

British Phycological Society

NEWSLETTER

APRIL 1972.

NUMBER 3.

SECRETARY'S REPORT FOR 1971.

This has been perhaps the most successful year in the history of the Society with a full programme of meetings, several innovations and a steady increase in membership.

Meetings.

The Winter Meeting was held at Bedford College where the local arrangements were most efficiently carried out by Les Turnbull. With twenty-five contributed papers and the Presidential Address of Mr. R. Ross this meeting contained more Phycology than ever before; it also attracted a record number of some 120 Phycologists. It is encouraging that an increasing number of members from outside the U.K. now attend the Winter Meeting.

An innovation during 1971 was a symposium on 'The Teaching of Phycology' which was held at Bangor in July. There is clearly a need for such meetings as some 77 people attended. That this symposium was a success can be judged from the fact that there was an immediate demand for another, and one is being planned for July 1972 by Dr. W. E. Jones. Our thanks go to Kenneth Rees, his committee and the local secretaries for their enthusiastic support.

A field meeting was held at Stornoway, Isle of Lewis, in August. Although not very well supported it provided some interesting collecting for those who attended.

Council.

The 1971 Council met on three occasions. One important matter which Council discussed was the question of whether it was time for us to have the Journal published professionally. After discussion with two publishers we have concluded what we hope will be an advantageous agreement with Academic Press. As far as members are concerned this will result in them receiving three issues a year and, we hope, no increase in subscriptions for a while. So far as the Officers of the Society are concerned, this will much reduce the work they have to do regarding proof-reading, sending our Journals and soliciting subscriptions from Libraries, etc. We hope that members will continue to support

CONTENTS.

THANKS TO JOHN DODGE	...2
BRITISH PHYCOLOGICAL JOURNAL AND ACADEMIC PRESS	...3
MAPPING THE SEAWEEDES	...4
COASTAL ECOLOGY RESEARCH STATION, NORWICH	...5
WINTER MEETING 1972	...6
MARINE NATURE RESERVE AROUND LUNDY	...7
ANNUAL CONFERENCE OF NATIONAL BIOLOGICAL SOCIETIES	...7
PHYCOLOGY IN SOUTH AFRICA	...8
SYMPOSIUM ON DESMIDS	...11
WRITING FOR REPRINTS	...12
A GUIDE TO CURRENTLY ACCEPTED NAMES OF SEAWEEDES	...14
MEETINGS & SYMPOSIA	...20
CORRECTIONS TO MEMBERSHIP LIST	...22
NEW MEMBERS	...24

SECRETARY'S REPORT - 1971. Contd.

the Journal by sending their manuscripts to the Editor.

One other innovation in 1971 was the setting up of a small conservation committee under the chairmanship of Dr. D. Hibberd. This committee would like to hear of any algal sites - marine or freshwater - which might be threatened by development. They would also like to know of areas of great interest which we might recommend to the Nature Conservancy as conservation areas.

Newsletter.

1971 saw the start of the B.P.S. Newsletter of which two issues have been produced. All credit must go to Mr. Ian Tittley and his helpers for producing and sending out these most interesting collections of news and information. If the Newsletter is to fulfill its objective it will, of course, need the support of members in sending in their news, reports, requests etc.

Membership.

Total membership now stands at around 500, a small increase over 1970. 40 new members joined but unfortunately we had to strike off some 20 members for non-payment of their subscriptions and we lost 9 names by resignation and 2 by decease. Here we must pay tribute to Roger Butcher who died in October. He was a member of the Society for many years and President in 1964-65. He was also elected an Honorary Member of the Society in January, 1971.

The Membership Secretary, Mr. W.D. Richardson, has had a very busy year and has successfully produced the first address list since 1962 when there were only 150 members. So now you can all know who belongs to the Society and who you note that friends and colleagues are not members perhaps there will be added incentive to try to enrol them!

The Secretaryship.

This is my last report after five years in office. I must thank my colleagues at Birkbeck who have often helped me in the tedious chores of folding and packing circulars and humping them to the Post Office. I must also thank the many members who have been patient with me, who have sent in ideas or who have helped in one way and another. I hope that you will continue to support my successor, Dr. Boney, in every way possible. I look forward to a little peace in which to concentrate on the dinoflagellates.

JOHN D. DODGE.

Thanks to the retiring Honorary Secretary, Dr. John Dodge.

I would like to take the opportunity of saying in this 'Newsletter' on behalf of all members of the Society, a very warm thank-you to Dr. John Dodge for the splendid service he has rendered to the Society as our Honorary Secretary for the past five years (1967 - 1971).

Not only has John been most efficient and enthusiastic in carrying out all of the many usual tasks that fall to the lot of the General Secretary, such as organisation of annual winter meetings, distribution of circulars, organisation and preparation for Council meetings, an ever increasing amount of correspondence on behalf of the Society etc., but he also played an integral role in the initial persuading of the Society into producing these regular and very worthwhile Newsletters.

John has also been most active in promoting the society world-wide, and it will be remembered with gratitude that the membership has almost doubled in number (to a present level of about 500) during his term as secretary.

With all this spare-time energy now available for other tasks, it is small wonder that Dinoflagellates around the world are reported to be dashing for cover! Thanks again, John.

Harry Powell.
President.

BRITISH PHYCOLOGICAL JOURNAL AND ACADEMIC PRESS.

As most members of the Society will be aware, the British Phycological Journal will in future be published by Academic Press rather than by the Society itself. The following extracts from the Editor's report to the 1972 A.G.M. summarise the main effects of the change.

1. Unrestricted editorial control over the contents of the Journal will remain with the Editor and Editorial Committee, on behalf of the Society. Copyright of the Journal is vested in the Society.
2. There will be three numbers of the Journal in 1972, to be published in the middle of March, July and November. In subsequent years there will also be three numbers, with a rise to four as soon as the amount of material justifies this.
3. There will no longer be closing dates for MS acceptance. MSS should be submitted all the year round and publication will take from three to seven months depending on the date of submission.
4. The Editor has completely revised the instructions for authors and the new detailed instructions will appear in the March Journal. An important departure from the previous system is the submission of MSS in duplicate; the duplicate set of figures may be photo-prints. All the papers submitted to the Journal must conform exactly to the stated format.
5. Much of the proof-reading, marking of MSS for the printer, ordering of reprints, etc., will be handled by Academic Press, rather than by the Editor and his Committee. All papers will be refereed by members of the Editorial Committee or by other specialists within the Society.
6. Reprints will be ordered direct from Academic Press at the galley proof stage, against a table of fixed charges. Reprint costs will be higher, but the number of free reprints is increased from 25 to 50.
7. For the time being, Academic Press will sell the Journal to the Society at £2.00 a volume; subscription price to libraries will be £5.00 (U.K.) or £5.75 (overseas).

The overall effects of the publishing change should be greatly to the Society's benefit. The Editor and Editorial Committee are relieved of a large amount of technical work and can spend more time on scientific aspects of the Journal. The Journal will be published more frequently and authors will therefore receive more rapid publication of their work. The Society will benefit from the fixed price, being to some extent shielded from rising costs of materials and printing.

It is now up to individual members of the Society to make sure that the system works by maintaining a continuous stream of high quality research papers, field studies and review articles to the Editor.

Gordon F. Leedale.

MAPPING THE DISTRIBUTION OF BRITISH SEaweEDS.

A PROGRESS REPORT.

The scheme is now well under way and records are beginning to be sent in. The records are derived from recent collections, lists compiled from the examination of herbarium specimens and from the literature. It has been decided that literature records should be kept separate from those where the actual specimen has been examined and that in view of the great increase in work on British seaweeds since the inauguration of the British Phycological Society, records prior to 1950 will be kept separate from those from 1950 onwards.

There are now over 170 recorders participating in the scheme including 100 who are not members of the B.P.S., mostly teachers and amateur divers. Such non-professionals have been issued with a guide to the collection, preservation and identification of seaweeds. As many found difficulty in equating the names in Newton's 'Handbook of British Seaweeds' with those given on the card, a guide to the names which have changed has also been prepared and is now being distributed.

A number of professional phycologists are acting as regional referees for various parts of the British Isles. Their task is to help amateurs to identify their collections and, where necessary, to forward rare or difficult specimens to a panel of specialist referees that has also been established. Several specialists have promised to supply keys for general distribution so that collectors can make many of the determinations themselves. Further offers of keys would be very much appreciated.

A grant received from N.E.R.C. has facilitated the employment of a part-time research assistant to help with the day-to-day running of the scheme. The grant is for a 3-year period and will be administered by the University of Glasgow.

Initially the scheme will concentrate on the collection and sorting of records in preparation for mapping. It is not anticipated that we will be in a position to make meaningful maps for at least two years.

Already there have been enquiries about the scheme from phycologists in Alaska, California, Washington, The Philippines and New Zealand with a view to establishing similar schemes.

I would like to take this opportunity to thank all those members of the Society who helped to launch the mapping scheme and those who by acting as referees or collectors are ensuring that it will be a success.

Trevor A. Norton.

COLLECTIONS OF MARINE ALGAE IN THE UNITED KINGDOM.

The Editor wishes to thank all those members who returned the forms requesting information on algal collections in the U.K. circulated with 'Newsletter No.2'. As a result of their efforts much further data has come to light, and this will be published in 'Newsletter No.4'. Members not yet having returned the forms are requested to do so as soon as possible; any further information about the collections listed in 'Newsletter No.2.' would also be appreciated.

I. Tittley.

COASTAL ECOLOGY RESEARCH STATION (NATURE CONSERVANCY) COLNEY LANE,
NORWICH, NORFOLK. NOR 70F.

The Coastal Ecology Research Station was established by the Nature Conservancy (a constituent body of the Natural Environment Research Council) at Norwich in September 1968. It has a permanent staff at present of 16 including both botanists and zoologists.

It has responsibility for research on coastal wildlife problems throughout Great Britain. Its present research priorities are especially concerned with soft coastlines (inter tidal mud and sand flats, saltmarsh, sand dunes and shingle beach), particularly in the south-east where problems arising from human development activities are intensifying. Work on hard cliff coasts is primarily at the survey stage at the present time.

Our primary aim is to improve knowledge of coastal wildlife resources and to investigate the ecology of coastal systems in order to advise on siting and management of coastal nature reserves.

We also give advise on problems related to wildlife resources on the coast generally such as the use of vegetation to help stabilize coastal deposits and augment sea defences.

An Algologist will be appointed this year to a two year temporary post to work as part of a team investigating wildlife resources in the Wash in relation to the feasibility study for building fresh water impoundments in the inter tidal zone there. There is also a need for assessment of algal food resources for birds and their palatability in relation to pollution in Essex estuaries arising out of the Third London Airport proposals for Foulness.

Much fuller knowledge is required of the Algal flora of outstanding marine biological sites within and outside existing National Nature Reserves.

Information is also needed on the stabilizing influence of blue-green and green algae growing on inter tidal flats of varying types and degrees of exposure as precursors to salt marsh formation.

Dr. D.S.Ranwell (Head of the Coastal Ecology Research Station), would appreciate any help or suggestions that members of the British Phycological Society can offer, for example in obtaining species lists of outstanding algological interest, publication of identification keys to difficult groups, and general encouragement of its younger members in field identification of macro-algae and population ecology studies of algae.

J.M.Pizzey.

FURCELLARIA - REQUEST.

'Furcellaria fastigiata (L) Lam. in any form - air dried, bulk, herbarium mounts or bottled specimens - from any place and at anytime of year, would be greatly valued by Alan Austin at the Department Biology, University of Victoria, British Columbia Canada. Particular value accrues to material collected during October, November and December each year but anyone kind enough to donate specimens from other months throughout the year would be heartily thanked. Colleagues from or visiting, northerly and southerly parts of the plant's distribution - Iceland, Faroes, North Norway and North Spain have material especially valuable to the requestor. Once fixed in formalin sea water or formalin acetic alcohol the plants can be allowed to dry out before posting. This is more convenient than packaging bottles and bothers the postal people less.

FURCELLARIA - Request contd.

Exchange of similar, or dissimilar, collections from the Vancouver Island region, and/or reimbursement of postage etc. costs, are offered in exchange!

WINTER MEETING AT GOLDSMITH'S COLLEGE, UNIVERSITY OF LONDON.

JANUARY 6th - 7th, 1972.

The twentieth winter meeting of the Society was held at Goldsmith's College by kind invitation of Dr. I. Griffiths, Head of the Department of Biology, and the College Warden. Mr. H.W. Pearson and Mr. W.D. Richardson acted as Local Secretaries and accommodation was provided at Raymond Hall. About 100 members and guests attended the meeting. The large number of overseas members and guests attending the meeting was particularly gratifying, and an invited lecture was given on the first morning by Prof. Dr. H.A. Von Stosch, Vice-President of the Society, entitled 'The vegetative reproduction and sexual life history of two freshwater dinoflagellates'. Twenty-three papers were read in the following sessions: Development and distribution of macro-algae (Chairman, Mr. T.K. Rees); Reproduction and life cycles of freshwater dinoflagellates (Chairman, Mr. H.T. Powell); The Chrysophyta (Chairman, Prof. H.A. Von Stosch); Pollution and freshwater sampling (Chairman, Dr. F.E. Round); Reproduction and life histories (Chairman, Mr. W.D. Richardson), and Chemistry and Biochemistry of Algae (Chairman, Dr. E.E. Percival). Abstracts of the papers will be published in Volume 7 of the Journal. A number of demonstrations were also on view in the Biology Department over the course of the meeting.

The Society Dinner was held in the College Refectory on the evening of January 6th, and was preceded by a reception for the Society by Goldsmith's College. The President duly expressed the thanks of the Society to the College Warden, the Registrar, and to Dr. I. Griffiths for their hospitality, and to Dr. J.D. Dodge, Mr. H.W. Pearson and Mr. W.D. Richardson for their planning and administration of the meeting. The Annual General Meeting was held on the morning of January 7th with Mr. H.T. Powell in the chair and 78 members in attendance. Reports from the various officials were presented, the more notable points including the Hon. Secretary's statement that total membership stood at about 500, and the comment by the Hon. Treasurer that this had been the first year in which the Society's income has exceeded £3,000. A further significant step forward by the Society was seen in the announcement by the Hon. Editor that publication of the Journal was to be taken over by Academic Press, starting with Vol. 7 in 1972. It is hoped that three parts per year will be published. It is also hoped that this enlarged publication will be supported by the members in the form of supply of papers to the Editor which will fully reflect the many and diverse interests in phycology of the membership. In a report on the activities of the Marine Algal Flora Committee, Mr. H.T. Powell drew attention to the progress being made on the Biological Flora, and particularly to the good news that the volume on the Rhodophyta might be ready in 1973. Other activities of the Society were reflected in the reports from Honorary Assistant Secretaries, viz., Field Meetings (Dr. T.A. Norton), Conservation Committee (Dr. D. Hibberd), and the successful Symposium in the Teaching of Phycology held at Bangor in June 1971. The commencement of the newsletter in 1971 with two issues in the first year, was also considered a welcome innovation.

The following officers were elected: President, Mr. H.T. Powell; Vice-Presidents, Prof. H.A. Von Stosch and Dr. F.E. Round; Hon. Sec. Dr. A.D. Boney; Hon. Treasurer, Dr. A.F. Marker; Ordinary Members of the Council, Dr. J.C. Green, Dr. D.J. Hibberd and Dr. E.E. Percival.

A.D. Boney

PROPOSED MARINE NATURE RESERVE AROUND LUNDY.

A report on the proposal to establish such a marine nature reserve has been published recently by the Lundy Field Society. It is a comprehensive document of 66 pages, edited by Dr. K. Hiscock, which outlines the history of the proposal, gives a resume of marine reserves elsewhere in the world, and an account of some of the algal and marine faunal work on the island carried out during two weeks in July and August, 1971, by personnel investigating the potentialities of Lundy as a marine nature reserve. This work convinced the investigators that the project was both feasible and desirable, and the most important part of the report is concerned with constructive suggestions as to how this might be brought about, both legally and financially, together with a recommended code of conduct for divers and fishermen to protect the sublittoral flora and fauna. These proposals are being supported by the various conservation bodies concerned - the Landmark Trust, the Lundy Field Society and the Devon Trust for Nature Conservation - and it is to be hoped that they will be speedily implemented.

D.E.G. Irvine.

ANNUAL CONFERENCE OF NATIONAL BIOLOGICAL SOCIETIES, Juniper Hall, November, 1971.

There were two items of particular interest discussed at the Conference this year: firstly, the need for a Marine Code of Conduct to encourage the control of seashore and submarine activities and, secondly, Marine Mapping.

Much anxiety was shown by representatives of the Conchologists and the Marine Biological Association, for example, as well as by phycologists concerning the increasing activities of aqualung divers, shell collectors, water sports enthusiasts etc. It was reported that the General Assembly of *Unitas Malacologia Europaea* had drafted a resolution in Geneva in September expressing 'deep concern for the rapidly increasing destruction of the natural environment'. A copy of this resolution has been sent to the British Phycological Society's Conservation Committee to assist them in the preparation of a Marine Code of Conduct in co-operation with members of other organisations with similar interests.

Plans for Marine Mapping are proceeding well. Recently, the Marine Biological Association has decided to send all future records to the Biological Records Centre for inclusion in their data banks. They have also begun the mapping of Echinoderms in British waters as a pilot scheme, using the conchologists' Marine Census Areas plus latitude and Longitude for plotting the records. If successful, the scheme will be extended to other groups of marine animals. The B. P. S. was encouraged to consider using these Census Areas. After discussion subsequent to the Conference however, it has been decided that, whilst it may occasionally be necessary to accept records using them, in practice, grid reference plus county will continue to be the normal requirement.

L.M. Irvine.

PHYCOLOGY IN SOUTH AFRICA.

A questionnaire was recently sent out to all the Universities and Research Institutes in the Republic to ascertain how many scientists are actively engaged in phycological research and in individual to find out their particular research interests.

The replies that were received, were however, a little disconcerting in that there did not appear to be very many phycologists, particularly in certain research institutions where one would imagine that the services of a phycologist would be invaluable.

The following gives some idea of the phycologists in South Africa, and their research interests.

CAPE PROVINCE.

South African Seaweed Research Laboratory, c/o Department of Botany, University of Cape Town.

Staff. R.H. Simons (M.Sc.).
J.R. Sinton (B.Sc. Hons.).
R. Green.

The Seaweed Laboratory houses approximately 10,000 seaweed specimens as well as holding the honorary curatorship of the Tyson, Issac and Bekker collections which are housed in the Bolus Herbarium of the University of Cape Town, together with collections gathered during the ecological Survey of the University of Cape Town from 1930 - 1940.

At present a card index to South African specimens of sea weeds as well as an index to sea weed literature is in preparation.

Three ecological projects have recently been initiated:

- (i) Semi quantitative assessment of certain species occurring between Agulhas and Port Elizabeth which might be of some economic importance.
- (ii) Synecology of the littoral zones, on a quantitative basis, in a few selected regions of the Cape Peninsula; the ultimate aim being to establish the constitution of littoral climax communities.
- (iii) Dynamics of kelps in kelp-beds under natural circumstances and following harvesting operations

Port Elizabeth Museum, Humewood, Port Elizabeth.

Dr. J.R. Grindley.

Research interests revolve around the ecology of various planktonic algae and in particular the dinoflagellates causing red tides.

Rhodes University, Department of Botany and Microbiology, Grahamstown.

Dr. M.A. Pocock.

Present studies include cultural studies on Haematococcus, Dr. Pocock possesses a very extensive collection of seaweeds which are housed in the Albany Museum, Grahamstown.

Dr. S. Seagrief.

Developmental stages of various genera of the Rhodophyta.

PHYCOLOGY IN SOUTH AFRICA - Contd.

Dr. S. Seagrief, contd.

At the moment Dr. Siegrief is working on Calliblephanis fimbriata Chondrococcus homemannii as well as other species. He is also at present compiling a card index on the genera and species of South African seaweeds with the view to publishing a check list in the near future.

Dr. P. Saenger.

Interested in the Amansiae (Phodophyta) and certain physiological aspects such as bromine metabolism.

Miss H. Meeuvissen.

Studying the effect of sand abrasion on marine algae under the guidance of Dr. Saenger.

TRANSVAAL.

Institute for Water Research, C.S.I.R. Pretoria.

Dr. B.J. Cholnoky.

Systematics of African diatoms.

Dr. F.R. Schoeman.

Ecology and systematics of Orange River diatoms.

Mrs. K. Cholnoky.

Physiology and toxicology of diatoms and blue green algae.

Department of General Botany, University of Pretoria, Pretoria.

A.J.H. Pieterse.

The effects of environmental factors affecting the growth of algae in natural waters with special emphasis on the effect of pollution (eutrophication).

Miss M.I. Classen.

The occurrence and dispersal of algae in the Transvaal with special emphasis on the Desmidiaceae.

Miss M.A. Rohrbeck

An ecological study of Chrissies Lake.

University of Witwatersrand, Department of Botany, Johannesburg.

Dr. R.E. Lee.

Presently investigating lysine pathways in the algae.

R. King.

Primary productivity studies on Lake Kariba, in conjunction with the Nuffield Lake Kariba Research Station and the University of Rhodesia.

Professor F.D. Hancock.

Studies on the diatoms of Lake Kariba.

ORANGE FREE STATE.

Department of Botany, University of the Orange Free State, Bloemfontein.

The Department of Botany under the leadership of Professor E.M. van Zinderenbakker has for several years now, undertaken limnological research. The following research topics are currently under investigation and are registered with C.S.I.R.

PHYCOLOGY IN SOUTH AFRICA. Contd.

- (i) Hydrochemistry and primary production of the rivers of Lesotho and the lower Orange River system of the Republic of South Africa.
- (ii) Hydrochemistry, physical limnology and primary production studies in the Hendrik Verwoed Dam and the Rusfontein dam.
- (iii) The influence of silt on primary production using isotopes of trace elements.
- (iv) Continuous algal culture systems (turbidostat and chemostat).
- (v) Metabolism of Microcystis species.

Research Team:

Professor E.M. van Zinderenbakker (Programme leader)
Dr. J.N. Eloff.
Mr. P.C. Keulder M.Sc.
Mr. J.U. Grobbelaar M.Sc.
Mr. P. Stegmen B.Sc.
Mr. P.J. van Niekerk B.Sc.

NATAL.

Department of Botany, University of Natal, Pietermaritzburg.

P. Colvin. M.Sc.

Plankton studies on the Pongola River flood pan.

Department of Plant Pathology, Faculty of Agriculture, University of Natal, Pietermaritzburg.

F. Rijkenberg. M.Sc.

Studies on the parasitic alga Cephaleuros virescens (Chlorophyta) which is found to attack tea plants (Thea sinensis)

Department of Plant Biology, University of Natal, Durban.

Dr. Richard N. Pienaar.

(i) Studies on the biology and fine structure of body covering formation in members of the Haptophyceae with special reference to coccolithophorids. The species currently under investigation are Hyaenomonas carterae, H. carterae strain p, H. elongata, Ochrosphaera neopolitana and Pleurocarysis scherfellii.

(ii) Gametogenesis and embryology of Sargassum heterophyllum
At present work includes the study of the periodicity of gamete production and release under field and laboratory conditions.

This work is being extended to include the fine structure of the Sargassum egg prior to fertilization and then following cytological changes that occur in fertilization.

As from the 1st January, 1972, Dr. Pienaar will be moving to the Department of Botany, University of the Witwatersrand, Johannesburg.

Institute for Water Research, C.S.I.R. Natal.

Mr. R.E.M. Archibald.

Quantitative and qualitative studies of seston in Natal Rivers in relation to eutrophication.

Mr. C. Archibald.

Study of the trends and possible eutrophication of Natal Estuaries.

SYMPOSIUM ON DESMIDS.

In order to promote the exchange of ideas and research materials as well as to allow scientists to become personally acquainted to one another, the Senckenbergische Naturforschende Gesellschaft of Frankfurt am Main (Germany) held a first symposium on desmids from September 26th - 30th 1971, at Frankfurt and Bieber (Spessart). This was organised by Dr Dieter Mollenhauer, Curator of cryptogams at the Forschungsinstitut Senckenberg and Head of the field station of this institute in the Spessart region, some 80 km. from Frankfurt. The meeting was also sponsored by the Institut für allgemeine Botanik der Universität Hamburg (Prof H. Drawert, Dr L. Kies, Prof M. Mix).

About twentyfive people, from eight countries, converged in the afternoon of September 26th on the Natur-Museum Senckenberg at Frankfurt am Main where Prof Schafer, Director of the Museum, welcomed the guests. Five of our colleagues (Tyler from Australia, Bicudo from Brazil, Lhotsky and Ruzicka from Czechoslovakia, Tassigny from France) could not attend the meeting personally. However, their communications were read during the sessions. From Frankfurt we went by car to our accommodation at Bieber. On the following Monday and Wednesday there were two full day excursions by coach to the highlands of the Rhon, the Spessart and the Vogelsberg. The landscape was unknown to most of the participants, and sites of touristic interest were also visited. There was, naturally, opportunity to collect material and collections were made from peat bogs, marshy places, ponds and fountains. Mr. Seibig from Gelnhausen, responsible for nature conservation in the areas of Spessart and Vogelsberg commented in detail on the history, geology and vegetation of the areas visited.

On Tuesday and Thursday there were two long series of sessions, with papers - supported by excellent slides and movies - concerning the following themes:

Reproduction and sexuality, reports on both microscopical and electron microscopical studies, given by Biebel (USA), Dobberstein (Germany), Dubois-Tylski (France), Kies (Germany), Lenzenweger (Austria), Lhotsky (Czechoslovakia) Lippers (USA), Tyler (Australia).

Ultrastructural studies on cell walls, plastids etc., given by Chardard (France), Gerrath (Canada), Mix (Germany).

An excellent report on the Karyology of Micrasterias was read by Kasprik (Germany).

Two papers were read dealing with ecological themes, Schulle (Germany), Tassigny (France).

The remaining papers can be listed under the headings systematics, taxonomy and phylogenetics - nomenclature etc. - Andresen (USA) and Bicudo (Brazil) dealt with nomenclatural problems which were alluded to in the communication of Ruzicka (Czechoslovakia) who gave an impressive survey of the problems of routine work of a desmid field botanist and taxonomist. Brunel (Canada) reported on long term studies on the Micrasterias flora of the region around Quebec (Canada) initiated by the late Irene-Marie. Finally, Mollenhauer (Germany) explained some concepts of comparative morphology in relation to phylogenetics in the desmids.

The meeting was completed by several receptions, a visit to a special performance of 'Doctor Faustus' by a marionette theatre in the neighbourhood, and short sightseeing tours to some medieval small towns near the Spessart and the Vogelsberg. The participants unanimously decided to continue to meet in this way. They also intend to facilitate the contact and exchange of ideas etc. by preparing a circular reporting on problems of common interest. They entered into the discussion about some of them, i.e. problems arising from the concept of later starting points; need for uniform

SYMPOSIUM ON DESMIDS - Contd.

and suitable terminology, especially concerning structural and morphological characters; assistance to those concerned with literature documentation services and reviewing journals that best serve the interests of desmid studies; preparation of lists of smaller private and official culture collections of desmids; assistance with the new edition of the "Susswasserflora Mitteleuropas" which will include a special volume on desmids-lacking in both of the preceding editions. This volume will be prepared by J. Gerloff, Berlin, and D. Mollenhauer.

Preparations are being made for a special symposium volume of papers presented at the Bieber meeting. Unfortunately, we cannot as yet give the name of the publisher.

All persons interested in the Desmidiace and wishing to co-operate in the scheme outlined above are requested to contact Dr Dieter Mollenhauer, Forschungsinstitut Senckenberg, Aussenstelle Lochmuehle, D-6465 Dieber, Federal Republic of Germany.

Dieter Mollenhauer.

WRITING FOR REPRINTS.

Recent years have seen a great increase in phycologists, and naturally and properly most feel the need to develop reprint collections. At the same time, the cost of reprints has increased considerably, and few authors or departments can purchase all they might wish.

Many, if not most, authors have to be selective in distribution of reprints, hoping that they are sent to recipients most likely to make use of them. A small stock is usually kept for later workers in the field.

Yet, how many postcards requesting a reprint does one receive from an unknown name and with no comment on the sender's interests? A few cases where one finds the card comes from a librarian, or a 'collector', or some way-off department such as one of Dentistry, soon results in many such cards finding their way straight to the paper basket.

A few notes on a card, or an air letter, explaining the writer's interests in the topic and giving his position (graduate student, new staff member, etc.), surely is no more than courtesy in requesting a reprint which has been possibly quite costly to the author or his department. The response to such a request is likely to be much better!

H.B.S. Womersley.

KEYS TO GENERA AND SPECIES.

Members of the B.P.S. may be interested to know that preliminary keys are more or less completed for the Eastern Canadian benthic marine algae. If members would like to examine, use, or criticize these keys, copies may be obtained from Dr. Andre Cardinal (Departement de Biologie, Universite Laval, Quebec) or myself, and we would be very grateful for constructive comments.

G. Robin South

VIII INTERNATIONAL SEAWEED SYMPOSIUM, 1974.

This Symposium is being held in August 1974, at the University College of North Wales, Bangor, by kind invitation of Professor G.E.Fogg. A National Committee has been set up to organise the matter and its membership is as follows:-

Professor G.E.Fogg (Chairman)	Department of Marine Biology, University College of North Wales.
Dr. W.A.P.Black.	Inveresk Research International.
Dr. G. Blunden.	School of Pharmacy, Portsmouth Polytechnic.
Dr. A.D.Boney.	Department of Botany, University of Glasgow.
Mr. B.R.Cuzner.	Wilfrid Smith (Horticultural) Ltd.
Dr. C.S. Johnston.	Department of Brewing & Biological Sciences, Heriot-Watt University.
Dr. Joanna M. Jones.	University of Liverpool, Marine Biological Station, Port Erin.
Dr. W. Eifion Jones.	Department of Marine Biology, University College of North Wales.
Dr. Margaret T. Martin.	University Hall, University College of North Wales, Bangor.
Dr. T.A.Norton.	Department of Botany, University of Glasgow.
Dr. Elizabeth Percival.	Department of Chemistry, Royal Holloway College.
Mr. H.T. Powell.	Scottish Marine Biological Assoc., Dunstaffnage.
Mr. J.H.Price.	Department of Botany, British Museum (Natural History).
Dr. D.A.Rees.	Unilever Research.
Professor W.D.P.Stewart.	Department of Biological Sciences, University of Dundee.
Dr. J. Turvey.	Department of Chemistry, University College of North Wales.

It is expected that the first meeting of the Committee will take place early in 1972.

J.H.Price.
(For the Organising Committee)

APOLOGIA*

It was reported in Newsletter 2 that Professor G.E.Fogg F.R.S. formerly Westfield College, London, had taken up the position as Professor of Botany, University College of North Wales. We have been informed that this was incorrect and wish to point out that Professor Fogg is now Professor of Marine Biology, University College of North Wales.

Editor.

A GUIDE TO THE CURRENTLY ACCEPTED NAMES OF SEAWEEDS.

Since the publication of Newton's 'Handbook of the British Seaweeds' in 1931 a great deal of taxonomic research has been carried out on marine algae. This has led to changes in the names by which some entities are known. In addition to changes which have taken place for purely nomenclatural reasons, some supposed 'species' have been found to be nothing more than growth forms of other algae whilst others formerly considered varieties have been raised to specific rank. Moreover, a few species listed by Newton (1931) were based on misidentifications by earlier workers and as no well authenticated records exist of these species occurring in Britain they have been dropped from our flora.

Many of those participating in the Society's scheme for mapping the distribution of benthic marine algae found great difficulty relating the names in Newton (1931) to those used on the recording card. To help them I produced a list which equated the names that had changed with those currently accepted. It is reprinted here in the hope that it may be of use to a wider public. The list is intended to be nothing more than a quick and easy-to-use guide for those using Newton (1931) for identifying seaweeds. More detailed information on the currently accepted names for marine algae is given in Parke and Dixon (1968). It should be noted however that unlike Parke and Dixon (1968) the present list uses the nomenclature of Drouet and Daily 1956, and Drouet 1968 for the Cyanophyceae as this is the nomenclature we used on the mapping scheme recording card. It must be emphasised that all the current names given in the present list are provisional and further changes are inevitable. However, the situation will be greatly clarified by the forthcoming flora of British marine algae which will replace Newton (1931) as the standard work and therefore render this guide superfluous. May I therefore wish the guide a speedy redundancy.

T. A. Norton.

Name in Newton.

Name on Card.

C h l o r o p h y c e a e

Capsosiphon aureolus	Capsosiphon fulvescens
Chaetomorpha aerae	Chaetomorpha linum
C. tortuosa	Chaetomorpha capillaris
Cladophora arcta	Acrosiphonia arcta
C. arctiuscula	Acrosiphonia arcta
C. balliana	Cladophora sericea
C. bombycina	Spongomorpha bombycina
C. Brownii	Not a marine species
C. cornea	Not found in Britain
C. corynarthra	Cladophora battersii
C. corymbifera	Cladophora albida
C. expanse	Cladophora vagabunda
C. falcata	Cladophora lactevirens
C. flexuosa	Cladophora sericea
C. glaucescens	" "
C. gracilis	" "
C. hirta	" "
C. lanosa	Spongomorpha aeruginosa
C. Macallana	Cladophora lehmanniana
C. Magdalenae	Cladophora albida
Cladophora Neesiorum	Cladophora rupestris
C. pallida	Spongomorpha pallida
C. rectangularis	Cladophora hutchinsiae
C. refracta	Probably Cladophora albida
C. repens	Cladophora coelotrix
C. Rudolphiana	Cladophora sericea
C. sonderi	Acrosiphonia sonderi
C. stolonifera	Spongomorpha aeruginosa
C. traillii	Acrosiphonia arcta
C. trichotoma	Cladophora lactevirens
C. utriculosa	Cladophora lehmanniana
Codium amphibium	Not a valid species.

C H L O R O P H Y C E A E -Contd.

<u>Name in Newton</u>	<u>Name on Card.</u>
C.tomentosum var. atlanticum	Codium fragile ssp atlanticum
Endoderma flustrae	Epicladia flustrae
E. leptochaete	Ectochaete leptochaete
E. viride	Entocladia viridis
E. Wittrockii	Ectochaete wittrockii
Enteromorpha crinata	Enteromorpha clathrata
E. marginata	Blidingia marginata
E. micrococca	" "
Enteromorpha minima	Blidingia minima
E. paradoxa	Enteromorpha clathrata
Gloeocystis adnata	Not a green alga
Halicystis ovalis	Derbesia marina
Monostroma laceratum	Monostroma oxyspermum
M. latissimum	" "
M. orbiculatum	" "
M. quaternarium	" "
M. Wittrockii	" "
Prasinocladus	see Prasinophyceae
Pringsheimia scutata	Pringsheimiella scutata
Protococcus marinus	Not listed, species intended not clear
Protoderma marina	Pseudendoclonium marinum
Rhizoclonium Kochianum	Rhizoclonium implexum
Ulothrix implexa	Ulotarix subflaccida
U. speciosa	Urospora speciosa
Ulva Linza	Enteromorpha linza
Ulvella confluens	Pseudopringsheimia confluens
U. fucicola	Pseudopringsheimia fucicola
Urospora collabens	Urospora wormskjoldii
U. isogona	Urospora penicilliformis
Vaucheria	see Xanthophyceae

P R A S I N O P H Y C E A E

Prasinocladus lubricus	Prasinocladus marinus
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P H A E O R H Y C E A E

Acinetospora pusilla	Acinetospora crinata
Aglaozonia reptans	Aglaozonia parvula
Ascocyclus foecundus	Hecatonema foecundum
A. hispanicus	Hecatonema hispanicum
A. orbicularis	Myrionema magnusii
Ascophyllum Mackaii	Ascophyllum nodosum
Asperococcus bullosus	Asperococcus turneri
Bifurcaria tuberculata	Bifurcaria bifurcata
Castagnea contorta	Cladosiphon contortus
Castagnea virescens	Eudesia cirescens
C. Zosteriae	Cladosiphon zosteriae
Chaetopteris plumosa	Sphacelaria plumosa
Chilionema Nathaliae	Chilionema ocellatum
Chordaria divaricata	Sphaerotrichia divaricata
Cystoseira discors	Cystoseira foeniculacea
C. ericoides	Cystoseira tanariscifolia
C. fibrosa	Cystoseira baccata
C. granulata	Cystoseira nodicaulis
Desmarestia Dudresnayi	Desmarestia dresnayi
Dictyosiphon hippuroides	Dictyosiphon foeniculaceus
D. Mesogloia	Dictyosiphon chordaria
Dictyota ligulata	Dilophus spiralis
Ectocarpus acanthophorus	Giffordia granulosa
E. Battersii	Kuetzingiella battersii
E. brevis	Streblonema breve
E. clandestinus	Myriactula clandestina

Name in Newton

Name on Card

P H A E O P H Y C E A E -Contd.

E. confervoides	Ectocarpus siliculosus
E. Crouani	Ectocarpus siliculosus
E. dasycarpus	Ectocarpus siliculosus
E. distortus	Ectocarpus fasciculatus
E. erectus	Ectocarpus siliculosus
E. fenestratus	Giffordia fenestrata
E. globifera	Feldmannia globifera
E. granulatus	Giffordia granulosa
E. Hincksiae	Giffordia hincksiae
E. Holmesii	Kuetzingiella holmesii
E. irregularis	Feldmannia irregularis
E. Landsburgii	Ectocarpus fasciculatus
E. Lebelii	Feldmannia lebelii
E. luteolus	Spongonema tomentosum
E. microscopicus	Cylindrocarpus microscopicus
E. microspongium	Compsomena microspongium
E. minimus	Spongonema tomentosum
E. Mitchellae	Giffordia mitchellae
E. ovatus	Giffordia ovata
E. Padinae	Feldmannia padinae
E. parasiticus	Streblonema parasiticum
E. penicillatus	Ectocarpus siliculosus
E. Reinboldii	Polytretus reinboldii
Ectocarpus repens	Chilionema ocellatum
E. sandrianus	Giffordia sandriana
E. secundus	Giffordia secunda
E. simplex	Feldmannia simplex
E. solitarius	Herponema solitarium
E. Stilophorae	Streblonema Stilophorae
E. terminalis	Spongonema tomentosum
E. tomentosoides	Laminariocolax tomentosoides
E. tomentosum	Spongonema tomentosum
E. valiantei	Herponema valiantei
E. velutinus	Herponema velutinum
Elachistea	Now spelt Elachista
E. grevillei	Elachista fucicola
E. stellaris	Symphoricoccus stellaris
Fucus anceps	Fucus distichus ssp. anceps
Gobia baltica	Dictyosiphon chordaria
Hecatonema globosum	Microspongium globosum
H. reptans	Chilionema ocellatum
H. speciosum	Protectocarpus speciosus
Himantalia lorea	Himantalia elongata
Laminaria Cloustoni	Laminaria hyperborea
L. Hieroglyphica	Laminaria saccharina
Leptonema fasciculatum	Leptonematella fasciculata
Lithoderma fatiscens	Pseudolithoderma extensum
L. simulans	Sorapion simulans
Litosiphon hibernicus	Litosiphon laminariae
Mesogloia Griffithsiana	Sauvageaugloia griffithsiana
M. Levellei	Liebmannia levellei
Myriactis Areschougii	Myriactula areschougii
M. Haydeni	Myriactula haydenii
M. pulvinata	Myriactula rivulariae
M. stellulata	Myriactula stellulata
Myriocladia Loveni	Not found in Britain
Myrionema saxicola	Compsomena saxicola
Myriotrichia densa	Leblondiella densa
Petrospongium berkeleyi	Cylindrocarpus berkeleyi
Phaeosaccion collinsii	Not a brown alga
Phaeostroma prostratum	Phaeostroma pustulosum
Phloeospora brachiata	Stictyosiphon griffithsianus
Phyllitis (all species)	Petalonia
Punctaria baltica	Desmotrichum undulatum.
P. undulata	" "
Saccorhiza bulbosa	Saccorhiza polyschides
Scytosiphon pygmaeus	Scytosiphon lomentaria

P H A E O P H Y C E A E -Contd.

<u>Name in Newton.</u>	<u>Name on Card.</u>
Sorocarpus uvaeformis	Sorocarpus micromorus
Spermatochnus Lejolisii	Stilopsis lejolisii
Sphacelaria cirrhosa var. fusca	Sphacelaria fusca
S. cirrhosa var. pennata	Sphacelaria cirrosa
S. furcigera	Sphacelaria fusca
S. olivacea	Sphacelaria britannica
Stictyosiphon subarticulatus	Stictyosiphon tortilis
Streblonema Chordariae	Dichosporangium chordariae
S. infestans	Endodictyon infestans
Stypocaulon scoparium	Halopteris scoparia
Zanardinia collaris	Zanardinia prototypus

R H O D O P H Y C E A E

Acrochaetium corymbiferum	Acrochaetium bernetii
A. efflorescens	Audouinella efflorescens
A. Lorrain-Smithiae	Acrochaetium caespitosum
Antithamnionella sarniensis	antithamnion spirographidis
Calliblepharis lanceolata	Calliblepharis jubata
Callymenia microphylla	Meredithia microphylla
C. reniformis	Kallymenia reniformis
Ceramium acanthotum	Ceramium shuttleworthianum
C. botryocarpum	Not an alga, a bacterial gall
C. pennatum	Ceramium armoricum
Choreocolax tumidus	Not an alga, a bacterial gall
Chylocladia kalifornis	Chylocladia verticillata
C. kalifornis var. squarrosa	Chylocladia squarrosa
C. ovatus	Gastroclonium evatum
Colacolepsis incrustans	Reproductive body of Phyllophora Crispa
Colacomena Bonnemaisoniae	Acrochaetium bonn emaisoniae
C. reticulatum	Colacodictyon reticulatum
Corallina elongata	Corallina mediterranea
C. rubens	Jania rubens
C. rubens var. corniculata	Jania corniculata
Corallina virgata	Corallina granifera
Cruoriella Dubyi	Peyssonelia dubyi
Dasya arbuscula	Dasya hitchinsiae
Dilsea edulis	Dilsea cornosa
Gelidium aculeatum	Gelidium crinale
G. corneum	Not the same as Gelidium corneum on the card.
G. melanoideum	Not found in Britain.
G. sesquipedale	Gelidium corneum
G. torulosum	Not found in Britain
Goniotrichum elegans	Goniotrichum alsidii
Gracilaria compressa	Gracilaria bursa-pastoris
G. confervoides	Gracilaria verrucosa
G. minima	Grateloupia filicina
G. multipartita	Gracilaria foliifera
Helminthocladia Hudsoni	Not found in Britain
H. purpurea	Helminthocladia calvadosii
Laurencia caespitosa	Laurencia hydrida
Lithophyllum adplicatum	Lithophyllum hapalidioides
Lithothamnion Battersii	Lithothamnion granii
L. calcareum var. norvegicum	Lithothamnion norvegicum
L. lichenoides	Mesophyllum lichenoides
L. membranaceum	Epilithon membranaceum
L. stroenfeltii	Lithothamnion laeve
Lomentaria rosea	Lomentaria areadensis
Melobesia corallinae	Lithophyllum corallinae
Monospora pedicellata	Corynospora pedicellata
Myriogramme Bonnemaisoni	Nitophyllum bonnemaisonii
M. versicolor	Nitophyllum versicolor
Nemalion helminthoides	Nemalion helminthoides
N. multifidum	" "

R H O D O P H Y C E A E - Contd.

<u>Name in Newton</u>	<u>Name on Card</u>
Phyllophora epiphylla	Phyllophora crispa
Plocamium coccineum	Plocamium cartilagineum
Polysiphonia fastigiata	Polysiphonia lanosa
P. obscura	Lophosiphonia reptabunda
P. variegata	Polysiphonia denudata
Pterosiphonia fruticulosa	Polysiphonia fruticulosa
Rhizoglossum thysanorhizans	Radicilingua thysanorhizans
Rhodochorton Brebneri	Acrochaetium brebneri
R. membranaceum	Audouinella membranacea
R. minutum	Acrochaetium minutum
Rhodochorton pallens	Acrochaetium pallens
R. Rothii	Rhodochorton purpureum
R. seiriolanum	Acrochaetium seiriolanum
Rhododermis elegans	Rhodophysena elegans
R. parasitica	Rhodophysena elegans
Rhodomela subfusca	Rhodomela confervoides
Rhodophyllis bifida	Rhodophyllis divaricata
Rhodymenia corallicola	Not found in Britain
R. Palmetta	Rhodymenia pseudopalmata
Scinaia furcellata var. subcostata	Scinaia turgida
Seirospora Griffithsiana	Seirospora seirospora
Spermothamion barbatus var. mesocarpum	Spermothamion mesocarpum
S. Turneri	Spermothamion repens.

C Y A N O P H Y C E A E

Amphithrix violacea	Schizothrix calcicola
Anacystis parasitica	Not a blue-green alga
Aphanocapsa marina	Anacystis marina
Aphanothece pallida	Coccochloris stagnina
Brachytrichia Balani	Brachytrichia quoyi
Calothrix consociata	Calothrix confervicola
Chroococcus turgidus	Anacystis dimidiata
Dermocarpa incrustans	Entophysalis conferta
D. Leibleiniae	" "
D. prasina	" "
D. rosea	" "
D. Schousboei	" "
Gloeocapsa crepidinum	Entophysalis deusta
Hydrocoleum glutinosum	Microcoleus lynbyaceus
H. lynbyaceum	" "
Hyella caespitosa	Entophysalis deusta
Lynghya aestuarii	Microcoleus lynbyaceus
L. Agardhii	Schizothrix mexicana
L. lutea	Oscillatoria lutea
L. majuscula	Microcoleus lynbyaceus
L. Meneghinianum	" "
L. Rivulariarum	Schizothrix calcicola
L. Seriplena	Microcoleus Lynghya
Merismopedia glauca	Agnonellum quadruplicatum
Microcoleus chthonoplastes	Schizothrix arenaria
M. tenerrimus	Schizothrix tenerrima
Oncobyrsa marina	Entophysalis conferta
Oscillatoria amphibia	Schizothrix calcicola
O. Bonnemaisonii	Microcoleus lynghya
O. brevis	Artarospira brevis
O. Corallinae	Microcoleus lynghya
O. formosa	Porphyrosiphon animalis
O. laetevirens	Schizothrix arenaria
O. margaritifera	Microcoleus lynghya
O. Nigroviridis	Porphyrosiphon notarisii
O. rosea	Oscillatoria submembranacea
Phormidium ambiguum	Microcoleus vaginatus
P. autumnale	Microcoleus autumnale
P. corium	Schizothrix rubella

C Y A N O P H Y C E A E -Contd

<u>Name in Newton</u>	<u>Name on Card.</u>
P. Ectocarpi	Schizothrix calcicola
P. fragile	" "
P. papyraceum	Oscillatoria retzii
P. tenue	Schizothrix calcicola
P. uncinatum	Microcoleus vaginatus
Plectonema Battersii	Schizothrix calcicola
P. norvegicum	" "
P. Nostocorum	" "
P. terebrans	" "
Pleurocapsa amethystea	Entophysalis conferta
P. fuliginosa	Entophysalis deusta
Schizothrix Cresswellii	Schizothrix calcicola
S. vaginata	" "
Spirulina major	Spirulina subsalsa
S. versicolor	" "
Symploca hydroides	Schizothrix mexicana

X A N T H O P H Y C E A E

Vaucheria Thuretii	Vaucheria velutina
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REFERENCES:

- NEWTON, L., 1931 Handbook of the British Seaweeds, 1-478
 PARKE, M. & DIXON, P.S., 1968 Check-list of British Marine algae - second revision. J. mar. biol. Ass. U.K. 48, 783-832
 DROUET, F & DAILY, W.A., 1956 Revision of the coccoid Myxophyceae. Butler Univ. bot. Stud. 12, 1-218.
 DROUET, F. Revision of the Classification of the Oscillatoriaceae. Acad. nat. Sci. Phila., Monogr. 15, 1-370.

T.A. Norton.

GREENLAND ALGAE - AUGUST 1971.

Members of the Polytechnic of North London expedition to Greenland in August, 1971, duly collected and preserved samples of the sublittoral vegetation from two localities on the East coast of Greenland - Kangertitivatsiaq Fjord (66° 17' 10" N, 35° 37' 10" W) and Ikerssuag Fjord (66° 40', 34° 36' W). In each case divers collected all the vegetation from within a quadrat of 1/2 metre side, brought it up in nylon mesh bags and transferred it to 5% formalin/sea water. Sites with large laminarians were avoided, but otherwise samples were considered to be reasonably typical. In each case samples from depths of approximately 45ft., 30ft., and 15ft., below low water were collected.

The samples are still being investigated. They consist mainly of brown algae, notably Desmarestia aculeata, with Lithoderma fatiscens encrusting the stones and rocks, but there are several small filamentous species still to be determined. While the number of species collected is small, it is interesting to have any material from known localities and depths from this general area.

D.E.G. Irvine.

B.P.S. FIELD MEETING, DUNBAR, EAST LoTHIAN.

Wednesday, August 23 - 30th, 1972.

The historic town of Dunbar is situated between Edinburgh and Berwick upon Tweed. It is the sunniest and driest resort in Scotland.

The main object of the meeting will be the collection of seaweeds. The region is of particular interest as it was the main collecting ground of Batters around the turn of the century. It is planned to revisit several of Batters favourite sites. The area is reputed to contain the best collecting sites on the east coast of Britain as well as clear water and excellent diving.

It is hoped that relative beginners as well as experts will attend. Even if your interest is in a group other than seaweeds you are more than welcome to join us to pursue your own line.

Dunbar is easily reached by a regular train and bus service from Edinburgh. Some trains from London actually stop at Dunbar en route to Edinburgh.

An excellent hotel in Dunbar has offered price reductions depending on the size of the party. Their normal full board terms are £26. per week. Cheaper accommodation can also be arranged if required.

If you are interested in participating please fill in the registration form enclosed with the 'Newsletter' AS SOON AS POSSIBLE.

T. A. Norton.

ALGAE IN THE TEACHING OF BIOLOGY.

A course on 'Algae in the teaching of Biology' will be held in Bangor from 2nd to 8th July 1972. Teachers who attended the symposium on the teaching of algae at Bangor in 1971 asked for a second, longer course which would concentrate on the practical aspects of using algal material in biology classes. A number of members of the British Phycological Society have responded to this enthusiasm and volunteered to act as instructors on the 1972 course. Amongst the topics to be included are: where to find algae and how to identify them, inexpensive culture methods, the use of cultures in physiology classes, freshwater and marine ecological methods, cytology and fine structure. The course is recognised by the D.E.S.; it is intended for teachers of biology in schools and colleges of all types. Laboratory facilities will be provided in the School of Plant Biology of the University College of North Wales at Bangor and accommodation with full board in a hall of residence.

Dr. W. Eifion Jones of the Marine Science Laboratories, Menai Bridge, Anglesey will be glad to supply further information.

SUMMARY OF COURSES INVOLVING PHYCOLOGY OFFERED BY THE
FIELD STUDIES COUNCIL 1972

Dale Fort Field Centre, Haverfordwest, Pembrokeshire

- May 17 - 24th Basic introduction to Sub-littoral Marine Ecology for
B.S.A.C. Divers : Course 1.
May 31 - June 7th. Advanced Sub-littoral Marine Ecology for B.S.A.C.
Divers: Course 2.
June 28 - July 5th Basic Introduction to Sub-littoral Marine
Ecology for B.S.A.C. Divers: Course 3.
July 12 - July 19th. Advanced Sub-littoral Marine Ecology Course
for B.S.A.C. Divers: Course 4.
July 26 - Aug. 2. Basic Introduction to Sub-littoral Marine Ecology
for B.S.A.C. Divers: Course 5.
Aug. 16 - Aug 23. Basic Introduction to Sub-littoral Marine Ecology
for N.S.A.C. Divers: Course 6.

Orielton Field Centre, Pembroke, Pembrokeshire.

- July 19 - 26th. Principles and Practices of Underwater Photography
for Members of the Underwater Association and B.S.O.U.P.
July 26 - Aug. 2. Seaweeds.
Sept 20 - 27th. Advanced Marine Ecology.

Preston Montford Field Centre, Montford Bridge, Shrewsbury SY41DX

- Aug 12 - 19th. Limnology and Planktonic Algae.

Slapton Ley Field Centre, Slapton, Kingsbridge, Devon TQ7 2QP

- Duly 26 - Aug. 2. The Natural History of the Sea Shore.

MEETINGS & SYMPOSIA.

April 7th - 8th 1972. CAMBRIDGE. U.K.

Joint meeting with the British and Scandinavian sections of the
Society of Protozoologists.

The meeting will be held at Christ's College, Cambridge.

Further information from: Mr. P. Killick Kendrew,
Department of Zoology,
Imperial College Field Station,
Ashurst Lodge,
Ascot. Berks. U.K.

April 11th - 12th, 1972. SOUTHSEA, U.K.

School of Pharmacy, Portsmouth Polytechnic, The Pharmaceutical
Society of Great Britain.

'A Symposium on the commercial utilisation of seaweed'

Programme and further information from:-

R.E. Marshall, Registration Secretary,
The Pharmaceutical Society of Great Britain,
17, Bloomsbury Square,
London. W.C.1. U.K.

June, 1972. CHARLOTTETOWN, PRINCE EDWARD ISLAND, CANADA.

Univerisity of Prince Edward Island.

'A Symposium on Chondrus'

Further information from: Organising Committee Headquarters,
Dr. L.A.
Biology Department,
University of Prince Edward Island,
Charlottetown,
P.E.I. Canada.

MEETINGS & SYMPOSIA Contd.

July 11th - 13th, DUNDEE U.K.

Joint meeting of the Society of Experimental Biology and British Phycological Society.

The meeting will be held at the University of Dundee.

Further information from: Prof. W.D.P. Stewart,
Department of Biology,
University of Dundee,
Dundee, DD1 4HN.
Scotland.

CORRECTIONS OR CHANGES OF ADDRESS, MARCH 1972.

- AL-HASAN, R.H., Marine Science Laboratory, Menai Bridge, Anglesey.
N.Wales.
- ALLEN, Dr. T., Dept. of Botany, Univ. of Wisconsin, Madison, Wisc.
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- ANDREWS, H.T., The Tennessee Technological Univ., Cookeville, U.S.A.
- BEGUES, Dr. F.M., Center for Aquatic Biology, Dept. of Biology,
E. Michigan Univ., Ypsilanti, Michigan 48197 U.S.A.
- BLINN, D.W., Dept. of Biological Sciences, Northern Arizona Univ.,
Flagstaff, Arizona 86001 U.S.A.
- CLAYTON, Mrs. M.N., 90, Ella Crescent, Caelsea, Victoria, Australia
3196
- COGGINS, Mr. C.R., Dept. of Botany, The University, Liverpool L69 3BX.
- CULLINANE, Dr. J.S.P., Dept. of Botany, University College, Cork, Eire.
- DAVID, Mrs. J.E., Perwick, 7 Oaksfield, Kirkstone Rd, Ambleside,
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Dr M.W. Parke F.R.S.

We would like to offer our sincere congratulations to Dr Parke of the Marine
Laboratory, Plymouth, on being elected a Fellow of the Royal Society.

REQUEST

Messrs W.F.Farnham and R.L.Fletcher of the Portsmouth Polytechnic, Marine Laboratory,
Ferry Road, Hayling Island, Hants. PO11 0DG, request stones with attached
Ahnfeltia spp. The material can be either dried or formalin preserved.

NEXT ISSUE

It is hoped that the next issue of the Newsletter will be published at the end
of November 1972. Contributions should reach the editor not later than November 11th.

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