

President : H.T.Powell M.Sc.

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A NEW VENTURE

The production of the 'Newsletter' by the British Phycological Society is a new venture. Its aim is to facilitate communication between members of the Society through the dissemination of information which, it is hoped, will be of interest to all. Its success depends on your cooperation. News items, information, requests, review articles and letters to the editor are welcome and should be sent to the editor of the 'Newsletter', I. Tittley, Department of Botany, British Museum (Natural History), Cromwell Road, London, S.W.7. Articles containing original matter, such as the results of research projects may not be included but should be sent to the editor of the British Phycological Journal.

Local Correspondents.

As a result of a circular distributed by the Secretary during November 1968, several members offered to act as local correspondents for the 'Newsletter'. More correspondents in all corners of the globe are still needed.

SECRETARY'S REPORT FOR 1970.

Meetings. The Annual Winter Meeting was held for the first time at the Northern Polytechnic, London, and was very well attended. Seventeen papers were presented and many demonstrations put on display. We are grateful to the Local Secretary, Dr. D. Irvine and the Head of the Biology and Geology Department, Dr. D. Etherington for their efficient organisation of the meeting.

A small number of members attended a field meeting at Kindrogan, Perthshire, in August. They had an interesting time collecting in a number of fresh-water habitats, and also visiting the Pitlochry research laboratory.

Council. The 1970 Council met on three occasions. At the first meeting Mr. D. Richardson was appointed to the new post of Membership Secretary. He will look after the enrolment of new members and will keep the records of the members' addresses and subscriptions. Much of the Council's time has been taken up with discussion of the 'Symposium on the teaching of algae' to be held in 1971 and with the preparation of the new marine flora. Hard-working sub-committees under Mr. T.K. Rees and Dr. M. Parke, respectively, are organising these activities.

At the end of the year Mr. R. Ross retired from the Presidential chair but will still remain on the council for two years as Past-President. Dr. M. Martin retired from Council after a long association which goes back to the early days of the Society. She became Treasurer when the Society was officially founded in 1953 and she looked after the finances all through the first ten formative years. She then became Vice-President, 1965-66, and President, 1967-68. The Society owes her a great debt for her consistent help and guidance. Dr. M. De Valera has resigned from the post of Vice-President. Also retiring, by rotation, are Dr. G. Boalch, Mrs L.M. Irvine and Mr. T.K. Rees. Their presence on the Council has been very valuable but we look forward to their continued assistance with Society activities.

Membership. During the year we welcomed some 70 new members (12 from the U.K. ; 45 from North America ; 6 from Europe and 7 from other parts of the world). Total membership now stands at about 480. Unfortunately, we lost 20 members in 1970. Of these 13 were struck off for non-payment of subscriptions, 5 just disappeared, one resigned and one died.

The assistance of members in encouraging their friends, colleagues and students to join the Society is greatly appreciated. Finances. The financial statement which has been circulated to members shows a healthy credit balance of about £500. on the year's operation. However, with the constant increases in printing costs, with extra secretarial help required to cope with the large membership, and with various activities planned there may be little or no credit balance in 1971. A steady increase in the membership and more especially in the sales of the Journal to libraries are necessary to keep finances in a healthy state.

J.D.D.

OBITUARY NOTICE.

Prof. Dr. Dr. hc. Ernst G. Pringsheim,
26.10.1881 - 26.12.1970.

Full obituary to be published in the British Phycological Journal.

A SCHEME TO MAP THE DISTRIBUTION OF BENTHIC MARINE ALGAE.

The British Phycological Society in conjunction with the Biological Records Centre has inaugurated a scheme to map the distribution of British Marine Algae. Recording cards have been printed and distributed to over 150 collectors.

Brief publicity articles have appeared in a large number of scientific journals and in the national press. Circulars have also been sent to Marine Stations, Field Studies Centres and local Museums.

As a result of this publicity over 70 amateur collectors who are not members of the B.P.S. have offered to help.

A large number of professionals have offered to act as local referees for various regions of the British Isles. Their task will be 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 also promised to supply keys for general distribution so that collectors can make many of the determinations for themselves.

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 abroad with a view to establishing similar schemes.

The success of our scheme depends on your cooperation. If you are not already involved and would like to participate in the scheme as a collector or referee, or if you are willing to prepare a key for the identification of a group in which you are interested, please contact:- Dr T.A. Norton, Department of Botany, The University, Glasgow, W.2.

T.A.N.

FLORA OF BRITISH MARINE ALGAE VOLUME 1 (RHODOPHYTA).

Dr P.S. Dixon (University of California, Irvine) and Mrs L.M. Irvine (British Museum (Natural History)) report that the Flora of British Marine Algae Volume 1 (Rhodophyta) is now in an advanced state of preparation, with an anticipated publication date in late 1973. A preliminary test exists for the Nemaliales, Ceramiaceae, Dasyaceae and most of the Rhodomelaceae and Rhodymeniales. The remainder is due to be completed by mid 1971. Collaborators include Dr P.R. Newroth (University of British Columbia): Phylloporaceae; Dr H.W. Johansen (Clark University, Massachusetts): articulated Corallinaceae and Dr W.H. Adey (Smithsonian Institution): non-articulated Corallinaceae.

L.M.I.

FLORA OF BRITISH MARINE ALGAE VOLUME II (PHAEOPHYTA).

Dr G. Russell (University of Liverpool) reports that considerable progress has been made on the Phaeophyta volume of the Flora of British Marine Algae. By the end of 1970 Dr Russell had completed generic investigations for Feldmannia, Stilopsis and Dictyosiphon. In addition, Feldmannia simplex, Stilopsis lejolisii and Dictyosiphon foeniculaceus have been studied in detail and plates for these species are now finished.

Two additions have been made to the British marine flora. Material agreeing in all respects with Composnema maculans (Lebel.) Kuck. was collected at Wexford during the B.P.S field meeting. The validity of the specific epithet is in some doubt however, and publication of the record will be withheld until its nomenclature is sorted out. A description of the British material and a plate have been prepared.

Plants identifiable as Laminaria groenlandica Rosenf. have been collected by Mr C. Thornton, initially from Port Erin, I.O.M., and subsequently from other localities. The status of the species is currently the subject of study by Mr Thornton and Dr E.M. Burrows at Liverpool University.

British records of Myriocladia lovenii J. Ag. are based on misidentifications and according to Kylin (1933) they belong properly to another species. This material has been re-examined and a full description is being prepared.

A new key to the genera has been constructed, which is based as far as possible on vegetative characters and is dichotomous throughout, with leads as contrasted as possible. Keys to all species have now been prepared. These (like the generic key) are dichotomous throughout, again with leads as contrasted as possible. Multi-character or single-character leads are used as appropriate to the taxa concerned.

EXCURSION DE BRETAGNE: Société Phycologique de France.

Brest, August 17 - 22 1970.

Once again members of the B.P.S. were invited to the field-meeting of the Société Phycologique de France. Regrettably, I was the only member present but the meeting attracted an international gathering of Phycologists from Australia, Germany and Spain. With the French members present there were some three dozen collectors on the excursions.

A most useful aid towards collecting at the different localities was the booklet prepared by the organisers assisted by MME Cabioch. This gave descriptions and maps of the various shores to be visited together with floristic details. Since a species list is to be published soon, only brief mention of the collections need be made. Among the more interesting finds for one accustomed to the British flora were such seaweeds as Codium bursa, Crouania, Microcladia and Falkenbergia with Laminaria ochroleuca and Galidium sequipedale abundant in the sublittoral.

Our excursions ranged from Plouguerneau on the north Finistere coast to Penmarc'h (south Finistere) with a memorable boat-trip to Ile d' Ouessant. At times the weather could have been kinder to us but I now know that downpours are not English prerogatives.

Most of the participants were accommodated at the Pax Christi hostel, conveniently situated near the laboratories of the University, which we were kindly allowed to use in the evenings. On the other hand the hostel was also near the city centre for those inclined to less scientific pursuits.

Certainly not every hour during the all too short week was devoted to phycology. On our first evening we were honoured with a champagne reception at the Town Hall. My indifferent French allowed me to understand from the speeches of welcome that the City of Brest

Brest, August 17 - 22 1970 Contd.

was proud of its connection with the Crouan brothers. Our organisers were adept at selecting interesting routes for the coach to follow on the return journeys, with frequent halts for exploring some of the fascinating Breton towns and churches. One culinary highlight of the week was when we sampled some of the many different pancakes at a 'crêperie'. We were also conducted round the well-known marine laboratories at Concarneau and Roscoff. Rather appropriately, on our last day, the fact that seaweeds are of more than just academic delight was emphasised, to me at least, by a visit to the factory at Landerneau processing kelp, etc. into fertilisers and animal feeds. Although, on some of the extensive rocky-shores which we had previously visited, we had often seen the loading of seaweeds on to small boats and horse-drawn carts, and at Le Conquet we saw holiday-makers earning themselves extra francs by collecting bags of Chondrus.

The meeting was ably organised by MM. A.H. Dizerbo and J.Y. Floc'h (Faculté des Sciences de Brest). I can represent all the participants in expressing our warm thanks to them for all their efforts into making the Excursion such a phycological and social success.

W.F.F.

II PLANKTONIC CONFERENCE.

Rome, September 29 - October 7 1970.

The second International Conference on Fossil Microplankton was held in the Institute of Geology and Paleontology at the University of Rome where a total of almost 100 papers were presented on topics ranging from ultrastructure studies of extant species to the diatoms found in pottery. The proceedings opened with two days of symposia on calcareous nannoplankton and siliceous microfossils, these being followed by one-day sessions devoted to Foraminifera and the JOIDES deep-sea drilling project. A one-day excursion to six sites of micropaleontological importance to the north-east of Rome divided this half of the meeting from the second in which contributions from all disciplines were brought together in an attempt to create an integrated picture of the stratigraphy of various geological epochs. A volume of abstracts was prepared for attending delegates and the papers will appear in full in the proceedings of the meeting.

The conference also acted as a forum for discussion of a list of proposed recommendations for workers on calcareous nannoplankton, drawn up during the week proceeding the meeting by a specially convened Round Table. The main recommendation, on which the practice of the remainder of the proposals depends, is that all workers in this field should, in future, follow the International Code of Botanical Nomenclature though it is clear that some revision of these rules will be necessary satisfactorily to accommodate microfossils. The Round Table also proposed that a committee for the study of outstanding nomenclatural and biostratigraphic problems would be appointed, suggested a list of specialist workers who might act in an advisory capacity to the committee, and drew up and distributed a series of diagrams illustrating a limited number of terms considered suitable for the description of coccoliths, discoasters and spenoliths.

The proposed measures reflect the present unsatisfactory situation in the taxonomy and nomenclature of calcareous microfossils, stemming from both the recent rapid increase in interest in these remains by paleontologists and the use of the electron microscope in the description of both extant and fossil forms. These problems can be overcome only by the application of a code of rules by all workers and it is therefore this aspect of the Conference that will have the greatest long-term import.

B.J.H.

MEETING OF NATIONAL BIOLOGICAL SOCIETIES.

Dorking, October 24 1970.

The meeting took place at the Field Centre, Juniper Hall, Dorking, Surrey. Mrs L.M. Irvine attended as the representative of the B.P.S. The topics of discussion included: 'A review of progress with action points for societies agreed at the 1969 meeting at Monks Wood Experimental Station', during which discussion mention was made of the preparation of mapping cards for the marine algae; 'A Code of Conduct', where it was reported that there had been a large demand for the code produced by the B.S.B.I. and Mrs Irvine added that there was a need for a code of conduct to regulate collecting on the sea-shore. It was agreed that a common code of conduct was desirable and that the Conservation Liaison Committee should prepare a draft code and the national biological societies should be asked for their opinions on this code. Mrs Irvine then raised the question of the representation of marine biologists on the Conservation Liaison Committee. (As a result of this discussion the B.S.B.I. has invited the B.P.S. to provide two representatives - one for marine algae and one for freshwater algae - to sit on its conservation committee).

Other topics discussed included, 'European Mapping Schemes'; 'Lists of museum collections'; 'Commercial sale of natural history specimens'; 'New developments at the Biological Records Centre (B.R.C.)'; 'Biological recording and the future pattern of museums in Great Britain'.

BRIGHTON 70'

Brighton, October 23 - 25 1970.

The 'Ninth B.S.-A.C. (British sub-aqua club) Conference on underwater activities', and the 'Fourth International Festival of Underwater Photography' were held jointly at 'The Dome', Brighton, Sussex.

Amongst many papers read at the meeting were: 'The Gulf-Stream Drift Mission' by Prof. J. Picard; 'Pollution in Paradise' by B. Rosen (Dept of Geophysics and Planetary Physics, Newcastle University); 'Pollution at Southend' by Dr J.D. George (B.M.N.R.), (see: George, J.D. 1970. 'Mortality at Southend', Mar. Pollut. Bull., 1: 131, for brief discussion on the effect of detergent on certain seaweed species); 'The Sea and its abuse' by A. Bourne; 'Project Starfish - results of nationwide underwater pollution investigation' by Dr D. Bellamy (University of Durham). Dr Bellamy discusses, *inter alia*, the heavy-metal ion pollution of certain plants (eg *Laminaria digitata*) and animals. (See also: Bellamy D., 1970. 'Project Starfish', *Triton* 15: 94 - 95.)

'LES CYCLES SEXUÉS ET L'ALTERNANCE DE GÉNÉRATIONS CHEZ LES ALGUES'.

A Symposium.

Paris, November 13 - 14 1970.

The symposium was sponsored jointly by the Société Botanique de France and the Société Phycologique de France. It was organised by Prof. J. Feldmann and the meetings were held at the Muséum National d'Histoire Naturelle.

Considering that the symposium was so short (only two days) it was successful in attracting phycologists from many countries, despite the general reduction in travel grants for scientists at present. Countries represented by participants included Britain, Canada, France, Germany, Italy, Japan, Netherlands, Spain and the U.S.A.

Paris Symposium contd.

The theme of the papers involved reproduction in different algal groups with more attention paid to the seaweeds than to flagellates. After the welcoming address, Prof. J. Felmann gave an introduction to the symposium by discussing his scheme for classifying algal life-histories with reference to the problematical life-histories of Bonnemaisonia and Asparagopsis. The remaining papers were mainly concerned with the elucidation of life-histories in various groups. A few papers perhaps communicated nothing new as they seemed to be deliveries of previously published work.

One of the main conclusions that could be made at the end of the meeting was how even relatively simple or well-known life-histories could reveal unexpected deviations in culture. As some speakers indicated, this should act as a caution against elaborate classificatory schemes based on incomplete data. Dr Müller, in his paper on reproduction in Ectocarpus siliculosus, revealed further complexity in this well-studied species, with haploid and diploid gametophytes, and haploid, diploid and tetraploid sporophytes. On a personal note, I was midway through giving an algology course when I attended this meeting and upon my return I had to amend quickly my lecture notes for the rest of the course in dealing with the reproduction of 'well-known' algal types!

Other papers showed how cultural conditions such as medium composition, temperature and, what is now realised to be an important factor viz. illumination (intensity, day-length) can effect the performance of cultured material. Some speakers raised the issue as to what extent life-histories achieved solely in laboratory cultures represent behaviour in the field. This criticism cannot be applied to Prof. Magne's elucidation of the life-history of Lemanea in which the culture-slides were kept under natural conditions. The reproduction of Batrachospermum has long been in doubt but, now according to Hurdlebrink and Swantes, follows the Lemanea pattern. These workers described how they obtained their results by using the novel technique of estimating the nuclear DNA content instead of conventional chromosome counts. This method could probably be used for cytological investigations of other algae with minute nuclei.

With thirty papers scheduled, strict time-keeping was essential and often interesting discussions had to be cut short by the chairman to accommodate the full programme.

The meeting finished most agreeably with an informal dinner for the participants which had the desirable effect of encouraging international contacts and continuing previous discussions - despite any linguistic difficulties.

I am sure that phycologists will look forward to the publication of this symposium, sometime in 1971, as a Mémoire of the Société Botanique de France. This new venture of a short international meeting dedicated to one particular aspect of phycology proved to be a great success and perhaps the idea could be taken up by the B.P.S.

W.F.F.

B.S.-A.C. FIRST NORTHERN CONFERENCE.

Manchester, December 15 1970.

This conference was held at the University, Manchester. A number of papers were read and were mainly concerned with diving techniques, ("A report on the 1500ft. recompression dive", "Mixed gas breathing techniques" and a Royal Navy Film "Bending and Unbending") though Dr J.D. George (B.M.N.H.) gave a paper on "Marine Pollution".

CHALLENGER SOCIETY MEETING.

London, January 13 - 14 1971.

The meeting was held at the British Museum (Natural History), London, and papers were read on three main themes 'Tropical Fisheries Biology', 'Physiology and Morphology' and 'Field Studies'.

Challenger Society Meeting Contd.

Dr P.G.Moore (Wellcome Marine Laboratory, Robin Hoods Bay) contributed to the latter-mentioned theme with a paper entitled "The kelp fauna of the north east coast - a preliminary assessment of pollution".

UNDERWATER ASSOCIATION, ONE-DAY SYMPOSIUM.

Swansea, January 16 1971.

The Symposium took place in the Department of Zoology, University College, Swansea. The meeting was divided into four main sessions : I "Marine Biology Techniques", II "Regional Marine Studies", III "Diving physiology and technique" and IV Films and Demonstrations. The meeting was well attended by a large number of scientists from the United Kingdom and abroad. Amongst the large number of papers read at the meeting were : (Sess.I) "Molluscan associations in sublittoral algae" by R.C.Earll, (Zoology Dept., Manchester University) ; (Sess.II) "Diving in the Antarctic", P.Bregazzi (Zoology Dept., U.C.Swansea) ; "Lundy as a marine nature reserve", K.Hiscock (Marine Science Labs., Menai Bridge) ; "A preliminary biological survey of the marine park at Wataou, Kenya" Dr D.A.Jones ; "Sublittoral investigations at Lough Ine, Ireland", Dr J.C. Gamble ; (Sess. III) "Changes in the electrical activity of the human brain during diving", J.Bevan (Royal Naval Physiological Laboratory) ; "Size adaptation in different underwater environments", Dr H.E.Ross (The University, Stirling) ; "Sea-bed working vehicles", J. Ward (Cammell Laird Ltd.) "Bottom surveying by diver-held television camera with ship-board monitor", a demonstration (Sess IV) and perhaps of interest to sub-aqua and littoral psychologists !

PHYCOLOGY IN ARGENTINA.

The number of Phycologists in Argentina is small in relation to the extent of coastline and inland waters in the country. Nevertheless a group of enthusiastic phycologists is carrying out studies on the marine and freshwater flora. Details are as follows :

Facultad de Ciencias Naturales y Museo de La Plata, Provincia Buenos Aires.

Dr. Sebastián Guarrera (Freshwater phytoplankton) ; Sr. Leonardo Malacalza (Freshwater phytoplankton) ; Sra. Marta F. de Castaños (Marine Diatoms) ; Sra. Elisa D. de D'Amelio (Marine Chlorophyta).

Museo Argentino de Ciencias Naturales, Bernardino Rivadavia, Buenos Aires.

Srta. Carmen Pujals (Phodophyta).

Centro de Investigacion de Biologia Marina, I.N.T.I., Buenos Aires.

Dra. María Mendoza (Rhodophyta) ; Dra. Delia Halperín (Cyanophyta) ; Dr. Oscar Kühnemann (Chlorophyta) ; Sr Aldo Asensi (Phaeophyta).

Facultad de Ciencias Exactas y Naturales, Buenos Aires.

Sr. Guillermo Tell (Freshwater algae).

Estacion Hidrobiologica Puerto Quequen, Necochea, Pcia. Buenos Aires.

Dr. Enrique Balech (Marine Phytoplankton).

PHYCOLOGY IN ARGENTINA Contd.

Laboratorio Algologico, Rawson, Pcia. Chubut.

Sra. Isabel K. de Paternoster (Marine algae).

Collections made for the purpose of forwarding the above studies naturally add value to the institutional herbaria concerned. The main institutional marine algal herbaria are at the Museo Argentino de Ciencias Naturales, Bernardino Rivadavia; and at the Facultad de Ciencias Naturales y Museo de la Plata for Provincia Buenos Aires. The latter holds the main freshwater phytoplankton collections. There are also two small collections of marine algae at the Instituto Interuniversitario de Biología Marina, Mar Del Plata, Pcia. Buenos Aires, and at the Instituto de Botánica Darwinio, San Isidro, Pcia. Buenos Aires. The latter is better known for its herbarium of vascular plants, and possesses the best botanical library in Argentina. The Instituto Antártico Argentino, Buenos Aires, has also a good library, particularly as far as Antarctic and Subantarctic literature is concerned. There are two permanent marine laboratories, in Puerto Deseado, Pcia. Santa Cruz, and in Usuhaia, Pcia. Tierra del Fuego, both of which belong to the Centro de Investigación de Biología Marina, I.N.T.I.; however they have no permanent staff.

There are data already published on the following areas: Coasts of Patagonia and Tierra del Fuego (C. Skottsberg; M. Mendoza; O. Kühnemann; D. Halperín; A. Asensi; coast of Pcia. Buenos Aires (C. Pujals; S. Cabrera de Price); lagoons of Pcia. Buenos Aires (S. Guarrera and collaborators). The following are the areas for which studies are in progress; coasts of Patagonia and Tierra del Fuego (M. Mendoza, O. Kühnemann, A. Asensi, D. Halperín, M. Castaños, I. Paternoster); coasts of Pcia. Buenos Aires (C. Pujala, D. Halperín, S. Cabrera de Price); coast of Pcia. Rio Negro (E. D'Amelio, M. Castanos); Buenos Aires and Patagonia lakes and lagoons (S. Guarrera, L. Malacalza, G. Tell). Most of the studies are taxonomic, although some aspects of physiology of unicellular green algae are also under investigation. Work of this latter kind, with other non-taxonomic aspects of phycology, tends to be neglected in Argentina as yet.

S.M.C. de P.

PHYCOLOGICAL RESEARCH AT DURHAM.

The coast of County Durham, England, is one of the most polluted shores in Europe. Large population centres pump their domestic waste into the sea, and the industrial effluents of coal and chemical industries are similarly disposed of.

A seasonal survey of the benthic marine algae of Durham, including the estuaries of the Rivers Tyne, Wear and Tees is in progress. From this the effect of pollution on the benthic marine algal flora of a region will be determined, and the specific identity of resistant forms established. The three estuaries are similar in size and are close in geographical proximity to each other, yet are polluted to different degrees. The vegetation of the Rivers Tyne (organic sewage pollution) and Tees (chemical or toxic pollution) is being compared to that of the Wear (relatively unpolluted), to indicate the effects on estuarine biology.

Callithamnion hookeri, a common intertidal red alga throughout Britain, has been isolated into culture from several localities along a pollution gradient from the north of Scotland to Durham. The developmental morphology, including cytology, is being compared with specimens from nature. The life-history of several isolates has been completed in culture, and carpospores, which are produced continually in large numbers, provide a uniform inoculum for experiments. The growth characteristics are being determined under varying environmental conditions, e.g. light-intensity and quality, daylength

PHYCOLOGICAL RESEARCH AT BUREHAM Contd.

temperature, and salinity. The response of the alga to the above 'natural' factors will then form a basis for an assessment of the effect of disturbances in the environment (thermal, chemical and nutrient pollution) on isolates of the species from both unpolluted and polluted localities.

FOSSIL ALGAE.

Two years ago Dr G. Elliott was appointed to the Department of Paleontology at the B.M.N.H. His terms of reference were to organise and curate a national collection of fossil algae, consisting of rock samples, rock sections, cell mounts and rare apparently complete fossil plants. Dr Elliott has incorporated into this new collection material he has collected in the Middle East, North Africa and Jugoslavia. The main research interest which Dr Elliott has concerns evolution in the Dasycladales.

Certain other major collections of fossil algae already exist in the U.K., in association with the current research work by other scientists. The Institute of Geological Sciences, London, S.W.7., has a collection of carboniferous algae from the border country, which has been the subject of considerable work by Dr F.W. Anderson. Similarly the Department of Geology, University College, Aberystwyth holds collections of the fossil algal genus Girvanella (Myxophyceae) as a result of the current research interests of Professor A. Wood.

PHYCOLOGICAL RESEARCH AT THE RIVER LABORATORY, WAREHAM.

The only phycologist on the staff at the Freshwater Biological Association's River Laboratory, Wareham, Dorset, is Mr. A. Marker (B.P.S. Treasurer). His current research projects concern the growth and primary production of benthic algae in rivers. Mr. Marker presented a paper on the "Studies on the growth and production of an epilithic population of algae in a chalk stream", at the B.P.S. 1970-1 winter meeting.

MONEY !!!

On Monday 15th February 1971 the United Kingdom changed to decimal currency. Cheques etc. sent to the society for subscriptions or publications should be written in decimal (£.p.).

THE RESEARCH SITUATION IN THE MARINE ALGAE OF GREECE.

Studies in marine algae in Greece at this moment are carried on in only a few places; major centres of botanical studies, as a whole, are indeed few. Although the history of botanical collections in Greece and the Eastern Mediterranean in general includes such names as Pory de St. Vincent, Sibthorpe, Lyall, Reehinger, Schiffner and others, most of the more recent contributions derive from the collecting tours of various vessels, including "Calypso". Publications by Laborel, Peres & Picard, the Huves and Giaccone have resulted from these tours, all within the last fifteen years. Overlapping with these studies have been taxonomic and other studies by workers within Greece, such as Politis (Athens), Diannelidis (Thessaloniki), Mitrakos (Athens and Thessaloniki), Phouphas (Athens), Charitonidis (Thessaloniki), Tsekos (Thessaloniki), Sordina (Vido, Corfu) and others. Many of these studies have been merely geographically localised, occasionally annotated, systematic lists which derived entirely from shore work and from chance collections, such as by fisherman with nets. For this and other reasons previous work with systematic and ecological bias was somewhat superficial until the French and Italian work, from vessels, mentioned above; in that work, divers, themselves scientists, often made their own collections and ecological observations - by far the most accurate and

THE RESEARCH SITUATION IN THE MARINE ALGAE OF GREECE Contd.

productive system of working in these areas. Collections from this work are held in the marine station Endoume, S. France (Peres, Picard, Huve, Laborel etc); are with various European experts for critical assessment; or are in the Università di Triests, Italy (Giaccone; Piccone).

One unfortunate factor with regard to collections made by workers from institutions within Greece, notably as regards Politis (Athens) and Diannelidis (Thessaloniki), is that collections are either no longer extant, or were never made, to support the published data. Phouphas, the nephew of Politis and previously at the University of Athens, has indicated in a verbal communication that any material retained by Politis was destroyed in the revolution of 1944 in Athens, whilst Diannelidis material could not be traced in Thessaloniki. Charitonidis, who is a member of the Department of which Diannelidis is the head, has never seen any material despite the well-organised reference collections of the other groups held in the Department at the University of Thessaloniki. Possibly therefore, permanent collections were never made; I was unable to see Diannelidis to confirm this point. The only carefully prepared herbarium of marine algae that I actually saw in Greece was that prepared by Charitonidis of Thessaloniki in connection with his studies on the taxonomy and ecology of the algae of the Gulf of Thermaikos and of Mytilene; this work is still in progress.

Studies, other than taxonomic and ecological projects, are in progress at some centres in Greece. Of these centres, Athens is understandably enough the major one, with Thessaloniki as its more easterly companion. Professor of Botany in Athens is a freshwater pycnologist with taxonomic interests, Anagrostidis, who has unfortunately suffered considerable ill-health after undertaking the major part in reorganisation and moving of the Department to new buildings on campus within the city. Professor in the Department of General Botany in the University of Athens is Konstantin Mitrakos who, aside from past interests in field ecology, has undertaken work in biochemical and fine-structural aspects; he has a research student, Mr. Koussouris, who is now undertaking electron microscopic work in the Rhodophyta. Koussouris himself has also had some experience with field-work, in that he has made algal collections from the south coast of Crete; these he is also in the process of working up, and indicates that there are considerable differences between the flora he found there and that which he has seen in other parts of the Aegean.

Elsewhere in Athens, at the Nuclear Research Centre 'Democritus', Aghia Paraskevi, Athens, interests in the algae exist for various reasons. The Director of the Nuclear Research Centre is also Director of the new Oceanographic Institute, which embraces the previous Hellenic Hydrobiological Institute. Director of the Biology Department at 'Democritus', Dr G. Akoyinoglou, is also on the board of the new Oceanographic Institute. This new institute has two parts at the moment, one associated with benthic ecology projects being carried out in the Department of Zoology, University of Athens (by Dr C.E. Vavvakas), the other (at Democritus) with environmental and biomass research in the Saronic Gulf. The benthic ecology programme at the University will probably eventually involve Professor Mitrakos and his group, at the department of Botany. Most of the algal collections thus far made in connexion with his scheme have been seen by P. and H. Huve, Marseilles, mentioned above, and have derived from west Negina and Saronis in the Saronic Gulf. At Democritus, the environmental and biomass research is carried out by the Hydrobiology group under Dr Theano Kontou-Becokos and there are two major present projects. Firstly, assessment of the plankton biomass at various depths at many stations in the Saronic

THE RESEARCH SITUATION IN THE MARINE ALGAE OF GREECE Contd.

Gulf is being carried out, and secondly the effects on it by, and therefore the control of, organic (sewage) pollution of the Gulf from outfalls from the Athens-Piraeus complex and being investigated.

The group has also been concerned with the pollution aspects of the intended reactor for establishment at Lavrion, near Sunion, Saronic Gulf. It is intended to extrapolate all pollution work to include effects on the benthic forms in the Saronic Gulf.

In the Department of General Botany, University of Thessaloniki the group working with Professor Diannelidis is also involved in protein and heavy metal analysis in association with marine algal cultures maintained in the Department. Dr J. Tsekos has been especially active in this field and has produced much published work on the subject. Material for the work has been derived from the Charitonidis collections in the Thermaikos Gulf and from special collecting trips to such locations as Rhodes.

Lastly, although the personnel concerned with the projected flora of Greece centred on the Goulandris Botanical Museum in Athens are not specifically concerned with marine algal studies, the flora being terrestrial only, it is a pleasure to record their help and interest in the work which my wife and I were carrying out during September 1970. Our collections from the major part of our reconnaissance trip were processed at the Museum and Mrs Niki Goulandris rendered us invaluable help in many directions. We now possess large collections of algae from locations in Corfu, the Saronic Gulf, the Thermaikos Gulf, the Chalkidiki Peninsula, and Ievkas, together with much useful data concerning facilities and locations for future work.

J.H.P.

FIELD MEETING IN STORNOWAY, ISLE OF LEWIS : British Phycological Society.

August 7 - 14 1971.

Stornoway is an excellent centre for exploring the Western Isles. It is surrounded by some of the wildest country in the Outer Hebrides and is rich in archaeological remains.

Stornoway is reached either by sea or air via Glasgow. By train and car-ferry the journey passes through some of the most beautiful scenery on the west coast of Scotland. Boat timetables and fares are available from David Macbrayne Ltd. 44, Robertson Street, Glasgow, C.2.

Two flights per day leave Glasgow for Stornoway. Details will be found in the B.E.A. 'Inter-Britain' timetable. If you wish to travel by air please inform Dr Norton before you book (and by February 14 at the latest) for it may be possible to obtain fare reductions if the party is sufficiently large.

Participants should book their own accommodation in Stornoway. For full details of accommodation available, and field-meeting registration form, please apply to:- Dr T.A.Norton, Department of Botany, The University Glasgow, W.2.

NOTICE:

Recent corrections, omissions or changes of address, degrees, titles or interests should be sent at once on the enclosed tear-off slip to the Hon. Membership Secretary, Mr. W. D. Richardson, Dept. of Biology, University of London Goldsmiths' College, New Cross, London S.E.14, U.K., for inclusion in a membership list which is being prepared.

W.D.R.

Tear along here.

NAME (BLOCK CAPITALS)-----
TITLES-----
ADDRESS-----
Main interest in Phycology,-----

MEETINGS AND SYMPOSIA 1971.

January 12 - 18, COCHIN, India. The Marine Biological Association of India. 'A symposium on Indian Ocean and adjacent seas'. Correspondence concerning this symposium to :- The Convenor, Symposium on Indian Ocean and adjacent seas, Marine Biological Association of India, P.O. Ramanathapuram District, Madras State, India.

March 9 - 12, BORDEAUX, France. Oceanexpo 71. 'Colloque International sur l'Exploitation des Oceans'. Correspondence concerning this colloquium to :- Secretariat due Colloque, c/o C N E X O, B.P. (Boite Postale!) 107, Paris (XVI) France.

March 31 - April 6, KIEL, West Germany. The Scientific Committee on Oceanic Research. 'A symposium on the biology of the Indian Ocean with particular reference to the 'Indian Ocean Expedition'. This symposium is being organised by the Scientific Committee on Oceanic Research, and the productivity marine section of the International Biological Programme with the assistance of the U.N. educational, cultural and scientific organisation, the F.A.O., and the International Association of Biological Oceanography. Correspondence concerning this conference to :- Dr G.F. Humprey, C.S.I.R.O., Box 21, Cronulla, Sydney 2230, Australia, and, Prof. J. Krey, Institut für Meereskunde, Hohenbergstrasse 2, 23 Keil West Germany. Telephone: 0431-597 29 60 ; Cable address: Kielsymposium.

July 14 - 16, BANGOR, U.K. The British Phycological Society. 'A symposium on the teaching of the algae', to be held at the University College of North Wales. Correspondence concerning this symposium to:- Mr. T.K.Rees, 23, Meades Lane, Chesham, Bucks. Note: accommodation is available at Halls of Residence at a cost of £2.25 (£2.5.0.) per day. In addition there will be a symposium registration fee of £2.

August 8 - 12, SAPPORO, Japan. 'Seventh International Seaweed Symposium'. This symposium is being organised by the Science Council of Japan under the auspices of the International Advisory committee of the symposium. Correspondence concerning this symposium to :- Dr Mitsuo Chihara, Secretary, Seventh International Seaweed Symposium, c/o National Science Museum, Ueno Park, Tokyo 110, Japan. Note: Japan Air Lines Ltd. are offering a special group return fare to Tokyo of £390. J.A.L. also state that, with the assistance of travel agents, this fare could be made to include accommodation, meals and transfers from the airports. The normal economy return fare from London to Tokyo is £564.70 (£564.14.0.). For further details please contact Mr J.H. Rice, Department of Botany, British Museum (Natural History), Cromwell Road, London, S.W.7

August 19 - 26, LENINGRAD, U.S.S.R. 'International Limnological Congress'. Correspondence concerning this congress to :- Dr I.M. Raspopov, General Secretary, Organising Committee, 18th Limnological Congress, Laboratory of Limnology, Petrovshaya ulitsa, 3 - a, Leningrad, U.S.S.R.

Summary list of courses being offered by the Field Studies Council.

Correspondence concerning these courses should be addressed to the Warden of the field centre concerned.

Orielton Field Centre, Pembroke, Pembrokeshire.

April 28 - May 5 : Birmingham College of Education marine and maritime ecology course.

May 26 - June 2 : Maritime Ecology.

June 9 - June 16 : Sublittoral marine ecology.

July 21 - July 28 : Seaweeds.

Sept. 8 - Sept. 15 : Freshwater Ecology.

Flatford Mill Field Centre, East Bergholt, near Colchester. Essex.

June 30 - July 7 : Freshwater Ecology.

Aug. 11 - Aug. 18 : Freshwater Ecology.

Leonard Willis Field Centre, Nettlecombe Court, Williton, Taunton, Somerset.

Aug. 4 - Aug. 11 : Natural History of the sea-shore.

Slapton Ley Field Centre, Slapton, Kingsbridge, Devon.

Aug. 18 - Aug. 25 : Water, fresh or foul.

Preston Montford Field Centre near Shrewsbury, Shropshire.

March 31 - Apr. 7 : Hydrobiology.

Dale Fort Field Centre, Haverfordwest, Pembrokeshire.

June 23 - June 30 : An introduction to sublittoral ecology for fully qualified aqualung-divers.

June 30 - July 7 : see above.

July 28 - Aug. 4 : see above.

Kindrogan Field Centre, Enochdu, Blairgowrie, Perthshire.

May 5 - May 12 : Freshwater Ecology.

Millport, Isle of Cumbrae.

May 15 - May 22 : Marine Biology.

May 22 - May 29 : see above.

May 29 - June 5 : see above.

Aug. 28 - Sept. 4 : see above.

Note: These courses are run at the Laboratories, Keppel Pier, Millport, with accommodation at the nearby Clarendon Guesthouse. Applications and enquiries should be addressed to :- The Executive Secretary, The Scottish Field Studies Association, 104, West George Street, Glasgow, C.2.

MISCELLANEOUS FIELD TRIPS AND LECTURES.

Members of the Society who take field-trips, or give lectures for natural history societies, field clubs etc. may like to make their meetings open to other members of the B.P.S. Members wishing to make their meetings open should inform the editor of the 'Newsletter' stating the date, time, locality (with grid references for field meetings) and title (where necessary) of the meeting.

March 26 1971. South London Botanical Institute.

8 pm., a talk on the 'Marine Algal flora of Kent' by I. Tittley.

April 25 1971. Kent Field Club.

2 pm., Kingsgate near Broadstairs Kent.

A field-trip to investigate the marine algal flora growing on a chalk shore, with particular emphasis on the lower intertidal and shallow sublittoral areas.

A frequent train service operates between London and Broadstairs, and there is a bus service between Broadstairs and Kingsgate.

Meet at the 'Captain Dogby' public house,

G.R., TR 395707. Leader I. Tittley.

FIELD TRIPS AND LECTURES Contd.

Sept. 4 1971 Kent Field Club.

2 pm., St. Margarets Bay, South Foreland, Kent.

A field-trip to investigate the marine algal flora growing on a chalk shore, and to make comparisons with the flora of the Kingsgate (North Foreland) shore.

A frequent train service operates between London and Dover, and there is a bus service between Dover and St. Margarets Bay.

Meet at the 'Green Man' public house, G.R. TR 36844.

Leader I. Tittley.

April 15, 1971. The Linnaean Society, Burlington House, Piccadilly London.

"The Biology of Lake Chad".

POSTAL STRIKE.

It will be noticed that some of the meetings mentioned in the 'Newsletter' have since taken place; this is due to the delay in distribution caused by the strike of Post Office workers.

Field Trip: It is now not possible to organise a charter flight to Stornoway and participants wishing to fly to Stornoway should make their own arrangements.

REQUEST:

Mr. M.L. Megarry of the Chemistry Department, Royal Holloway College, Englefield Green, Egham, Surrey, requests material of Urospora sp. and Microspora sp., reasonably free of other filamentous green algae, for use on the investigation of constituent carbohydrates. The material can be sent to him either dried or preserved in ethanol. If Members are unable to obtain material, but know of localities where Urospora and Microspora can be found, Mr. Megarry would be pleased to receive this information.

Newsletter No.1. Issued by the British Phycological Society,
c/o Dept. of Botany, British Museum (Natural History), London. S.W.7.
Edited by I. Tittley, and duplicated at the British Museum (Natural History).

THE 1970 - '71 WINTER MEETING.

In many ways the 19th Annual Winter Meeting which was held at Bedford College, London on January 7/8th was probably the most successful meeting ever held by the Society. More members attended than ever before, there being over 120 present at some sessions. Quite a few of these had come from overseas and we were pleased to have visitors from as far away as Canada and Pakistan as well as a group from the Netherlands. In addition to the listeners there were also more 'performers' than before and 25 papers were presented, an increase of four over the previous highest number.

The "star turn" of the meeting was the Presidential Address delivered by the retiring President Mr Robert Ross. This was a very beautifully illustrated account of the work being carried out at the British Museum (Natural History) by Mr. Ross and Miss Pat Simms in which scanning electron microscopy is being used in a reappraisal of the taxonomy of certain groups of diatoms. This address was followed by two other papers on diatom structure by Dr F. Round and Mr R. Crawford. The large number of papers concerned with the Cyanophyta tended to emphasise that the blue green algae are 'blooming' in more ways than one! Other sessions dealt with primary production, fine structure of marine algae and pollution - a fair range of algal interests.

The Annual General Meeting produced the usual reports including a healthy financial report (no loss this year!). Following this Mr Harry Powell of Oban, Scotland, was elected President for 1971, Dr Frank Round of Bristol and Prof H.A. Von Stosch of Marburg, Germany were elected Vice-Presidents. Dr A.D. Boney, Mr. W.D. Richardson and Prof W. Stewart were elected new ordinary members of the Council.

On the 7th January, over 90 members and guests attended a most enjoyable dinner held at the College; The menu was especially chosen by the local secretary Les Turnbull. This dinner, like all of the other arrangements, was excellently organised, for which we thank the local secretary Mr. Turnbull most sincerely.

To sum up, the only criticism was that too little time had been left for discussions. This can be overcome only by holding a longer meeting, or by the presentation of fewer papers! In fact, the 'proverbial shoehorn' was necessary to fit everything into the two days of this meeting.

EXPEDITION TO THE STEINSTRUPE AREA OF EAST GREENLAND 1971.

The expedition will sail at the beginning of July in the M.V. ICE KING from England to Anngmagssalik, the principal settlement on the East Coast of Greenland, and then will proceed northwards up the coast.

The principal objective is to climb Ingolfsfjeld, an unclimbed peak of 2232m. near the head of Kangerdlugssuatsiaq a deep fiord approximately sixty miles north of Anngmagssalik. The party will then sail a further twenty miles to the North East to a hitherto unvisited region to the north of the lower portion of the K.I.C. Steenstrups Nordre Brae glacier, in between latitudes 66° 30' and 66° 45' N. with a view to primary exploration of routes inland and further mountaineering.

A small botanical and meteorological programme is planned. Two members of the expedition who are experienced divers are investigating the possibility of conducting underwater research into marine life and if this seems practical a biologist would join the expedition. It is believed this will be the first time such work has been undertaken in this region.

EXPEDITION TO THE STEINSTRUP AREA OF EAST GREENLAND 1971 Contd.

The expedition is a follow-up to the University of London Graduate Mountaineering Clubs' Expeditions of 1968 and 1969 the former being a reconnaissance of the north side of Ingolfssjæld and the latter an inland circuit including a descent of the upper sections of the Steenstrups Nordre Brae Glacier from the Kristians Glacier.

It is expected to take approximately two weeks to sail to Greenland via the Faroes and Iceland in the M.V. Ice King a 57' converted Scottish Motor Fishing vessel. If the pack-ice off the Greenland coast is extensive some difficulty in reaching the coast may be experienced and this may necessitate an alteration in the programme. It is being arranged that any members who have not the time to undertake the sea voyage will be picked up at Kulusuk, the local airstrip, and will join the expedition for the time to be spent in the area (4 weeks). The return to the United Kingdom will be by a similar route.

Members interested in taking part in this expedition should contact :- Dr D.E.G. Irvine, Department of Biology & Geology, Northern Polytechnic, Holloway Road, London. N.7.

DISTRIBUTION RECORDS (1753-1970) for BRITISH MARINE ALGAL FLORA VOLUME I (Rhodophyta).

The Natural Environment Research Council has awarded a grant to the British Phycological Society towards the cost of the above investigation. The work will be carried out in the Botany Department at the British Museum (Natural History), under the direction of Mrs. L.M. Irvine during a one-year period starting on or about 1st July, 1971. The appointment will be considered by the Museum to be equivalent to that of a temporary Assistant Experimental Officer. For further details please contact Mrs. Irvine.

OBITUARY NOTICE

MRS C. I. Meikle M.A. (née Dickinson)

d. 27.3.1970

Mrs Meikle, better known as Miss C.I. Dickinson and editor of the well-known text book "British Seaweeds", worked for many years at the Royal Botanic Gardens, Kew. Miss Dickinson's collections of marine algae (mainly from the U.K.) were incorporated into the Kew collection, now housed at the B.M.N.H.