

EDITORIAL

(Editorial Address: Dr Martin Wilkinson, Dept. of Brewing & Biological Sciences, Heriot-Watt University, Chambers Street, Edinburgh EH1 1HX, Scotland).

The Newsletter is changing! I have been worried for a long time that it is useless to overseas members because of despatch by surface mail - and the particularly slow, extra low price printed paper reduced rate, at that. In fact only 3 overseas members have complained to me in the past 5 years about slow delivery but I would nonetheless like to serve all the membership. Annual publication means that many contributions may be outdated before they reach members, particularly overseas ones, but also UK ones. We now have a new system. There will be 2 issues a year. Preparation, printing and despatch will be speeded up with overseas issues going by air mail. This will mean a large increase in cost so some "cramming" of contents may become necessary to save space and postage. Nonetheless it should be a vast improvement. Can you, the membership, now do your bit by contributing more? Make it a real Newsletter with lots of useful information. Dick Crawford has suggested, for example, that

"A number of overseas workers spend greater or lesser periods of time in the U.K. during the year and would probably be pleased to have invitations to visit labs other than those in which they are working. Phycologists throughout the country would be pleased to know that a particular worker was in, say, London for six months and they might like to invite him to give a talk.

The Newsletter would be a good vehicle for such information. Britain is a small enough country for this to be feasible whereas labs in the U.S. for example are not so close together".

Other ideas like this would be welcomed by the Editor. In addition I would like to recruit correspondents in different countries to pass on information which would be of interest in other countries. I will approach some people to invite them to do this but many more volunteers would be welcomed. Do please write to me if you want to volunteer or if you have any information whatever for the Newsletter - next issue JULY 1984 unless sufficient material available earlier.

MARTIN WILKINSON, Editor.

FINNAVARRA FIELD RESEARCH STATION, University College, Galway, Ireland.

This research station, eminently suitable for marine and brackish water field research, is situated on the south side of Galway Bay, about 25 miles from Galway. It was erected in 1972 by means of a grant from Clare County Council and has accommodation for 6-7 persons. There are three bedrooms, a kitchen, a bathroom with shower, and a large laboratory. The building stands just above a storm beach typical of many of the northern and southern shores of Galway Bay. The intertidal is comprised of large boulders in sand and bedrock of pavement limestone like that of the Burren. Perhaps the most interesting shore to the phycologist is the large reef called Carrickadda (carraigfhada; long rock) which is an extraordinarily variable system of habitats (pools, lagoons, flat

expanses both sheltered and moderately exposed) which is reflected in a very high species diversity. A species list is given in De Valera, Pybus, Caslely and Webster (1979, Proc. R. Ir. Acad., 79B: 259-269) and, to date, over 300 species of marine macroalgae have been found in the area.

There are also large areas of maerl (Phymatolithon calcareum) in the shallow subtidal just off the end of the reef, some of which is accessible at low spring tides.

To the north of the station there is a rapids system at New Quay which also has an interesting and diverse flora. Current speeds equivalent to those found in Lough Hyne (Ine), Co. Cork make this area somewhat dangerous for diving at full flood but investigations can be carried out with ease at slack water. Behind the station there is a large brackish water lake, the hydrography and phytoplankton of which have been described by Pybus and Pybus (1981, Proc. R. Ir. Acad., 80B: 367-384). Various interesting Charophyta occur there including Lamprothamnion papillosum. In a pasture beside the station a small tidal pool with an asymmetrical tidal curve is fed by a system of fissures in the limestone. In nearby grykes (channels in the limestone) various algae such as Ascophyllum nodosum and Fucus spp grow within centimetres of salt-tolerant flowering plants (De Valera and Cooke, 1979. Ir. Nat. J. 19: p. 436 + photographs on pls. 17/18).

To the south, exposed, inclined shores can be found at Black Head and Fanore. Behind the station there is a low limestone hill with a typical Burren flora of spring Gentians, Bloody Cranebill and others; indeed, Gentians occur by the roadside at sea level on the road to New Quay.

The station is available for 12 months of the year for projects in marine or freshwater phycology, mycology or lichenology. There is a charge of IR £4.50 per night per person for accommodation.

Applications with a brief outline of work proposed, number of people, dates (with alternatives) should be sent in the first instance to Dr M.D. Guiry, Department of Botany, University College, Galway, Ireland.

FORTHCOMING MEETINGS

1. The Third International Congress of Systematic and Evolutionary Biology (ICSEB III) will be held at the University of Sussex, England in July 1985.

ICSEB I was held in Boulder, Colorado in 1973, when about 1800 attended, while about 900 attended ICSEB II in Vancouver in 1980. The intention of these meetings is very different from that of large international single-topic congresses, for it aims to integrate the divergent branches of systematic and evolutionary biology. A number of other "special interest" symposia are also arranged, which are narrower in concept, but which still bring together participants from separate but inter-related fields.

Details: Professor Barry Cox, Zoology Dept., King's College, Strand, London WC2R 2LS, England.

2. Estuarine and Brackish-Water Sciences Association Local Meeting on the Humber Estuary, University of Hull, 13-14 April 1984.

Details: Dr N.V. Jones, Zoology Dept., University of Hull, Hull, HU6 7RX, England.

3. Joint NIOZ-OC-EBSA meeting on Nutrients in Estuaries, Eutrophication and Other Effects, NIOZ, Texel, Netherlands, 3-6 September 1984.

Details: Mr W. Halcrow, EBSA Meetings Secretary, Welsh Water Authority, Tremains House, Coychurch Road, Bridgend, Mid-Glamorgan, South Wales, U.K.

NORTH EAST ALGAL SOCIETY. For about 20 years the North-East Algal Society has been meeting in New England, U.S.A., usually in the spring; and in the last few years at Woods Hole, Massachusetts. The 1984 meeting will be 28-29 April and approximately 150 phycologists are expected to attend. There will be presented papers and posters, a mini-symposium of four invited speakers, and a banquet with a speaker. Details from:

Dr H.W. Johansen
Dept. of Biology
Clark University
Worcester
MA 01610, U.S.A.

All British Phycological Society members are cordially invited to attend.

WILLIAM RANDOLPH TAYLOR, Emeritus Professor, is a senior phycologist, well-known for his algal research and floras. He has been affiliated with Woods Hole Marine Biological Laboratory since 1914 and he and his wife have a summer home in Woods Hole. The North East Algal Society plans to honour him at the April meeting (see above) by establishing a "chair" for him in the Lillie Auditorium. Several other senior scientists have been accorded this honour. Including a bronze plaque the chair costs \$1000 and those who would like to contribute are asked to send a donation to Dr H.W. Johansen (address above).

VISITING PHYCOLOGY. Dr Bill Woelkerling, from La Trobe University, Melbourne, Australia will be in the UK from 28 April to 20 May 1984. He will be working on coralline algae at the British Museum (Natural History) with Linda Irvine and at the Marine Laboratory, Portsmouth Polytechnic with Yvonne Chamberlain.

DETERMINANTS OF PHYTOPLANKTON DISTRIBUTION

A Discussion Meeting. 12-13 April 1984. University College of Swansea, Swansea SA2 8PP, Wales.

Details from Professor P.J. Syrett, Dept. of Botany and Microbiology.

NEW BOOK. Introduction to Freshwater Algae, containing over four hundred common/typical found in Britain with many original illustrations. Suitable for sixth-formers and undergraduates. Written by Allan Pentecost. Will be published 1984. Price under £10. Further details when published.

VAUCHERIA. Lynda Smith who previously requested Vaucheria samples and records in this Newsletter has changed her address:

Dr Lynda P. Smith
45 Ashlar Road
Agburth
Liverpool L17 0DT

NORTHERN IRELAND ALGAE. In comparison with the sublittoral conservation survey of the Northern Ireland coastline being undertaken by the Ulster Museum, described at the recent winter meeting of the Society, Heriot-Watt University has been asked to undertake a littoral survey, also with a view to designation of marine nature reserves. We would be delighted to hear from any person with intertidal algal records for Northern Ireland which are either unpublished or available only in reports of limited circulation rather than the normal scientific literature. Please contact either Dr Martin Wilkinson or Mr Ian Fuller at Dept. of Brewing and Biological Sciences, Heriot-Watt University, Chambers Street, Edinburgh EH1 1HX.

ALAIN SOURNIA, formerly at the Museum National d'Histoire Naturelle, Paris, has moved to Station Biologique, 29211 Roscoff, France (phone: 98.69.72.30), a marine centre operated by the University of Paris and the centre National de la Recherche Scientifique. There he intends to investigate primary production in tidal fronts and in coastal waters, together with colleagues from other parts of Brittany. Permanent interest in "taxonomy" of marine phytoplankton will continue.

PUBLICATIONS

1. Characeae Atlas

Have you got your copy of the Characeae Atlas which was published in April 1983? This is an Atlas with a difference as, apart from the distribution maps, it also contains a complete catalogue of the charophyte specimens of the B.M. Herbarium. I would be pleased to receive any comments on the maps or catalogue data from members who have had time to digest their copies. There are many "blank squares" of the British Isles where charophytes have not been recorded, thus providing scope for members in those areas to gain a "first" by searching these elusive plants out. The Provisional Atlas of the Characeae of the British Isles, including a catalogue of specimens held in the Herbarium of the British Museum (Natural History) by J.A. Moore and D.M. Greene is available from I.T.E., 68 Hills Road, Cambridge, CB2 1LA and costs £6.35. Characeae specimens for identification should be sent to Mrs Jenny Moore, Botany Department, Natural History Museum, Cromwell Road, London SW7 5BD. A plant is best sent damp (not wet) in a polythene bag and strong envelope marked "Live Plant Material - Open at once".

2. The entire stock of "Seaweeds of Australia" (c.2000 copies) has been purchased by the Australasian Society for Phycology and Aquatic Botany. Copies are available price A \$ 2.50 plus carriage from Margaret Clayton, Dept. of Botany, Monash University, Clayton, Victoria, Australia 3168.

HAROLD C. BOLD AWARD AND GERALD W. PRESCOTT AWARD

The Phycological Society of America sponsored 2 awards at the recent 4th Annual AIBS meetings held at the University of North Dakota, Grand Forks. The recipient of the 1983 Harold C. Bold Award was F. Gerald Plumley from the University of Georgia, Athens, who won the best student paper presentation with the title: "Selective accumulation of photosynthetic proteins in Chlamydomonas reinhardtii (Chlorophyceae) following pulsed additions of nitrogen". The winner of the 1983 Gerald W. Prescott Award was Matthew J. Dring, Hon. Secretary-elect of the British Phycological Society, Queen's University of Belfast. This first biennial award was presented by Dr Prescott in recognition of the outstanding scholarly book or monograph devoted to algae. The title of Dr Dring's book is The Biology of Marine Plants published by Edward Arnold.

(Dean W. Blinn, Chairman, G.W. Prescott Award and H.C. Bold Award Committees).

BASIC PROGRAMS

With the every-increasing numbers of microcomputers, home computers, mini-computers and personal computers in the home and in the laboratory it seems an opportune time to offer to exchange programs that might be useful in the field of phycology. To set the ball rolling I give, below, a short program which people may find useful. It is written in MBASIC but is easily adaptable to other BASIC dialects. Perhaps the greatest confusion will be caused by the statement PRINT CHR\$(26). This merely clears the screen and is represented in some BASICS by the statement CLS. The command SYSTEM at line 370 should be replaced with END unless operating under CP/M. People may find other dialect differences but the rest seems fairly straightforward. The program simply finds the number of days, weeks and months between two dates. The input must always be as DD/MM/YYYY, the month and year being given in full. North American readers will have to use the European system or modify the program in lines 70-90 and 140-160. There is a simple option loop to allow the operator to use the first date repeatedly. The program may be adapted to give the day of the week for any given date. No prize for the solution, but I will give it to anybody who is interested. I would also like to hear from anybody who develops any worthwhile modifications. This is not an 'elegant' program, but it does work.

(M.D. Guiry, Department of Botany, University College, Galway, Ireland).

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10 PRINT CHR$(26):PRINT "D A T E S   P R O G R A M   -   V E R S I O N   2"
20 GOSUB 380
30 PRINT CHR$(26): INPUT"DATE 1(DD/MM/YYYY)";D1$:PRINT:PRINT
40 PRINT"DATE 1   ";D1$:PRINT:PRINT
50 INPUT"DATE 2(DD/MM/YYYY)";D2$:PRINT:PRINT
60 PRINT"DATE 2   ";D2$:PRINT:PRINT
70 DD=VAL(MID$(D1$,1,2))
80 MM=VAL(MID$(D1$,4,2))
90 YY=VAL(MID$(D1$,7,4))
100 IF MM>2 THEN GOTO 130
110 F1 =365*(YY)+DD+31*(MM-1)+INT((YY-1)/4)-INT(.75*(INT(((YY-1)/100)+1)))
120 IF M<=2 THEN GOTO 140
130 F1=365*YY+DD+31*(MM-1)-INT(.4*MM+2.3)+INT(YY/4)-INT(.75*(INT(YY/100)+1))
140 D2=VAL(MID$(D2$,1,2))
150 M2=VAL(MID$(D2$,4,2))
160 Y2=VAL(MID$(D2$,7,4))
170 IF M2>2 THEN GOTO 180
180 F3=365*Y2+D2+31*(M2-1)+INT((Y2-1)/4)-INT(.75*(INT(((Y2-1)/100)+1)))
190 IF M2<=2 THEN GOTO 210
200 F3=365*Y2+D2+31*(M2-1)-INT(.4*M2+2.3)+INT(Y2/4)-INT(.75*(INT(Y2/100)+1))
210 PRINT:PRINT:PRINT F3-F1; "DAYS DIFFERENCE"
220 PRINT:PRINT (F3-F1)/7; "WEEKS DIFFERENCE"
230 PRINT:PRINT "APPROXIMATE DIFFERENCE IN MONTHS IS" (F3-F1)/31
240 PRINT:PRINT:PRINT "JOB DONE"
250 PRINT:PRINT:PRINT "ANOTHER SET?"
260 INPUT "YES/NO (Y/N)"; AN$
270 IF AN$="N" THEN GOTO 370
280 IF AN$="Y" THEN GOTO 290
290 PRINT CHR$(26): PRINT "IS DATE 1, BELOW, TO BE USED AGAIN?":PRINT:PRINT
300 PRINT "DATE 1   "; D1$:PRINT:PRINT
310 INPUT "YES/NO (Y/N)";Q$:PRINT:PRINT
320 IF Q$="N" THEN GOTO 30
330 IF Q$="Y" THEN GOTO 340
340 INPUT "DATE 2(DD/MM/YYYY)";D2$:PRINT:PRINT
350 PRINT "DATE 2   ";D2$:PRINT:PRINT
360 GOTO 140
370 SYSTEM
380 PRINT "TO FIND THE TIME ELAPSED BETWEEN TWO DATES"
390 PRINT "ENTER DATE 1 AND DATE 2; INPUT MUST BE AS DD/MM/YYYY"
400 PRINT: INPUT "PRESS SPACE BAR AND RETURN TO CONTINUE", K$
410 IF K$=" " THEN 420
420 RETURN
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To start the ball rolling I have reproduced a full-listing of the program, as supplied by Dr Guiry, in this Newsletter. I am particularly anxious to hear readers' views on this section of the Newsletter. Further programs in BASIC, written by my research students include the following which may be of interest to readers:

"CHLORDET" (written by David Mills, now at UGNW, Menai Bridge) to calculate chlorophyll levels (as mg m^{-3}) in extracts of benthic sediment samples using Strickland and Parsons' equations and chlorophyll and phaeopigment levels using Lorenzen equations, including means and standard deviations of replicate analyses.

"P GAL 5" (written by Alan Tollervey) to calculate rates of photosynthesis and respiration of macroalgae in a particular design of light and dark bottle experiment - particularly suited for class use.

(for details contact editor - Dr Martin Wilkinson, address on front page).

INFORMATION FROM MEMBERS

1. Dr Trevor Norton has been appointed Professor of Marine Biology in the University of Liverpool and from 1st October 1983 his address has been,

Professor T.A. Norton
Department of Marine Biology
University of Liverpool
Port Erin
Isle of Man

(Contributors to Seaweed Mapping Scheme please note).

2. From H. Nyberg, Dept. of Botany, University of Helsinki, Finland, report of phycological interest:

Nyberg, H. 1983: Tensidien kemiasta ja biologisista vaikutuksista (On the chemistry and biological effects of tensides) (In Finnish, 32pp. + reference list 12pp.) Report from the Walter and Andree de Nottbeck Foundation 1983. Obtainable from Dr G.-A. Haeggstrom, Dept. Bot., Univ. Helsinki, Fabianink. 24 A, SF-00100 Helsinki 10, Finland.

ANALYTICAL TECHNIQUES COURSE

Department of Biological Sciences, University of Dundee. Tuesday July 3rd to Thursday 5th 1984. Discussion groups will be held until midday Friday 6th if required. The course will cover theoretical and practical aspects of the following: amino acid analysis; DNA isolation techniques; GC; HPLC; methods in immunology; all aspects of electrophoresis and chromatography; density gradient centrifugation and information technology.

The course will be run in conjunction with a major scientific equipment company which will provide an opportunity to use the latest equipment available.

All levels of experience will be catered for.

Accommodation will be available from Monday 2nd July to Friday 6th.

Further details about the course and of costs, accommodation and reduced-price travel to and from Dundee are available from:

Dr W.J.N. Marsden, Department of Biological Sciences, University of Dundee,
DUNDEE DD1 4HN (0382) 23181 ext 326.

BRITISH DIATOMISTS' MEETINGS

The last meeting, organised by Dr Elizabeth Haworth, was held at Brathay Field Centre, Ambleside, Westmorland, from November 4th to 6th 1983. A report will appear in the next Newsletter together with details of the 1984 meeting to be held at Platford Mill Field Centre.



BRITISH PHYCOLOGICAL SOCIETY

for inclusion in Newsletter no. 18. July 1984
Closing date 30 April 1984. Please mail to
the editor, Dr Martin Wilkinson, Department of
Brewing & Biological Sciences, Heriot-Watt
University, Chambers Street, Edinburgh EH1 1HX.

NAME _____

ADDRESS _____

LECTURES

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

SABBATICALS

I will be going on sabbatical to _____
from _____ to _____

The following sabbatical visitors will be staying in my department

from _____ to _____

THESIS TITLES

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

Student	Degree	Title
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_____	_____	_____
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_____	_____	_____
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_____	_____	_____
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JOBS VACANT

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

JOBS WANTED

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

REPORTS/TRIAL KEYS ETC

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

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

Martin Wilkinson