



No. 32, Autumn 1996

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ASSOCIATION BUSINESS

NOMINATIONS FOR COUNCIL - 1997-1998

The following nominations have been received:

Vice President:

Dr P. Doyle (University of Greenwich)

Proposed - Prof. D. Edwards (University of Wales College of Cardiff)

Seconded - Dr P. D. Lane (University of Keele)

Editor:

Dr R. Wood (University of Cambridge)

Proposed - Dr B. M. Cox (BGS)

Seconded - Dr P. Doyle (University of Greenwich)

Other Members:

Dr P. Pearson (University of Bristol)

Proposed - Dr S. Rigby (University of Edinburgh)

Seconded - Dr D. M. Unwin (University of Bristol)

Dr M. J. Simms (Ulster Museum)

Proposed - Dr P. R. Crowther (Ulster Museum)

Seconded - Prof. A. D. Wright (Queen's University)

Mr F. W. J. Bryant (Maidenhead)

Proposed - Dr P. Doyle (University of Greenwich)

Seconded - Dr S. Rigby (University of Edinburgh)

Since nominations do not exceed vacancies, there will be no ballot.

CONTINUING MEMBERS OF COUNCIL 1997-1998

President - Prof. D. Edwards. Vice-President - Dr P. D. Lane. Treasurer -

Dr T. J. Palmer. Membership Treasurer - Dr M. J. Barker. Institutional

Membership Treasurer - Dr J. E. Francis. Secretary - Dr M. P. Smith.

Editors - Dr B. M. Cox, Dr D. A. T. Harper, Dr R. M. Owens, Dr D. M.

Unwin. Newsletter Editor - Dr R. B. Rickards. Newsletter Reporter - Dr S.

Rigby. Marketing Manager - Dr A. King. Publicity Officer - Dr M. A.

Purnell.

AMATEUR PALAEOLOGIST AWARD 1996

Members are reminded that nominations for this year's Amateur Palaeontologist Award will close on 1 December. The award is made annually to candidates who, in the opinion of Council, have made an outstanding contribution to the study of palaeontology. Such contributions may range from the compilation of fossil collections to their study, care and conservation.

The award will comprise a cash prize plus an inscribed scroll. It will be presented to the winner at the AGM in March 1997. Nominations should comprise a short statement (up to one page of A4) outlining the candidate's principal achievements. Members putting forward candidates should also be prepared, if requested, to write an illustrated profile in support of their nominee. Please send your nominations 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 will 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 on the WWW](#) or from the Secretary: [Dr Paul Smith](#), School of Earth Sciences, University of Birmingham, Edgbaston, Birmingham B15 2TT.

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ANNOUNCEMENTS

FIELD GEOLOGY OF THE BRITISH JURASSIC

This publication was [reviewed in Newsletter no. 31](#). It is now available to Pal. Ass. members at the reduced price of £163.29 (postage free in UK; add 10% postage for overseas addresses) until 31 December 1996. This is a saving of over 50% off the list price. Please contact: Geological Society Publishing House, Unit 7, Brassmill Enterprise Centre, Brassmill Lane, Bath BA1 3JN, UK. Tel: (01225) 445046; Fax: 01225 442836.

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Palaeo-Comment

In this Newsletter there are four responses to the two *Palaeo-comment* articles in the last issue:

1. [Response to Specimens in private collections - editorial responsibilities by Patrick N. Wyse Jackson](#)
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3. [Response to Ichnotaxonomic revision and the importance of type material by Stephen K. Donovan](#)
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Response to Specimens in private collections - editorial responsibilities

[David Loydell \(Newsletter 31: 6\)](#) raises a very important matter in relation to the publication of palaeontological data derived from collections in private hands: should editors accept papers in which such material is illustrated and described? As he outlined this is a very difficult problem, but the fundamental criterion by which editors should operate is that the material must be available to others at a future date, to allow for comparative research and reassessment.

Collections such as those assembled last century by the Earl of Enniskillen of fossil fishes and by Sir Richard Griffith of Lower Carboniferous invertebrates from Ireland were the bases of important palaeontological works (including those by Louis Agassiz and Frederick M'Coy). In both cases the material was subsequently deposited in museums (the Natural History Museum, London and National Museum of Ireland respectively) and they continue to be utilized by researchers today. These two collections were large and very important in palaeontological terms and owned by persons of public standing, which certainly helped their long-term survivability. How many similar or indeed smaller but equally important collections have been lost broken up on the death of the collector?

Equally important are collections made by academics who work in institutions without adequate curatorial and storage provision. How many of these collections have been discarded by colleagues after the death of the individual collector?

In both cases there has undoubtedly been a vast loss of important geological material, even though the collector intended that the collection was to ultimately reside in a museum. Unfortunately testamentary wishes are not always followed to the letter by a grieving family or executors, who in many instances do not realize the significance of the collection.

The ICZN (1985) recommends that that all holotypes, lectotypes and syntypes be deposited in a museum or similar institution (Article 72D), and that deposition of neotypes is mandatory (Article 75d (6)). This allows for curation to recommended levels (see Brunton *et al.* 1985), and the future availability of the material to subsequent researchers. While the ICZN makes no recommendation on cited or figured material the Geological Curators' Group discusses aspects of the acquisition of material and made recommendations which should be followed (Brunton *et al.* 1985). Casts of specimens should be treated with equal importance as the originals.

Private collectors and academics should be encouraged by researchers to deposit scientifically important material to recognized institutions where it will be come a valuable asset in perpetuity. Perhaps these institutions could give the collector a good quality cast of their specimen(s) in return. There is no real reason why academics should keep personal collections of unique material, other than for reasons of 'stamp collecting'.

Editors can go a long way towards guaranteeing that important specimens survive for future research if they adopt a rigid policy of insisting that type, cited and figured and other published material is already deposited or will be soon after publication, in a recognized museum or institution and that accession numbers are published in the journal. The repository should have a full-time curator who will ensure the long-term safety of the collection. Such a policy, which might seem somewhat inflexible, can only result in what is best for palaeontology research in the future.

BRUNTON, C.H.C., BESTERMAN, T.P. & COOPER, J.A. 1985.
Guidelines for the curation of geological material. *Geological Society Miscellaneous Paper* **17**.

*Patrick N. Wyse Jackson,
Editor Geological Curators' Group,
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Response to Specimens in private collections

I read with interest the [Palaeo-Comment by my good friend Dr Loydell \(Newsletter 31\)](#) raising the issue of publication on specimens housed in private collections. Although the holding of specimens in private collections is far from ideal, it is clear that many scientifically valuable specimens do reside in numerous and often extensive private collections, and until the owners die or can be offered generous financial incentives to part with them, there they will remain. Providing scientists do not go and look at the, then this is fine and we remain as ignorant as if the fossil had not been collected. But every year I am shown hundreds of specimens by private collector, many of which I would dearly like to describe, because they show features previously not observed or are new taxa. I resist strongly the urge to describe new taxa in private collections, but once I learn something about the morphology or biomechanics of a fossil from an example in a private collection, I cannot unlearn it. However, if I am unable to publish my newly learned gem, then I also am unable to build on that knowledge, or disseminate it to those who remain in ignorance. By way of examples, I know of a pterodactyloid pterosaur with a keratinous beak (previously only hinted at from external moulds in a single Solnhofen Limestone rhamphorhynchoid pterosaur) and a pterosaur with hair preserved in the neck. Both of these specimens are in private collections. Both are extremely important for studies on pterosaurian thermodynamics, aerodynamics and feeding. In both cases I can adequately demonstrate the presence of the salient features by good quality photographs. Sure enough the material might not be available for chemical analysis, and sure enough, the specimen may have been forged and I been duped. But why not take the chance and allow science to advance, by allowing the specimen to be described. Sooner or later the specimen will end up in a museum.

I therefore ask that the editors do not impose a blanket ban, and allow editorial discretion when presented with manuscripts that discuss specimens in private collections.

Dave Martill
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Response to Ichnotaxonomic revision and the importance of type material

One of the negative features of our own journal, *Palaeontology*, is that it does not publish discussions of previous contributions. This may be for various reasons, the most obvious of which is that the potential authors of such notes/papers may not actually write or submit them to the editors for consideration; a paper needs to be written before it can be published! However, from my own discussions with colleagues at conferences, *etc.*, I consider that it is at least the perception of many members of the palaeontological community, may it be true or false, that such contributions are not welcomed by the editors of *Palaeontology*. This is unfortunate, as the journal takes on a 'tablets of stone' aura, perhaps suggesting to at least some that nothing in *Palaeontology* can possibly be worthy of further discussion. However, many other journals in which we might publish encourage such exchanges - *Nature*, *Geology*, *Journal of Paleontology* and *Palaeogeography*, *Palaeoclimatology*, *Palaeoecology*, to mention a varied few - and their content is better for it.

Nevertheless, supposing you consider a paper published in *Palaeontology* to be sufficiently erroneous, speculative or incomplete to require comment, what is the correct organ in which to publish your views? If *Palaeontology* does not accept brief 'comments' of previously published papers, unlike many (if not most) journals in palaeontology and geology, then I would recommend publication as a note in a parallel journal. Several years ago, I wrote a discussion of a paper published in *Palaeontology* and published it as a peer reviewed note in *Journal of Paleontology*. Similar such pathways are open to all prospective authors.

Why pursue this particular line of discussion if such obvious avenues are available? Because I now see authors using the pages of the *Palaeontology Newsletter* as an organ for the publication, presumably without peer review, comments on papers in *Palaeontology*. The article in question, by Goldring & Pollard (1996), criticized Keighley & Pickerill (1994) for not using 'type' material of the ichnofossil *Beaconites antarcticus* Vialov, type ichnospecies of the ichnogenus, in their re- assessment of the taxon, despite the fact that no type material *sensu stricto* exists. Goldring & Pollard (1996) asserted that specimens examined in various collections made from the type locality of *B. antarcticus* differ in morphology from the Vialov's original description; however, these differences may just as likely mean that two morphologically different ichnotaxa are being compared. Thus, without a holotype for comparison, the original description must be regarded as the only true source of morphological data, however imperfect it may be. I also note that Goldring & Pollard (1995) have already published a criticism of

Keighley & Pickerill's views elsewhere; how many 'comments' is it necessary to write on any paper, particularly on one that is already over two years old?

While I am sure that Goldring & Pollard's note wasn't written with any such intent, I strongly recommend that the Association should nip in the bud any possibility that the *Newsletter* might become an organ for 'unrefereed' comments on papers in *Palaeontology*. It would be much better if they were received by *Palaeontology* itself and subjected to peer review. Astute editing could enable the authors of the original paper to reply in the same issue, thus strengthening the overall scientific value of the discussion while keeping it concise. Additionally, because of the copies available on library shelves, *Palaeontology* reaches a much wider audience than the *Newsletter*, further increasing the influence of such deliberations.

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Response to Ichnotaxonomic revision and the importance of type material - an alternative view

Goldring and Pollard (1996) recently provided their opinions on 'ichnotaxonomic revision and the importance of type material' and appear to have utilized our work (Keighley and Pickerill, 1994) as a specific example

of how not to apply their doctrine. We therefore wish to point out what we believe are some fundamental misconceptions perpetrated by these authors in their discussion regarding ichnotaxonomic nomenclature and type material, and also to point out their apparent misunderstanding of several aspects of the International Code of Zoological Nomenclature (I.C.Z.N., 1985) that dictates the validity of zoological names and trace-fossil names (ichnotaxa).

Regarding Goldring and Pollard's (1996, p. 7) assertion that the I.C.Z.N. (1985) does not '...discuss in any detail procedure for *taxonomic revision*...' (our italics), the I.C.Z.N., as its name implies, is a binding code governing (trace-) fossil names and thus provides very precise procedures for the establishment and *revision* of *taxonomic nomenclature* (e.g. 'The Principle of Priority' - I.C.Z.N., Article 23). At this point it should be emphasized that a taxon (or ichnotaxon) is merely a conventional cipher that serves to avoid the need for continuous use of a cumbersome descriptive phrase (Pickerill, 1994); the descriptive phrase need then only be given in the diagnosis of the (ichno-) taxon. General consensus has an ichnospecies being named (and hence diagnosed) from distinguishing morphological features (hence the 'Principle of Name-Bearing Types' to allow for "...the objective identification of names and for establishing synonymy..." - I.C.Z.N., 1985, p. xvi). However, morphological terminology is not covered by the I.C.Z.N. and, unfortunately, such terminology frequently has different definitions attached to it, potentially causing nomenclatural confusion. It is therefore up to individual workers to clearly state their use of undefined or vague terms (Keighley and Pickerill, 1994). Accordingly, since the procedure for the revision of any diagnosis is similarly not covered by the I.C.Z.N., we would suggest that diagnostic emendations can be undertaken at any time by a worker wishing to make a diagnosis clearer, more exclusive, or more all-encompassing.

The I.C.Z.N. does not interfere with a worker's freedom to reclassify a particular fossil or trace fossil into different taxonomic groups (the discipline of taxonomy) and categorically states that taxonomic judgement (i.e. *taxonomic revision*) "...must not be made subject to regulation..." (I.C.Z.N., 1985, p. xiii). However, the name-bearing type provides the ultimate reference point to a worker's diagnosis and use of a particular name at the family, genus, and species group level (though the I.C.Z.N., 1985, does not obligate the identification of type material). Thus, as Goldring and Pollard (1996) advocate, in any systematic review of an ichnotaxon the type material should be obtained for investigation (where

such material has been identified and is readily available). However, in objectively describing or reanalysing type material, the skill of the worker is still paramount. Goldring and Pollard (1995, 1996) seem to imply that simply by obtaining type material, a worker's conclusions are incorrigible. The worker must, of course, first accurately observe all morphological features and then apply the appropriate terminology (in the usage advocated by the worker for that term) to these features.

The I.C.Z.N. defines different varieties of permissible type material, for example: holotypes, syntypes, and lectotypes. Topotype material is not covered by the I.C.Z.N., which defines 'topotype' as:

"A term, not regulated by the Code, for a specimen originating from the type locality of the species or subspecies to which it is thought to belong, whether or not the specimen is part of the type series." (I.C.Z.N., p. 269).

Hence, topotype material has no bearing whatsoever on the construction or subsequent application of zoological names (unless a worker is in the process of introducing a 'neotype' following I.C.Z.N. Article 75). In ichnology the irrelevance of topotype material is particularly critical because, as Pickerill (1994) and MacNaughton and Pickerill (1995) have stated, gradational and compound ichnofossils exist (e.g. a lined burrow passing laterally into an unlined burrow) and trace fossils may also form part of a taphoseries (e.g. where a lining may be lost by enhanced weathering at points along the burrow course). Accordingly, holotype/syntype material may be distinctly different to topotype material that is present even on adjacent slabs.

Goldring and Pollard (1995, 1996) utilized, as supposed examples of inappropriate ichnotaxonomic revisions, the work of D'Alessandro and Bromley (1987) and ourselves (Keighley and Pickerill, 1994) on the ichnotaxa *Taenidium* Heer and *Beaconites* Vialov. Accordingly, we shall use the same examples to illustrate several of Goldring and Pollard's (1995, 1996) misconceptions. Specifically, regarding the use of morphological terminology, we distinctly emphasized that our use of the descriptor 'wall' was for a three-dimensional, marginal (constructional) burrow feature - and the descriptor 'margin' was used more generally for the outermost part of a burrow - particularly because of the ambiguous use of these terms in ichnological literature (Keighley and Pickerill, 1994). *Contra* Goldring and Pollard's (1996) opinion, Bromley's (1996) definition of a wall is very clear - merely different to how they would interpret the term. Our use of the term

(adopted by Bromley, 1996) followed the 'rigorous' usage not of the AGI, or of a subsequent informal agreement between a few workers, but of no lesser an authority than the Oxford English Dictionary. Regardless, as long as usage (in diagnoses) of a particular term such as 'wall' is clearly defined, then with regards to nomenclature and ichnotaxonomic revision it does not matter what a 'wall' should or should not stand for: that our use of the term may differ from that of the four AGI definitions or that of Goldring and Pollard, is irrelevant .

D'Alessandro and Bromley (1987) reviewed the ichnogenus *Taenidium* and deemed the primary criteria (ichnotaxobases) for a trace fossil to be so named were the nature of the burrow fill (i.e., meniscate) and the structure of the burrow adjacent to its margin (i.e. essentially unlined - a 'lining' being a type of wall - Keighley and Pickerill, 1994). In our 1994 paper, we attempted an examination of the ichnogenus *Beaconites* and its potential publication as a junior synonym of *Taenidium*. Accordingly, we had to investigate what trace-fossil morphology the cipher '*Beaconites*' represented. Initially, we concluded that the provisions of the I.C.Z.N. were followed when the ichnospecies *Beaconites antarcticus* Vialov was validly introduced as the name-bearing type of the ichnogenus in question . The type series of the ichnospecies (I.C.Z.N., Article 72c-v), that in this case comprises syntypes (I.C.Z.N., Article 73b), was provided only by the specimens illustrated and described in Vialov (1962, p. 728, figs 9, 10) since the type material was not collected and is now presumed lost. Note that the morphology of a subsequently introduced ichnospecies (e.g. '*B. barretti*' Bradshaw) is irrelevant with regards what the ichnogeneric name represented (I.C.Z.N., Article 42c, and *contra* Goldring and Pollard, 1995).

As noted earlier, topotype material, such as that in the collections of Bradshaw, Woolfe, and the Natural History Museum, is also irrelevant to what the ichnogeneric name stands for. Accordingly, though Goldring and Pollard (pers. comm., 1994; 1995; and, indirectly, 1996) criticize the fact that we did not examine topotype material of *Beaconites* in arriving at our decision regarding the use of this name, there was absolutely no reason to do so. Our recommendation that *Beaconites* (by way of the type ichnospecies) be utilized for walled burrows was based on our interpretation of Vialov's (1962) diagnosis *and* figures (*contra* Goldring and Pollard, 1996) - the only valid 'material' that there was to consider. Unfortunately, as we stated in our 1994 contribution, from Vialov's (1962) diagnosis *and* figures it cannot be unequivocally established whether a wall-lining is or is not present. Our decision had to be subjective.

Furthermore, since the diagnosis of *Beaconites* does not explicitly state that a lining is present or absent and no type material exists, it was incorrect for Goldring and Pollard (1995, 1996) to state that Bradshaw and Woolfe could 'confirm' or 'show' the absence of a lining in *Beaconites*. Metaphorically, they 'name' the cart before the horse. These workers can certainly confirm the absence of a lining in their own material, but whether or not this material should be called *Beaconites* depends upon what morphological features are present in the type material. Their material cannot simply be referred to as *Beaconites* because it was collected from the same area, and the diagnosis of the ichnogenus then adapted to the material that they have found. *Skolithos* Haldemann has been found in the same area...! Note also that D'Alessandro and Bromley (1987) confirmed that topotype material of *Beaconites* was very badly weathered and hence is of dubious utility both for ascertaining the true structure of the type material and for making any future selection of a neotype from topotype material (I.C.Z.N., Article 75b.ii and 75d.4).

Since the use of *Beaconites* has to be based on subjective interpretations, our recommendation to use *Beaconites* for walled burrows was therefore also based (see Keighley and Pickerill, 1994, p. 308) on the subsequent use of *B. antarcticus* for other lined burrows (and hence 'walled' burrows) by later workers. For example, Bradshaw (1981, p. 630) stated: '...Burrow lining smooth...' in her ichnogeneric diagnosis, and '...a poorly developed sand lining to the burrow is more obvious (Fig. 15)...' in the description of her material assigned to *B. antarcticus*. That she now apparently notes the absence of a lining in all material (pers. comm. in Goldring and Pollard, 1995) is somewhat contradictory, but this may highlight the problem we mentioned earlier, and in our original contribution, that workers do not specify how they are employing a particular term and perhaps even vary their use of a term with time.

Our recommendation that *Beaconites* be used for walled meniscate burrows permitted a name to be attached to burrows with such a morphology (e.g. Trewin and McNamara, 1995; Pickerill *et al.* 1996; and likely Gevers *et al.* 1971, pl. 18.3; Bradshaw, 1981, fig. 15; amongst others). If Goldring and Pollard (1995) and others prefer to disagree with our recommendations and to interpret Vialov's (1962) diagnosis to mean that *Beaconites* be used as a cipher for unwalled burrows, they are, of course, free to do so. They are in no more error than we are for saying that *B. antarcticus* is walled. In following such a course of action, however, they initiate several more nomenclatural problems. Meniscate burrows with a wall lining would be

left without a name - as Keighley and Pickerill (1994) have argued, *Ancorichnus* Heinberg cannot be used. Additionally, following D'Alessandro and Bromley's (1987) seminal work, meniscate burrows without a wall lining (a morphology that we all agree includes '*B. barretti*', which has a false lining) would then be included within *Taenidium* and the ciphers '*Beaconites*' would become a junior synonym of *Taenidium*. Our recommendations avoid these problems.

In conclusion, it is our opinion that Goldring and Pollard's (1996) comments regarding the importance of topotype material are irrelevant; they skirt the issue of what procedures to adopt when valid type material does not exist (emphasis has to be placed on original figures and diagnoses, and upon the subsequent use of the name); they do not address procedures for the revision of ichnotaxonomic nomenclature correctly, and instead provide a convoluted discussion on the varied use of certain terms for trace fossil morphology. Accordingly, the title of their 'palaeo-comment' is also very misleading. With regards their example of an 'erroneously' revised ichnotaxon (i.e. *Beaconites*), we stand by our recommendation that *B. antarcticus* and *B. barretti* should be considered ichnogenerically separate.

Finally, although we agree with Goldring and Pollard (1996) that it is desirable that valid type material be examined in any systematic review of an ichnotaxon, in many cases such material does not exist or, alternatively, cannot be located given the limited resources available to most authors (e.g. 49% of the type specimens of *Palaeophycus* Hall and *Planolites* Nicholson were not retrieved by Pemberton and Frey, 1982). Similarly, although we agree with Goldring and Pollard (1996) that much greater 'consensus' in the use of morphological terms would be welcome, all that is realistically achievable is greater clarity as to how such terms should be employed.

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FUTURE MEETINGS OF OTHER BODIES



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 [WWW site](#) or from the organizers: Geologisch-Palaeontologisches Institut, Im Neuenheimer Feld 234, D-69120

Heidelberg, Germany; e-mail: Peter.Bengtson@urz.uni-heidelberg.de or Heinrich.Bahlburg@urz.uni-heidelberg.de

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 [WWW site](#) or from the organizer: Geologisch-Palaeontologisches Institut, Im Neuenheimer Feld 234, D-69120 Heidelberg, Germany; e-mail: Peter.Bengtson@urz.uni-heidelberg.de

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 [wwwsite](#)

or contact Petr Cejchan, Geological Institute, Czech Academy of Sciences, Rozojova 135, CZ-16502, Praha 6-Suchbát, Czech Republic

OR Douglas H. Erwin, Dept. of Paleobiology, MRC-121, Smithsonian Institution, Washington, DC 20560 USA (email: MNHPB028@SIVM.SI.EDU)

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

5th International Symposium on the Jurassic System

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

Organized by the IUGS Jurassic Subcommittee. 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: psmith@eos.ubc.ca or via the [Symposium Website](#)

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Newsletter copy

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 suerigby@glg.ed.ac.uk Last minute items may be sent by e-mail to Lori Snyder at ljps@esc.cam.ac.uk

Deadline for copy for Issue No. 33 is 31 January 1997.

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

<http://www.nhm.ac.uk/paleonet/PalAss/PalAss.html>

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

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Deadline for copy for Issue No. 32 is
31 January.*

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