

UNIVERSITY HALL,

BRITISH BOTANICAL SOCIETY

June 28th, 1951.

PHYCOLOGICAL SOCIETY

Dear Miss Newton,

The informal meeting of botanists interested in marine algae, which was arranged to be held at the University of Bangor, has now been arranged for the week ending September 1st, 1951. Permission to use the Botanical Laboratories has kindly been given by Professor Richards, and accommodation will be available in University Hall at £4.10.0 for the week; you are requested to bring ration book and towels.

Transport. Arrangements will be made for hiring a private bus, but if anyone attending proposes to bring a car and does not want to use the bus, please inform us. Expenses will depend on numbers, but will be kept as low as possible.

Demonstrations will be shown in the botanical laboratory. Will you please let us know if you can contribute an exhibit and about how much space and how many microscopes you will need.

1952 - 1977

Programme. In general it is proposed to use the laboratory in the mornings for demonstrations, discussions and examination of materials, and to go out collecting in the afternoons. The provisional programme is as follows:-

- September 13th: Meeting at 8. p.m.
- 14th: Laboratory and Dredging.
- 15th: Treaddur Bay.
- 16th: Rhosneigr.
- 17th: Puffin Island.
- 18th: Rhoscolyn and Borth Saint.
- 19th: Menai Straits.

You will find a statement enclosed setting out some of the reasons for calling this meeting, and the projects which might be worked on should regular meetings be considered desirable. It is proposed to hold a preliminary meeting to discuss this and related matters at 8 p.m. on September 13th., and to follow this later in the week by another meeting at which it is hoped to reach some concrete decisions about future policy and plans. Any further suggestions about this aspect of the meeting would be welcome, and if possible these should be sent in before the meeting to facilitate the drawing up of an agenda.

It is hoped that you will be able to come, and a sheet is enclosed for your reply. This should be returned to Dr. Martin, University Hall, Bangor, not later than September 1st, though an earlier reply would be appreciated.

Yours sincerely,

(Signed) K. M. BAKER.

M. T. MARTIN.

While there is a growing interest in marine algae, there are at present few algologists who are in a position to interest undergraduates and train graduates. We have felt for some time that regular meetings of algologists should help to remedy this state of affairs and to further scientific research and interest in the marine algae. Conversations with other algologists in Sweden last summer showed that this feeling was shared by a number of others, both British and foreign, and that such meetings might well be useful in encouraging and stimulating younger workers.

It is suggested that at the proposed meeting at Bangor next September the following points should form a basis for discussion:-

1. That a group of algologists interested in the marine algae should meet at regular intervals.
2. That the main object of such meetings should be the encouragement of critical and experimental work on marine algae.
3. That, with such objects in view, the meetings should include reports of original work in progress, reviews, discussions, and demonstrations as well as field work.
4. That, as all marine research is based on a sound knowledge of the local flora, it is desirable that the group should undertake as soon as possible the preparation of
 - (a) a check list of British marine algae (N.B. some groups in title only);
 - (b) a list of the classical herbaria and particularly the whereabouts of type specimens;
 - (c) a list of collections of material available for supply to research workers.
5. That consideration be given to the preparation of a marine flora and the accumulation of information on form, fruiting periods, zonation, longevity, distribution etc. of the commoner littoral algae.

Some of these activities, if undertaken, will involve the active and continuing co-operation of workers in different parts of the country. In this connection, it is hoped that some algologists will make themselves responsible for the identification of algae belonging to certain groups of genera.

(Signed) K. M. BAKER,
E. M. BURROWS,
S. M. LODGE,
M. T. MARTIN,
M. PARKE,

NEWSLETTER NUMBER TEN

TWENTY-FIVE YEARS ON.

The first organised meeting of an informal group of British phycologists was held at Bangor in September 1951. But this, of course, was preceded by quite a bit of discussion and correspondence among the marine phycologists concerned, and Dr Elsie Burrows recalls that this included some discussion in a cafe in Stockholm during the first post-war meeting of the International Botanical Congress (1950). It was felt that British phycologists should meet together once a year, not only to get to know each other, but to get to grips with some of the taxonomic and nomenclatural problems that had only been too obvious in international discussions on algae at the Congress.

This led to the first meeting of British phycologists at Bangor 13th - 20th September 1951, (a period with good spring tides of course!), called, organised and carried through by Dr Kathleen Drew Baker and Dr Margaret Martin (see Report in Phyc. Bull., 1: 1-2). The meeting was attended by 28 people and we all found it most stimulating. A committee of 9 was established and a very ambitious programme of projects (initially suggested by Dr Sheila Lodge) was adopted. Dr Baker was Chairman (and became the first President of the Society in January 1953) and I agreed to be Secretary (continuing in this office up to January 1951!).

More and more people became interested in the activities of the informal group and we arranged our second meeting in London at the British Museum (Natural History), 3rd January 1952 (see Phyc. Bull., 1: 2-4), still mainly preoccupied with problems of algal taxonomy and nomenclature. At the business meeting of the group I suggested that we consider establishing a formal Society soon, with defined aims, Constitution, etc., and it was agreed that Mr F.T. Walker and I would look into the procedure involved in establishing a Society.

This we did, and drew up a Constitution for a British Phycological Society which was approved and adopted at what proved to be the Inaugural Meeting of the Society held in Edinburgh University on 12th July 1952. This Edinburgh meeting of the group (9th - 13th July) immediately preceded the

CONTENTS

Original invitation to Bangor Meeting 1951.	....1-2
Twenty-five years on	....3-4
A review	....5-7
Field meeting in Galloway, summer 1976	....8
The work of the checklist and flora committee	....9-10
Seaweeds of the British Isles	....11-13
An atlas of the seaweeds of Kent	....14
Membership statistics	....15-17
Flight of small learned societies	....17-18
Algae Zeelandicae	....19
Culture collection of algae	....19
Meetings & Symposia	....20
Officers of the Society and Members of Council 1952-1976	....22-24

DECEMBER 1976

First International Seaweed Symposium arranged by the Institute of Seaweed Research (14th - 17th July 1952). There is an account of this Edinburgh Meeting in Phyc. Bull., 2: 2 - 7.

Then the first postal ballot for officers and members of the new Society was carried out in time for the First Annual General Meeting of the Society held in Queen Mary College, London, on 2nd January 1953. A full account of this meeting is given in Phyc. Bull., 2: 8 - 11. The meeting adopted a clear resolution that all of the projects already begun by the informal group would be continued by the Society, including the following main objectives:

1. the holding of scientific meetings and field meetings.
2. the preparation of a revised check-list of British marine algae, and the accumulation of information for an eventual comprehensive new flora of the British marine algae.
3. the preparation and distribution to members of a period News Bulletin.

In retrospect it would seem that in the early 1950's the time was ripe for starting the Society and it has been very gratifying to the founder members that it has prospered so well. If I may comment a little on the original main objectives:

1. The interests of the Society members now embrace all aspects of the study of algae and our annual January scientific meeting now occupies 2 - 3 days. The Society meetings have retained the distinctively friendly atmosphere of the early days and usually 5 or more overseas phycologists attend. The encouragement of young members, at both scientific and field meetings has always been a feature of the Society.

2. Dr Mary Parke's invaluable first Check-list of British Marine Algae has been updated at frequent intervals and 1976 has seen the publication of the Third Revision by Mary Parke and Peter Dixon. I am sure that all members would like to congratulate them most warmly on this splendid effort. It will surely be the most referred to, and therefore, the most useful, single phycological publication of this decade. The new Flora of British Marine Algae has required vastly more work to produce than we ever imagined in the early days, but Vol I Rhodophyta, Part 1 (by Peter Dixon and Linda Irvine) is now in press - a most encouraging beginning.

3. The original Phycological Bulletin grew in size and status to become first the British Phycological Bulletin and later the British Phycological Journal - now appearing as 4 issues per year and recognised internationally as a first class scientific journal. This is the most important achievement of the Society and for it we thank principally the successive editors - Sheila Lodge, Elsie Conway, Mary Parke, Gordon Leedale and Gerald Boalch.

In 1971 the Society began producing also a Newsletter to communicate general news of interest to members of the Society, and this now carries the sort of information that was the main content of the Phycological Bulletin in the early days.

I would like to wish the Society all success in the next 25 years. This is assured if all members of the Society continue to support its activities as well as they have done in the past.

FROM SMALL BEGINNINGS

In the year when we celebrate the 'Silver Jubilee' meeting of our Society it is important that we should remember how it began. Collective gatherings of phycologists prior to 1939 were probably on a small scale, linked with meetings of the British Association or at International Congresses. The group employment of phycologists in projects of national importance in the war years may well have paved the way for the later collaborations which enabled the Society to be created. Following an initial proposal made jointly by the late Dr K.M. Drew-Baker and Dr M.T. Martin, a meeting which brought together 28 'interested people' was held at the University College of North Wales, Bangor in September 1951. Field excursions were made to various shores in the Menai Straits and other localities in Anglesey. General agreement was reached that this informal group would '... continue to hold meetings for an experimental period.' An unofficial 'steering committee' of 9 members was formed:-

Dr K.M. Drew-Baker
Dr H. Blackler
Dr E.M. Burrows
Dr E. Conway
Dr S.M. Lodge

Dr M.T. Martin
Dr M.W. Parke
Mr F.T. Walker

Acting Hon Secretary Mr H.T. Powell

Proposals for future events included a Field Meeting to be held in July 1952 and a short meeting in January 1952 under the title 'Algal Taxonomy and Nomenclature'. An Annual News Bulletin was to be produced, and a Check-list of the British Marine Algae. This Check-list was to be the basis of the preparation of a comprehensive new British marine algal flora - a long-term project which would involve a number of phycologists prepared to critically revise certain groups. Standard record cards would be made available for more detailed information on species. The meeting in January 1952 was held at the British Museum, with papers devoted to taxonomic rules as applicable to the algae. It was at the Business Meeting which followed that the possibility of establishing a British Phycological Society was given more serious attention - this viewpoint being clearly encouraged by the increasing number of phycologists becoming interested in the activities of this still informal group. A lecture tour by Professor Toré Levring in March 1972 brought together the Steering Committee at the University of Liverpool, and further detailed consideration was given to the formation of the Society. In January 1952 at the British Museum it had been decided to fix a Summer Meeting to immediately precede the First International Seaweed Symposium, due to be held at Edinburgh in July 1972.

The inaugural meeting of the Society thus took place at Edinburgh, 10-12 July, 1952. Twelve scientific papers were read over the three days, and field excursions to North Berwick and St Andrew's were also included in the programme. The complete programme of scientific papers is set out in Phycological Bulletin (1) No.2, p. 1-2 (1954), and the topics covered included Cytology of the Algae, Culture of the Algae and Modern Techniques - the latter including a paper on 'Electron microscopy as applied to algae' by Professor I. Manton. The Constitution and Rules were adopted at this first Inaugural Meeting. The 'Steering Committee' continued in office until the First Annual Meeting, held at Queen Mary College, London, 2 January, 1953. The formal election of Executive Officers and Council was made at this, the first AGM:-

President:	Dr K.M. Drew-Baker
Vice-Presidents:	Dr M. Knight, Professor L. Newton
Hon. Treasurer:	Dr M. T. Martin
Hon. Secretary:	Mr H.T. Powell
Council:	Dr H. Blackler
	Dr E. Conway
	Dr M.F.E. Nicolai
	Dr M.B.E. Godward
	Dr S.M. Lodge
	Dr J.W.G. Lund

With these elections the informal 'Steering Committee' lapsed. A resolution from this retiring Committee put clearly before the members the principal themes on which the informal group had visualized the proper functions of a Phycological Society, viz:-

- a) the holding of scientific meetings
- b) the holding of field meetings
- c) the preparation of a revised Check-list of the British marine algae, and the accumulation of information for an eventual 'comprehensive new British marine algal flora'.
- d) the preparation and distribution of a periodic News Bulletin.

The fact that we are celebrating the 25th Annual Winter Meeting at Royal Holloway College in January 1977 is sufficient indication of the continuing fulfillment of point a) mentioned above. All winter meetings so far have been held in college of the University of London, so that certain of our members from London University have been called on to serve as local secretaries over the years. The scope of the meetings has changed - from the one day meetings of the early years to those of two-and-a-half days which are now usual. With this increase in meeting length has come greater numbers of papers covering a wider range of topics, although over the years regular sessions seem to be devoted to papers on Algal Ultrastructure, Marine and Freshwater Algae and Physiology and Biochemistry of Algae. Except on the occasions of this 'Silver Jubilee' meeting, when all papers have been invited, the apparent 'free-for-all' arrangement of paper offerings of other years always seems to give a reasonable balance between the main aspects of research interest. Field Meetings have also been held at regular intervals. The record is as follows:-

1953	Plymouth (Marine Biological Laboratory)
1954	Aberystwyth (Joint Meetings with British Ecological Society)
1955	Ferry House, Ambleside
1956	Dale Fort, Pembrokeshire
1957	Flatford Mill, Essex
1958	Galway (3rd International Seaweed Symposium)
1959	Northumberland

- 1960 Guernsey (with Societe Phycologique de France)
- 1961 Norfolk (cancelled)
- 1962 Lerwick, Shetland
- 1963 Ferry House, Ambleside
- 1964 Bangor, St. Andrews, Plymouth (International Botanical Congress, Edinburgh)
- 1965 Normandy (with Societe Phycologique de France)
- 1966 University of Leeds - E.M. Techniques
- 1967 Isles of Scilly
- 1969 Wexford, Eire
- 1970 Kindrogan, Perthshire
- 1971 Stornoway
- 1972 Dunbar
- 1973 Orkney
- 1974 Port Erin, Bangor (also tours of Scotland (Oban) and England (Plymouth) (8th International Seaweed Symposium
- 1975 Aberdeen
- 1976 Galloway

In only one case has cancellation due to lack of interest been necessary (1961). Whilst numbers have varied over the years, the success of such a meeting is assured with a sufficiency of enthusiasm of those taking part.

A preliminary check-list of the British marine algae was published in the journal of the Marine Biological Association in 1953 by Dr M. Parke, with corrections and additions published in 1956, 1957 and 1959 in the Phycological Bulletin. A revised check-list (Dr Parke and Professor Dixon) was published in 1964, followed by a second revision in 1968, and a third revision in 1976.

The proposed News Bulletin became in effect the Phycological Bulletin, published at irregular intervals in the early years, and becoming a more regular publication in terms of its research paper content with the commencement of Vol. 2 in 1960, with 5 numbers issued annually up to 1964. Thence the present format of the journal was established (still as the British Phycological Bulletin) with the commencement of Vol. 3 in 1966. One number per year was issued up to 1969, followed by a change to the British Phycological Journal in 1969 with the first number of Vol. 4. Two numbers of the Journal were issued per year up to 1971, when Academic Press took over the printing and distributing. Vol. 7 (1972) was in three parts, and from Vol. 8 onwards (1973) in four parts per year. The growth from a cyclostyled Phycological Bulletin of 19 pages in 1954 to the present day Journal of international standing is a lasting tribute to the dedicated services of a succession of Hon. Editors (Dr S.M.Lodge 1954-56; Dr E Conway, 1956-65; Dr M.Parke (jointly with Professor P.S.Dixon, 1966), and with Dr G.F. Leedale, 1967-68; Dr G.F.Leedale, 1959-1975, and Dr G.T. Boalch 1976-). Finally, in terms of the four proposals outlined above, the first part of the British Marine Flora (Vol.1, Pt.1, Rhodophyta) is close to publication. Thus, in all ways, continuing progress can be measured on the development of the main 'themes' first proposed as the reasons for establishing the Society.

SUMMER FIELD MEETING - JULY 3 - 10 1976

Last summer's field meeting was centred on the town of Stranraer in the Dumfries and Galloway region of western Scotland. The timing of the meeting differed from other years in that it was held during the first week of July. Despite comment that this period was inconvenient for some members, a dozen or so people met together on the Saturday evening at the Castle Hotel, Stranraer, in order to plan the week's activities. All the marine excursions (bar one to Garliestown) were to localities on the Mull of Galloway. Colleagues dealing with diatoms and dinoflagellates went further afield however.

The Mull of Galloway provided the benthic marine phycologists with a range of habitats from sheltered situations on the eastern side to more exposed on the west. Collections were made mainly from the littoral and shallow infralittoral zones. Although several people snorkelled for material, the deeper infralittoral was not collected and no doubt a number of species were therefore missed. Almost all the species noted by Dr Burrows (Br. phycol. Bull. 2: 23-25) in 1961 were found and a considerable number of others added to the list. A number of interesting finds in Loch Ryan which, at first glance appeared to be a dull area lacking a continuous rocky shore, included Spyridia filamentosa, Chondria dasyphylla and Acinetospora. Interestingly, S. filamentosa was recorded for Loch Ryan over 100 years ago.

Perhaps the most unusual site visited was a tidal fish pool near Port Logan. Originally used for the storage of fish caught in the area, it is now a popular tourist attraction with almost tame cod feeding from the hand of the Keeper. Prolific growths of seaweed in the pool provided us with twenty species records including our first record of Asperococcus turneri.

Excellent laboratory facilities were made available at the Stranraer Academy and we wish to thank the local authorities for assisting us in this respect.

Some of the party took a little time off marine botany in order to indulge in some terrestrial botanising in the beautiful Logan Botanic Gardens. The vast array of tropical plants which grow in the open served to emphasise the pleasant climate of the Mull of Galloway. Indeed most members could, this year, show off first class sun tans as a bonus to our field activities.

An apology.

To Dr E G Menez, Smithsonian Institution, Washington, who was incorrectly listed in the deaths footnote in Newsletter number 9.

Dr Menez is alive and well !

THE WORK OF THE CHECK LIST AND FLORA COMMITTEE, 1951 - 1976

At this point in the history of the British Phycological Society, it seems appropriate to give a brief historical account of the work of the Check-List and Flora Committee over the past twenty-five years.

As the result of a proposal initiated by Dr. K.M. Drew-Baker and Dr. M.T. Martin, an informal meeting of about 16 phycologists was held at the University College of North Wales, Bangor in September 1951. During the discussions which took place then, the inadequacy of our knowledge of British Marine Algae was particularly obvious and several projects were initiated with the object of providing further information and filling some of the gaps. It was agreed that this group would continue to meet informally and that the first object would be to prepare a 'Check-List of British Marine Algae' as soon as possible. Dr. M. Parke offered to produce a provisional list based on the manuscript then in preparation for the 'Flora of Devon'. Preparation of a comprehensive 'British Marine Algal Flora' was accepted as a long-term project, responsibility for the main algal divisions being allocated to a number of interested members.

The second meeting of the informal group was held at the British Museum (Natural History) in January 1952, by which time it had become clear that the number of people interested in its activities was increasing rapidly. During the 1st International Seaweed Symposium in Edinburgh, it was decided to found the British Phycological Society, which held its first meeting there on 12th July, 1952.

At the first Annual General Meeting of the British Phycological Society, held at Queen Mary College in January 1953, it was agreed that the activities of the informal group would be continued by the Society. Specifically listed were 'the preparation of a revised Check-list of the marine algae of the British Isles and the accumulation of information for an eventual comprehensive new British Marine Algal Flora'. It was recommended that this project be entrusted to a committee, the membership, as initially established, being as follows: Dr M. Parke (Chairman), Dr E.M. Burrows (Secretary), Dr K.M. Drew-Baker, Dr H. Blackler, Dr S.M. Lodge, Dr M.T. Martin and Mr H.T. Powell.

At a meeting held at Plymouth in September 1953 in connection with the Summer Field Meeting Dr Burrows reported that in addition to a Check-list and a Flora, the Committee was also considering publication of a series of genus and species descriptions based on original work, which would constitute a Biological Flora of British Marine Algae. At the same time, membership of the Committee was expanded so that the Divisions of micro-algae would also be covered.

Dr Parke's 'Preliminary Check-list of British Marine Algae' was published in September 1953, in the Journal of the Marine Biological Association (32: 497-520). The first list of 'Corrections and Additions to the Preliminary Check-list' was published in May, 1956, in the Phycological Bulletin (1(4): 26-31) with a second list of 'Corrections and Additions' in the following year (1(5): 36-37), and a third list of 'Corrections and Additions' in 1959 (2(7): 74-78). A revised Check-list was published in 1964, once again in the Journal of the Marine Biological Association (44:499-542), with a Second Revision in 1968 (48: 783-832) and a Third Revision in the present year (56: 527-593).

Schedules for the description of genera and species for the 'Biological Flora of British Marine Algae' were published initially in the Phycological Bulletin, for 1954 (1(2): 24). On the basis of experience gained in the use of these, revised schedules were published

The Work of the Check-list and Flora Committee 1951-1976 contd.

in 1959 (British Phycological Bulletin, 1(7): 78-81). The first two parts of the 'Biological Flora' were published in 1960 in the Journal of the Marine Biological Association (39: 331-374, 375-390) under the title 'Studies on Marine Algae of the British Isles'. Subsequently, eight further parts have appeared in the British Phycological Bulletin and Journal.

Schedules for the description of genera and species for the 'Marine Flora of the British Isles' appeared in the Phycological Bulletin for 1957 (1(5): 32-33), together with sample treatments of two general and species (1(5): 33-35). The first part of the first volume to be completed (Rhodophyta) was sent to press in 1976 and should appear early in 1977.

Membership of the Committee has changed over the years. This brief survey provides only the briefest description of its work and activities and gives no account of the time and effort expended by its members in furthering knowledge of the marine algae of the British Isles.

PETER S. DIXON.

MEMBERS SERVING ON THE MARINE ALGAL FLORA AND CHECK-LIST COMMITTEE

Dr M.W.Parke	1953 - 1972	Prof M.Godward	1961 - 1967
Dr E.M.Burrows	1953	Mr N.I.Hendey	1954 - 1967
Miss D.Ballantine	1953 - 1957	Hepper	1959 - 1966
Dr H.Blackler	1953 - 1967	Mrs L.M.Irvine	1966 -
Dr R.W.Butcher	1954 - 1967	Dr S.M.Lodge	1953 - 1954
Prof P.S.Dixon	1955	Dr M.T.Martin	1953 - 1967
Dr J.D.Dodge	1967	Dr M.Naylor	1955 - 1962
Mr M.R.Droop	1954 - 1957	Dr T.A.Norton	1976 -
Dr R.L.Fletcher	1972 -	Mr H.T.Powell	1953 -
Dr J.C.Green	1973 -	Mr R.Ross	1968 -
Dr G.Russell		1961 -	

Seaweeds of the British Isles - 264 pp, 90 figs. Publishing Jan 1977
Approximately £10.00

The result of many years research carried out by the British Museum (Natural History) and the British Phycological Society, this is the first of a series of books which will be published under this title covering all the British and the majority of northern Atlantic seaweeds.

Volume 1 Rhodophyta, Part 1 Introduction, Nemaliales, Gigartinales. Parts 2 and 3 of Volume 1 will complete the Rhodophyta. Volumes dealing with the Chlorophyta (green seaweeds) and Phaeophyta (brown seaweeds) are in active preparation.

In the first part a general introduction to the Rhodophyta - dealing with such topics as morphology, reproduction and economic utilization - is followed by treatment of the orders Nemaliales and Gigartinales. Each species is described and illustrated and notes on the ecology and distribution are given. Keys to aid identification are also included.

Seaweeds of the British Isles

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

Volume 1 Rhodophyta

Part 1 Introduction, Nemaliales, Gigartinales

Peter S. Dixon

University of California, Irvine

&

Linda M. Irvine

British Museum (Natural History)

British Museum (Natural History)

London

1977

RHODOPHYLLIDACEAE Engler

RHODOPHYLLIDACEAE Engler (1892), p. 19.

Thallus with a branched (*Calliblepharis*, *Cystoclonium*) or discoid (*Rhodophyllis*) holdfast and erect fronds, fronds terete, compressed or flattened, dichotomously or laterally branched, irregularly lobed; uniaxial but not showing an axial filament, medulla composed of narrow elongate filaments sometimes surrounded by a pseudoparenchymatous region, cortex compact, with large cells inwards and small cells outwards, occasionally of only one or two cell-layers; a daughter cell of supporting cell functioning as auxiliary cell, visible or not visible before fertilization, gonimoblast usually initially developing inwards, either with a large fusion cell on which carposporangium-bearing filaments are borne, or gonimoblast developing secondarily from base of cystocarp with or without sterile cells between gonimoblast and cystocarp wall, enveloping filaments absent, carposporangia in rows, cystocarps immersed in thallus, protruding on one or both sides, pore usually absent, tetrasporangia scattered in outer cortex, zonate.

This family is represented in Britain by three genera, *Calliblepharis*, *Cystoclonium* and *Rhodophyllis*. *Calliblepharis* and *Cystoclonium* have an extensive 2-layered medulla but in *Rhodophyllis* it consists only of a few filaments. *Calliblepharis* differs from the other two genera in lacking a fusion cell in the cystocarp.

CALLIBLEPHARIS Kützinger nom. cons.

CALLIBLEPHARIS Kützinger (1843), p. 403.

Type species: *C. ciliata* (Hudson) Kützinger (1843), p. 404.

Ciliaria Stackhouse (1809), p. 54, 70.

Thallus with a branched holdfast and erect fronds, fronds flattened, dichotomous or pinnately branched, beset with simple or branched narrow proliferations on margins and also sometimes on blade surface; structure uniaxial, with a 2 or 3 sided apical cell, axial filament not visible, medulla with a few filaments, surrounded by a pseudoparenchymatous region consisting of several-layers of large cells, cortex compact, small celled, with inner cells larger than outer.

Gametangial plants dioecious; spermatangia superficial; carpogonial branches in cortex, 3 celled, a daughter cell of supporting cell functioning as auxiliary cell; gonimoblast developing inwards from a small-celled tissue, carposporangia in rows, enveloping filaments absent; cystocarps protruding strongly, pericarp formed by cortical thickening, reputedly without a pore; tetrasporangia either scattered over frond or confined to proliferations, zonate.

The two British species of *Calliblepharis* are sometimes difficult to distinguish. Young plants of *C. ciliata* are found in spring and they mature the following winter whereas young plants of *C. jubata* are found in autumn and they mature the following summer, with old plants persisting in the drift in both cases. Plants of *C. ciliata* can be distinguished from young plants of *C. jubata* in which the proliferations are still short since the latter plants have narrow lanceolate blades. It has been suggested (Newton, 1931) that the tetrasporangia are restricted to the proliferations in *C. jubata*. Tetrasporangia are rare in the British Isles but in the few cases examined they usually occurred on the blade also and a similar situation has been observed by Ardre (1969) in Portugal.

KEY TO SPECIES

- 1 Proliferations rarely more than 5 mm long, frond normally more than 10 mm broad; mature in winter, commonly fertile; plants mainly sublittoral . . . *C. ciliata*
 Proliferations up to 30 mm long, frond normally less than 7 mm broad; mature in summ, rarely fertile; plants mainly in lower littoral . . . *C. jubata*

Calliblepharis ciliata (Hudson) Kützting (1843), p. 404.

Lectotype: BM. An unlocalized, undated Hudson specimen accepted provisionally as of lectotype status, England.

Fucus ciliatus Hudson (1762), p. 472.

Thallus consisting of a branched holdfast giving rise to an erect frond with a terete stipe about 0.5–1 mm in diameter and 5–10 mm long which gradually expands into a simple, dichotomous or irregularly divided blade up to 7 mm broad 300 mm long and 350–650 μ m thick, with concave or ovate lobes, apices acuminate, margins plane, fringed

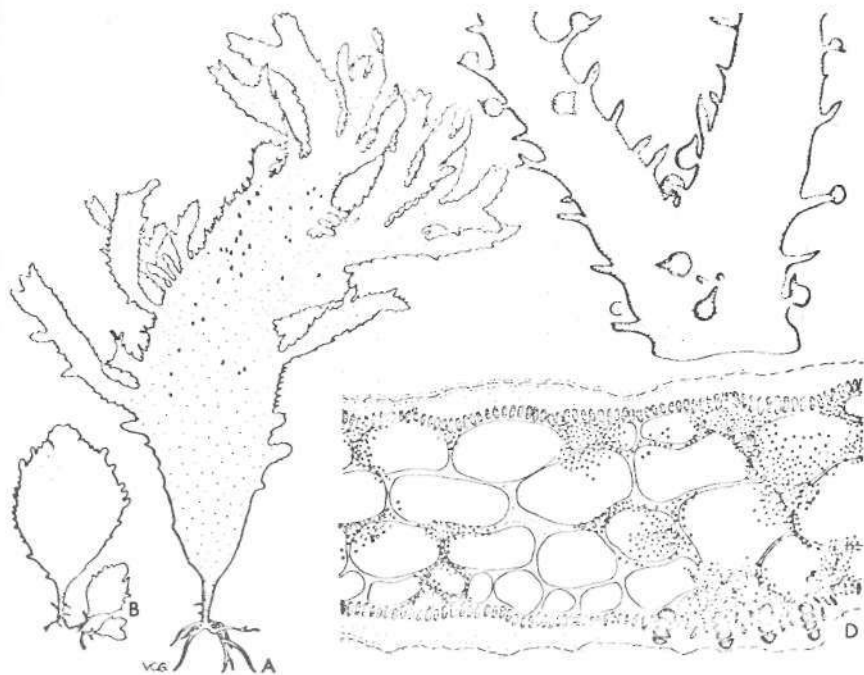
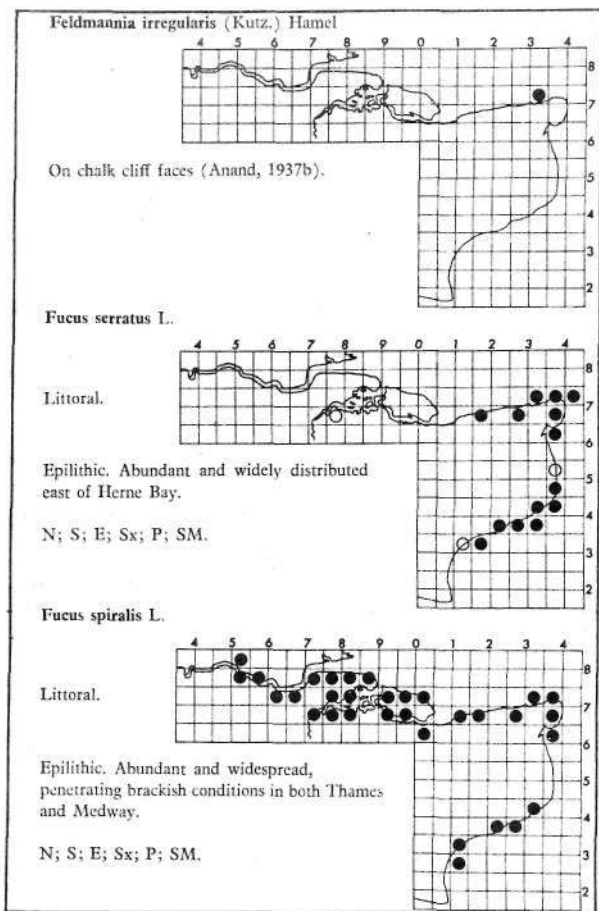


Fig. 68 *Calliblepharis ciliata*
 A. Habit of mature plant (Aug.) $\times \frac{3}{4}$; B. Habit of young plant (Apr.) $\times \frac{3}{4}$; C. Part of blade with cystocarps (Oct.) $\times 4$; D. T.S. blade with tetrasporangia (Jan.) $\times 80$.

An atlas of the seaweeds of Kent



An 80 page booklet mapping some 200 species of seaweed is currently being produced as a special volume of the Transactions of the Kent Field Club. Each species entry cites habitat and other ecological data as well as details of distribution in adjacent English counties (Norfolk; Suffolk; Essex and Sussex) and northern France (Pas de Calais; Seine Maritime).

Copies of the atlas are available price £2.00 from:

Mr. F.H. Brightman
 Hon. Editor Kent Field Club
 c/o British Museum (Natural History)
 Cromwell Road
 London SW7 5BD

MEMBERSHIP STATISTICS FOR THE SOCIETY

1952 - 1976

The membership of the British Psychological Society has increased during the twentyfive years of its existence, reaching a maximum in 1974. The size of membership for the past twentyfive years is illustrated in Newsletter number 8 page 17 and below.

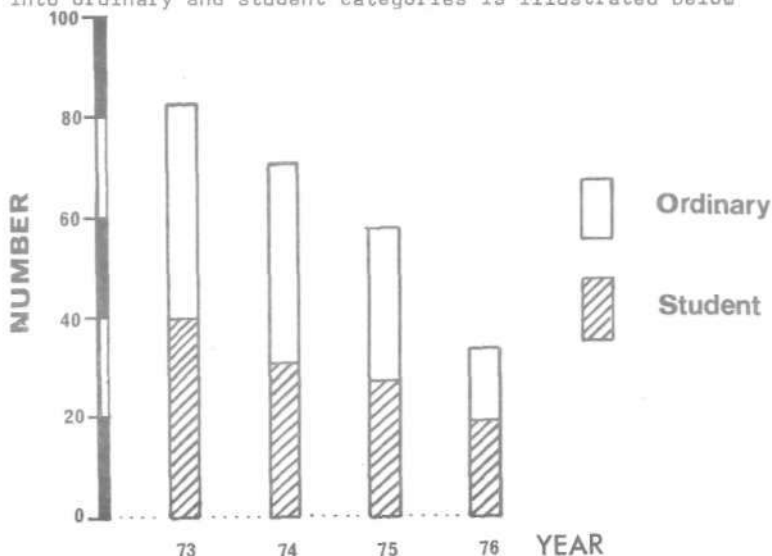
CURRENT MEMBERSHIP - OCTOBER 1976

Details of membership over the past four years are given below. Numbers of members include only fully paid of subscribers (i.e. those receiving the British Psychological Journal) both ordinary and student members.

	1976*	1975	1974	1973
Ordinary members	497	465	589	561
New members	35	57	70	82

(* Data for 1976 is for the 10 months period January to October not twelve months).

Large numbers of new members joined the society in the early 1970's. Although applications are less at present, they are still received at a steady rate. A breakdown of the new members joining the society into ordinary and student categories is illustrated below.



It is interesting to note that more or less equal proportions of full and student members have joined the society during the past four years.

The membership of the British Psychological Society is international and drawn from a total of 47 countries. Details of the countries and numbers of members are given below. NB. This data includes outstanding and part paid subscriptions totalling 166 people in October 1976.

MEMBERSHIP COUNTRIES - OCTOBER 1976

U.K.	239	New Zealand	8	Finland	3
U.S.A.	239	India	7	Puerto Rico	3
Canada	30	Brazil	7	Peru	2
Japan	14	Norway	7	Turkey	2
W. Germany	13	Sweden	7	Thailand	2
Australia	13	Eire	6	Czechoslovakia	2
Denmark	13	S. Africa	6	Hawai	2
Netherlands	11	Italy	4	Iran	2
France	10	Belgium	4	Israel	2
		Kuwait	2	Venezuela	2

The number of fully paid up members in 1976 is approximately 14% lower than in the previous three years. This results mainly from A LARGE NUMBER OF OUTSTANDING OR INCOMPLETE SUBSCRIPTIONS.

Subscriptions in arrears

1976	Part payment (mostly at 1975 rate)	31
1976	No payment	94
1975 & 1976	No payment (to be struck off January 1977)	41
TOTAL OUTSTANDING MEMBERSHIP.		<u>166</u>

This figure of a total of 166 subscriptions outstanding or partly paid represents nearly a third of the total members at present on the books and is worrying. If all these dues were paid the potential membership of the society would be 663 people. Therefore if you know anyone who may not have paid their subscription please remind them.

MISSING PERSONS AND ADDRESSES

In sending reminders for outstanding subscriptions the Membership Secretary has had several letters returned by the Post Office as 'not known at this address' If anyone knows the whereabouts of any of the following members will they please let the Membership Secretary know as soon as possible.

Last known address

HADI, R.A.M.

Botany Department, The University
Glasgow, W2
12 The Knowle, Basildon, Essex
Dept. of Plant Sciences,
The University, Leeds LS2 9JT

HOPKINS, Dr TREVOR
TAYLOR, Miss Gabrielle, E

Hon Membership Secretary:
Dr C M Happey-Wood
School of Plant Biology
University College of North Wales
Bangor
Gwynedd
Wales

SUBSCRIPTIONS

These are due January 31 each year and should be sent to:

Dr. H. Pearson
Hon. Treasurer B.P.S.
Dept. of Botany
University of Liverpool
Liverpool L69 3BX

Members taking the <u>Journal</u>	£7.50
(Reduced to £5.00 for undergraduates and research students)	
Members not taking the <u>Journal</u> or retired members	£2.00

THE PLIGHT OF THE SMALL LEARNED SOCIETIES

In an earlier issue of the Newsletter (1) I set out in some detail the reasons for the increased Subscription Rates decided on at the 23rd A G M in January 1975. At that time it was evident that rampant inflation and accompanying increases in publishing costs of the Journal had dealt rather severely with our financial reserves. The satisfactory 'on course' situation of a few years previously, when the generally satisfactory state of an increasing membership and a fairly healthy financial climate gave us a feeling of confidence, rapidly changed. I said at the time that other Societies of similar size were experiencing similar difficulties. These matters came to a head when, at the end of 1975, I replied on behalf of the Society to a questionnaire sent out by the Joint Committee on Learned Societies of the Royal Society and the British Academy. A total of 315 Societies were asked to supply the information required. Of these, 228 (72%) replied. The relatively large number of Societies replying rather highlights the common plight. The report (2) now published gives in some detail the analysis of the replies received.

The membership of the 228 Societies was markedly variable - from the 57 with less than 500 members to the 21 societies each with over 10,000 members. Our own membership placed us in the largest 'membership number category' (500-2000 members), a group which constituted about 43% of the overall number involved. Whilst the total number of members of the 228 Societies was 941,637, some 65% of these were in the 21 large Societies mentioned above. Both the large and small organizations shared the common problem of too few monies chasing too many outlets, but the scales and scope were obviously different. The large Societies employ staff, run libraries, etc. Few small Societies can run to these expensive attributes and so call for voluntary workers to keep the essential functions going. In general over the four years preceding the date of enquiry, the striking fact emerged that the growth of membership had been more marked than a decline. But some 60% of the Societies were due to increase subscriptions in 1976 and 1977. The common concern was the extent to which further increases in subscriptions would be self-defeating, with the cumulative effect of a steady decline in membership. This is the unknown factor, and one which Council will have to watch closely over the next few years. The annual recruitment of post-graduate students has always been a welcome addition to our Society. The general cut-back in the funding of the Research Councils may well depress our potential 'market' of new members - we may already be seeing the early signs of this. Many postgraduates nowadays move away from psychology on completion of their training - another loss which we can ill afford, but forced on us (and the students concerned) by unpleasant facts of employment potential.

The Plight of the Small Learned Societies contd.

The two main functions concerned with dissemination of knowledge are the meetings and publications. A surprisingly large number of the Societies questioned held no meetings at all, other than 'business meetings' of Councils and Annual General Meetings for members. Some 40% of the Societies used Universities and Colleges. Most Societies viewed with alarm the inevitable rises in accommodation and associated costs of meetings. As far as possible, most small Societies try to make the meetings financially self-supporting. But how far can increasing costs be met by members? With the added implications of cut-backs in University and College finances in which 'Learned Society Expenses Funds' may be especially vulnerable.

By far the major cause for concern was the escalating costs of publishing. Where Societies seek to cover the costs of publishing Journals by the members' subscriptions, the added support of the Publishers of Library subscriptions is essential. The overall story of the steep rise in production and distribution costs, all too frequently stated at our own AGM's, needs little reiteration here. The major worry to all concerned is the possible fall in sales to academic libraries - a further manifestation of the financial stringencies now felt by all Universities and Colleges. A cut-back in sales to academic libraries could throw further burdens on the members. Would the number of publications have to be reduced to prevent the financial 'loading' on members being excessively high? Similar problems of a 'self-defeating nature' inevitably arise.

How are these problems to be resolved? The Joint Committee Report sets out a number of 'Possible Courses of Action'. On Publications, i) and advice and guidance organization; ii) creation of a 'Learned Societies Printing Press', or encouragement from the U.G.C. to establish one of the University Presses in this role; iii) a 'Storage and Distribution Centre', with an advisory service on alternative distribution methods to those by post. On Accommodation, the possibility of shared office space and staff, and of a 'Conference Centre' in London, are discussed. Finally, Grant Aid. Inevitably, the possibility of an approach to H.M. Government for financial aid to help maintain activities is mentioned. How such aid would be funded, and the distribution channels, will clearly be difficult to decide. In the present financial situation it would seem unlikely that much help will be forthcoming, but it is a significant step forward that the means of obtaining grant-aid are being explored by the two Societies sponsoring the questionnaire.

It is still little consolation to know that we are not alone in our troubles. But we must gratefully acknowledge the great service given by the Royal Society and the British Academy in gathering the information and setting out so clearly and authoritatively the situation as it stands, and for indicating possible remedial measures. Whether Societies agree or disagree with the proposals is a matter for them to decide. Any Society decisions must be those of the members. I would ask as many members as possible to read the Joint Committee Report. The guidance of a well-informed membership will make Council decisions much easier at a time when (to quote from the Report) ".... the situation is serious and the outlook grim".

A.D. BONEY

- (1) British Phycological Society Newsletter No. 8, pp. 3-4, 1975
- (2) The Royal Society and British Academy Report of Joint Committee on 'A survey of Learned Societies'. 80pp., 1976

ALGAE ZEELANDIAE

a new exsiccata of benthic marine algae

A collection of benthic marine algae from the S.W. part of The Netherlands has been made by the phycologists and other staff-members of the Rijksherbarium, Leiden, with help of the Delta Institute for Hydrobiological Research, Yerseke. The first series of this exsiccata will contain 25 numbered specimens of benthic marine algae of the province Zeeland and some additional specimens. On the labels are mentioned: title, family, algal class, name, authority, collector, number, date, identifier, locality, annotations. The material for a second series, also containing 25 numbers, is already collected and a third series is in preparation.

This exsiccata is of particular interest because of the already far advanced realization of the 'Delta-plan', a huge technical operation to close most of the sea-gaps in the south western part of The Netherlands.

Algae Zeelandiae are offered for exchange to all institutions and phycologists interested. Sixty lots were compiled of almost all numbers, and our mailing list contains already more than thirty addresses. New addresses will be added to this list in the sequence in which we receive reaction. For information write to W.F. Prud'homme van Reine, Rijksherbarium, Schelpenkade 6, Leiden.

THE CULTURE COLLECTION OF ALGAE

After 23 years at Indiana University the Culture Collection of Algae will be moved during 1976 - 77 to new quarters at the University of Texas at Austin. As a professor in the Department of Botany I will continue to direct the activities of the Collection of Algae with its main financial support coming from the National Science Foundation and through income from the charges for cultures as usual (\$ 4.00 postpaid for academic and non-profit institutions; \$ 10.00 postpaid for commercial organizations).

ORDERS: After September 1st these should be addressed as follows:

Dr. Richard C. Starr
Culture Collection of Algae
Department of Botany
University of Texas
Austin, Texas 78712

BILLING: After September 1st the billing for all orders will originate at the University of Texas. Payment should be made as indicated on the invoices.

CULTURE DESIGNATIONS: After September 1st the Collection will be known as THE CULTURE COLLECTION OF ALGAE AT THE UNIVERSITY OF TEXAS. The strain numbers on cultures being moved from Indiana will be continued at Texas without change. Thus IUCC 625 Anacystis nidulans will be continued as UTEX 625 Anacystis nidulans.

TELEPHONE ENQUIRIES: These should be directed to me in Texas:

Area Code 512, 471 - 4019

All efforts will be made to provide prompt service during this period of transfer.

MODERN APPROACHES TO THE TAXONOMY OF RED
AND BROWN ALGAE

A Symposium on this topic has been arranged, to be held in the Polytechnic of North London on 14-15 April 1977. Papers will be given by invitation and aspects covered include taxonomic applications of culture studies, electron microscopy, physiology, field ecological and regional variation studies and chemotaxonomy, as well as recent work on difficult or neglected algal groups.

Joint Organisers

Dr D E G Irvine
Department of Biology & Geology
The Polytechnic of North London
Holloway Road
London N7 8DB
Great Britain

Mr J H Price
Department of Botany
British Museum (Natural History)
Cromwell Road
London SW7 5BD
Great Britain

Hostel accommodation will be available. To facilitate planning of accommodation requirements potential participants are asked to contact Dr Irvine, from whom further information may be obtained.

SYMPOSIUM ON CORAL REEFS.

The Third International Symposium on Coral Reefs will be held in Miami, Florida, U.S.A. May 23 - 27 1977. There are pre-symposium trips 11 - 23 May, and post-symposium trips 27 May - 1 June to many different reef sites in the western Atlantic. The Symposium is held in co-operation with the Committee on Coral Reefs of the International Association of Biological Oceanographers and is sponsored by The University of Miami, Rosenstiel School of Marine and Atmospheric Science, The Smithsonian Institution and The United States Geological Survey. Correspondence should be directed to: Reef Symposium, University of Miami, Fisher Island, Miami Beach, Fla. 33139.

9th INTERNATIONAL SEAWEED SYMPOSIUM

SANTA BARBARA, CALIFORNIA - 21st/27th AUGUST 1977

Arrangements are now being made in conjunction with the British Phycological Society for group travel for delegates attending the above Symposium. The travel arrangements are being made by Express Boyd Limited 4/5 Bonhill Street, London EC2A 4BX (tel.no: 01.628-6060). Early reservation is strongly recommended in view of the fact that travel will be in the peak season.

REQUEST FOR MATERIAL Dr Hilda Carter and Dr G Jaworski who are currently involved in the culture of fungal parasites on planktonic algae would be pleased to receive live wild material of Asterionella from freshwater lakes overseas. Also colonies with frustule length of over 80µ from any locality.

Freshwater Biological Association
Windermere Laboratory
Ferry House
Far Saurey
Ambleside LA22 0LP
Cumbria

1953

Dr H.Blackler
Dr E.Conway
Dr M.F.E.Nicolai
Dr M.B.E.Godward
Dr S.M.Lodge
Dr J.W.G.Lund

1956

Dr P.S.Dixon
Dr MA.P.Madge
Dr J.K.Spearing
Dr E.M.Burrows
Dr M.R.Droop
Mr E.A.George

1959

Dr A.J.Brook
Dr R.W.Butcher
Dr W.E.Jones
Dr E.M.Burrows
Dr G.E.Fogg
Dr M. Naylor

1962

Dr H. Blackler
Mr L.P.Turnbull
Dr D.E.G.Irvine
Dr J.H.Belcher
Prof F.W.Jane
Dr G.F.Leedale

1965

Dr G.T.Boalch
Dr P.S.Dixon
Dr M.R.Droop
Dr J.D.Dodge
Dr M.Madge
Mr H.T.Powell

1968

Dr A.D. Boney
Dr F.E.Round
Dr W.D.P.Stuart
Dr G.F.Leedale
Dr G.Russell
Mr L. Turnbull
Dr G.T.Boalch
Mrs L.M.Irvine
Dr T.K.Rees

1971

Dr M.R.Droop
Dr C den Hartog
Dr L.Evans
Dr Eaton
Dr J.Hayward
Mr J.H.Price
Dr A.D.Boney
Mr W.D.Richardson
Prof W.D.P.Stuart

1954

Dr G.E.Fogg
Dr M.W.Parke
Mr R.Ross
Dr M.B.E.Godward
Dr S.M.Lodge
Dr J.W.G.Lund

1957

Dr P.S.Dixon
Dr M.A.Madge
Dr J.K.Spearing
Dr K.M. Drew Baker
Miss D Ballantine
Dr F.E.Round

1960

Dr G.T.Boalch
Dr P.S.Dixon
Mr. R.Ross
Dr E.M.Burrows
Dr G.E.Fogg
Dr M.Naylor

1963

Dr H. Blackler
Mr L.P.Turnbull
Dr D.E.G.Irvine
Dr J.H.Evans
Mr E.A.George
Dr W.E.Jones

1966

Dr A.D.Boney
Dr F.E.Round
Dr W.D.Stuart
Dr J.D.Dodge
Dr M.Madge
Mr. H.T.Powell

1969

Dr M.R.Droop
Dr C den Hartog
Dr L.Evans
Dr J.Hayward
Dr G.Russell
Mr.L.Turnbull
Dr G.T.Boalch
Mrs L.M.Irvine
Dr T.K.Rees

1972

Dr J.C.Green
Dr D.J.Hibberd
Dr E.Percival
Dr Eaton
Dr J.Hayward
Mr J.H.Price
Dr J.D.Dodge
Mr W.D.Richardson
Prof W.D.P.Stuart

1955

Dr G.E.Fogg
Dr B.Moss
Mr R.Ross
Dr E.M.Burrows
Dr M.R.Droop
Mr E.A.George

1958

Dr A.J.Brook
Dr R.W.Butcher
Dr W.E.Jones
Dr H. Blackler
Miss D Ballantine
Dr F.E.Round

1961

Dr G.T.Boalch
Dr P.S.Dixon
Dr D.E.G.Irvine
Dr J.H.Belcher
Prof F.W.Jane
Dr G.F.Leedale

1964

Dr G.T.Boalch
Dr P.S.Dixon
Dr M.R.Droop
Dr J.H.Evans
Mr. E.A.George
Dr M.B.E.Godward

1967

Dr A.D.Boney
Dr F.E.Round
Dr W.D.P.Stuart
Dr G.F.Leedale
Dr G.Russell
Mr L.Turnbull

1970

Dr M.R.Droop
Dr C den Hartog
Dr L.Evans
Dr Eaton
Dr J.Hayward
Mr J.H.Price
Dr G.T.Boalch
Mrs L.M.Irvine
Dr T.K.Rees

1973

Dr J.C.Green
Dr D.J.Hibberd
Dr E.C.Percival
Dr D.E.G.Irvine
Dr G.S.Johnston
Dr B.A.Whitton
Dr J.D.Dodge
Dr W.D.Richardson
Dr H.W.Pearson

1974
 Dr J.C.Green
 Dr D.J.Hibberd
 Dr F.C.Round
 Dr D.E.G.Irvine
 Dr C.S.Johnston
 Dr B.A.Whitton
 Dr G.T.Boalch
 Dr W.E.Jones
 Dr T.A.Norton

1975
 Dr K.Benson-Evans
 Dr D.Crawford
 N.Reynolds
 Dr D.E.G.Irvine
 Dr C.S.Johnston
 Dr B.A.Whitton
 Dr G.T.Boalch
 Dr W.E.Jones
 Dr T.A.Norton

1976
 Dr K.Benson-Evans
 Dr D.Crawford
 N.Reynolds
 Dr J.M.Jones
 Mr T.B.Paddock
 Dr I.Tittley
 Dr W.E.Jones
 Dr T.A.Norton

Hon Membership Secretary
 1970 Mr W.D.Richardson
 1971 Mr W.D.Richardson
 1972 Mr W.D.Richardson
 1973 Mr W.D.Richardson
 1974 Mr W.D.Richardson
 1975 Mr W.D.Richardson
 1976 Dr C.M. Happy-Wood

Hon Field Meeting Sec.
 1970 Dr T.A.Norton
 1971 Dr T.A.Norton
 1972 Dr T.A.Norton
 1973 Dr T.A.Norton
 1974 Dr M.Wilkinson
 1975 Dr M.Wilkinson
 1976 Dr M.Wilkinson

Hon Ed. of Newsletter
 1971 Mr. I.Tittley
 1972 Mr. I.Tittley
 1973 Mr. I.Tittley
 1974 Mr. I.Tittley
 1975 Mr. I.Tittley
 1976 Mr. I.Tittley

WINTER MEETINGS

September 1951
 January 1952
 July 1952

Bangor
 London, B.M.N.H.
 Inaugural Meeting
 Edinburgh, The University.

1953 Queen Mary College
 1954 University College
 1955 Bedford College
 1956 Imperial College
 1957 Birkbeck College
 1958 Queen Mary College
 1959 University College
 1960 Bedford College
 1961 Royal Holloway College
 1962 Imperial College
 1963 Westfield College
 1964 Birkbeck College

1965 University College
 1966 Bedford College
 1967 Royal Holloway College
 1968 Queen Elizabeth College
 1969 Westfield College
 1970 Northern Polytechnic
 1971 Bedford College
 1972 Goldsmith's College
 1973 Royal Holloway College
 1974 University College
 1975 Goldsmith's College
 1976 Westfield College

Reminder: Subscriptions are due January 31.

- - - - -

Have you remembered to change your bankers order ???

- - - - -

Changes of address should be notified as soon as possible to the Hon. Membership Secretary.

- - - - -

Summer Field Meeting 1977

The field meeting will be centred on Weymouth, Dorset, on the south coast of England. Fresh, brackish and marine habitats will be visited.

For further details write to the Hon. Field Meetings Secretary

Dr M Wilkinson
Dept of Brewing and Biological Sciences
Heriott-Watt University
Chambers Street
Edinburgh
Scotland

- - - - -

The editor of the Newsletter will be pleased to receive articles, comments, book reviews, details of meetings and symposia for inclusion in future issues

- - - - -

British Phycological Society Newsletter No 10, edited by
Ian Tittley, c/o Botany Dept., British Museum (Natural History)
Cromwell Road, London SW7 5BD.