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Contents

I learnt of a new expression the other day. It's called the 'phenotype gap'. This, apparently, was coined in response to a recognition that we still have little understanding of the ways in which events occurring at the molecular level are translated into the growth and functioning of whole organisms. Coincidentally it has also been recognised that there is a shortage of people out there who have the expertise for these investigations. These sentiments are not new to members of the BPS. A letter, with the former President, Chris Gibson, as a signatory, was sent to the Office of Science and Technology earlier this year (see *The Phycologist*, Number 58), emphasising the serious consequences associated with the decline in support for research on whole organisms. Hans Meidner, former Professor of Biology at the University of Stirling, who sadly died recently, carried out a number of outstanding studies in the area of stomatal functioning and photosynthesis, and probably spent most of his scientific career trying to bridge the plant phenotype gap. One of my recollections of Hans Meidner was of a direct, straight talking person and I wondered what his interpretation of this terminology might have been. Plant physiology, perhaps?

A number of important items, including the minutes from the 49th Annual General Meeting, are included with the current issue of 'The Phycologist'. The most important of these is probably the programme for the Jubilee meeting. Information on travel, registration and the conference venues being used for this meeting are also enclosed, for the assistance of those attending, as are details of a new BPS-supported publication on the Freshwater Algal Flora of the British Isle, the first modern account to be published. There's also a 20% discount for BPS members! Finally, please don't forget to complete the enclosed membership form and send this in as soon as possible.

I should also remind you again of the auction, now an established and important part of the BPS proceedings, which was held over from the previous meeting. As well as being of considerable entertainment value it also provides a valuable source of funds for the society. If you have

anything of psychological interest that could be auctioned for a good cause, bring it along.

Lastly, yet another apology. Due to a number of editorial difficulties some errors crept into the

article on Peter Fay. My apologies to all concerned and I hope this did not detract from what was, for me, an illuminating appreciation of an outstanding scientist.

BPS JUBILEE MEETING, 2ND - 4TH JANUARY 2002

Site Location and Travel Information

Maps – maps of the Greenwich area and of the NHM area can be obtained from the web at: www.streetmap.co.uk/

Type in 'King William Walk' to obtain the Greenwich map, and SW7 5BD to obtain the map with the museum

Maps and information about travel in London can be obtained on: www.transportforlondon.gov.uk/

To Greenwich

(Greenwich is at the edge of zone 2 in the London Transport system.)

Docklands Light Railway (from Tower Hill, Tower Gateway, Bank, Stratford or Lewisham) to Cutty Sark station

Jubilee line (underground) to Canary Wharf, and change to *Docklands Light Railway* to Cutty Sark station

Mainline train from Charing Cross, Cannon Street or London Bridge to Greenwich. (There is an interchange at Greenwich onto the DLR and one stop brings you to the Cutty Sark station.)

The **University of Greenwich** site (former Royal Naval College) has its west entrance on King William Walk, which is part of a one-way system around Greenwich centre. Walk down the main path ahead of you (parallel to the river), past the entrance to the Painted Hall and Chapel, and you will then be directed to the right and the registration area. Be prepared to tell the staff at the gate that you have come for the British Psychological Society meeting.

Registration at University of Greenwich will be from 2 - 6pm on 2nd January and from 8.30am on 3rd January.

The **Ibis Hotel** is on the corner of High Road and Stockwell Street, near the markets.

The **Holiday Inn Express** is on the Greenwich peninsula and may be reached by taking the Jubilee line to N. Greenwich and then No. 161 or 188 bus. The 188 bus continues into Greenwich. We will have transport arranged to and from the meeting venues.

The ice-breaker buffet on Wednesday night (from 7.30pm) will be at **Pizza Express** in Greenwich. This is situated on High Road, opposite St Alfege Street. We will be in the basement.

Dinner on Thursday night will be in **Café Rouge**, just beside the Ibis Hotel.

The Natural History Museum

For those participants staying in Greenwich, transport will be provided.

Otherwise, take the District or Circle line to South Kensington. The subway to the museum has 2 entrances on Exhibition Road. Exit by the second exit (NHM & V&A museums) and continue up Exhibition Road, with NHM on your left. Enter by the Earth Galleries entrance.

Please arrive in good time (9.00am) as we want to take a group photograph before the talks start.

PROGRAMME FOR THE WINTER MEETING

Wednesday 2nd January

14.00 onwards: registration

15.00: Council meeting

19.30: Buffet

Thursday 3rd January (Greenwich)

Symposium 1 – Species and populations

09.00: Chris A. Maggs (Queen's University, Belfast). Macroalgal taxonomy: recognition of species and genera.

09.25: David M. Williams (The Natural History Museum, London). Classification, collections, diatoms and biogeography.

09.50: David J. Scanlan, Fuller, N.J., Orcutt, K. & Post, A.F. (University of Warwick & H. Steinitz Marine Lab, Eilat, Israel). Genetic analysis of photosynthetic picoplankton communities: a spatial and temporal study.

10.15: Jeanine L. Olsen, & Stam, W. T., (University of Gröningen, The Netherlands). Population level studies in seaweeds - progress and challenges.

10.40: Coffee

Symposium 2 – Models incorporating algae

11.00: Colin Reynolds, Alliot, A. & Irish, T. (Centre for Ecology & Hydrology, Windermere). Modelling the dynamics of phytoplankton with the needs of the end user in mind.

11.25: Richard Geider (University of Essex). Marine primary production and climate change.

11.50: Tony Walsby (University of Bristol). The annual cycle of growth and photosynthesis by cyanobacteria in stratified lakes and seas.

12.15: Jeremy Young (The Natural History Museum, London), Geisen, M., Probert, I., Medlin, L., Saez, A., Cros, L., Estrada, M., Bollmann, J., Cachao, M. & Kleijne, A. Science for models – cryptic species and haplo-diplontic life-cycles in coccolithophores.

12:40: Lunch

Manton Prize

13.50: Doe, S. & Rippey, B. (University of Ulster, Coleraine). The classification of Northern Ireland's lakes using phytoplankton: choosing a method of classification.

14.10: Franklin, D.J., Hoegh-Guldberg, O., Jones, R.J. & Berges, J.A. (Queen's University of Belfast). Bleaching stress kills coral symbiotic dinoflagellates *in hospite*: photoinhibition oxidative stress and symbiont cell death are the first steps in coral bleaching.

14.30: Karlsson, I. (Uppsala University, Sweden). Migration of *Gleotrichia echinulata* in Lake Erken, Sweden during 1999 and 2001.

14.50: Morrison, L., Brown, M.T. & Stengel, D.B. (National University of Ireland, Galway). Heavy metal levels in *Ascophyllum nodosum* (Fucales, Phaeophyta) and intertidal sediments from the Irish coast.

15.10: Stephens, N., Flynn, K.J. & Gallon, J.R. (University of Wales, Swansea). Modelling N₂ fixation and the effects of combined nitrogen sources in the cyanobacterium *Gloeothoece*.

15.30: Wilkes, R.J., McIvor, L.M. & Guiry, M.D. (National University of Ireland, Galway). Molecular systematics investigations into the red algal genus *Grateloupia* from the coasts of Ireland and Britain.

15.50: Tea

Posters

16.10: Formal Poster session

19.00: Dinner

Friday 4th January (NHM)

Coaches from Greenwich to The Natural History Museum

Symposium 3 – Manipulation of algal populations

09.30: Brian Moss (University of Liverpool). Lake restoration by biomanipulation. Do the species of algae matter?

09.55: Andrew Watson (University of East Anglia). Ocean biomanipulation: Iron fertilization experiments.

10.20: Coffee

Symposium 4 – Founders symposium

11.00: Matt Dring & Klaus Lüning (Queen's University, Belfast & Alfred-Wegener Institute, Germany). From algal photomorphogenesis to seaweed farming – the long march of Anglo-Helgoland collaboration.

11.40: Michael Melkonian (University of Cologne). The impact of electron microscopy in algal systematics.

12.20: Barry Leadbeater (University of Birmingham). 50 years of the British Phycological Society.

13.00: Lunch

14.00: AGM

15.00: Tea

Symposium 5 - Physiological Advances

15.30: John A. Raven (University of Dundee). How macroalgae obtain carbon.

15.55: Rod M. Forster (Netherlands Institute of Ecology). Advances in the understanding of algal photosynthesis in the past fifty years.

16.20: Gill Malin (University of East Anglia). Marine algal production of trace gases – linking physiology with the atmosphere.

16.45: Kevin Flynn (University of Wales, Swansea). Interactions in N-nutrition of phytoplankton.

17.50: Depart for Greenwich

19.30 for 20.00: Reception for Conference Dinner in the Painted Hall, Greenwich

POSTER PRESENTATIONS

Batley, J. & Hayes, P. (University of Bristol).	Using SNPS to study the genetic structure of <i>Nodularia</i> populations from the Baltic Sea.
Beszteri, B., Crawford, R.M., Hinz, F., Medlin, L.K., Mühlebach, A. & Weber, K. (Alfred Wegener Institute for Polar and Marine Research, Bremerhaven, Germany).	Molecular, morphological and biological relationships in some marine planktonic diatom genera.
Black, K. G., Parsons, R. & Osborne, B. A. (University College Dublin & University of Dundee).	Uptake and metabolism of glucose in the <i>Nostoc-Gunnera</i> symbiosis.
Blake, C. & Maggs, C. (Queen's University Belfast).	Investigation of the maerl bed at Sketrick Island, Strangford Lough, with determination of growth rates of maerl species.
Braithwaite, R. A. & Fletcher, R. L. (University of Portsmouth).	The use of image analysis in determining the toxicity of the antifouling agents Irgarol and Sea-Nine 211 to zygotes of the fucoid alga <i>Fucus serratus</i> .
Browne, K. L., Dring, M. J. & Faes, V. A. (Queen's University Belfast).	Mariculture of <i>Palmaria palmata</i>
Campbell, C. N., Bolch, C. J. S. & Harvey, R. (Scottish Association for Marine Science, Dunstaffnage).	An unusual benthic dinoflagellate from a sea-loch in North West Scotland.
Ciba, S. & Fletcher, R. L. (University of Portsmouth).	Studies on unattached populations of the two red algae <i>Solieria chordalis</i> (C. Agardh) J. Agardh and <i>Gracilariopsis longissima</i> (S. Gmelin) Steentoft, L. Irvine & Farnham in Langstone Harbour, south coast of England.

Cox, E. J. (The Natural History Museum London).	Kimoportulae, raphe slits and sterna - using morphogenesis in the hunt for homology.
Davies, A., Hetherington, C. & Portig, A. (Queen's University, Belfast).	Long-term effects of limpet grazing on fucoid algae.
Ellegaard, M., Lewis, J & Harding, I. University of Westminster, University of Southampton & University of Copenhagen).	Dinoflagellate cysts as palaeosalinity indicators – modelling morphological changes in the new species <i>Gonyaulax baltica</i> (cyst based genus: <i>Spiniferites</i>).
Farrell, P. & Fletcher, R. L. (University of Portsmouth).	A report on the increased distribution of the introduced macroalga <i>Undaria pinnatifida</i> (Harvey) Suringar in UK coastal waters.
Flynn, K. J. (University of Wales).	Models of algal physiology
Franklin, L. A., Dalton, R. & Nicotra, A. (The Australian National University, Canberra & Smithsonian Environmental Research Centre, USA).	High temperature thresholds of photosynthesis in Zooxanthellae and a free-living dinoflagellate.
Gainswin, B. E., House, W. A., Armitage, P. D. & Leadbeater, B. S. C. (Winfrith Technology Centre & University of Birmingham).	Rehabilitation of urban rivers
Hassan, R. & Leadbeater, B. S. C. (University of Birmingham).	Choanoflagellates: diversity and phylogeny based on morphological and molecular characters.
Hernández-Becerril, D. U. (Instituto de Ciencias del Mar y Limnología, Mexico).	The type species of the planktonic diatom genus <i>Chaetoceros: chaetoceros dichaeta</i> and a possible cryptic species related.
Hotchkiss, S., Braithwaite, R. & Fletcher, R. L. (University of Portsmouth).	The environmental impact of fast ferry wash on rocky shore communities in Loch Ryan, Scotland.
John, D. M., Whitton, B. A., Brook, A. J. & York, P. V. (The Natural History Museum London, University of Durham & University of Buckingham).	The freshwater algal flora of the British Isles: A reality.
Jüttner, I., Sharma, S., Mani Dahal, B. & Cox, E. J. (The Natural History Museum London & Kathmandu University, Nepal).	Diatoms as bioindicators of eutrophication and organic pollution in Himalayan hill-streams.
Kadner, S. (University of East Anglia).	Inspection of the chemical defence mechanisms of phytoplankton.
Kraberg, A. (Port Erin Marine Laboratory, University of Liverpool).	Possible alternative roles for 'anti-grazer defences' in the brown seaweed <i>Ascophyllum nodosum</i> .
Loughnane, C. & Stengel, D. B. (Ryan Institute, National University of Galway).	Algal taxa as indicators for different categories of rockpools in Galway Bay.
Lourenço, S. O., & Berges, J. A. (Queen's University Belfast).	Physiological and biochemical responses of two marine microalgae to nitrogen-, phosphorus-, or light-deprivation.
Medlin, L., Groben, R., Garcia-Saèz, A., Valentin, K., Eller, G., Kerkmann, K., John, U., Töbe, K. & Mehl, H. (Alfred Wegener Institute, Germany).	Molecular biological research on unicellular algae.

Mitchell, T. J., Brown, M. T. & Bilton, D. (University of Plymouth).	Population genetics and biodiversity in a red agarophyte in south west Britain.
Morris, E. P., Forster, R. M. & Kromkamp, J. C. (Netherlands Institute of Ecology).	Biopit: Intertidal sediment ecosystems - a remote sensing approach.
Munoz, J., Mudge, S. M. & Sandoval, A. (Universidad Católica de la Santísima, Chile & University of North Wales).	Effects of ionic strength (0.5 to 3.0m NaCl) on the production of short chain volatile hydrocarbons <i>Dunaliella salina</i> .(teodoresco) conc. 006.
Ngo, D. (University of East Anglia).	Marine algae put the <i>I</i> in ozone destruction and Idd?
Pantazidou, A. & Belegreatis, M. R. (University of Athens).	Cyanobacteria (cyanophytes) and the associated microflora from the Altis (Olympia, Peloponnese, Greece).
Purcell, D. & Rothschild, L. J. (Institute & NASA Ames Research Centre, USA).	Naturally-occurring levels of hydrogen peroxide may induce mitosis in algae in nature.
Radi, N. I. & Norton, T. A. (Port Erin Marine Laboratory, University of Liverpool).	Effect of copper ions on the growth and morphology of the microscopic stages of <i>Fucus ceranoides</i> .
Reid, G. (The Natural History Museum London).	Morphology of the genus <i>Toxonidea</i> .
Rose, D. T. & Cox, E. J. (The Natural History Museum London & University of Plymouth).	Diatoms (Bacillariophyta) from different benthic habitats within seven upland lakes in the Laguna San Rafael National Park (LSRNP), southern Chile
Scott, G., Davies, A. & Hull, S. (University of Hull & Queen's University Belfast).	Allozyme variation within the genus <i>Fucus</i> .
Shaw, J. H., Cowling, M. J. & Frid, C. L. J. (University of Glasgow & University of Newcastle upon Tyne).	The effect of magnetism on the settlement and germination of <i>Fucus spiralis</i> zygotes.
Shtewi, O. A. (University of Seventh April)	Observation on the recovery growth of <i>Mastocarpus stellatus</i> sporelings.
Shubert, E. & Massalski, A. (The Natural History Museum London & Institute of Biology, Poland).	Morphometric analysis of <i>Desmodesmus subspicatus</i> exhibiting phenotypic plasticity: A taxonomic dilemma.
Stevens, G., Rumsey, F. J. & Vogel, J. C. (The Natural History Museum London).	Capacity building in specialist natural history societies to promote species and habitat conservation for cryptogamic plants.
Tassavvor, G. A. & Dawson, J. T. (Pittsburg State University).	A study of Isoenzymes in the various strains of <i>Dysmorphococcus globosus</i> .
Tiffany, M. A. (San Diego State University).	Species of <i>Arachnoidiscus</i> epiphytic upon red algae of the Pacific coast, USA.
Tobin, M. & Scott, G. (University of Hull).	Morphological function groups: What can they tell us?
Werner, A., McConville, M., Savidge, M. & Dring, M. J. (Queen's University Belfast & Northern Ireland Waterservice Belfast).	Brown macroalgae used as biofilters in an urban sewage treatment works: A pilot study.
Wiedemann, T., Dring, M. J., Tuohy, M. & Reis, R. (Queen's University Belfast, National University of Ireland, Galway & University of Minho, Portugal).	The calcareous red alga <i>Corallina officinalis</i> as source for bone forming material!

John H. Evans (1927-2001): An Appreciation



With the recent death of John Evans, at his home near Wigton in northern Cumbria, the British Phycological Society has lost one of its oldest and most engaging personalities. I first met him at a Christmas meeting of the Society in the 1950s at which he expounded on the survival of algae on the drying margins of ponds^{1,2} – a subject that was part of his Ph.D. thesis. His background emphasis was a robust self-deprecation, a lasting characteristic that – with later experience – I learnt to discount. Foremost among this experience were several months spent in 1960 in his congenial company at a fishery research station on Lake Victoria in Uganda. There he combined good-natured diplomacy and worldly practicality, with an active pursuit of algal floristics, distribution and ecology^{5,6}. In this he devised and used a unique multi-directional sampler³ and made pioneer bioassays of Victoria water with its indigenous algae⁴.

It was, however, as a lecturer at Royal Holloway College of the University of London that his main professional life was spent. He was much influenced by Professor Frank Jane, for whom

he had a great respect, and from whom he imbibed further enthusiasm for algae and their personal collection for class teaching. Later in life he worked from his former professor's chair in the study of his Cumbrian home – a peaceful haven for phycology when his numerous other activities permitted. For many years he and his family had enjoyed holidays near lakes in northern Cumbria, and in retirement he and his wife Mina decided to live in this scenic region – where he loved to tramp the fells.

John was a most painstaking teacher, and his unpretentious but emphatic championing of algae stimulated many a student. Conversely, human traits did not pass him unnoticed. He once remarked that during College dances held in the great Holloway gallery of oil paintings, female students were markedly reluctant to sit under a massive portrayal of slave girls gathered for sale in a Roman market.

The breadth of his original work will be apparent from the various publications listed below. The location of his College in the valley of the Thames, near major reservoirs with algal problems, influenced the choice of research

topics for himself and various students¹⁰. His interest in novel equipment and its application is illustrated by the development of a multi-filter underwater photometer¹¹ and in extensive testing and use for algae of the Coulter electronic particle counter^{8,9}. The counter was used systematically in a wider study of algal floristics and periodicity in Virginia Water, a large pond near the edge of the Windsor Royal Park. Once, in the throes of sampling there, John was asked what he was doing by a lady on horseback who held authority over more than the Park! Regular sampling began in 1958; it extended over 28 years, with qualitative and quantitative algal estimations backed by chemical and physical measures of the environment. Only small parts of this exceptionally long series of observations, dealing with the green flagellate *Pteromonas varians*⁷ and the cryptomonads¹², are published; John was working on the remainder until shortly before his death. The documents are now held in the library of the Freshwater Biological Association at Windermere. He was more fortunate with the full publication during 1997 of another major study begun long before, dealing with the distribution and seasonality of phytoplankton in a large lake (Albert) of the western Rift Valley of Africa¹³.

He will be remembered with affection by many in the Society. He leaves his wife, Mina, two sons and two daughters.

Publications mentioned

¹Evans, J.H. (1958-59) The survival of freshwater algae during dry periods. Part I. *J. Ecol.* **46**, 149-167; Parts II and III, **47**, 55-81.

²Evans, J.H. (1960) Further investigations of the algae of pond margins. *Hydrobiologia* **15**, 384-394.

³Evans, J.H. (1961a) A phytoplankton multisampler and its use in Lake Victoria. *Nature, Lond.* **191**, 53-55.

⁴Evans, J.H. (1961b) Growth of Lake Victoria phytoplankton in enriched cultures. *Nature, Lond.* **189**, 417.

⁵Evans, J.H. (1962a) The distribution of phytoplankton in some Central East African waters. *Hydrobiologia* **19**, 299-315.

⁶Evans, J.H. (1962b) Some new records and forms of algae in Central East Africa. *Hydrobiologia* **20**, 59-86.

⁷Evans, J.H. (1964) *Pteromonas varians* Jane (= *P. aequiciliata* (Gincklh.) Bourr.). *Br. Phycol. Bull.* **2**, 317-321.

⁸Evans, J.H. (1971) The use of a model A Industrial Coulter Counter in quantitative determinations of the phytoplankton of the River Thames. *Proc. Soc. Analyt. Chem.* **8**, 260-264.

⁹Evans, J.H. & McGill, S.M. (1970) An investigation of the Coulter Counter in 'biomass' determinations of natural freshwater phytoplankton populations. *Hydrobiologia* **35**, 401-419.

¹⁰Haffner, G.D. & Evans, J.H. (1974) Relation of light penetration to particle distribution in vertically mixed lacustrine environments. *Br. Phycol. J.* **9**, 261-267.

¹¹Evans, J.H. (1985) Simple multi-filter sensors for determining relative radiation in the sea and in freshwater. *Hydrobiologia* **127**, 79-88.

¹²Evans, J.H. (1988) Long term changes in planktonic cryptophycean populations. In F.E. Round, ed., *Algae and the aquatic environment*. Biopress, Bristol: 44-52.

¹³Evans, J.H. (1997) Spatial and seasonal distribution of phytoplankton in an African Rift Valley Lake (Lake Albert, Uganda-Zaire) *Hydrobiologia* **354**, 1-16.

J.F. Talling (Freshwater Biological Association, Windermere, Cumbria)

The first decade of the 21st century is going to be an exciting time to work in applied freshwater biology: an opportunity to develop new paradigms for the assessment of environmental quality. The reason for this is the EU's new Water Framework Directive (WFD), which puts the concept of "good ecological status" at the heart of water quality assessment, rather than at the periphery. This will affect all types of water body – rivers, lakes, estuaries (aka "transitional waters") and coastal waters, and involve assessment of several different elements of the biota. Whilst invertebrates have been a part of the applied biologist's armoury for some time, the WFD will require assessment of phytoplankton and phytobenthos in these habitats on a much wider scale than was hitherto the case.

The problem is that the term "good ecological status" is itself rather nebulous. The Directive requires assessment of this in terms of a comparison with "type-specific conditions" – in other words, a comparison between what "is" with what "should be". This raises many fascinating questions that go beyond a short article in "The Phycologist" (scope for a special session at a future Winter Meeting perhaps?). In the short term, however, the practical problem is how to take methods that were designed for relative assessments over a limited area (the Trophic Diatom Index is a good example) and turn these into absolute measures that can be used to make comparisons nationwide that can be calibrated against methods used elsewhere in Europe.

One of the questions that will inevitably arise from this is the extent to which we are looking at real differences in ecology as opposed to differences in the working practices of ecologists. CEN, the European Standards Organisation, is taking the first steps, by attempting to harmonise methods for different techniques. The rationale is that if we agree on how to collect and process samples, then we will have a good foundation on which to build data assessment techniques applicable to the WFD.

In the case of rivers, a method is near publication on diatom sampling, and one on diatom enumeration is at the comment stage. A further standard on phytoplankton methods is under preparation. All of these standards involve harmonising aspects of technique where there is already broad agreement on the best approach, but this still leaves many areas of phycological practice where more work is needed, even at this most basic stage.

The other area of CEN's work that may have direct relevance to BPS members is the development of a "Guidance Standard on the Quality Assurance of Ecological Analyses". It works on the premise that the type of reproducibility that we can perhaps expect of a method within a research group is difficult to maintain when that method is scaled up to cover many laboratories across the entire country. Results from ring-tests on phytoplankton and diatom samples often contain many surprises in the extent to which two experienced analysts differ in their taxon lists. Often, these differences can be resolved through workshops and discussions, but they should never be underestimated.

We are lucky in the UK that the Environment Agency has pioneered the development of quality control and audit procedures that are appropriate to ecological analyses. To have your analyses subjected to external scrutiny can be a daunting prospect at first but, as experience of invertebrate analyses has shown, once this initial hurdle has been overcome, so analysts gain confidence in their abilities. Moreover, knowing the overall error rate of a method aids the decision-making process. However, the entire issue of Quality Assurance / Quality Control in the context of ecological analyses is still in its infancy and those of us involved with CEN are keen to hear from other ecologists who are using and applying such techniques in their own work. The first draft of the Guidance Standard will probably be ready by April 2002 and I shall make sure that copies are available in case BPS members wish to comment. Meanwhile, if you

have views or comments, please send these to me as soon as possible so that they can be worked into the drafts. I can be contacted at Bowburn_Consultancy@compuserve.com.

Martyn Kelly, Bowburn Consultancy, 11 Montaigne Drive, Bowburn, Durham DH6 5QB

Instructions for Contributors

Copy which is submitted for publication in 'The Phycologist' should be concise and informative. Articles should be scientifically sound, as jargon free as possible and written in a readable scientific magazine style.

Unless absolutely essential references should not be included. All types of relevant material will be considered, these include job advertisements, scientific reports, book reviews, news items of topical interest, meeting announcements, grant awards, promotions, appointments, profiles of eminent phycologists and obituaries. If you are interested in submitting material that does not fall within any of these broad categories, or you are unsure of the appropriateness of a potential article, then contact the editor. Suggestions for future articles or a series of articles are welcomed.

Copy should be submitted, preferably, on disc (ms word for windows) and the editor reserves the right to edit the material before final publication.

Submission of Copy and Deadlines

Copy should be submitted to: Dr Bruce Osborne, The Phycologist, Botany Department, University College Dublin, Belfield, Dublin 4, Ireland, Tel. +35317062249, Fax. +35317061153,
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Deadlines are January 31 for the April issue, May 31 for the August issue and September 30 for the November issue

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