

BRITISH LICHEN SOCIETY

BULLETIN

25 p

July 1975

No. 36

President: D. H. Brown, B.Sc., Ph.D.

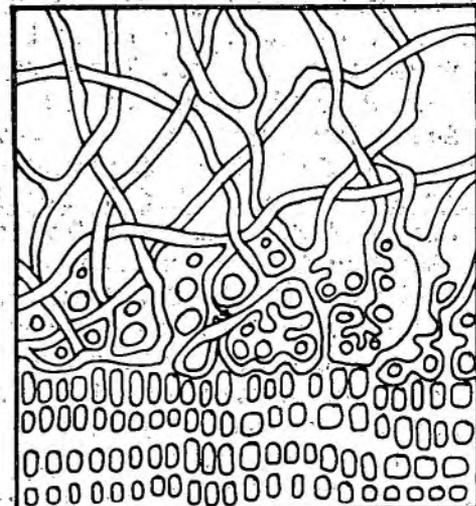
Uprooting lichens to be illegal

In the House of Commons on 18 April 1975 Mr John Silkin, Minister for Planning and Local Government, moved an amendment on behalf of the Labour Government to the Wild Creatures and Wild Plants Protection Bill during its third reading to ensure that lichens were protected by the Bill. The amendment was that "any fungus or alga shall not be treated as a plant for the purposes of this Act unless it is a composite of fungus and alga in the form of lichen." The amendment followed representations by Mr P. W. James and others on behalf of the British Lichen Society and Mrs Mary Briggs and others of the Botanical Society of the British Isles to have lichens included in the Bill, which had been initially omitted mainly because of the deliberate exclusion of both fungi and algae and the difficulty in obtaining a legal separation of lichens from these two groups which compound lichen plants. In the debate there was some discussion as to the pronunciation of the word 'lichen', and Mr Arthur Blenkinsop (Labour, South Shields) remarked that "lichens were plants of great importance scientifically and otherwise. They may be regarded as playing an important part in the protection of our health, because they are valuable indicators or monitors of the state of the atmosphere in different areas, and they are so regarded by health inspectors and others. This is becoming a matter of increasing interest and one is concerned to ensure that there should be proper forms of protection and that the lichens should not be condemned to obscurity." The Bill, sponsored as a private member's measure

stitches

Lichen quilt

This quilt design, based on a thallus section of a lichen, appears in Introducing Quilting, by Eirian Short, published by Batsford, London, in 1974. In view of the attractive appearance of many lichens, and also of lichen substances by micro crystal tests, it is surprising how little these forms are used in commercial and industrial design. The editor thanks Mr F. S. Dobson for drawing his attention to this book.



7 above Non-repeating all-over pattern from natural source (magnified cross section of lichen)

by Mr Peter Hardy (Labour, Rother Valley), was given an unopposed third reading.

It is expected that the Bill will complete its various stages and receive the royal assent before the summer recess. It will then be illegal, subject to a maximum fine of £100, for any person to uproot a lichen in Great Britain without the permission of the landowner, his servant or the occupier. It will not be an offence to pick a lichen. The Bill also includes a list of plants and animals which are afforded a much greater degree of protection by making it illegal to either pick or uproot them, whether by the landowner or not (except under special licence from the Nature Conservancy Council); this list is to be reviewed at five year intervals by the Secretary of State on the advice of the Nature Conservancy Council. There are no lichens listed under the present schedule, but clearly the Society's Conservation Committee may wish to make representations to the Conservancy for the inclusion of certain lichens, which are in danger of extinction in Great Britain, at a future date. The Bill also has an important educational value in drawing attention to the dangers to the survival of lichen populations by either the unnecessary or thoughtless collecting of specimens.

Autumn field meeting at Leek, Staffordshire, 1975

The autumn field meeting based at Leek, Staffordshire, will be held under the leadership of Dr D. L. Hawksworth from the evening of Friday 24 October 1975 to the late afternoon of Sunday 26 October. Please note that these dates are the weekend following that provisionally agreed at the AGM.

The lichen flora of Staffordshire has received little attention this century but, while much of it has been modified as a result of air pollution and other effects of man, some areas in the north-east of the county abutting on to and within the Peak District National Park still retain a varied lichen flora. Habitats to be visited will include millstone grit crags (The Roaches), Carboniferous limestone dales, deciduous woodlands and churchyards. Some sites in the area were examined by Dr Hawksworth in the course of the preparation of a "Report on the Lichen Flora of the Peak District National Park" (1974, 54pp., copies available at 50p from Mr J. B. Pendlebury, Nature Conservancy Council, Aldern House, Baslow Road, Bakewell, Derbyshire) which includes preliminary species lists for some of the localities which will be visited. Dr F. Rose and Dr Hawksworth visited some additional sites in the area in April 1975 to ascertain those of the greatest potential for this meeting. Amongst species of interest found recently are Dermatocarpon miniatum, Dimerella diluta, Parmelia omphalodes, Peltigera horizontalis and Umbilicaria polyphylla. Despite its somewhat limited lichen flora, the area should prove of considerable interest. Newcomers to lichenology would not be expected to find the lichen flora too overpowering! It will be possible to collect most of the commoner species encountered.

A general introduction to the region will be given in the headquarters hotel at 20.00 on the Friday evening which will be followed by a talk on the lichens by Dr Hawksworth. It is hoped that these will be illustrated by slides. The headquarters will be the Three Horseshoes Inn, Blackshaw Moor, near Leek (tel. Blackshaw 296); bed & breakfast currently £3.50 per night; evening meals and sandwiches for lunch are also available. The hotel is situated at grid SK 009598 on the west side of the A53 road about 4 km (3 miles) north of Leek. When booking members are asked to indicate that they will be attending this meeting; they should then return the form at the end of this Bulletin to Dr Hawksworth. Early booking is advised in view of the limited accommodation. The hotel can be reached by bus (route 28, Sheffield - Hanley) from Stoke-on-Trent (Hanley), Buxton or Leek; Leek can also be reached by bus (451, Derby - Manchester) from Derby; buses are sparse and members should check times in advance. Little alternative accommodation is available in Leek but there is a wide range at Buxton (details from Entertainments Manager, Pavilion Gardens, St John's Road, Buxton, Derbyshire). Anyone not staying at the headquarters hotel should meet at 09.30 in the hotel car park on Saturday 25 October if they are unable to attend the talks to be given on the Friday evening.

Provisional arrangements for the Society's meetings in 1976 include the annual general, lecture and exhibition meeting on 3 January, the spring field meeting at Gregynog, Montgomeryshire, from 7 - 14 April, and the summer meeting in northern Spain.

NERC support for Society's mapping scheme

A Natural Environment Research Council grant of £9390 has been awarded for the "Development of the British Lichen Society Distribution Maps Scheme". This is a two-year research programme to be undertaken at the University of Bradford under the direction of Dr M. R. D. Seaward. The programme, to commence in October 1975, will be based on the survey of the British lichen flora presented as standard 10 km & 10 km grid square distribution maps. The data assembled will be used for the production of a data bank, site lists and rare and/or endangered species lists, and for the publication of a Provisional Atlas. All data will be processed in conjunction with the Biological Records Centre at Monks Wood Experimental Station, and evaluated from phytogeographical, ecological and anthropogenic standpoints. The grant makes provision for a post-doctoral research assistantship/fellowship, although suitable post-graduates would be considered; in the latter case it may be possible to commence work on a higher degree in conjunction with the research programme outlined above. The grant also makes provision for part-time technical and clerical assistance, and for travel and subsistence in the United Kingdom and Irish Republic for a team of lichenologists to undertake fieldwork in connection with this programme; further details of this aspect of the work will be given in a future issue of the Society's Bulletin. Members who wish to apply for the research post should immediately contact Dr M. R. D. Seaward, Postgraduate School of Studies in Environmental Science, The University, Bradford, BD7 1DP, or telephone Bradford (STD code 0274) 33466 ext. 8540.

Index of Ecological Continuity based on lichens

Dr F. Rose, in the book on The British Oak (1974), edited by M. G. Morris and F. H. Perring, has published an 'Index of Ecological Continuity' (IEC) of the British forest environment based on 'old forest' lichen epiphytes. A list of 20 such epiphytes are given, and the IEC is obtained by calculating the percentage of these species occurring in a given area. This technique can be used for obtaining an "assessment of continuity of forest environment, as opposed to continuity of some sort of woodland," for any site. Thus Mark Ash Wood in the New Forest, Hampshire, known to have been continuously forested since medieval times, has an IEC of 95, in comparison with only 25 for The Mens, Sussex, an area of apparently similar forest but on former grazing land, and only 5 for Hayley Wood, Cambridgeshire, an old coppice woodland with oak standards. The index is a most valuable tool for help in assessing the history of woodlands, and is particularly important to conservation bodies, such as the Nature Conservancy Council, in the scheduling of sites on the basis of their continuity. The index is a further demonstration of the considerable value of lichens as environmental indicators.

New Treasurer and Assistant Treasurer

The Annual General Meeting on 4 January 1975 elected Mr S. N. Tallwin, The Moat, Llandyry, Kidwelly, Dyfed, SA17 4EL (telephone: Trimsaran 628), as the Society's Treasurer in succession to Mr Manning, Mr P. W. Lambley, Castle Museum, Norwich, Norfolk, NR1 3JU (telephone: Norwich 22233 ext. 649), was elected Assistant Treasurer. Mr Lambley will receive subscriptions, and therefore all members who have not yet submitted their dues for 1975 are urged to pay them without further delay to enable the Treasurer to budget for the Society's expenses, and to save the considerable cost of further reminder notices.

Fossil lichens form gold deposits

A paper entitled "Fossilized plants in thucholite from Precambrian rocks of the Witwatersrand, South Africa" by D. K. Halibauer and K. T. van Warmelo in the new journal Precambrian Research 1: 199 - 212 (1974) suggests that gold-bearing conglomerate of Precambrian date is composed of fossil remains of lichens, and moreover, these organisms have "important implications on the dating of the origin of life." The reef deposits of the Witwatersrand group in South Africa contain carbonaceous matter, or thucholite, which was investigated by the scanning electron microscope. As a result of these studies, the carbonaceous material was considered to be "the fossilized residue of a Precambrian symbiotic association, which probably consisted of an algal partner and a fungal organism" which "appears to have many morphological and perhaps physiological similarities with lichens." "The high gold and uranium content of the fossilized material point to a process of active assimilation of these substances, a process similar to the dissolution and accumulation from the substrate of radioactive and other minerals by lichens." Structures morphologically similar to lichens were also observed on the surface of gold particles.

In a letter from T. M. Letcher, J. T. Moelwyn-Hughes and J. M. Pratt of the University of the Witwatersrand, Johannesburg, in Chemistry in Britain, February 1975: 74 - 75 (1975) it is pointed out that the gold particles occur in two very distinct forms. Those of irregular nuggets were waterborne, and trapped by the mat of 'lichen' described above, whilst those of a fibrous nature were apparently extracted from the environment by the symbiotic organisms. Thus the origin of gold in South Africa would appear to be due to lichen activity.

The editor is greatly indebted to Mr B. J. Starkey for providing information and copies of the above papers.

Population growth halted

Britain is now "virtually static in terms of overall numbers" according to the Office of Population, Censuses and Surveys. Between January and March 1975 deaths exceeded births by about 5000, whilst in the twelve-month period from March 1974 to March 1975 the population was almost static because although the growth in population was 49,000, there was a net outflow of some 50,000 due to migration. This is the first time since before the Second World War that there has been no increase in the overall population of Great Britain, which is now about 56 million.

It is generally agreed that Britain would be a more pleasant place to live in with greater benefit to wildlife if the population were reduced substantially to the order of some 30 million, although this would bring about many new problems of an economical and political nature, such as the dwindling youth of the country having to maintain and support an aged army of conservative-orientated senior citizens. However a sharp reduction in population appears unlikely at present, because, although there has been a decline in the rate of population growth since 1971 at an annual rate of some seven per cent., the annual decline so far this year has been only four per cent.

International Lichen Sites

It has been suggested that the Society should try to organise the drawing up of a list of sites of the most outstanding international lichenological importance on a world basis. If such a scheme is to meet with any form of success, it must have the backing of foreign members, and the Society would be grateful to have their views on the proposal. Persons who might be willing to act as representatives from their country on an international committee should also inform the Society. Please reply to the Secretary of the Conservation Committee, Mr F. H. Brightman, British Museum (Natural History), Cromwell Road, London, SW7 5BD.

Some reflections on the ethics of collecting specimens

Though I have been marooned in an open boat on Lake Rudolf south of Ethiopia, lost in the hills bordering Uganda and the Sudan, and frozen to the marrow in a snowstorm on Mount Kenya, I cannot pose as an expert on ethical questions. But I did raise some when speaking at the Annual General Meeting of the Society a year or so ago, and in consequence the Editor of the Bulletin asked me to discuss the theme further. The following reflections are therefore offered as a stimulus to thought rather than as a code of conduct. Because the problems are much more acute in developing countries than in, for example, Britain and Europe, and because my main scientific collecting has been in Africa, I will admit to a bias in my thoughts. Such conclusions as I offer stem from that viewpoint.

Once when I was collecting lichens in the Ruwenzori foothills in Uganda a young man came up and, after watching me for a few minutes, uttered this carefully composed sentence: "I thank you, sir, for coming to my country to do your researches." Those words made a deep impression on me with the welcome they offer, the gratitude they express, and the plea they make to bridge the gap between "my country" and "your researches." In a short phrase they suggest a great obligation.

As I have thought about them in different ways in the five years since they were spoken on a hot dusty afternoon among the Euphorbia trees they have come to mean something like this to me. Whatever country we may collect specimens in, our object is to advance knowledge. It may not be immediately useful knowledge, for fundamental research is needed in developing countries just as it is elsewhere. But our general aim is at least to bring some order into chaos. Two consequences follow from this. The first is that we have a duty to work on the specimens we have collected in order to extract some results from our study. Collections that are borne away to a distant country and never studied by the collector or colleagues should not have been made in the first place. I have personally known this happen, and among the several criticisms that can be made of such conduct the ethical is, I believe, paramount. It is a betrayal of the trust which the developing country, as in a very real sense a host, has put in the collector.

This brings me to the second consequence of undertaking scientific work. As we all know, research often does not provide a direct solution to a practical problem, so that this is not necessarily the immediate return we can make for a country's hospitality. But I think it is wrong to visit a country, take away a collection of specimens, and publish results on them without bringing the people of that country into the process in some way. It is desirable to meet people out there who might be interested in the project and to discuss it with them. Reprints of papers should always be sent to individuals and centres in the country from which specimens have been collected, and duplicate specimens forming a reference collection so far as possible should be deposited in a museum or university there. Perhaps there is no one yet in that country who can make use of the collection, but one day there will be. A collector should impart what knowledge he can in return for the specimens he has acquired.

An obligation of a different kind can arise in the course of collecting. Often enough some boys or young men will appear from a near-by village or farm and attach themselves to the botanist for some hours. They want to carry bags or a rucksack, or to climb trees or rocks (which they may do with great skill), or to act as guides (not always reliable). I personally offer a small payment to these people, which is adjusted to a certain extent to the age of the helper. So before I set out on a trip I equip myself with a bag of coins for the purpose (never tobacco, owing to its ill effects on health). Some people argue that it is bad to encourage boys to act in a way that comes near to begging. But my view is that it is their country and I am a visitor on sufferance, so that I owe them something for being permitted to enter their domain and take from it specimens obtained with what they consider to be their help. The obligation I am acknowledging here is ethical rather than commercial, a voluntary bond rather than a financial transaction.

The ethical obligation that I think underlies these situations is a simple one. In the old days the explorers in remote places were obstructed at every turn by continually having to pay tribute to all the small chieftains through whose territories they passed. Now the tiny kingdoms have all become parts of countries with central governments. But the far mountains, valleys, forests, and lakes have people living among them who are largely untouched by national politics. It is still their country we enter to remove specimens. We should, I think make clear acknowledgement to them that we accept our position as guests. By their standards even the poorest of us are enormously rich, and those of us who go on botanical exploration have something the local inhabitants prize even more, and that is a high degree of education. Therefore it is nothing less than an ethical duty, as I see it, to share some of our good fortune with hosts who lack it. Giving pocket money to boy helpers is a small token, not to be regarded too seriously. But encouraging the educated adults of the country we visit to enjoy the exhilaration of exploring their forests and mountains is a worthwhile return for their hospitality.

T. D. V. SWINSCOW

Report on lecture and exhibition meeting, 1975

The lecture and exhibition meeting, held after the Annual General Meeting on 4 January 1975 at the Department of Botany, Imperial College, London SW7, was attended by 47 members. The following exhibits were displayed:

- BROWN, D. H. Lichens on man-made habitats: man himself.
BROWN, D. H. Lichens on man-made habitats: record sleeves.
DOBSON, F. S. Preliminary map of the British distribution of Parmelia tiliacea (Hoffm.) Ach. and var. pastillifera (Harm.) Grumm.
DOBSON, F. S. More photographs of British lichens.
GILBERT, O. L. World Wilflide Fund grant. (Remapping of chart quadrats containing Lobaria pulmonaria.)
GILBERT, O. L. The use of lichens in Derbyshire well dressings.
JAMES, P. W. Sketches of lichens by Miss Gulielma Lister (1860-1949).
LAMBLEY, P. W. Breckland lichens and man-made habitats.
MILLAR, R. O. (Institute of Terrestrial Ecology) Lichen damage near aluminium smelter, Holyhead, Anglesey.
RICHARDSON, D. H. S. The Vanishing Lichens (book).
RICHMOND PUBLISHING COMPANY, Bookstall.
WILKINS, C. A. Soredial cultures of Parmelia physodes.

In the afternoon Mr J. R. Laundon spoke on lichens on buildings and constructions, dealing with colonisation on wood, metal, thatch, window glass and stone. The role of lichens in both the deterioration and enhancing of the surfaces of stone buildings was discussed and illustrated, appropriately as this was European Architectural Heritage Year 1975. Dr M. R. D. Seaward dealt with the aspects of the eco-physiology of Lecanora muralis on asbestos cement, giving the results of his studies in the West Yorkshire conurbation and elsewhere. Mr P. M. Earland-Bennett was unfortunately indisposed, but Mr F. S. Dobson kindly took over at very short notice and showed many photographs of lichens, giving an interesting commentary on photographic methods. The President, Dr Brown, warmly thanked the speakers for their communications.

Professor Cain retires

Professor Roy F. Cain, Department of Botany, The University, Toronto, Canada, retired on 30 June 1975 after 46 years of active research and teaching. He intends to remain in the department, devoting full time in continuing his research programme.

A. L. Smith's Lichens (1921), originally published by the University Press, Cambridge, is to be reprinted about December 1975 by The Richmond Publishing Co. Ltd., Orchard Road, Richmond, Surrey, TW9 4PD, for £8.95 until 29 February 1976, then for £11.50. The book has been out of print for many years. It provides an outstanding general account of all aspects of lichenology and is, in effect, a review of all lichen works published before about 1920. A new introduction, a new supplementary index updating the nomenclature, and lists of further reading will be provided by Dr D. L. Hawksworth.

Copies of Henssen & Jahns' book Lichenes (1973) (in German) are available from The Richmond Publishing Co. Ltd., Orchard Road, Richmond, Surrey, TW9 4PD, for £3.95 each plus 39p postage and packing.

Penguin Education, a division of Penguin Books Ltd., have produced a book called The Pollution Handbook (1974) by Richard Mabey. It is based on the Advisory Centre for Education/Sunday Times clean air and water surveys referred to in Bulletin 31: 10 (1972) and 33: 10 (1973), and is extensively illustrated. Indicator lichens are described. The book explains in simple language what pollution is, how it can be monitored by using biological indicators, and what steps individuals can take to bring about its reduction. It is available from bookshops for £0.70.

Lichenologist published

Part 2 of volume 6 of The Lichenologist was published on 21 December 1974 by placing copies on display in the libraries of the Department of Botany, British Museum (Natural History), London, and the Commonwealth Mycological Institute at Kew, in accordance with Article 29 of the International Code of Botanical Nomenclature. Reprints of the articles therein were also issued in 1974. Copies to the membership were delayed until 1975 because of binding difficulties. Any paid-up ordinary member for 1974 who did not receive a copy should inform the Assistant Treasurer, Mr P. W. Lambley, Castle Museum, Norwich, Norfolk, NR1 3JU.

Part 1 of volume 7 of The Lichenologist was published on 21 April 1975. Any paid-up ordinary member for 1975 who did not receive a copy should inform the Assistant Treasurer, Mr Lambley, at the above address.

The index will in future be published every few years, so that it covers several volumes at a time.

Soil binder to conserve terricolous specimens

Rohm and Haas (UK) Ltd., Lennig House, 2 Mason's Avenue, Croydon, Surrey, CR9 3NB, are able to supply free samples of Primal AC-55 to members for hardening the soil beneath fragile terricolous lichen specimens. Members should ask for a sample by letter, stating the purpose for which it is required. The primal is brushed on to the underside of the specimen, which is then left overnight to dry soil-side up. The artist's brush should be stood in water when not in use, and washed thoroughly when the job has been completed. A. E. Wade in Lichenologist 1: 87 - 88 (1959) gives a full account of this method.

Professor Smith elected Fellow of the Royal Society

D. C. Smith, Melville Wills Professor of Botany in the University of Bristol, was elected a Fellow of the Royal Society in March 1975 in recognition of his distinguished work on the physiology of symbiotic systems, especially in lichens and invertebrates. Professor Smith was President of the British Lichen Society from 1972 - 73, and was the Society's Librarian from 1958 - 1970. The "FRS" is an honour now bestowed on comparatively few botanists, and it is in one sense a reflection of the important and original research which can still be done on lichens by those who are prepared to carry out the hard but rewarding work involved.

Reports on air pollution using lichens as monitors

Interest in the possibilities of making use of observations on plants, especially lichens, as possible monitors of the spread of air pollution is becoming widespread, and people all over the country are making lists in areas of known or suspected pollution with this end in view. The Society would like to hear from these people, many of whom are non-members, or if members, have not informed the Council of their activities. The minimum information required is: the author of the survey, the area surveyed, the date of the survey, the short title of the report, and the library or place where a copy is deposited. The Chairman of the Conservation Committee, Mr F. N. Haynes, 102 Stakes Road, Purbrook, Portsmouth, Hampshire, would be most grateful to receive such information, and also if possible a copy of the report which will be deposited in the Society's library.

New members

The following new members joined the Society between October 1974 and June 1975:

Mr A. H. Abuzinada, Botany Department, Faculty of Science, University of Riyadh, RIYADH, Saudi Arabia.

Mrs J. Balkwill-White, 95 Mandarin Way, Wymansbrook, Swindon Lane, CHELTENHAM, Gloucestershire.

Miss A. Bradley, College of Education, 75 Breck Road, Poulton-le-Fylde, BLACKPOOL, Lancashire.

Mr S. Cambridge, 32 Fossil Road, Lewisham, LONDON, SE13 7DE.

Mr R. T. Charles, Pencincoed, Glyn-Brochan, LLANIDLOES, Powys, SY18 6PN.

Dr R. W. N. Corner, 36 Wordsworth Street, PENRITH, Cumbria, CA11 7QZ.

Miss K. S. Eaves, 6 Monmouth Close, New Inn, PONTYPOOL, Gwent, NP4 5PB.

Mr L. T. Ellis, Department of Botany, British Museum (Natural History), Cromwell Road, LONDON, SW7 5BD.

Mrs W. A. Ernste, Claudiagaarde 78, BUSSUM, Netherlands.

Mr D. V. Galvin, 20 Fairmount Road, READING, Mass. 01867, U.S.A.

Mr F. R. Gomm, Greenside, Ashmount Road, GRANGE-OVER-SANDS, Cumbria.

Miss K. E. Hammant, The Moorings, Broadwas-on-Teme, WORCESTER, WR6 5NW.

Mr M. Harkema, Van Renesselaan 36, ZEIST, Netherlands.

Dr G. R. Hoffman, Department of Biology, University of South Dakota, VERMILLION, South Dakota 57069, U.S.A.

Mrs R. Honegger-Lehmann, Botanisches Institut, Schönbeinstr. 6, CH-4056 BASLE, Switzerland.

Mr E. Jacques, Theo Verellenlaan 70, B-2170 WOUSTWEZEL (Gooreind), Belgium.

Mr J. M. Line, 8 Heath Grove, MAIDSTONE, Kent, ME16 9AS.

Mr E. P. McCann, 2 Mayfield Avenue, SALE, Cheshire, M33 2JN.

Mr P. M. McCarthy, 4 Sunnyside, Belmont Park, BALLINLOUGH, Cork, Irish Republic.

Miss L. J. Mitchell, 1 Staverton Leys, RUGBY, Warwickshire, CV22 5RD.

Mr D. M. Palmer, 20 Heathfield Road, Acton, LONDON, W3 8EL.

Mr I. H. Robertson, 6 Invergordon Avenue, East Cosham, PORTSMOUTH, Hampshire.

Mrs S. A. Robinson, 5 Glendale Crescent, Laverstock, SALISBURY, Wiltshire.

Mr N. Sammy, Botany Department, University of Western Australia, Nedlands, PERTH 6009, Western Australia, Australia.

Mr M. Senior, 5 The Firs, 27 Marquis Lane, HARPENDEN, Hertfordshire.

Dr Anne L. D. Southorn, Drapers' Field Centre, Rhyd-y-Creiau, BETWS-Y-COED, Gwynedd, LL24 0HB.

Mr E. L. Swann, 282 Wootton Road, KING'S LYNN, Norfolk, PE30 3BJ.

Mr R. F. Tull, Nursing Staff, Tone Vale Hospital, Norton Fitzwarren, TAUNTON, Somerset.

Mr R. G. Woods, Coed Anel, Nebo, LLANON, Cardiganshire.

Mr D. C. Wright, Orangery Cottage, Nercwys Hall, Nercwys, MOLD, Clwyd.

Mycotaxon, a do-it-yourself publication

In the autumn of 1974, the first number of a new journal on the taxonomy and nomenclature of fungi and lichens appeared; it is called Mycotaxon. The journal is published quarterly by Mycotaxon, P.O. Box 264, Ithaca, NY 14850, U.S.A., and the managing editor is Professor R. P. Korf of this address. It seeks to publish all papers within four months of acceptance, by photo-offset lithography of the original manuscripts. Thus no proofs are necessary, and the American concept of financing publication through page charges is rejected. Authors must first submit drafts of their papers to suitable referees for critical comment, and must then produce perfect camera-ready copy for the journal, preferably by electric typewriter. The editor has the thankless task of ensuring that a good standard is maintained.

Victoriana

While working through literature relating to the early history of lichen exploration in Northumberland I came across a series of over 20 papers on lichens which the Rev. W. Johnson contributed to that short-lived journal The Wesleyan Naturalist (1887 - 89), the monthly publication of the Wesleyan Scientific Society (Woolmer, London). He was writing at a time when the romantic attitude to nature was at its height and his papers furnish some memorable examples of Victorian prose style. Here are a few examples:

Baeomyces icmadophilus (= Icmadophila ericetorum): "Delicate enough for the hot-house, yet grown on the rough moorland, neither Lily nor Violet nor well kept flower, could appeal to us like this meek, motionless lichen."

Red-fruited Cladonia: "One thought of a Fairy battlefield, or place of martyrdom if they had a faith they ever fought for. Every little emerald spray, or mossy tuft, seemed covered with a drop of fairy gore ... The beauty was full, rapturous, sacred."

Gyrophorei (= Umbilicaria): "They are the hardiest among the foliaceous order, and squat on the rocks and wall tops like dark savages in their mountain fastnesses."

Parmelia: "Now and again, with some golden Placodium, or crusted Lecanora, the dark Stygia and the grey Saxatilis will steal into the graveyard and take up their watch by the headstone, entering into and becoming a part of the very stillness, at the same time softening the melancholy and relieving the barrenness of the tomb; suggesting that the dead are not forgotten, and by never leaving their post, rendering the rest of the sleepers less forlorn."

Parmelia fuliginosa (= P. glabratula subsp. fuliginosa): "This is a sober solitary lichen, seldom found entwined with others of its tribe. Its sooty, isolated patch, is suggestive of mourning, as if it knew there was loss and sorrow in the world."

Roccella fuciformis: "In its outward show, there is not a shadow of a suggestion as to the beauty it enfolds ... so this lichen held its own, until a touch of putrid urine betrayed its secret."

Stereocaulon: "We have frequently observed their grey tufts squatting solitary like little lonely birds upon the rocks."

O. L. GILBERT

Lichens become mobile in the motor age

Few lichens have been reported from mobile man-made substrata. Dr F. Rose in Bulletin 33 (1973) reported a species of Usnea from the woodwork of a Morris traveller estate car at Aberystwyth. It is, perhaps, of interest to note the occurrence on another Morris traveller of Lecanora dispersa growing abundantly on the woodwork together with the mosses Bryum argenteum and B. capillare which flourished in the window grooves and overgrew the woodwork. The car was seen in Robin Hood Lane in the London Borough of Sutton during February 1975 and bore a Surrey registration. Could this be an adaptation for dispersal in the motor age?

R. H. BAILEY

Literature on lichens - 24

- ARMSTRONG, R. A. 1974. Growth phases in the life of a lichen thallus. New Phytol. 73: 913 - 918.
- AULD, J. A. M. 1974. Here be squamules. Press Association Link 34: 4 - 5. (Lichens on roof of the Press Association, Fleet Street, London, reported in their House Journal.)
- BRIGHTMAN, F. H. 1975. 5th May - wall tour at Canterbury. Bull. Kent Fld Club 20: 5 - 6. (Report of field meeting with lichen records.)
- BROWN, D. H. 1974. Field and laboratory studies on detergent damage to lichens at The Lizard, Cornwall. Cornish Studies 2: 33 - 40. (Important paper including observations on substantial lichen damage and slow recolonisation following oil and detergent pollution from the Torrey Canyon disaster.)
- CULBERSON, C. F. 1974. Conditions for the use of Merck silica gel 60 F254 plates in the standardized thin-layer chromatographic technique for lichen products. J. Chromat. 97: 107 - 108. (Drastic changes in relative R_F values due to reduction in concentration of binder in Merck glass plates.)
- CULBERSON, C. F. & HALE, M. E. 1973. Chemical and morphological evolution in Parmelia sect. Hypotrachyna: product of ancient hybridization? Brittonia 25: 162 - 173.
- DEGELIUS, G. 1974. The lichen genus Collema with special reference to the extra-European species. Symb. bot. upsala. 20 (2). (Monograph of 77 species.)
- FARRAR, J. F. 1974. A method for investigating lichen growth rates and succession. Lichenologist 6: 151 - 155.
- FLETCHER, A. 1975. Key for the identification of British marine and maritime lichens. I. Siliceous rocky shore species. Lichenologist 7: 1 - 52. (Ramalina curnowii var. stenoclada (Culn.) D.Hawksw. & A.Fletcher is a new combination and Verrucaria degelii R.Sant., V. ditmarsica Erichs., V. erichsenii Zsch., V. internigrescens (Nyl.) Erichs. and V. sandstedei B.de Lesd. are new British records.)
- FRIEDMANN, E. I. & GALUN, M. 1974. Desert algae, lichens, and fungi. Desert Biology 2: 165 - 212. (Review.)
- GILBERT, O. L. 1974. Reindeer grazing in Britain. Lichenologist 6: 165 - 167.
- HALLBAUER, D. K. & VAN WARMELO, K. T. 1974. Fossilized plants in thucholite from Precambrian rocks of the Witwatersrand, South Africa. Precambrian Research 1: 199 - 212. (Fossils similar to lichens.)
- HAWKSWORTH, D. L. 1974. Report on the Lichen Flora of the Peak District National Park. Nature Conservancy Council, Shrewsbury. (Discussion of the lichen flora, factors limiting its development and discussion and species lists from major sites. £0.50 from J. B. Pendlebury, Nature Conservancy Council, Aldern House, Baslow Road, Bakewell, Derbyshire.)
- HAWKSWORTH, D. L. 1975. The changing lichen flora of Leicestershire. Trans. Leicester lit. phil. Soc. 68: 32 - 56. (Detailed account and discussion including reference to adjacent counties.)

- HERTEL, H. 1975. Beiträge zur Kenntnis der Flechtenfamilie Lecideaceae V. Herzogia 3: 365 - 406. (Among the new combinations are the following affecting British species: Huilia albocaerulescens (Wulfen) Hertel (Lecidea albocaerulescens (Wulfen) Ach.), Huilia crustulata (Ach.) Hertel (Lecidea crustulata (Ach.) Spreng.), Huilia hydrophila (Fr.) Hertel (Lecidea hydrophila Fr.), Huilia macrocarpa (DC.) Hertel (Lecidea macrocarpa (DC.) Steud.), Huilia melinodes (Koerb.) Hertel (Lecidea melinodes (Koerb.) Magnusson), Trapelia mooreana (Carroll) P. James (Lecidea mooreana Carroll). Lecidea lactea Flörke ex Schaer. is the correct name for L. pantherina (Ach.) Th. Fr.)
- HILL, D. J. 1974. Some effects of sulphite on photosynthesis in lichens. New Phytol. 73: 1193 - 1205.
- JØRGENSEN, P. M. 1975. Contributions to a monograph of the Mallotium-hairly Leptogium species. Herzogia 3: 433 - 460. (Includes key and phytogeographical notes.)
- KING, L. & LEHMANN, R. 1973. Beobachtungen zur Oekologie und Morphologie von Rhizocarpon geographicum (L.) DC. und Rhizocarpon alpicola (Hepp) Rabenh. im Gletschervolfeld des Steingletschers. Ber. schweiz. bot. Ges. 83: 139 - 147.
- KROG, H. 1974. Taxonomic studies in the Hypogymnia intestiformis complex. Lichenologist 6: 135 - 140. (Three species.)
- LAMB, I. M. & WARD, A. 1974. A preliminary conspectus of the species attributed to the imperfect lichen genus Leprocaulon Nyl. J. Hattori. bot. Lab. 38: 499 - 553. (Monograph of seven species.)
- MILLBANK, J. W. 1974. Nitrogen metabolism in lichens. V. The forms of nitrogen released by the blue-green phycobiont in Peltigera spp. New Phytol. 73: 1171 - 1181.
- MORRIS, M. G. & PERRING, F. H. (Editors) 1974. The British Oak. Botanical Society of the British Isles, c/o Faringdon, Berkshire. (An important chapter on "The epiphytes of oak" by F. Rose is included, in which old forest indicator species are listed and discussed, and form the basis for an Index of Ecological Continuity. Sites of ancient oak forests are listed. £6.00 from E. W. Classey Ltd., Park Road, Faringdon, Berkshire, SN7 7DR.)
- PRINCE, C. R. & SOMMERVILLE, A. H. 1974. The H.E. Wilson lichen collection. Trans. Proc. bot. Soc. Edinb. 42: 173 - 179. (List, with localities, from Scotland.)
- PUCKETT, K. J., RICHARDSON, D. H. S., FLORA, W. P. & NIEBOER, E. 1974. Photosynthetic ¹⁴C fixation by the lichen Umbilicaria muhlenbergii (Ach.) Tuck. following short exposures to aqueous sulphur dioxide. New Phytol. 73: 1183 - 1192.
- RICHARDSON, D. H. S. 1975. The Vanishing Lichens. David & Charles, Newton Abbot, Devonshire. (Popular work concerned especially with the economics and importance of lichens. £5.25.)
- SALISBURY, G. 1975. Thelotrema monosporum Nyl. in Britain. Lichenologist 7: 59 - 61. (Thelotrema monosporum new to Britain and Europe.)
- SEAWARD, M. R. D. 1974. Contributions to the lichen flora of lowland Scotland - I. Dumfriesshire. Trans. Proc. bot. Soc. Edinb. 42: 143 - 151. (Recent records.)
- SEAWARD, M. R. D. 1974. Lichenology. Trans. Lincs. Nat. Un. 18: 84 - 85. (New county and divisional lichen records for Lincolnshire; map of numbers of taxa recorded per grid square since 1960.)
- SEAWARD, M. R. D. 1974. Some observations on heavy metal toxicity and tolerance in lichens. Lichenologist 6: 158 - 164. (Metal contamination from barbed-wire on tree boles, etc. Toxicity appears to be mainly due to zinc.)
- SEAWARD, M. R. D. 1975. Contributions to the lichen flora of south-east Ireland - I. Proc. R. Ir. Acad. B, 75: 185 - 205. (Discussion of lichen poverty; records and status of 203 taxa.)
- SOMERMAA, A. 1972. Ecology of Epiphytic Lichens in Main Estonian Forest Types. Academy of Sciences, Tartu.
- WUNDER, H. 1974. Schwarzfrüchtige, saxicole Sippen der Gattung Caloplaca (Lichenes, Teloschistaceae) in Mitteleuropa, dem Mittelmeergebiet und Vorderasien. Bibliotheca Lichenologica 3. (Monograph of dark-fruited saxicolous species of Caloplaca, especially the C. variabilis group.)
- WIRTH, V. & LLIMONA, X. 1975. Das Pertusarietum rupicolae un. nova, eine Silikatflechten-Gesellschaft im Mittelmeerraum, mit Bemerkungen zur Taxonomie des Pertusaria pseudocorallina - Formenkreises. Herzogia 3: 335 - 346. (Sociology; Pertusaria microstictica is considered to be identical to P. pseudocorallina.)

Secretary's report for 1974

The Society now has 439 members, compared with 465 at the end of 1973. This is the lowest total since 1968, but in view of the rise in the subscription rate from £2 to £5 over the last two years, the number is by no means as small as might have been expected. Indeed 57 new members joined during the year, compared with 47 in 1973, an increase of ten.

The most important event was the international symposium entitled "Progress and Problems in Lichenology" held at Bristol in April, arranged jointly with the Systematics Association. This was the first international symposium devoted entirely to lichens held in the United Kingdom, and it was attended by over 70 lichenologists of some 15 nationalities. The pre-symposium field meeting was attended by 20 members, and was noteworthy in that the British contingent was outnumbered in the proportion of one to three by overseas members on several days. The Society's other meetings during the year were also successful and went according to schedule. Dr Alvin, Mr Bailey, Mr Brightman, Dr Brown, Mr James, Dr Seaward and Dr Topham are thanked for arranging and leading these events.

Two separate parts of The Lichenologist were published this year, thanks to the editor Mr James and Assistant Editor Dr Hawksworth, and our new publishers Academic Press. The association between the Society and the publishers appears to have got off to a good start. As always two numbers of the Bulletin were issued.

A Conservation Committee has been formed from the old Lichen Site Committee. We are grateful to the Chairman of this Committee Mr Haynes, and the Secretary Mr Brightman for running this vital branch of the Society's activities. As our Treasurer Mr Manning is now standing down I would like to record a special appreciation for all the exacting work he has put into his duties. Lastly, I wish to thank all members for their help and co-operation during the year.

J. R. LAUNDON

Honorary Secretary.

(This report was presented at the Annual General Meeting on 4 January 1975.)

BULLETIN 36. Issued by the British Lichen Society, c/o Department of Botany, British Museum (Natural History), Cromwell Road, London SW7 5BD (telephone: 01-589 6323 ext. 552). Edited by J. R. Laundon. Duplicated by Brown's Typewriting Service Ltd., Helena Street Works, Burnley, Lancashire. July 1975.