in Universities. He indicated that he was personally in contact with HEFCE and DfES and hopes to influence them in changing the ratio.

Finally, as an affiliated society, BLS members are entitled to attend IoB courses and workshops at IoB member rates – a significant discount. Lists of courses are available on the IoB website (www.iob.org).

Anthony Fletcher

BULLETIN EDITORS REPORT

Two parts were produced as usual. The Summer number came out at the end of May and consisted of 82 pages and the Winter of 74 pages.

I apologise for the late delivery of the Winter Bulletin which was caused largely by factors outside my control. It did go to the printers about 5 days later than usual (on November 8th) due partly because it coincided with my retirement at work and also because of the desire include accounts of the Francis Rose memorial event. However the difficulties with the accounts and field meetings meant that copy for these did not get to the printers until the 5th December. Although they promised to deliver to the direct mailers on the 10th or 11th, they did not get there until the 14th. The mailers then sent them out the following week (ie the week before Christmas) but clearly they seemed to have got caught up with the Christmas post and did not reach most members until January 5th. I am not sure what lessons can be learned from this though in hindsight I think the Bulletin should have been posted in advance of the others in which case it would have arrived in the first week of December as usual. However there would have been costs in an additional mailing.

Peter Lambley

RECORDS SUBMITTED TO BLS DATABASES

By submitting records to any of the BLS databases the supplier of the records agrees that they may be collated by the BLS and disseminated for environmental decision-making, education, research and other public benefit uses in accordance with the BLS data access policy. This does not, in any way, restrict the rights of the supplier to use the records themselves or to pass them on to others.

Names and contact details of data suppliers will be used for administration and verification purposes only. Contact details will not be passed to other parties without consent, but the recorder's name may form part of the record that is collated and disseminated. It may not always be possible to acknowledge all the suppliers of the records.

Records will be made available only at the discretion of the BLS. Depending on the use to which the data will be put, it will be summarised to an appropriate level and provided as hard copy, electronically or on the NBN Gateway. Any supply of information will be accompanied by a statement describing the sources of the data, the period covered and the level of verification applied. No database can ever be complete or fully accurate, and it is not possible for the BLS to verify all records. The BLS can accept no liability for the consequences of any inaccuracies.

The database projects referred to above include the Mapping Scheme, BioBase, "New, Rare and Interesting", and any other databases compiled by the BLS from time to time as part of its work. The supply of data by the BLS to Local Record Centres, the compilers of local floras and other organisations concerned with conservation is also covered.

Any queries should be addressed to Janet Simkin.

PUBLICATIONS AND OTHER ITEMS FOR SALE
(Subject to availability)

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

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

Cheques should be made out to 'British Lichen Society' and sent to J W Hinds, 254 Forest Avenue, Orono, Maine 04473-3202, USA.

Publications

Bulletin back numbers each £1.00
Please check for availability.

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

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

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

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

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

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

browser for Acorn computers free

Microchemical Methods for the identification of Lichens
for members £8.00

for non-members £11.00
(Airmail, additional at cost)

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

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

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

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

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

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

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

Surveying and report writing for Lichenologists (Guidelines for surveyors, consultants and commissioning agencies.)
for members £10.00
non-members £15.00

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

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

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

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

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

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

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

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

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

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

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

Other Items

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

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

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

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

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

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

Hand lenses
Gowlland x10 plastic lens - a useful spare or second lens,
handy when taking a friend with you! £3.00
x10 glass lens in metal body, lens diam 18mm £8.50
x30 lens diam 21mm. A new top quality lens £14

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

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

BACK NUMBERS OF THE LICHENOLOGIST

Cambridge University are pleased to announce that from 2006 all BLS members will be able to purchase back numbers of the Lichenologist (ISSN 0024-2829) at £10.00

per back issue and back volumes at £40.00. Cambridge holds issues back to and including Volume 33 (2001).
Contact:
Tel. 0044 1 233 326070
Fax 0044 1 223 325150
E-mail: journals@cambridge.org

Back stock is also held at SWETS. For details see:
http://backsets.swets.com/web/show/id=47067/dbid=16908/typeofpage=47001
A complete volume from SWETS costs 200 euros.

SUBMISSION DEADLINE

Please would intending contributors to the Winter 2007 issue of the ***Bulletin*** submit their copy to the Editor by 21 September. These can be sent by e-mail to plambley@aol.com as an attachment. This should be in MS Word. Alternatively they can be sent on a compact disc to the Editor (for address see back inside cover). It is helpful to have hard copies of tables and other diagrams. For the style of references see past ***Bulletins***.

BRITISH LICHEN SOCIETY OFFICERS AND CONTACTS 2007

PRESIDENT P A Wolseley, Department of Botany, The Natural History Museum, Cromwell Road, London, SW7 5BD.

VICE-PRESIDENT P W Lambley, MBE, The Cottage, Elsing Road, Lyng, Norwich, NR9 5RR.

SECRETARY Dr S LaGreca, Department of Botany, The Natural History Museum, Cromwell Road, London, SW7 5BD.

TREASURER J F Skinner, 28, Parkanaur Avenue, Southend-on-sea, Essex, SS1 3HY.

ASSISTANT TREASURER AND MEMBERSHIP SECRETARY D Chapman, The Natural History Museum, Cromwell Road, London, SW7 5BD.

REGIONAL TREASURER (Americas) Dr J W Hinds, 254, Forest Avenue, Orono, Maine 04473-3202, USA.

CHAIR OF THE DATA COMMITTEE Dr D J Hill, School of Biological Sciences, University of Bristol, Woodland Road, Bristol, Avon, BS8 1UG.

MAPPING RECORDER AND ARCHIVIST Prof M R D Seaward, DSc, FLS, FIBiol, Department of Environmental Science, The University, Bradford, West Yorkshire, BD7 1DP.

BIOBASE RECORDER Ms J Simkin, 41 North Road, Ponteland, Newcastle upon Tyne, Northumberland, NE20 9UN.

SENIOR EDITOR (*LICHENOLOGIST*) Dr P D Crittenden, School of Life Science, The University, Nottingham, NG7 2RD.

***BULLETIN* EDITOR** P W Lambley, (address see Vice-President)

CHAIR OF CONSERVATION COMMITTEE & CONSERVATION OFFICER B W Edwards, DERC, Library Headquarters, Colliton Park, Dorchester, Dorset, DT1 1XJ.

CHAIR OF THE EDUCATION AND PROMOTION COMMITTEE Dr B Hilton, Beauregard, 5 Alscott Gardens, Alverdiscott, Barnstaple, Devon, EX31 3PT.

CURATOR R K Brinklow, Dundee Museums and Art Galleries, Albert Square, Dundee, DD1 1DA.

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WEBMASTER Dr J I J Middleton, 2 Manton Close, Bracklesham Bay, Chichester, Sussex , PO20 8RN.

CHAIR OF THE MEMBERS SERVICES COMMITTEE & FIELD MEETINGS SECRETARY S R Davey, 10, Cottage Home, Common Lane, Ditchling, Hassocks, Sussex, BN6 8TW.

MEMBERS OF THE COUNCIL, Dr H Döring, J Douglass, Dr C Ellis, P W James, D Palmer, Dr O W Purvis, M Sutcliffe , R Woods.

REFEREES (Regional & Specialist) See Web-site: wwwthebls.org.uk

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