

BRITISH PHYCOLOGICAL SOCIETY NEWSLETTER

Number 16

March 1983

The editor would like to thank all contributors to this issue

The list of recent publications and forthcoming meetings in this issue will seem highly selective to some members. This is because it has largely been put together by the editor. Many members must know of local meetings and obscure reports and publications that will interest other members. Please let the editor know. Please send any contributions for the next issue by 31st December 1983 to the editor:

Dr Martin Wilkinson
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Biological Sciences
Heriot-Watt University
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Edinburgh EH1 1HX
Scotland

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SOCIETY ANNOUNCEMENTS

Logo for the Society

We need a logo, so a prize of a £10 book token (or equivalent outside the UK) is being offered for the best design. It should be usable in black and white, transferable between small and large scale and distinguish our Society from other phycological ones. Submissions will be displayed as a poster at the next winter meeting. Send to the Hon. Secretary:

Dr Joanna M. Jones
Department of Marine Biology
Port Erin
Isle of Man
U.K.

Seaweeds of the British Isles

A collaborative project of the British Phycological Society and the British Museum (Natural History).

Volume 1 Rhodophyta

Part 2A Cryptonemiales (sensu stricto), Palmariales, Rhodymeniales, by L.M. Irvine, will be published shortly. The British Museum (Natural History) is offering a copy to each member of the British Phycological Society at a substantially reduced price, by sending in the Order Form at the back of this Newsletter with payment. All payments should be made to 'Publication Sales, British Museum (Natural History)'. Overseas remittances should be made by sterling bank draft payable in the U.K.

FORTHCOMING MEETINGS

Meetings on Blue-Green and Greens from Estuarine and Marine Sites
Meetings have been arranged on the ecology and taxonomy of these two groups, with the emphasis on practical problems of identification. The two meetings are consecutive, in the hopes that some people will come to both. Arrangements for attendance should, however, be made with the individual organizers, even if you wish to come to both meetings. It would help the organizers if you could let them know as soon as possible if you intend to come and anyone requiring accommodation must give a firm booking before June.

Blue-Green Algae meeting

Place Department of Botany, University of Durham
Dates Mid-day Friday 24 June - late afternoon Sunday 26 June
Plan Friday is intended for people without much knowledge of taxonomy of this group and will include lectures and organized laboratory work and a field trip to the Durham coast and the highly polluted local estuaries. Anyone who wishes to miss Friday and join early on Saturday is most welcome.

Materials Please bring as much material with you as possible. Live material is much easier to identify than preserved, but obviously it is not always possible to get this. Preserved samples should preferably be kept in both KI.I₂ and buffered formaldehyde or glutaraldehyde (CARE) solutions. Formaldehyde stocks should be diluted than often used for marine algae (2½-3% depending on amount of algae). It is hoped to send Trevor Norton plenty of records for the mapping scheme, so do not forget to record details of location etc.

Costs Registration fee to £4.00 to cover travel to field sites, cold meals on Saturday and Sunday and as much tea or percolated coffee as you can drink. Accommodation can be arranged in a college hall of residence and will cost approximately £8.50 for bed, breakfast and evening meal. (Exact costs will be known well in advance of the meeting).

Booking Contact Dr B.A. Whitton, Department of Botany, University of Durham, Durham DH1 3LE (0385-64971).

Travel
to

Edinburgh There will be suitable trains from Durham to Edinburgh in later afternoon or early evening of Sunday 26th, but exact times not known until British Rail publish summer timetable.

Green Algae meeting

Place Department of Brewing and Biological Sciences, Heriot-Watt University, Edinburgh.

Dates Monday 27 June (morning) to midday Wednesday 29 June (Accommodation available for Sunday evening).

The meeting will be an informal workshop suitable for both the inexperienced student and the expert. It will concentrate on estuarine and marine genera but with particular reference to those also found in freshwater. Field collecting expeditions to a variety of sites around Edinburgh will be backed by informal laboratory and discussion sessions. Do bring your own material if you wish.

Costs As for blue-green algae meeting.

Booking Contact Dr M. Wilkinson, Department of Brewing and Biological Sciences, Heriot-Watt University, Chambers Street, Edinburgh EH1 1HX, Scotland 9031-225-8432 ext. 347).

A limited number of awards from the scientific meetings fund may be allocated to full-time students to attend these meetings. These will not exceed £15 for anyone attending one or £25 for anyone attending both meetings. Applications should be made to the honorary secretary (Dr J.M. Jones) by April 1.

British Diatomist's Meeting

The next meeting of British Diatomists will be held at the Brathay Centre for Exploration and Field Studies, Ambleside, Cumbria on November 4th - 6th 1983. Details will be issued to all previous participants or, application may be made to Dr Elizabeth Y. Haworth, Freshwater Biological Association, Far Sawrey, Ambleside, Cumbria LA22 0LP.

Symposium on Green Algae

A symposium on the "Systematics of the Green Algae" will be held, with the sponsorship of The Systematics Association, The British Council and The British Phycological Society, at the Polytechnic of North London, 29-31 March 1983. Details from Dr D.E.G. Irvine, Department of Food and Biological Sciences, Polytechnic of North London, Holloway Road, London N7 8DB.

Symposium on Structure and Function of Brackish-Water and Inshore Communities

Organised by the Estuarine and Brackish-Water Sciences Association. To be held at Heriot-Watt University, Edinburgh in September 1983. Details from Dr M. Wilkinson, Department of Brewing and Biological Sciences, Heriot-Watt University, Chambers Street, Edinburgh EH1 1HX, Scotland.

Midlands Freshwater Group and University of Leicester are organising a meeting in Norwich on Friday 25 March 1983 (plus field visit on Saturday) on "Recent Advances in Broadland Research". Details from David Harper, Department of Adult Education, University of Leicester.

Ecology and Natural History in the Northern Lake District

Organized by University of Birmingham, at Higham Hall, Cockermouth, Cumbria, 22-29 May 1983. Details from Mrs M. Jones, Department of Extramural Studies, University of Birmingham, P.O. Box 363, Birmingham B15.

Society for Experimental Biology

The meeting at Hull University in April will include a session on Estuarine Pollution on 7th April 1983.

Scottish Sea Lochs

A one day meeting at Stirling University on 3rd November 1983, jointly sponsored by the Scottish Marine Biological Association (SMBA) and the Estuarine and Brackish-Water Sciences Association. Details from SMBA, Oban.

REPORTS OF PAST MEETINGS

British Diatomist's Meeting 1982

The fourth annual meeting of the British diatomists was held at Nettlecombe Court, Somerset in late October. There were over 40 of us this time and we were joined by Miska Hogan-Guzkowska and Karen Serieysson from France, Pieter Houpt from The Netherlands and Anne-Marie Schmid from Austria.

On Friday evening serious doubts about mounting procedures were raised by Tony Peabody. This warmed us up as it were for a full programme of talks the following day. Different aspects of paleoecology were covered by Neil Anderson, Martin Coard and Roger Flower; Theresa Gow described the benthic diatom flora of the Clyde Estuary and Pieter Houpt reported some interesting observations on tube-dwelling diatoms. We were then given a very impressive slide-tour of the lakes in the vicinity of Mount St. Helens, before and after the eruption, from the phyecological standpoint by Ann Smith.

Later in the day things took a microscopic turn as David Mann reviewed some aspects of Pennate auxospores and Anne-Marie Schmid opened up a new world for many of us with her interpretations of the events of valve morphogenesis, and Lesley Edgar then gave us an up-to-date report of her superb work on diatom locomotion. The day was rounded off by Tony Chamberlain who showed us some beautiful work on the polysaccharides involved in diatom attachment.

Sunday morning was given over to informative discussion and exchange of observations - such an important element of these meetings.

We are grateful to Mr John Crothers and his staff for such a pleasant and comfortable weekend. Sadly, at future meetings we will be without Bob Firth and Horace Barber who both passed away shortly after Nettlecombe. We will sorely miss these two who had been at the centre of diatom study in Britain for many years. It is hoped that a tribute will appear in the journal shortly.

Dr Elizabeth Haworth of the F.B.A., Windermere Laboratory will be organising the next meeting at Brathay, Ambleside, in the Autumn 1983.

R.M. Crawford

RECENT AND CURRENT PHYCOLOGICAL RESEARCH

Department of Botany - University of Adelaide

The editor apologises that, owing to an oversight, this article was omitted from the previous issue of the Newsletter. Some of its contents will now be dated. Nonetheless articles of this nature are a very important part of the Newsletter and more of this type are required. Professor Womersley is thanked for taking the time to prepare it.

Recent and current research has been concerned largely with the comparative morphology, relationships and taxonomy of southern Australian benthic algae, but includes also studies on the local seagrasses and on estuarine diatom biology.

Professor Bryan Womersley. A revision of the southern Australian species of Ceramium has been published recently, and a similar account of the species of Polysiphonia should be complete by August. Following this, the major project will be the first volume, covering the sea-grasses, Chlorophyta and Phaeophyta, of a "Marine Flora of southern Australia". It is hoped that this will be published in 1981.

The "Critical Survey of the marine algae of southern Australia III. Rhodophyta" proceeds gradually, and further subtidal ecological accounts (with S.A. Shepherd) of selected localities will also be completed within the next year.

Dr Elise Wollaston continues her studies on the comparative morphology, taxonomy and biogeography of selected taxa of Ceramiaceae. Recent work has involved comparisons between southern Australian representatives and those from other countries, in the groups Antithamnionaceae, Heterothamnionaceae, and in Spongoclonium and related genera, with the aim of producing a world monograph on taxa in these groups.

Mrs Ann Mitchell (Research Associate) is completing studies on the Australian species of Hypoglossum and related genera, and also on southern Australian taxa of Dumontiaceae.

Dr Elizabeth Gordon-Mills continues her revision of Medeiothamnion and related genera.

Dr Min-Thein, now in the Marine Biology Department, Moulmein College, Burma, recently published (with H.B.S. Womersley) his doctoral studies on the Solieriaceae, Rhabdoniaceae and Rhodophyllidaceae.

Dr Gerry Kraft, now in the Department of Botany, University of Melbourne, has recently published his doctoral studies on the families Acrotylaceae, Dicranemaceae and Mychodeaceae.

Mr Bob Baldock, now in the Botany Department of Salisbury College of Advanced Education, Adelaide, recently published his studies on the Griffithsiaceae group of the Ceramiaceae.

Mr David Thomas has recently completed his studies on the epiphytic diatom flora, on Zostera (including the ecology and seasonal distribution), in the Onkaparinga Estuary, South Australia. He is currently in the Department of Geology, University of New England, N.S.W.

Mr Stephen Skinner continues his doctoral studies on the morphology, reproduction and life history of pulvinate, mostly epiphytic, brown algae in southern Australia.

Miss Meg Robertson (Honours student) is studying the comparative morphology and reproduction of southern Australian species of Chondria.

Mr Ralf Engler (Honours student) is studying the growth, seasonality and productivity of Ecklonia and selected species of Cystophora, all of which are common dominants in upper sublittoral communities on southern Australian coasts.

Mr Steve Clark (Honours student) is studying the forms of Hormosira on coasts near Adelaide - their morphology, growth rates and seasonality, and their interfertility.

Mr Scoresby Shepherd (S.A. Department of Agriculture and Fisheries) continues his subtidal ecology studies (in association with H.B.S. Womersley) in selected localities, and is also completing a Masters thesis on the algal ecology of a proposed sewer outfall area off Cape Northumberland.

Mr John Johnson (S.A. Department of Agriculture and Fisheries) also continues his Masters ecological studies of an area in the northern part of Spencers Gulf, where Posidonia dominates the subtidal regions and carries a rich epiphytic algal flora.

Dr Dennis Steffensen (S.A. Engineering and Water Supply Department) continues his studies of the growth and distribution of Posidonia near Adelaide in St. Vincent Gulf, in areas where it is subject to treated sewage effluent and storm-water runoff.

Other recent projects, as yet unpublished, include studies on the ecology and zonation of the algal flora of jetty pylons at Port Stanvac, a study of the distribution of epiphytes on the sea-grass Amphibolis, and the occurrence and distribution of the taxa of crustose coralline algae epiphytic on sea-grasses.

THE BOTANICAL RESEARCH FUND

This small private Trust Fund exists to aid individual research workers in botany. Grants, usually not in excess of £150, are awarded for specific items of expenditure connected with their work and are generally made to those who are not in receipt of any official funding to support their research.

Applications should be made to the Secretary (Dr K.L. Alvin, 2 Little Gaynes Lane, Upminster, Essex, RM14 2JP) in time to be considered at the Governors Meeting held annually, generally in late April. Applicants should give a concise statement of their research experience, an outline of the research in hand for which assistance is sought and details of the nature and estimate of the expenditure. The name and address of a referee familiar with the applicant's work should also be included.

PHYCOLOGICAL SOCIETY OF AMERICA

Announcement of the Gerald W. Prescott Award for 1983

The Phycological Society of America will accept nominations for an award to be presented at the Annual Meeting of the Society at the University of North Dakota, Grand Forks in August 1983. The Award will recognize a member(s) of the Phycological Society of America for scholarly work in the form of a book or monograph devoted to phycology and published in English. Edited volumes, individual book chapters, typical journal articles and the like will not be considered. Publications must have copyright dates of 1981 or 1982. All authors of a publication must have held membership in the Phycological Society of America prior to the Award consideration period. The value of the Award for 1983 is expected to be \$500.

Nominations may be made by any member or non-member of the Phycological Society of America by submitting a brief letter stating the strong points of the scholarly work and a copy of the book or monograph to be considered. Books and/or monographs will be returned upon completion of the review process. It is acceptable and in fact strongly encouraged that authors nominate their own publications. Separate publications by the same author(s) may be nominated. Nominations for the 1983 Award should be sent to the Chairman of

the Gerald W. Prescott Award Committee, Dr Dean W. Blinn, Department of Biological Sciences, Northern Arizona University, Flagstaff, Arizona 86011, U.S.A., and to be considered must be postmarked not later than April 1st, 1983. For further information write to the Chairman or call him at (602) 523-4107 or 779-5857.

TRIAL KEY

Test versions of A Field Key to the British Red Seaweeds by Sue Hiscock should be available by the end of March. Anyone interested in helping with the testing of the key (i.e. using it and feeding back any difficulties encountered, or other comments on the key or illustrations to the author before revision and publication of a final version in 1984) should write to: AIDGAP Co-ordinator, The Leonard Wills Field Centre, Nettlecombe Court, Williton, Taunton, Somerset TA4 4HT. Tel: WASHFORD (098 44)0320.

Already available are copies of A Field Key to the British Brown Seaweeds (Phaeophyta), price £1.25 from the above address.

TITLES OF RECENT THESES

J. COSSON (1978) - Recherches morphogénétiques et écophysiological sur la Phéophycée *Laminaria digitata* (L.) Lam., Thèse de Doctorat d'Etat, Université de Caen, 203 pages, 6 pl.

H. MAYHOUB (1976) - Recherches sur la végétation marine de la côte syrienne - Etude expérimentale sur la morphogenèse et le développement de quelques espèces peu connues, Thèse de Doctorat d'Etat, Université de Caen, 286 p.

H. MICALÉF (1981) - Recherches cytomorphologiques et cytochimiques sur le cycle de reproduction et développement de *Ulva lactuca* (L.) (Ulvanes) Thèse de Doctorat d'Etat, Université de Caen, 107 pages. 54 pl.

Copies of any of the above three theses can be obtained from Laboratoire d'Algologie Fondamentale at Appliquée, Université de Caen, 39 Rue Desmoueux, 14000 Caen, France for the photocopying and postage cost of 100 French Francs for each one.

RENDALL, D.A. (1982) - Factors affecting the distribution of *Melosira nummuloides* in the polluted Clyde estuary. Ph.D. Thesis Heriot-Watt University, Edinburgh, 255pp.

FULLER, I.A. (1982) - An experimental approach to the taxonomy of *Ulothrix* species from the Forth estuary. M.Sc. Thesis, Heriot-Watt University, Edinburgh, 155pp.

MACLEOD, L. (1982) - An experimental and numerical approach to the taxonomy of the British Prasiolales. Ph.D. Thesis, Heriot-Watt University, Edinburgh, 547pp.

JOB WANTED

LYNN M. HODGSON, Ph.D., Stanford University, 1979.
Available January 1983. Research: aquatic botany,
general biology and botany, marine biology, phycology,
aquatic biology. Current address: c/o Harbor Branch
Foundation, RRL, Box 196A, Ft. Pierce, FL 33450, U.S.A.

SOME RECENT PUBLICATIONS

- DARLEY, W.M. *Algal Biology: A Physiological Approach*, 1982,
Blackwell, Oxford, 176pp. Paperback £7.80 ISBN 0-632-00608-0.
- CARR, N.G. & WHITTON, B.A. *The Biology of Cyanobacteria*. 1982,
Blackwell, Oxford, 700pp. Hardback £42.00 ISBN 0-632-00695-1.
- LOBBAN, C.S. & WYNNE, M.J. *The Biology of Seaweeds*, 1981,
Blackwell, Oxford, 800pp. Hardback £45.00 ISBN 0-632-00672-2
- PRESCOTT, G.W. *Algae of the Western Great Lakes*. Reissued 1982
as reprint by Otto Koeltz. Paperback DM 78.
- GAYRAL, P. *Les Algues des Côtes Françaises (Manche et Atlantique)*.
Reissued 1982 as reprint by Otto Koeltz. DM 80.
- ÅSEN, P.A. *Illustrert Algeflora*. 1980, J.W. Cappelen, Forlag, A.S.,
64pp. ISBN82-02-01856-0.
(This is a new algal flora of Norway, illustrated with line
drawings of 105 common seaweeds. Keys are also included).
- ROUND, F.E. *The Ecology of Algae*. 1981, Cambridge Univ. Press,
653pp. Hardback £60.00 ISBN-0-521-22583-3.
- DRING, M.J. *The Biology of Marine Plants*. 1982, Arnold, London,
199pp. Paperback £7.50. ISBN-0-7131-2860-7.
- VANLANDINGHAM, S.L. & COLLINS, G.B. *Guide to Identification,
Environmental Requirements and Pollution Tolerance of Blue-green
Algae*. 1982, U.S. Environmental Protection Agency. EPA 600/3-82-
073.
(Available from U.S. Environmental Protection Agency, CERL,
ORD Publications, Cincinnati, Ohio 45268, U.S.A. - quoting
EPA no. above).

MARINE BIOLOGY HOLIDAY ON JURA

This summer Trevor Norton is organizing a holiday week on Jura, a wild and beautiful island in the Inner Hebrides of Scotland. Several days will be set aside for marine biological collecting aimed particularly at helping the amateur naturalist. It is hoped to include a boat trip to the Corryvreckan whirlpool. There are also opportunities for sailing, fishing and pony-trekking.

Participants will stay at the Jura Hotel from July 9th - 16th 1983, at a cost of £148 per person. Children up to 12 years of age, £74, children under 3 years, free.

Brochures can be obtained from
Trevor Norton
Department of Botany
University of Glasgow
Glasgow G12 8QQ
Scotland

TO:-

Publications Sales, British Museum (Natural History),
Cromwell Road, London, SW7 5BD, England.

Please send me one copy of Seaweeds of the British
Isles Volume 1 Rhodophyta Part 2A Cryptonemiales,
(sensu stricto), Palmariales, Rhodymeniales, by
I.M. Irvine, 1983, at the B.P.S. discount price of
£10.50, post free (U.K. and overseas).

NAME _____

ADDRESS _____

BRITISH PHYCOLOGICAL SOCIETY

for inclusion in Newsletter no. 17. March 1984
Closing date 31 January 1984. Please mail to
the editor, Dr Martin Wilkinson, Department of
Brewing & Biological Sciences, Heriot-Watt
University, Chambers Street, Edinburgh EH1 1HX.

NAME _____

ADDRESS

LECTURES

I am willing to give a talk(s) to other institutions (subject to
suitable expense arrangements) on _____

SABBATICALS

I will be going on sabbatical to_

from _____ to

The following sabbatical visitors will be staying in my department

from

to

THESIS TITLES

The following higher degree thesis have been presented this year
in this department

Student _____ Degree _____ Title _____



JOBS VACANT

Give title, date available, qualifications sought and details of person to contact.

JOBS WANTED

Give names of person, qualifications, date available, and field preferred.

REPORTS/TRIAL KEYS ETC

Give details of any keys, reports etc of phycological interest not published in normal scientific literature.

Thank you for your help. If this form is not suitable please just send your information or comments to me in any manner you please.

Martin Wilkinson

