BRITISH PHYCOLOGICAL SOCIETY

May 1978

NEWSLETTER 11

NEWSLETTER EDITOR

Newsletter 12 and subsequent issues will be edited by Dr Martin Wilkinson to whom material for publication should be sent. The membership is requested to submit news items, information, requests, reviews, and details and reports of meetings and symposia. Response to requests for Newsletter items during the past years has on the whole been disappointing. The success of the Newsletter depends very much on your cooperation.

* c/o Dept of Brewing and Biological Sciences
Heriot Watt University
Chambers St
Edinburgh
Scotland

SUBSCRIPTIONS

These are due January 31 each year.
Members taking the Journal £7.50
(reduced to £5.00 for undergraduates and research students).
Members not taking the Journal £2.00.
Since the last Newsletter Dr H Pearson has resigned as Treasurer and Dr B Leadbetter* has taken on the job. Cheques etc should be sent to the Treasurer: * c/o Botany Dept
The University
Edgbaston
Birmingham

ADDRESSES

It is hoped that a complete list of addresses will be circulated with the next Newsletter. Members should inform the Hon. Membership Secretary* of any address changes as soon as possible.

*Dr C Happey-Wood
U.C.N.W.
School of Biology
Memorial Buildings
Bangor LL57 2UW
Wales

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Twenty-sixth Winter Meeting at Birmingham University, 3 - 5 January 1978.

After the great success of the Silver Jubilee winter meeting, held at Royal Holloway College in January 1977, the first time the Society met outside London could have been a come-down. That instead it was another great success can be attributed mainly to Dr Barry Leadbeater who acted as local secretary and thought of everything. He seemed to be everywhere at once, available to help anyone with problems. As a result there was a happy atmosphere and interchange of ideas.

The Council decided on two experiments with this meeting, holding it outside London and allowing speakers longer than 20 minutes if they wanted it. Because there were a record number of papers offered the latter nearly proved impossible but into a tight schedule were aqueezed a total of 39 papers, 12 of which had 30 minutes allocated for them. With the occasional prod by the excellent chairpeople the speakers kept extremely well to time and what could have been chaos was well ordered. The standard of presentation was very high, including well designed, clear slides. Dr Leadbeater was even able to arrange two simultaneous projectors to avoid slide juggling and aid clarity of presentation. He was also able to cope with weird-sized slides from across the Atlantic. We were particularly gratified with the number of transatlantic visitors (5 papers were presented) in addition to those from Europe (2 papers, 7 participants). With nearly two-thirds of our membership being overseas it is fitting that the winter meeting should become more international.

The opening day, Tuesday, was stormy outside (those who flew arrived slightly green) but this went unnoticed in the large, comfortable Arts lecture theatre. The session (afternoon only) was chaired by Dr J.W.Eaton and was devoted to freshwater topics; lakes, broads and streams in England, Wales, Ireland and Europe to Antarctic epiphytes. On Wednesday morning Professor A.D.Boney had the task, after an unavoidable delay in starting, of chairing six marine papers and allowing time for the AGM. The papers,ably presented in the short time available, included mapping and species distribution, a proposed exposure scale and a description of an almost inaccessible piece of coast in Labrador. At the AGM two decisions were taken 1) Not to raise the subscription in 1979 at this stage, though it can still be raised at the next AGM and 2) to support, somewhat guardedly, the idea of an international phycological congress.

The Wednesday afternoon session was chaired by Dr Betty Moss and included taxonomy, fine structure and attachment mechanisms. The dinner in the evening was much enjoyed if the noise issuing from the gathering was an indicator. Unfortunately the noise was taken as a convenient cover by an outside thief who raided some downstairs rooms. The Warden, who was gallantly keeping the bar open, certainly did not deserve this treatment.

In spite of the festivities, the morning session on Thursday was well attended, chaired by Professor P.J.Syrett. There was a well integrated group of four papers on Sargassum followed by a variety of physiological topics. Unfortunately good papers in the afternoon were badly attended because many members left early. This was unexpected because biochemical subjects had been chosen for this period in order to link with members of the Phytochemical Society of Europe, meeting in the same place the following day. The session was chaired by Mr R.H.McDowell and included fine structural and other aspects of biochemical topics, followed by two papers on soil algae in the United States.

Joanna M. Jones.

Report of Field Meeting at Weymouth, Summer 1977

The Society's Summer field meeting for 1977 was based at the Dorset Institute of Higher Education in Weymouth, Dorset, for a week at the beginning of August and was attended by about 20 participants. It was the first field meeting since 1969 to be held outside Scotland and the weather in Weymouth certainly lived up to its reputation - 7 days of blazing sun. Marine algal collections were made on shores at Kimmeridge, Osmington, Wemouth, Portland and Lyme Regis while a number of estuaries in Devon were also visited by a small contingent from the meeting. Particularly interesting was the large brachish lagoon behind Chesil Bank - the Fleet - in which a number of unusual red algae and charophytes were very abundant, and also the bay at Portland where the Fleet opens to the sea, which still contained many unusual taxa recorded for this site by Batters at the turn of the century. Dr Arthur Marker kindly arranged an unofficial visit to the Freshwater Biological Association's River Laboratory at East Stoke and to their artificial stream near Dorchester. We are also grateful to him for conducting a tour of interesting freshwater collecting sites.

Our thanks must also be given to Dr Elsie Burrows who has now retire to Dorset, and to Mrs. Jeanne Fitzpatrick of Dorset Institute of Higher Education for guiding us around and arranging many things including laboratory accomodation and access to, and boat facilities on the Fleet.

Martin Wilkinson.

Field Meeting at Swansea, Summer 1978

By kind permission of Professor Syrett the 1978 annual field meeting will be held in the Department of Botany, University College, Swansea West Glamorgan, during August 1978. (final dates yet to be fixed but of about 7 days duration). It is hoped that residential accomodation will be available on the campus close to the laboratory.

Swansea is particularly well sited for a large variety of field situations. Within a handful of miles are the scenically beautiful rocky shores of the Gower Peninsula and the salt-marshes of the Barry Inlet, both of which need phycological investigation. There is a great variety of open coast shores within easy driving distance in Pembrokeshire. There are also many small and medium-sized estuaries both clean and polluted and a large variety of fresh water streams and rivers, again both clean and with a variety of polluting situations. It is hoped that this variety of habitats available will result in the meeting being attended by a large contingent of both marine and freshwater workers. The meeting is intended for all levels of expertise - not just for experts - beginners and graduate students are particularly welcome.

If you would like further details of the meeting please write as early as possible to the honorary field meetings secretary:

Dr. Martin Wilkinson
Department of Brewing & Biological Sciences
Heriot-Watt University
Chambers Street
Edinburgh. EH1 1HX Scotland.

Martin Wilkinson

AMATEUR INVOLVEMENT IN PHYCOLOGY

Of the six major British botanical societies the B.P.S has the smallest proportion of amateur membership (see table). This is perhaps not surprising since from the Society's inception encouraging the amateur has been low on its list of aims and priority has been given to tasks involving the professional member (see paragraphs 1 - 5 on page 2 of Newsletter 10) The B.P.S. is now well on the way to achieving these aims: checklists appear at regular intervals, part 1 of the seaweed flora has been published, critical and experimental work is duscussed regularly at winter meetings and published in what is perhaps one of the most professionally produced botanical journals.

Indeed the growth in membership of the B.P.S. (see Newsletter 7) has gone hand-in-hand with the development of the journal. The Society has been successful in recruiting members from all over the world, and in particular America. However, there are now signs that membership is levelling off with recruitment just keeping pace with losses. In view of the present economic climate with ever increasing prices (and this includes subscription rates) it is difficult to forsee further significant growth in full membership. Further growth in membership could be achieved however, if the Society were to turn to the amateur.

In the past amateur interest in phycology has contributed much towards the progress of the subject. Names such as Neeve (a gas company official), Buffham (a city office worker) and Holmes (initially a pharmacist) are mentioned in phycological studies as frequently as current professional workers. All managed to combine an active interest in phycology with an active and quite different professional life. Today there is considerable amateur interest in the other botanical disciplines and this is clearly indicated in the table; the low amateur membership of the B.P.S. sticks out like a sore thumb.

Amateur participation has been discussed recently by Council, who have asked me to take on the task of doing something about this. Council suggested reciprocal advertising in other Societies' publications and the note about the Quekett Microscopical Club in this Newsletter is our first attempt at this.

It seems sensible to encourage potential amateur membership to join the Society as Associate members, subscription £2. 00., an amount which most people should be able to afford without too much hardship. A rise in the Associate subscription rate, I believe, would make recruitment much more difficult.

In order to bring about a momentum of amateur recruitment, the Society must initiate activities which will attract people. This relies very much on individual members of the Society helping out in a practical way. To begin with therefore, I would like to make contact with members who are interested in, or who are already active in this field, with a view perhaps to forming a small working party.

There are a number of ways of encouraging amateurs to join the Society. Probably the most important is by personal contact through other botanical and natural history societies. Conjoint B.P.S./Field Club day field excursions provide an excellent forum for contact. This is one of the reasons for requesting members who organise such field trips to advertise them in the Newsletter. Field Centre and extra-mural courses not only provide training but are excellent media for recruitment.

Looking ahead, I would like to maintain interest through articles in the Newsletter, and perhaps later a bulletin aimed specifically at that level, demonstration meetings, field work and identification sessions.

	Membership (approx)	% Amateur (approx)	% British Members (approx)	Subscription	Journal Parts/pages		Newsletter or equicalent no. per year	Other Bullet per ye
British Bryological Society	440	40	80	£6.	2	307	2	
+ British Pteridological Society	440	80	60	£4.	1	70		1pt. 40 p
British Lichen Society	500	30	55	£7.	2	200	2	
* British Phycological Society	600	5(?)	40	£7.50	4	440	1	Winter meeting circular
* British Mycological Society	1500	30	65(?)	£8.	8	1131		2pts. 80
Botanical Society of the British Isles	2400	60	90	£5.	2	188	3	B.S.B.I Abstracts 1 pt. 50

+ Associate Membership (not taking Journal) £3.

* " " " " " £2.

x Bulletin = House Journal which includes Newsletter type information.

Are there signs of potential amateur interest in the subject? I believe the answer to be yes, judging from personal contact with natural history societies and groups such as the B.S.A.C. On several occasions I have been asked to talk to diving groups on the recording, collection and identification of seaweeds, and also to suggest projects in this field.

It was the amateur membership of the B.S.B.I which carried out most of the groundwork which enabled an atlas of flowering plants to be produced within 12 years; amateur interest in conservation has enabled significant steps to be taken in that direction. The B.P.S. has dabbled in, and paid lip service to such topics, but without much progress being made. Encouraging amateur interest would contribute significantly to these topics, but more importantly, would inject a new and quite different type of approach and enthusiasm into the study of phycology.

From a seaweed point of view, two amateurs from each coastal county in the British Isles would result in a group of 150 or so people.

Ian Tittley.

BRITISH CHAROPHYTA

The distribution maps shown here are of recent collection of Charophyta and are intended to encourage would-be collectors to get into the field and look for these un-common algae. Large areas of the British Isles are lacking up-to-date records of this group and the distribution pattern revealed on the maps is one that demonstrates the 'habitats' of keen collectors rather than those of charophyte preference. The maps were based on records handled by the Natural History Museum from 1972-1977. The genera Chara and Nitella make up the bulk of the records shown here with a few collections of the uncommon Tolypella spp. and the rare Lamprothamnium papulosum and Nitellopsis obtusa. I would be grateful for any specimens especially those from the blank areas of the maps and will be pleased to give further details to interested phycologists. The plants can be sent fresh or pickled (not dry) and, if fresh, they should be placed in a well-sealed polythene bag, the excess moisture having been poured off, and the envelope clearly marked 'Live plant material - open at once'. Full details including 6-figure grid references are important.

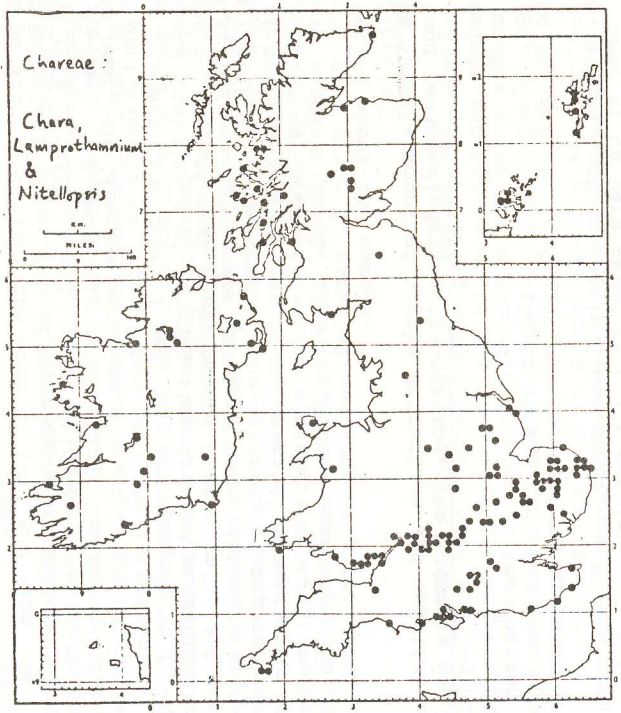
Send your finds to: Mrs. A.J.Moore
Botany Department
British Museum (Natural History)
Cromwell Road.
London. SW7 5BD.

IMPACT OF MARINE ALGAE ON MARINE ECOSYSTEMS

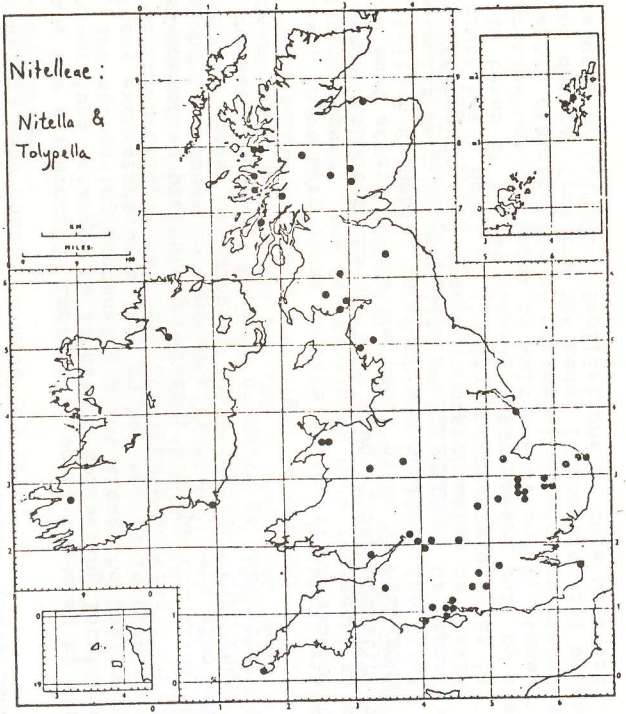
A meeting of the Porcupine Society to be held at Portsmouth Polytechnic, September 23 - 24 1978. Contact W.F.Farnham* for further details.

*Marine Laboratory
Portsmouth Polytechnic
Ferry Road
Hayling Island
Hants PO11 0DG

Records from 1972 - 1977



Records from 1972 - 1977



IX International Seaweed Symposium - Santa Barbara, California 20 - 27 August 1977.

Thanks to generous contributions from BM (NH) and from the International Phycological Society (Biogeography Symposium) I was able to attend this intellectually stimulating but physically quite exhausting meeting. Intellectually stimulating, because of the opportunity to meet, and discuss problems with, a large selection of the 740 or so participants to this, (thus far) the largest such Symposium held. Apart from that, I defy any phycologist to find, out of the 494 papers (naturally of ranging standard and presentation), absolutely none of any interest whatsoever ! Physically exhausting, because (despite the well-organised sessions on a virtually self-contained and finely situated campus) the quantity of papers and the multiplicity of extra-sessional lectures, specialist meetings, formal and informal society meetings, editorial bodies, and such, ensured that much of the week resolved itself into continuous agonising choice between at least 4 or 5, more often 7, parallel sessions or other commitments in buildings dotted about the campus.

Despite the immense amount of highly attractive and appetizing food offered (and consumed) during the meeting, the majority of participants started off by losing weight through both rushing hither and yon to sessions and (at least in the case of most European participants) through being unable to make a reasonable showing as trenchermen. As the week wore on, of course, the will to attend lectures grew noticeably less strong and the ability to ingest nutriment commensurately greater !

The choice between lecture sessions was sometimes firmly made on one's behalf. Some of us were asked to chair sessions, normally those in which we were also presenting papers. Imagine my delight at having my Sunday morning (the first lecture session - phycologists, as well known, rarely recognise weekends as anything but a continuation of the working week !) mapped out for me in this way - the first paper (9a.m. for 20 minutes) and chairing the session up to lunch-time! This would have been less taxing had not my"co-chairperson" (Dave John, University of Ghana) been unable to make the trip.

This, then, was a thoroughly impressive week, leavened by the interesting excursions arranged to important collecting locations, scenic areas, and harvesting/processing plant along the California coastline. These excursions were laid on before, at intervals during, and terminal to the meeting. The spin-off from a meeting such as this, in terms of co-operative projects generated, and opportunities to view work patterns and techniques in other institutions, were also very evident here. Some argue, not without justification, that these form far and away the most important aspects of meetings that attain the size and complexity of this one.

Nevertheless, there were other aspects of importance amongst the formally presented papers; the few mentioned here represent my own bias of interest. Without doubt the most elegant demonstration of research at its most effective was the paper given by M.W.Hawkes of University of British Columbia, in which was outlined the first unequivocal establishment of sexuality on Porphyra. Dr Papenfuss quite rightly, afterwards acclaimed this presentation as 'making history' The paper as given was a model of clarity and precision, but hid its light under abushel in terms of title! Equally interesting but, by its nature, less precise was the paper by Walter Adey and R. Staneck on the phytogeographic distribution of marine algae and the probable province origins derived from the 18K model (Wisconsin Age) of sea surface temperatures by CLIMAP. Implications of this work are

fascinating. Finally, the demonstration by Rick Fetter from Neushul's laboratory at Santa Barbara, of details of possible spermetial release mechanisms in red algae (Ceramiaceae) was extremely interesting and of potentially far-reaching systematic and functional importance.

With all the complexity, it was inevitable that minor snags and hitches should arise, but these hardly coloured one's overall impression of the meeting. The general air of courteous efficiency amongst the organisers was notable and Michael Neushul, David Coon, the National and Local Organising Committees, and all the helpers at all levels, deserve commendation for their large part in a memorable event. Still, save us, O God of phycologists, from any further increase in the size and complexity of any future meetings in the series.

J.H.Price.

A coded list of 1000 Freshwater Algae of the British Isles

Authors: B.A.Whitton, N.T.H. Holmes & C. Sinclair.

Contents: List of the commoner or more interesting freshwater species for anyone wishing to keep floristic records. Each species is allocated a unique 6-digit code for use in computing. In addition notes are included for each species on synonymy, useful floras and previous Britis records.

Copies may be obtained by writing to Dr J.C. Rodda, Water Data Unit, Department of Environment, Reading Bridge House, Reading, RG1 8PS. (We understand that they will be supplied free of charge, but nevertheless, suggest confirming this before making a firm order).

Brian Whitton.

Biodeterioration

The Editor of the INTERNATIONAL BIODETERIORATION BULLETIN has indicated that he would like to publish more articles on the biodeteriorative activities of algae. This would include disfigurement of buildings, interference with the operation of any plant or equipment, production of objectionable slimes or films, or any other interference with human activities caused by algae. Also, any account of the control of such activities, or of the use of algicides generally would be of interest. All papers are refereed.

Any member involved in work of this kind who thinks it may be suitable for publication in this Journal should contact:

Professor T.A.Oxley
Editor, International Biodeterioration Bulletin,
University of ASTON in Birmingham,
80 Coleshill Street
Birmingham. B4 7PF.

Symposium on Desmids and Other Zynematales (Second International Desmid Symposium).

In continuation of our 1st meeting (see this Newsletter, No.3 1972 p.11) we held another conference on desmids and other conjugates at Lake Itasca, Minnesota, USA, from September 26 to October1 1976. 24 participants came from 5 countries: Canada (3), Federal Republic of Germany (3), Japan (3), the Netherlands (1), and the USA (14). The symposium was organized and skilfully arranged by Paul Biebel, Dickinson College, Carlisle, PA. USA. He was an ingenious and amiable host. His fellow-countrymen and the Canadians generously supported his hospitality. Biebel's cautious though accurate chairmanship facilitated an informal and unaffected conference which all the participants enjoyed very much. The lack of funds, the declaration of Itasca State Park a barred zone because of the danger of fire hazards in the extreme dry summer 1976, long distance between residence and place of performance were very unfavourable conditions. In spite of all this he succeeded in accomplishing this 2nd meeting. It really proved the productiveness of such symposia. Their continuance depends less on their inauguration. Decisive is, however, success or failure of the following performance. Thus Biebel's masterly achievement is very meritorious for this field of phycology.

The assemble was on Sunday, September 26, at Radisson Hotel Downtown in Minneapolis, MN. From there we started with private cars of our American and Canadian hosts for a visit to the beautiful and liberally equipped Freshwater Biological Institute of the F.B. Research Foundation at Navarre, MN. In addition to looking round the station the participants heard some very intructive lectures on structure and history of the landscape around the Great Lakes, especially of Northern Minnesota. After a second stop on the way for a dinner we arrived late in the evening at the Forestry and Biological Station of the University of Minnesota in Itasca State Park, region of the sources of the Mississippi.

The following days were filled up with field trips, sightseeing tours, work with the microscope, lectures, and dozens of profitiable discussions of different kind. The lectures covered the following topics: Sexuality in Sirogonium; Caryology and morphology of some Desmidiaceae and their bearing on taxonomy; Alterations in ultrastructure during the sexual process of the Desmid Staurastrum gladiesum Turner; Conjugation and 'free' zygospore formation ina homothallic Cylindrocystis; Comparative morphology and observations on the sexual processes in the Spirotaenia; Nucleic acid metabolism in Spirogyra and Closterium; The influence of cell wall chemistry and cell wall structure on the uptake of heavy metals in some Desmidiaceae; Structure and dynamics of desmid communities in hydrossere vegetation in a mesotrophic quivering bog; Desmid studies in northern California; Taxonomy of the Closterium calosporum complex; Diological problems in the taxonomy of Closterium; Some observations on polymorphism in populations of certain Xanthidium taxa; Some remarks on chloroplast spiralization in Spirotaenia and Spirogyra. The high standard of all the papers caused much discussion which brought to light a lot of pertinent remarks for adequate interpretation of results, strategies of scientific research, and open questions as a wide field for future research activities. The very different scientific traditions represented by the participants stimulated frank exchange of ideas rather than causing cross-purposes. No doubt, this was due to the good humour of all the members of the symposium favoured by hospitality, nice sites, and fair weather. Enjoying the meeting and considering it rather productive the participants unanimously decided in the final session to go on to come together in this way. There were a lot of proposals and remarkable contributions to problems relating to ecology, taxonomy, systematics, and evolution of Zygnematales, and, especially, to future International co-operation in this field of research. A place for the

Symposium on Desmids and Other Zygnematales (Second International Desmid Symposium - Contd

next conference is not yet fixed. In the remaining time between Symposium 2 and 3 we hope to improve the international exchange of ideas and to bring about better personal acquaintance of the workers all over the world by means of a circular. Up to now we collected some 350 names of persons who may be interested in such co-operation. We decided to manage distribution of the circular "Conjugate Forum/Forum Conjugatophycearum" (forthcoming 1977 with a first provisional issue) from 4 places, viz. : Dr Paul Biebel, Dept. of Biology, Dickinson College, Carlisle PA 17013,USA (for the Americas), Dr. Terunobu Ichimura, Institute of Applied Microbiology, University of Tokyo, Bunkyo-ku, Tokyo 113, Japan (for Australia, South and Southeast and East Asia), Dr. Oldřich Lhotský, Czechoslovak Academy of Sciences, Institute of Botany, Dept of Hydrobotany. Dukelska 145, 379 82 Třeboň, Czechoslovakia, (Europe and Near East, 'non capitalistic' or 'socialistic'), Dr. Dueter Mollenhauer, Aussenstell. Lochmuehle, Forschungsinstitut Senckenberg, D-6465 Biebergemuend 3, Federal Republic of Germany (Europe, Near East, and Africa, 'non socialistic' or 'capitalistic'). All these 4 persons also shall act as ports of call for any further suggestions, requests, etc. related to Zygnematales research.

The proceedings of the 2nd meeting shall be published in the same journal like those of the 1st one, viz. in "Beihefte zur Nova Hedwigia", colume 56. We hope to make it lower in price than the first volume by a more suitable way to produce it. Managing editor is Paul Biebel.

Dieter Mollenhauer

Fifth International Symposium on Living and Fossil Diatoms

The fifth International Symposium on Living and Fossil Diatoms will be held September 4 - 8 1978 at the Societe Royale de Zoologie D'Anvers in Antwerp, Belgium.

Four days will be devoted to oral presentation of papers and workshops while the fifth day will be devoted to excursions. Papers dealing with such topics as diatom taxonomy, shell structure, diostratigraphy, ecology and paleoecology would be most welcome. In addition, evening workshops on specific topics are being planned. Interested persons should request a copy of the first circular from Dr. John Barron, U. S. Geological Survey, Menlo Park, California, USA.

REQUEST

A research project on tropical fruits and seeds washed ashore on British Isles and European coasts is being undertaken at the National Botanic Gardens, Glasnevin. Any person with specimens of tropical drift seeds or records of collection is requested to contact Dr. E. C Nelson giving details of collection.

I would be pleased to examine and identify specimens.

Department of Agriculture and Fisheries.
National Botanic Gardens
Glasnevin.
Dublin 9.
Ireland.

Modern approaches to the taxonomy of the red and brown algae

Polytechnic of North London, 14 - 15 April 1977

David Irvine and Jim Price put a lot of effort into organising this most successful symposium. The Systematics Association, N.E.R.C. and the B.P.S. conjointly sponsored this meeting which was attended by some 50 phycologists. Seventeen papers were read during the two days; several displays were put on, and the last evening was devoted to a workshop on the future lines of taxonomic research in the red and brown algae. Several of the papers outlined the application of new techniques such as S.E.M., computer identification, and biochemical approaches. Other papers presented a more classical approach to the subject. A complete account of papers read at the meeting will be published by Academic Press during 1978.

The function of local natural history collections

Liverpool University, 22 - 23 September 1977

A symposium conjointly organised by the Biological and Geological Curators Groups and the Systematics Association. I took the opportunity to wave the flag for phycology and remind local museum curators of the valuable collections of seaweeds held at some 80 provincial and university museums throughout the British Isles (see Newsletter nos. 2 & 5). Several curators expressed an interest in the subject and we may, in the future, see them participating in projects such as the seaweed mapping scheme and local flora writing.

Thirteenth International Botanical Congress

Sydney, Australia. 21 - 28 August 1981.

The Programme will consist of 12 sections - molecular, metabolic, cellular and structural development, environmental, community, genetic, systematic and evolutionary, fungal, aquatic, historical, and applied botany. There will be plenary sessions, symposia, and sessions for submitted contributions (papers and posters). Chairman of the Programme Committee:- Dr. L.T.Evans.

Field Trips will include visits to arid and semi-arid regions, eucalypt forest, rain forest, heath, coastal vegetation (e.g. Great Barrier Reef, mangoves) etc., and specialist trips. Chairman of the Field Trips Committee :- Prof. L.D.Pryor.

First Circular, containing details, will be mailed in August 1979. Send your name and full address, preferably on a postcard, to ensure your inclusion on the mailing list.

Enquiries should be sent to the Executive Secretary, Dr. W.J. Cram.

Congress address - 13th I.B.C., University of Sydney, N.S.W. 2006 Australia.

Sponsored by the Australian Academy of Science.

Courses of Interest to Amateurs and Students 1978

DALE FORT FIELD CENTRE

12 - 19 July	:	Marine Biology for Divers
15 - 26 July	:	Marine Biology for Divers
9 - 16 August	:	Marine Biology for Divers

FLATFORD MILL FIELD CENTRE

26 July - 2 August	:	Freshwater Biology
30 August - 6 September	:	Exploring a river

MALHAM TARN FIELD CENTRE

26 July - 2 August	:	Freshwater Algae

ORIELTON FIELD CENTRE

19 - 26 July	:	Seaweeds

SLAPTON

24 - 31 May	:	The elements of Scuba diving and Marine ecology

For further information on the courses write to:

Information Office
Field Studies Council
Preston Mountford
Mountford Bridge
Shrewsbury SY4 1HW

Telephone: 0743 - 71 674.

THE QUEKETT MICROSCOPICAL CLUB
c/o British Museum (Natural History)
Cromwell Road, South Kensington
London. SW7 5BD

The Quekett Microscopical Club was founded in 1865 to provide facilities for the friendly exchange of ideas between people interested in microscopy. Whilst the Club was originated and has always existed mainly for the benefit of those who take an interest in microscopical research as a means of recreation, all classes of workers with the microscope are most heartily welcomed. The Club is fortunate to number among its members many professionals who have done much to further its interests and enhance its reputation, both at home and abroad.

The present membership totas over 500, with the membership spread throughout the UK and only about 10% being able to regularly attend its Meetings in London, the Club's publications provide a vital link to keep the majority informed of the Club's activities. The journal "Microscopy" is published twice yearly and consists of 64 pages per issue In addition to distribution to members, it is acquired, either by purchase or Journal exchange, by over 90 Scientific Societies and Libraries. Also a News Letter is distributed to members twice yearly.

Contd.....

The Quekett Microscopical Club - contd

There is a full programme of Meetings throughout the year, some Meetings being for Lectures or the discussion of Members' papers and others being of an informal nature for the demonstration of objects and apparatus and for conversation. There are also occasional Saturday afternoon Meetings for demonstration of slides and apparatus. An annual Exhibition of Microscopy is held every October.

The Club has an extensive library bearing on microscopy and a large collection of slides, from both of which members may borrow. The Club also possesses a number of instruments for the use of members at the informal Meetings. In the summer, excursions are arranged for Saturday afternoon visits to suitable collecting grounds. There is also a postal library service for out-of-town members.

The yearly subscription is £4. and entitles Members to all privileges of the Club, including free copies of the Journal and News Letter.

Any person wishing to apply for election or who would like an invitation to a Meeting of the Club should write to the Registrar at the above address.

Littoral Ecosystems

A meeting on methodology and classification in littoral ecosystems is being arranged for April 1979; it will be centred on Portsmouth Polytechnic. Local Secretary will be W.F.Farnham and joint organisers are Farnham, J.H.Price and D.E.G.Irvine. Major review papers; shorter presentations; associated or separate demonstrations of method; and actual field applications are being planned. All interested in either attending or contributing are asked to contact any of the organisers.

Marine algae of the Indian Ocean Region.

The International Symposium on "Marine Algae of the Indian Ocean Region" will be held during the fourth week of December 1978 at the Central Salt & Marine Chemicals Research Institute, Bhavnagar 364 002 (India).

The Symposium is open to all who are interested in the various aspects of marine algae of the Indian Ocean Region ranging from the purely scientific to industrial and commercial utilisation.

If sufficient interest is available, the Symposium will be followed by excursions to centres of marine algal interest along the Saurashtra coast.

If you wish to be placed on the mailing list for subsequent circulars, please write to:
Dr P S Rao
Secretary & Convenor
International Symposium on Marine Algae of Indian Ocean Region
Central Salt & Marine Chemicals Research Institute
Bhavnagar 364 002
India

A Brief Guide to the British Species of Antithamnion Nägelli

This article is written with two aims in view. The first, a selfish one, is to inform readers of my interest and please for material of the group to assist me in my work. The second, more altruistic, purpose is to provide a simple character matrix and basic distribution data to assist those who encounter the group in their own collecting.

I would be grateful for any material sent but would prefer it either alive or fixed in 3 : 1 Acetic acid/alcohol or 3 : 6 : 1 Acetic acid/ alcohol/Chloroform.

The following are brief notes on distribution and habitat but if further information is required, please write to me.

Antithamnion plumula (Ellis) Thuret Fig 4.

Widely distributed in the British Isles on mud covered rocks at low tide or, generally, below 8-10mm on stones or shells. Often occurs on artificial substrata such as pontoons, buoys, harbour walls; either directly attached or on various algae.

Antithamnion cruciatum (C.Ag.) Nägelli Fig 2

Distributed mainly on South and West coasts of Britain and the West coast of Ireland. Habitat similar to that of A.plumula but much less common. At depth may take the repent "radicans" form

Antithamnion spirographidis Schiffner Fig. 3

First recorded in the British Isles as Antithamnionella Sarniense by Lyle in 1920 in the Channel Isles; has since appeared on South and West coasts of Britain and Ireland. Occurs inter-tidally or subtidally down to 15m, epiphytic on various algae, ascidians or tube worms. Similar to previous species in its common occurence on pontoons and buoys. Also appears in covered marine aquaria.

Antithamnion boreale (Gobi) Kjellman Fig. 2

Considered as requiring re-investigation in the 1968 check-list but since recorded (Check list 1976) as valid by Professor P.S.Dixon, who has noted plants in the North of Scotland from argyll to Aberdeen. I have found plants in the Clyde Sea-area at various localities, the largest populations being in Troon harbour. Mainly epiphytic on various algae. This appears to be the most southerly occurence of the species on this side of the Atlantic (not including Baltic records).

Antithamnion floccosum (Müller) Kleen Fig. 1

Another norther species at its southern limits in Britain. Occurs infrequently around Scotland from the Forth to the Clyde. In the latter it is locally abundant in the intertidal zone, occasionally subtidal, attached directly to rocks or to barnacles occasionally epiphytic.

Antithamnion crispum (Ducluz.) Thuret A.plumula var.. crispum (Ducluz)

Rare on South west coasts of British Isles. Epiphytic on various algae. Information on this species is lacking and any plants which roughly fit the description would be appreciated.

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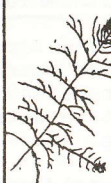
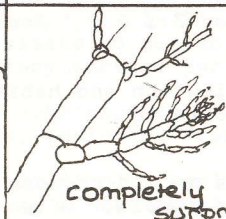
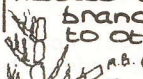
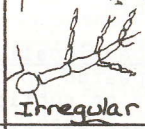
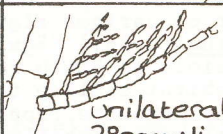
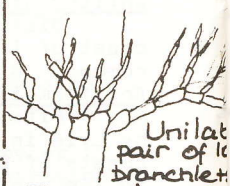
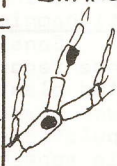
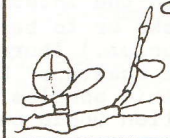
	A. cruciatum	A. plumula	A. crispu
Pattern of main branching and apical regions.	 Few main-branches. Apices tufted.	Main branching varies from sub-dichotomous to dichotomous.  Apices have forcipate appearance.	Main bra sub-dich to dich as in A  Apices Recurved br and small branchlets "Spiny" appea
Effect of main-branch on opposite whorl-branchlet.	 M.B completely suppressed.	Either: Reduced to 2 simple branchlets at 90° to others.  M.B. Or: slightly reduced  M.B	Similar to A. plumu
Morphology of whorl-branchlet basal cell. Position of ramuli on whorl-branchlets.	Opposite  unilateral Basal cell isodiametric  Irregular	 Unilateral, bearing 2° ramuli. Basal cell shorter than others but similar width. In one plane.	 Unilat pair of l branchlet Irregular on
Position and shape of gland cells.	 Lie alongside 2 or 3 cells of reduced ramule.	 Lie alongside one cell of whorl-branchlet or ramule of normal dimensions. Lens shaped → subglobular.	Similar to A.  Also oc on flan whorl b cells (di to see).
Position and morphology of tetrasporangia.	On short stalk, isolate, cruciate division. 	On short stalk or sessile, clustered or isolate, cruciate division. 	Similar to A
Additional information.	Whorl branchlets in 2's decussate at 90°. Main axis may be repent for majority of its length.	All branching in one plane.	4 whorl-branch each axial cell. larger pair simil A. plumula althe ramuli may be i several planes smaller pair irregularly brar

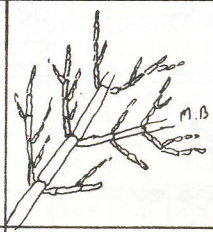
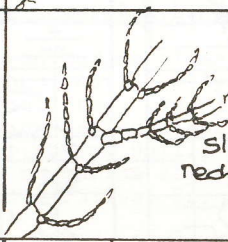
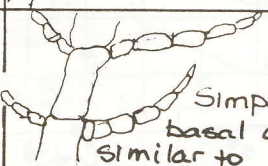
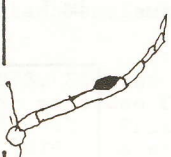
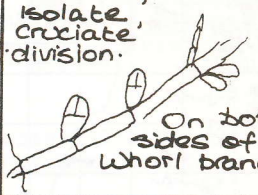
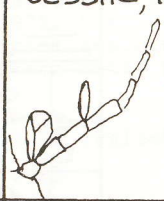
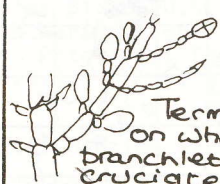
	A. boreale	A. spirographidis	A. floccosum
	Main branching alternate, apices slightly tufted. 	Main and whorl-branching spirally arranged (1:3). 	Main branching varies from alternate to irregular. Whorl-branchlets tapered. 
	Little effect. 	Slight reduction. 	No effect Extra branchlet present. 
	Irregular, some at 90° to plane of axis. Basal cell same as others. 	Simple, Basal cells vary considerably in older parts of plants. Similar to others in younger parts. 	Simple, basal cells similar to others, sometimes shorter. Whorl-branchlet awl-shaped 
	Lie along one cell of whorl-branchlets; lens-shaped. 	Lie alongside one cell. 	Not recorded in this species in Britain.
	Sessile, clustered or isolate, cruciate division. On both sides of whorl branchlet. 	Sessile, isolate, tetrahedral division. 	Terminal on whorl-branchlets, cruciate division. 
			May persist in reduced form with alternate whorl-branchlets. 

Fig. 1

A. crispum ... ●

A. floccosum .... ▲

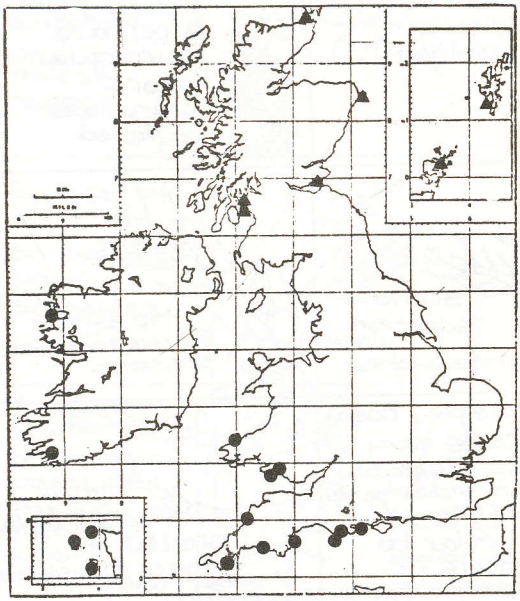


Fig. 2

A. cruciatum .... ●

A. boreale .... ▲

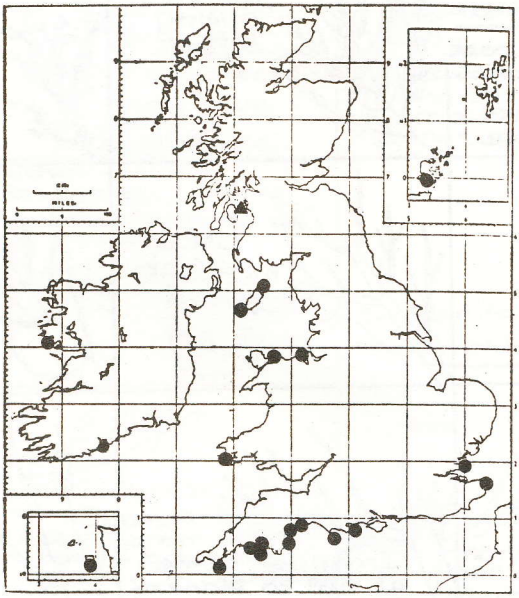


Fig. 3

A. spirographidis ... ●

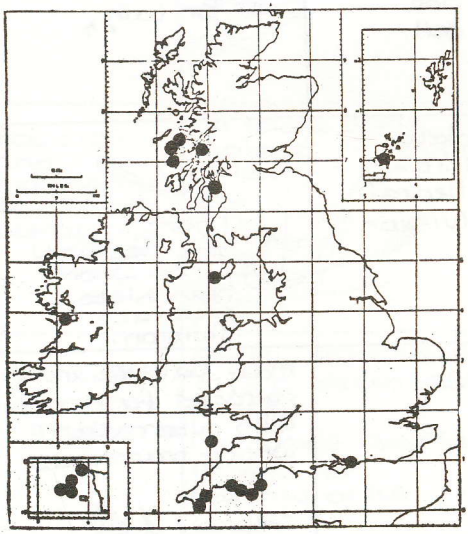
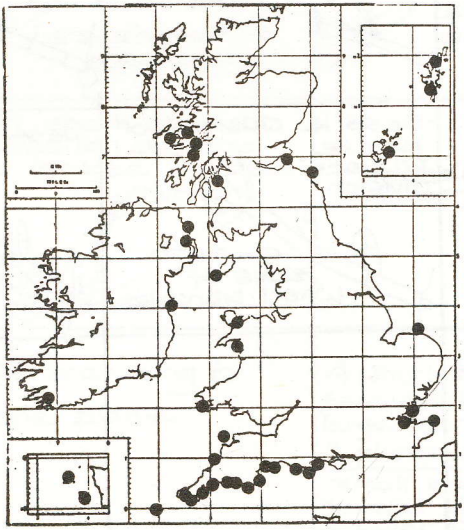


Fig. 4

A. plumula ..... ●



British Phycological Society Publications

Members are reminded that the Society has a number of reprints of important phycological papers for sale. These include:

1. Studies on Marine Algae - a series of biological studies if individual genera and species of British marine algae. The following parts are currently available

DIXON, P.S. 1960a Studies on marine algae of the British Isles: the genus Ceramium. J.mar.biol.Ass.U.K., 39:331-374. Price 30p post free (No. 1)

DIXON, P.S. 1960b. Studies on marine algae of the British Isles: Ceramium shuttleworthianum (Kutz.) Silva. J.mar.biol.Ass.U.K., 39:375-390. Price 20p post free. (No.2)

ROBERTS,M., 1967a. Studies on marine algae of the British Isles. 3. The genus Cystoseira. Br.phycol.Bull., 3:345-366. Price 25p. post fre

ROBERTS, M. 1976b. Studies on marine algae of the British Isles. 4. Cystoseira baccata (Gmelin) Silva. Br. phycol.Bull., 3:367-378 Price 20p post free.

SOUTH, G.R. & BURROWS, E.M., 1967. Studies on marine algae of the British Isles. 5.Chorda filum (L).Stackh.Br.phycol.Bull., 3 379-402. Price 25p post free.

NORTON, T.A. & BURROWS, E.M., 1969. Studies on marine algae of the British Isles. 7. Saccorhiza polyschides (Lightf) Batt. Br. phycol.J., 4:19-54. Price 35p post free

ROBERTS, M., 1070. Studies on marine algae of the British Isles. 8. Cystoseira tamariscifolia (Hudson) Papenfuss. Br.phycol.J., 5: 201-210. Price 20p post free

ROBERTS, M., 1977 Studies on marine algae of the British Isles. 9. Cystoseira nodicaulis (Withering) M.Roberts. Br.phycol.J., 12: 175-199

2. Other publications - important reviews of the more general phycological interest:

ADEY, W.H. & ADEY,P.J., 1973. Studies on the biosystematics and ecology of the epilithic crustose Corallinaceae of the British Isles. Br.phycol.J. 8:343-408. Price 85p post free

OBRIEN, P.Y. & DIXON,P.S. 1976. The effects of oils and oil components on algae: a review. Br.phycol.J., 11:115-142. Price post free: U.K. 50p; overseas (surface mail) 60p or $1.00 (U.S.)

PARKE, M. & DIXON, P.S., 1976. Check-list of British Marine Algae - Third Division. J. mar.biol.Ass.U.K., 56:527-594 Price post free U.K. 75p: overseas (surface mail) 85p or $1.40 (U.S.)

Copies of all reprints will be available at the Winter Meeting or they may be obtained from

Dr. J.C.Green, The Laboratory, Citadel Hill, Plymouth PL1 2PB.

All cheques and money orders should be made payable to "The British Phycological Society".

Field meeting in Kent: Margate.

A general meeting with the Kent Field Club to record the species of seaweed which may be found along the north-east coastline of Kent. Meet at the top of the main slipway (TR354713) at 1pm on Saturday 17th June .

Leader I. Tittley

Field meeting in Kent: Shellness, Isle of Sheppey.

A Kent Field Club meeting to examine the plants and animals of this stretch of coastline comprising of shingle and saltmarsh. Meet by the seawall (TR 047693) at 11.15am on Sunday 18th June 1978.

Field meeting in Kent: Sheerness, Isle of Sheppey.

A meeting to observe the varied plant life which lives on walls. Areas under study will include the old naval dockyard. Organised by Mr Brightman and Mrs Side of the Kent Field Club.

Meet at Sheerness Station at 11am on Sunday September 10 1978.

The Assessment of sublethal effects of Pollutants in the Sea.

24 & 25 May 1978, at the Royal Society, 6 Carlton House Terrace London SW1 5AG

For further details please write to the Executive Secretary at the address above.

Recent publications of interest to Phycologists.

Introduction to the algae.
Bold, H.C. & Wynne, M.J., 1978
pp. xi + 706. ISBN 0-13-477786-7
Prentice-Hall Inc., Engleswood Cliffs, N.J.
Cost in U.K. £17.45

The Genetics of Algae
Lewin, R.A., 1976
pp. x + 360 ISBN 0-632-00077-5
Botanical Monographs, vol. 12
Blackwell: Oxford

Tratat de Algologie II Rhodophyta - Phaeophyta
Péterfi, S. & Ionescu, A., 1977.
pp. 298
Editura Acad. Rep. Socialiste România: Bucharest.

Recent publications (contd.)

Ecologie du plancton marin 1. Le Phytoplancton
Bougis, P. 1974
pp. ix + 196 ISBN 2-225-39412-x
Masson et Cie: Paris

Pacific Seashores A guide to intertidal ecology
Carefoot, T. 1977
pp. 208 Isbn 0-295-95522-8
Univ. Washington Press: Seattle & London
Cost in U.K. £9.10

Zur Kenntnis der Algen Neuseeländischer Torfmoore
Skuja, H. 1976
Nov. Acta Regie Societatis Scientiarum Upsaliensis
Ser. V: C vol. 2

Forthcoming publication:

The Island of Mull a survey of its flora and environment.

Most county floras describe the distribution of flowering plants and ferns within their prescribed areas. The less conspicuous and more primitive groups of plants, however, often receive little attention and are frequently omitted completely.

For the first time a complete inventory of the plants and their distribution in a small part of Britain has been undertaken by the Botany Department of the British Museum (Natural History).

Contents:

Part One: prologue

1 History of Plant recording on Mull
2 Patterns of distribution within the flora of Mull

Part Two: the environment

3 General description and topography
4 Geology
5 Geomorphology and soils
6 Climate
7 Marine physical environment
8 Marine ecosystems
9 Brackish and freshwater ecosystems
10 Terrestrial ecosystems

Part three: the flora

11 Flowering plants and conifers
12 Ferns and their allies
13 Liverworts and mosses
14 Lichens
15 Fungi
16 Freshwater algae
17 Freshwater diatoms
18 Marine diatoms
19 Marine Algae

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