

No. 31, Summer 1996

# **NEWSLETTER CONTENTS**



- Palaeontology Contents (Volume 39, part 3)
- Palaeontology Contents (Volume 39, part 4)
- <u>Association Meetings Programme</u>
- <u>Association Business</u>
- Articles: a word from the new president
- Palaeo-Comment I
- Palaeo-Comment II
- <u>Announcements</u>
- Future Meetings of Other Bodies
- Book Reviews
- About the Newsletter
- <u>About the Palaeontological Association</u>

# **ASSOCIATION BUSINESS**

# **NOMINATIONS FOR COUNCIL - 1997-1998**

At the AGM in March 1997, the following vacancies will occur on Council:

Vice-President, Institutional Membership Treasurer, Editors (x2), Ordinary Members (x3)

Nominations are now invited for these posts. Please note that each candidate must be proposed by at least two members of the Association and that any individual may not propose more than two candidates. Nominations must be accompanied by the candidate's written agreement to stand for election and a single sentence describing his/her interests.

All potential Council Members are asked to consider that: 'Each Council Member needs to be aware that, since the Palaeontological Association is a Registered Charity, in the eyes of the law he/she becomes a Trustee of that Charity. Under the terms of the Charities Act 1992, legal responsibility for the proper management of the Palaeontological Association lies with each Member of Council'.

The closing date for nominations is **Monday 30 September 1996**. They should be sent to the Secretary: Dr Paul Smith, School of Earth Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT.

# **SYLVESTER-BRADLEY AWARDS 1997**

Applications are now invited for the 1997 Sylvester-Bradley Awards. The capital in the fund has recently been increased and up to five awards will be made in 1997 to assist palaeontological research (travel, visits to museums, fieldwork etc.). Each award will have a maximum value of £500. Preference will be given to applications for a single purpose (rather than top-ups of other grant applications) and no definite age limit is applied, although some preference may be given to younger applicants. The award is open to both amateur and professional palaeontologists. Preference may be given to members of the Association. The closing date is 31 December 1996 and the announcement of recipients of the awards will be made at the AGM in March, following a decision by Council. Application forms may be obtained from the Secretary: Dr Paul Smith, School of Earth Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT.

#### Back to Contents



#### A word from the new President...

1996 has been a vintage year for me. The promise of about £21 million from the Millenium Commission for a National Botanic Garden for Wales (sadly inadmissible as income for the RAE) almost coincided with the start of my term as president of a flourishing and financially sound Palaeontological Association, a situation created by the stalwart activities of my predecessor Richard Fortey and his Council. I hope to maintain his role as a watchdog on the future of British palaeontology and look forward to being involved in a global initiative based on the Senckenberg Msueum in Frankfurt to discuss ways of influencing governments on the future of our science. At home there was a slight improvement in the number of NERC PhD projects which involved palaeontological training. The topics themselves confirm that success lies in interdisciplinary studies. It is a cause for concern that the allocation of earth sciences studentships is concentrated on relatively few departments although we are fortunate that these tend to be strong in palaeontology. Also alarming for those of us who toil in Universities which might not be included in the 'super league' of research universities is the prospect of withdrawal of all government research funding. Prepare to lobby the Deering brigade. Sources of alternative finance in palaeontology are not easy to find, but as Sue Rigby noted in this newsletter some time ago we are versatile scientists. We have the potential to diversify our interests and are ideally situated to exploit current preoccupations with environmental geology and global change. (Would that my exceedingly simple plants had possessed leaves and wood so that they could reflect changing climate. But at least the Devonian was definitely a time of major change for atmosphere and lithosphere as plants conquered the land! or so I inform the NERC in my numerous unsuccessful proposals). We must all adapt to survive and produce viable research progeny.

Taxonomic and phylogenetic studies must continue to underpin all our activities: palaeontology was not particularly favoured in the outcome of the NERC's taxonomic initiative. Perhaps we should start lobbying Mrs Virginia Bottomley to direct lottery proceeds into fundamental science as well as into the arts and sport. A further immediate worry is the fate of the collections held at the BGS as a consequence of proposed privatization, from viewpoints of both curation and access. Write to your MP or to Right Hon Lord Morris of Castle Morris at the House of Lords to voice your concerns.

Finally on a more optimistic note it is heartening that members achieve so much publicity in newspapers, radio and television for their discoveries. Keep up the good work, but make sure you produce papers for <u>our own</u> <u>journal</u> and come to <u>Birmingham at Christmas</u> to tell us all about it. See you there!

Diane Edwards Dept. of Earth Sciences University of Wales College of Cardiff P.O. Box 914 Cardiff CF1 3YE

#### Back to Contents



## PORTSMOUTH UNIVERSITY OFFERS BRITAIN'S FIRST PALAEOBIOLOGY DEGREE

September 1996 sees the first intake into a new B.Sc. (Hons) degree in 'Palaeobiology and Evolution' in the Department of Geology at the University of Portsmouth. Overall, the course comprises an equal balance of biology, soft-rock geology, and specialist palaeobiology units to be taught by Barker, Loydell and Martill. The first year is dominated by appropriate geology and biology units with the palalaeobiological component becoming increasingly evident during the second and third years. Students will have access to Portsmouth's excellent collections which have recently been supplemented by the addition of those from the Portsmouth City Museum together with several (thousands) of graptolites and uniquely preserved material from Brazilian Lagerstätten. We have a close association with the Museum of Isle of Wight Geology with their exceptional collections of dinosaurs. In the past, students have participated in dinosaur excavations and will continue to have the opportunity to do so. We have recently benefited from the generous donation of several important private collections of molluscs and microfossils. Full use will

also be made of the nearby classic Mesozoic and Tertiary localities of Dorset, Hampshire and the Isle of Wight. Continental dimensions will not be neglected and with easy ferry access, trips to Germany and France are planned for second and third year students. The degree will place a high emphasis on team and individual project work, development of presentational skills (oral, poster and report writing) and computing/IT literacy. Practical palaeontological techniques including preparation, photography, specimen conservation and curation will all be covered.

We think that this is the degree that most of us would have signed up for had it been available earlier in the Holocene. For further information contact: Dr M. J. Barker Department of Geology, University of Portsmouth Burnaby Building, Burnaby Road Portsmouth PO1 3QL, UK Tel. (01705) 842245 Fax (01705) 842244 e-mail <u>barkerm@geol.port.ac.uk</u>

Back to Contents

# **Salaeo-Comment**

#### **Specimens in private collections**

An issue which is causing much discussion at Palaeontology editors' meetings is what our policy should be with regard to publication of descriptions and illustrations of specimens in private collections.

Should we impose a blanket ban? This would be the easiest to administer, and scientifically is the most easily defended position to hold, the point being that one scientist's findings should be reproducible by another. In the case of palaeontology this often involves being able to make the same observations on the same specimen.

This, of course, is an easy view to hold if, like I do, you work on a fossil group (in my case the graptolites) which has the following characteristics: (1) it is easy to make large collections; (2) there are few private collectors; and (3) individual specimens generally have only a small (if any)

commercial value.

With fossil vertebrates (and some of the more 'popular' invertebrate groups), however, it is increasingly becoming the case that scientifically important specimens are held in private hands. Publication on these specimens would undoubtedly advance our knowledge, but would also present us with some serious problems.

How could we insist and ensure that the private owner of a published specimen 'acts responsibly'? We could require that with any paper submitted, there was appended a written statement from the owner of the specimen guaranteeing the following:

1. Palaeontologists who needed to examine the specimen in the future would have free access to it.

The specimen could only be sold to someone willing to abide with 1.
 In the owner's will the specimen was bequeathed to an individual or organization willing to abide with 1.

I wonder how well this scheme would work in practice.

An alternative might be to require that photographs, casts or moulds of a privately owned specimen be deposited in a recognized palaeontological institution. How a controversy such as that surrounding the authenticity of the feathers of *Archaeopteryx* could be resolved on the basis of anything other than the original specimens escapes me, however.

This is a horribly complex issue and one which might require every case to be judged on its merits, weighing up the importance of an immediate advance in palaeontological understanding with that of ensuring the permanent availability of the specimen upon which that advance is founded.

Dr David K. Loydell University of Portsmouth

#### Ichnotaxonomic revision and the importance of type material

The International Code of Zoological Nomenclature (1985) does not discuss in any detail procedure for taxonomic revision. There are specific rules and recommendations governing the selection of a lectotype and designation of a neotype. Nowadays publication of a new ichnotaxon, as with a new body fossil taxon, normally includes selection of a holotype, assignment to a recognized repository, description, and the type locality and stratigraphic horizon. Anomalies affecting trace fossils will be rectified in the forthcoming 4th edition of the Code.

Many trace fossils were not originally recognized as the work of an animal but as the fossilized remains of algae, sponges and other organisms. The subjectivity that is potentially involved in revision of such taxa means that much caution has to be used in the interpretation of the original description or in reading more into the terminology that was used than is justified. However, the original description may give indications of aspects of the morphology that were modified or lost during archival arrangements such as during cleaning and coating. Prime emphasis must be placed on type material. If type material is not forthcoming, suitable new material is unavailable and the original description uncertain, then the taxon is best regarded as a *nomen dubium*. However, as an example of what can be achieved by careful examination of type material, and judicious treatment of the systematics, Wetzel & Bromley (1996) have been able to retain *Helminthopsis*.

Keighley & Pickerill (1994) revised the relatively recently proposed ichnotaxon *Beaconites* Vialov, 1962. Vialov established *Beaconites* on the basis of a photograph but without material. The description is in English, in somewhat colloquial terms. Vialov used *wall* several times in a preamble to his description. *Wall* is characteristically defined in various ways. Bromley (1990) and Pemberton (1992) referred to it as a catch-all term, and in his new edition Bromley (1996) is still unclear. Although material from the type locality in Antarctica, together with photographic evidence, exists, Keighley & Pickerill (1994) chose to revise *Beaconites* on their reading of Vialov's description, and subsequent emendations where the terminology was also undefined, concluding that 'from both the validly introduced original and emended diagnoses *Beaconites* must remain a *walled meniscate burrow*' (our italics).

To illustrate the problem the *Glossary of Geology* (Bates & Jackson, 1987) provides four definitions of wall (here abbreviated): (1) (palaeontological) An external layer surrounding internal parts of an invertebrate, e.g. a skeletal deposit...; (2) (mining) The side of a lode, or of mine workings...; (3) (in faulting) The rock mass on one side of a fault...; (4) (speleology) The side of a cave passage... . It is the first two definitions that provide the problem. We cannot be sure what Vialov meant by wall; either a structural element or a burrow margin. Keighley & Pickerill opted for the first, arriving at a very different construction for *Beaconites* than is known to be

the case from material available at the Natural History Museum or in the collections of Margaret Bradshaw (New Zealand) or Ken Woolfe (Australia) which shows *Beaconites* to be essentially an unlined back-filled burrow. Presence or absence of a burrow lining is regarded as a very significant feature in trace fossil taxonomy.

At the Third International Ichnofabric Workshop, Bornholm, Denmark, August 1995, (reported by Sutcliffe, 1996) it was informally agreed that *wall* is an unsatisfactory term and that *margin* was preferable. The margin, or side of a burrow may be lined, unlined, deformed or impregnated.

It is not the purpose here to re-enter into discussion of the morphology of *Beaconites* or its distinction from *Taenidium*, but to emphasize that while the importance of ichnotaxonomic revision is recognized, emphasis should be placed on material rather than the original and subsequent descriptions, and that every effort must be made to inspect type material and to use the many means of communication that are nowadays available to locate material and to seek opinions from other workers.

Further, it is clear that much greater rigour is required in terminology of trace fossil morphology.

Margaret Bradshaw (Christchurch) and Ken Woolfe (Townsville) kindly supplied information on topotypic material in their possession and Elaine Walker (University of Manchester) found material collected on Scott's 1901-4 Discovery Expedition in the Natural History Museum collections (Ferrar, 1907).

#### References

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PEMBERTON, S. G. (ed.) 1992. *Applications of ichnology to petroleum exploration: a core workshop*. Society of Exploration Paleontologists and Mineralogists. Core workshop no. 17.

SUTCLIFFE, O. E. 1996. The Third International Ichnofabric Workshop, Limensgade Mill, Aakirkeby, Bornholm, Denmark, 15-21 August 1995. *Paleontology Newsletter* **29**, 19-21.

VIALOV, O. S. 1962. Problematica of the Beacon Sandstone at Beacon Height West, Antarctica. *New Zealand Journal of Geology and Geophysics* **5**, 718-32.

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Back to Contents

# **FUTURE MEETINGS OF OTHER BODIES**

# The Sixth Canadian Paleontology Conference

#### **Economic and Applied Paleontology**

Corner Brook, Newfoundland 28 - 30 September 1996 Note New Dates It has been discovered that are no hotel rooms to be had in Corner Brook, western Newfoundland from September 21-23, 1996 (due to a political convention being held by the Progressive Conservative Party). Consequently, the Sixth Canadian Paleontology has had to be rescheduled and will now take place September 28-30, 1996

The meeting next September is planned to illustrate the key fossiliferous units of western Newfoundland, ranging in age from Cambrian to Recent and incorporating everything from oceanic graptolitic shales to shallow marine shelly carbonates and fluvial plant-bearing sandstones. The oral forum will include discussion of how paleontological studies can be applied to the solution of economic and other more general geological problems. The three-day meeting will be based in Corner Brook; the first and last days (Saturday 28 and Monday 30 September) will comprise excursions to the Port au Port Peninsula, presently the site of intense hydrocarbon exploration activity. Technical sessions, with mostly oral presentations, will be held on Sunday 29 September in newly completed facilities at the Sir Wilfred Grenfell College campus of Memorial University of Newfoundland. We will encourage presentations related to the theme for the meeting, although other papers, especially from students, will also be welcome.

Further information is available in <u>Newsletter No. 30.</u> Contact: Henry Williams, Elliott Burden, Convenors, Dept of Earth Sciences, Memorial University of Newfoundland, St. John's, NF, A1B 3X5, Canada, Tel: (709) 737-8142. e-mail: <u>williams@sparky2.esd.mun.ca</u>; etburden@morgan.ucs.mun.ca

## British and Irish Graptolite Group (BIG G)

University of Edinburgh, UK 5 - 6 October 1996

Contact Sue Rigby, Department of Geology and Geophysics, University of Edinburgh, West Mains Road, Edinburgh EH9 3JW; e-mail: <u>suerigby@glg.ed.ac.uk</u>. All are welcome.

# Third Baltic Stratigraphical Conference

Tallinn, Estonia 8 - 11 October 1996 The main topic of this conference, to be held in Tallinn, will be 'Highresolution Biostratigraphy and Baltic Regional Stratigraphy'.

Contact: Dimitri Kaljo, Chairman, Institute of Geology, Estonian Academy of Sciences, 7 Estonia Ave, EE0100 Tallinn, Estonia. Phone 372.2.454653, Fax 372.6.312074. E-mail: <u>kaljo@pzgeol.gi.ee</u>

Further information is available in *Newsletter* No. 27.

# Environmental Geology: the modern frontier - one day conference

Convened by the University of Greenwich and English Nature University of Greenwich, Medway Campus 15 January 1997

The conference will explore four main themes:

- The scope and context of environmental geology
- Geological resources: including materials and waste disposal voids
- The importance and presentation of geological information to decision makers
- The future of environmental geology

**Contributors:** Key note speakers will be from a range of academic, professional and political backgrounds. Further contributions are invited for oral and poster presentations on the above themes, particularly on the geological environment as a resource and on the need for the effective presentation of geological information. Abstracts for speakers should be submitted by **27th September 1996**. Abstracts for posters should be submitted by **1st November 1996**.

**Publication:** All speakers will be invited to submit a paper to be published as part of a thematic set in an academic journal. Papers should be submitted on the day of the conference.

**Registration:** This will cost £25 (student discount available). There is a limit of 100 delegates; early registration is therefore recommended. Registration should be before **1st December 1996**. Registration forms and further information are available from the conference administrator: Linda Muir, Environmental Geology Conference Administrator, School of Earth Sciences, University of Greenwich, Pembroke, Chatham Maritime, Kent,

#### ME4 4AW (Tel: 0181 331 9807; Fax: 0181 331 9805)

## Conference on Australasian Vertebrate Evolution, Palaeontology and Systematics (CAVEPS)

Perth, Western Australia 7 - 11 July 1997

Pre- and post-meeting field trips to the Kimberley (Broome, Blina Shale, Gogo) and Margaret River region (Pleistocene mammals). Contact John Long or Alex Baynes for details, Australia (09) 427 2757; fax (09) 328 8686 or email: long@muswa.dialix.oz.au

## PaleoForams '97

Western Washington University, Bellingham, WA, USA 17 - 21 August 1997

Examining all aspects of Paleozoic Foraminifera and their stratigraphic and geographic distribution. An initial list of topics for which talks and/or posters are solicited include: Evolution, dispersal and paleobiogeography; Classification and taxonomy; Biostratigraphy and zonation; Paleoecology and sedimentary environments of deposition; Biological interpretations and significance; Numerical and statistical methods; Composite standard sections and their utility in Foraminifera biostratigraphy; New techniques. At this time the organizers welcome additional topics that participants wish to have included.

Field trips are planned through the late Paleozoic accreted terranes of southern British Columbia and to the Mid-Carboniferous boundary succession in southern Nevada.

For further information, contact the organizer: C. A. Ross, Dept. Geology, Western Washington University, MS-9080, Bellingham, WA 98225, USA; Fax: (+360)650-3634; e-mail: rossjrp@henson.cc.wwu.edu

## European Meeting on the Palaeontology and Stratigraphy of South America

Heidelberg, Germany 2 - 4 September 1997 (To be held in conjunction with the 18th IAS Regional Meeting on Sedimentology.) Organized by P. Bengtson and H. Bahlburg. Preliminary registration a.s.a.p. Further information incl. registration form is available through the <u>WWW site</u> or from the organizers: Geologisch-Palaeontologisches Institut, Im Neuenheimer Feld 234, D-69120 Heidelberg, Germany; e-mail: <u>Peter.Bengtson@urz.uni-heidelberg.de</u> or <u>Heinrich.Bahlburg@urz.uni-heidelberg.de</u>

## Regional Meeting of IGCP Project 381 "South Atlantic Mesozoic Correlations"

Heidelberg, Germany 2 - 4 September 1997

(To be held in conjunction with the 18th IAS Regional Meeting on Sedimentology.) Organized by P. Bengtson. Preliminary registration a.s.a.p. Further information incl. registration form is available through the <u>WWW site</u> or from the organizer: Geologisch-Palaeontologisches Institut, Im Neuenheimer Feld 234, D-69120 Heidelberg, Germany; e-mail: <u>Peter.Bengtson@urz.uni-heidelberg.de</u>

# Biotic Recoveries from Mass Extinction, IGCP Project 335

Prague, Czech Republic 12 - 14 September 1997

The final meeting of IGCP Project 335 "Biotic Recoveries from Mass Extinctions" will be held in Prague, Czech Republic. Organized by the Czech Academy of Sciences, the meeting will include three days of scientific meetings plus associated field trips.

Organizers: Petr Cejchan and Jindra Hladil. For more information check the recovery <u>wwwsite</u> or contact Petr Cejchan, Geological Institute, Czech Academy of Sciences, Rozojova 135, CZ-16502, Praha 6-Suchdol, Czech Republic OR Douglas H. Erwin, Dept. of Paleobiology, MRC-121, Smithsonian Institution, Washington, DC 20560 USA (email: <u>MNHPB028@SIVM.SI.EDU</u>)

OR Erle G. Kaufmann, Dept. of Geological Sciences, Indiana University, Bloomington, IN 47405 USA (email: <u>CLAUDIA@INDIANA.EDU</u>).

# International Symposium on the Jurassic System

Vancouver, B.C., Canada 17 - 20 August 1998

Organized by the IUGS Jurassic Subcommission. There will be pre- and post-meeting field trips to the Canadian Rockies, the Coast Mountains, the Queen Charlotte Islands and Nevada. Contact Paul L. Smith, Earth and Ocean Sciences, University of British Columbia, 6339 Stores Rd., Vancouver, B.C. V6T 1Z4, Canada. Tel: (604) 822-6456; Fax: (604) 822-6088; e-mail: <u>psmith@eos.ubc.ca</u> or via the <u>Symposium Website</u>

Back to Contents



Information, whether copy as such or Newsletter messages, can be sent in writing to Dr R. B. Rickards, Dept. of Earth Sciences, Downing Street, Cambridge CB2 3EQ, or Faxed (01223 333450). It would be helpful if longer items of copy could be sent on a 3 1/2" disk with text in Microsoft Word or Wordperfect. Disks clearly marked with the owner's name and address will be returned as soon as possible.

Review material, news (also preferably on disk), emergencies and advertising suggestions to Dr Sue Rigby, Dept. of Geology and Geophysics, University of Edinburgh, West Mains Road, Edinburgh EH9 3JW; e-mail <u>suerigby@glg.ed.ac.uk</u> Last minute items may be sent by email to Lori Snyder at <u>ljps@esc.cam.ac.uk</u>

#### Deadline for copy for Issue No. 32 is 1 October 1996.

#### **Palaeontological Association on the Internet**

The Palaeontological Association has its own pages on the world-wide web, including information about the Association, and copies of the *Newsletter*. The locator is <a href="http://www.nhm.ac.uk/paleonet/PalAss/PalAss.html">http://www.nhm.ac.uk/paleonet/PalAss/PalAss.html</a>

Site-keeper Mark Purnell can be reached by e-mail on map2@le.ac.uk

#### Advertising in the Newsletter

Advertising space in the printed paper version of the Newsletter will be

made available at the rates given below to any organization or individual provided the content is appropriate to the aims of the Palaeontological Association. Association Members receive a 30% discount on the rates listed.

All copy will be subjected to editorial control. Although every effort will be made to ensure the bona fide nature of advertisements in the Newsletter, the Palaeontological Association cannot accept any responsibility for their content.

£75 for a half page £130 for a full page

These rates are for simple text advertisements printed in the same type face and size as the standard Newsletter text. Other type faces, line drawings, designs etc. can be printed.

#### Rates for distribution of separate fliers with the Newsletter:

1100 copies for worldwide distribution £230850 copies for worldwide distribution exclusive of No. America £200600 copies for U.K. circulation only £150

Reminder: Deadline for copy for Issue No. 32 is **1 October**.

Back to Contents

HTML version of The Newsletter by <u>Mark Purnell (map2@le.ac.uk)</u>

2