

Notice of Annual General Meeting and Annual Address

The 163rd Annual General Meeting will be held in the Flett Lecture Theatre, Natural History Museum, London SW7 5BD on Wednesday, 14th April, 2010 at 4.15 pm. The Annual Report of Council will be presented, along with Income and Expenditure Accounts for the year ended 31st December 2009 and Council Members and Officers will be elected for the ensuing year. Tea and coffee will be available from 3.45 pm in the foyer of the Flett Lecture Theatre. This meeting is open to all members of the Society.

The AGM will be followed by the Society's Fourth Annual Lecture, to be given by Prof. Paul Pearson (University of Cardiff) on "Species and time". The event will be held in the Flett Lecture Theatre, Natural History Museum, Cromwell Road, London, SW7 5BD at 4.30 pm. This event is open to members of the Society and other interested parties.

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1 Publications: Volume 163 was published in December 2009.

Vol. 163, 2009 (for 2009) (£210):

- 632. The British Silurian Crinoidea. Part 1. Introduction and Disparida, by S. K. Donovan, D. N. Lewis, F. E. Fearnhead & R. E. Widdison (pp. 1–45, pls 1–6. £70.00).
- 633. A revision of the Lower Jurassic ammonite genus *Eoderoceras* Spath and its immediate descendants and other relatives (Complete), by M. Edmunds (pp. 1–89, pls 1–40. £140.00).

The Editors welcome suggestions for new titles and would also be grateful for manuscripts that represent concluding or additional parts of ongoing unfinished monographs.

2 Subscriptions for 2010 were considered due on 1st January 2010 and will entitle subscribers to Volume 164. Individual subscriptions are £35.00. Institutional subscriptions are £120.00, though if paid through an agency are £230.00. The Student rate remains at half the individual rate, £17.50.

Subscriptions can sent to Dr M. P. A. Howe, The Treasurer, c/o British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, NG12 5GG, United Kingdom (cheques, drawn on a UK bank, should be made payable to the 'Palaeontographical Society'). A subscription renewal form for 2010 (Volume 164) was enclosed with the recent mailing of Volume 163. If a replacement is required please download one from the Society website or contact the Treasurer.

The Society also accepts credit card payments for subscriptions and renewals via PayPal. If you wish to pay via this method please follow the instructions on the 2010 subscriptions form or visit the Society's new website (www.palaeosoc.org).

The Treasurer maintains the membership list and prepares the distribution list for each volume of monographs. Any enquiries concerning subscriptions or methods of payment should be directed to the Treasurer. His e-mail address is mhowe@bgs.ac.uk.

3 The Society's Web Site (www.palaeosoc.org) and Online Shop was launched in 2009. The website has been substantially expanded to include more information on the Society's activities and to allow online sales of past monographs, as well as online membership applications and renewals. This website supercedes the old site, which will be closed down in early 2010. The new website appears to have been a great success and its online ordering facility has helped many overseas representatives to either join our Society or purchase monographs more easily. To obtain the member's discount from the online shop, a password is required. If you have not already registered your e-mail address with us and been issued with your personal password please contact the President (a.smith@nhm.ac.uk), who will be pleased to issue you with one.

4 Research fund: Council would like to draw the attention of Members to the call for new applications to the Palaeontographical Society Research Fund. This scheme aims to provide awards in the region of £500 for research on the UK fossil flora and fauna. Please see the website or contact either Co-Secretary (P.Barrett@nhm.ac.uk or S.Long@nhm.ac.uk) for further information. The next closing date for applications is 28th February 2010 and the successful applicant(s) will be announced at the AGM. Three grants were awarded in 2009:

Dr A. Butcher (University of Portsmouth): Palynomorph assemblages from the early Sheinwoodian (Wenlock, Silurian) of Wales and the Welsh Borderland.

Mr J. Lamsdell (University of Bristol): Redescription of eurypterids assigned to the genus *Drepanopterus* from the Silurian strata of the Pentland Hills.

Mr A. Storey (University of Birmingham): Systematics of British upper Silurian trilobites.

Reports on two of these projects are appended to the end of this Newsletter.

5 Discount rate on backstock for Members and Authors: Individual Members are reminded that they are entitled to a discount of at least 50% on the purchase of one copy of any backstock and reprinted editions where available. This discount is available via the website when using your member login details. Authors are entitled to receive a 75% discount on backparts of monographs they contributed to. If authors wish to purchase backstock they should contact the Treasurer (mhowe@bgs.ac.uk).

6 Society Archives: Members of the Society wishing to view the archives of the Palaeontographical Society should write to one of the Co-Secretaries (S.Long@nhm.ac.uk or P.Barrett@nhm.ac.uk).

7 An Atlas of Graptolite Type Specimens: This publication seeks to make graptolite species, new and old, better known by providing good annotated drawings of type specimens. The First and Second Folios are available at a cost of £10.00 +p&p and can be ordered from the Secretary (S.Long@nhm.ac.uk or P.Barrett@nhm.ac.uk).

8 Annual Address: The subject of the Fourth Annual Address is "Species and Time". This year's speaker is Prof. Paul Pearson (University of Cardiff) who is an internationally recognized expert on Tertiary climate change and the evolution of foraminifera. Details of the meeting venue and date are given above.

9 Lyell Meeting: The Society is a major sponsor of the Lyell Meeting, which will be held in conjunction with the Third International Palaeontological Congress (28th June to 3rd July 2010), which is to be held at Imperial College and the Natural History Museum, London. This year's Lyell Meeting is being convened by the President (Dr A. B. Smith) and is entitled: "Comparing the geological and fossil records in deep-sea, shallow marine shelf and terrestrial habitats: implications for biodiversity studies". All members of the Society are entitled to attend this session of the IPC for free, but must register via the IPC website in order to do so (<http://www.ipc3.org/register-or-submit-an-abstract/>). If members wish to attend other sessions at IPC they will have to register for the full cost of the meeting.

10 Nominations for Council: The Palaeontographical Society is open for nominations to council for 2010-2013. The council meets twice a year and is responsible for overseeing the running of the Society and for providing guidance on how it can best serve its membership's needs. Any member of the Society can nominate a candidate, and names will be considered at the next AGM. Members should nominate a candidate by sending an email to the Co-Secretaries (p.barrett@nhm.ac.uk or s.long@nhm.ac.uk) together with a statement from the candidate that he/she is willing to be considered.

11 Financial advisor: Council is seeking an individual from among the membership who has past experience in investments management and who would be willing to offer the Society informal advice on financial matters from time-to-time. Please contact the Treasurer (mhowe@bgs.ac.uk) if you would be interested in taking on such a role.

12 Out-of-print monographs: The Society hopes to make out-of-print monographs available to the membership by scanning back copies of these works and archiving them on our website as .pdf files. These files would be free to download for the membership and would also represent a valuable archival resource for the Society. If members have any unbound copies of old monographs (numbers 1-250) that they would be willing to loan Council for this purpose please contact one of the Co-Secretaries (p.barrett@nhm.ac.uk or s.long@nhm.ac.uk).

13 New members: We would like to extend a warm welcome to the following recent new members of the Society: Dr B.B. Britt (USA), B. Brooks (UK), Dr E. Buffetaut (France), Dr A. Butcher (UK), Prof. P. J. Currie (Canada), P. L. Falkingham (UK), Dr S. Garner (UK), D. J. Gravett (UK), Dr J. Harris (USA), Prof. T. R. Holtz Jr (USA), Dr A. Hunter (UK), S. Keenan (UK), D. Legg (UK), B. Metcalfe (UK), Dr M. Montenari (UK), Dr M. Munt (UK), G. Niedzwiedzki (Poland), S. Pond (UK), K. Richards (UK), A. Schmidt (Germany), Dr T. Vandenbroucke (Belgium), Dr G. Weedon (UK), S. Wills (UK) and P. Winrow (UK).

14 Newsletter: If in future you would prefer to receive this newsletter and the Annual Report in electronic form (rather than hardcopy) please send your details to Paul Barrett (P.Barrett@nhm.ac.uk).

P. M. Barrett
Co-Secretary
February 2009

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Palynomorph assemblages from the early Sheinwoodian (Wenlock, Silurian) of Wales and the Welsh Borderland

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The Sheinwoodian succession of Wales and the Welsh Borderland has been shown to yield well-preserved chitinozoans and acritarchs (e.g. Dorning & Harvey 1999; Mullins & Loydell 2001), and several deeper-water localities within this area that have received relatively little or no study have the potential to yield excellent palynomorph assemblages. The early Sheinwoodian is a particularly interesting interval within the Silurian as both the Ireviken Event on Gotland and a large global positive $\delta^{13}\text{C}$ isotope excursion coincide during this time (see Munnecke *et al.* 2003; Loydell 2007). Detailed palynological analysis from such deeper-water localities in Wales and the Welsh Borderland will potentially allow for the recognition and characterization of these important early Sheinwoodian global events.

In order to fulfil the aims above, fieldwork (funded by a Palaeontographical Society Research Grant) was undertaken to collect samples from a quarry in Wales. A 12.2 m section was logged, and samples were collected every 5 cm for palynological processing - such high-resolution sampling was conducted in order to ensure the recognition of the global Sheinwoodian events if represented within the strata. Initial sample processing, using a hydrochloric/hydrofluoric acid technique, has yielded well-preserved chitinozoan and acritarch specimens. Detailed taxonomic analysis of the chitinozoan specimens will allow for biostratigraphical correlation of the strata, while morphological and abundance analyses of the acritarchs may show correlation with the early Sheinwoodian carbon isotope excursion (e.g. see techniques of Stricanne *et al.* 2006).

Palynological processing and analyses of the palynomorphs continues, and it is hoped that the taxonomic analyses will prove to be sufficient for the production of a Palaeontographical Society monograph in the future. Sincere thanks are extended to the Palaeontographical Society for the award of this Research Grant, for it enabled for the collection of field data to initiate this highly interesting study.

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Redescription of eurypterids assigned to the genus *Drepanopterus* from the Silurian strata of the Pentland Hills

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The eurypterids from the Silurian of the Pentland Hills form part of a unique assemblage of well-preserved fossils formed due to smothering of the seabed by volcanic ash. Seven genera are known from the Eurypterid Bed, including 15% of all known stylonurine (eurypterids with their posterior legs adapted for walking) species. The genus *Drepanopterus* was erected in 1892, when the fauna was first described, and was the first step in recognising the diversity of eurypterids beyond the genera *Eurypterus* and *Stylonurus*. Three species of *Drepanopterus* (*D. pentlandicus*, *D. bembycoides* and *D. lobatus*) are reported from the site, however renewed taxonomic interest in the genus suggested that some of these may be synonymous with *Nanahughmilleria conica* and may represent a distinct, hitherto unrecognised genus.

All of the Pentland Hills material is held at the collections centre of the National Museums of Scotland, and in July 2009 I spent a week there studying the rather well preserved specimens. It soon became readily apparent that '*D. bembycoides*' and '*D. lobatus*' did not belong in *Drepanopterus* sensu stricto, and that '*N. conica*' was no *Nanahughmilleria*! The three were certainly co-generic, however, and possessed an intriguing set of characters, including a pediform appendage VI with a modified podomere 7a (a structure normally only seen on swimming paddles). In order to fully resolve the affinities of this new genus I travelled to the Senckenberg museum in Frankfurt, Germany, and visited the private collection of Markus Poschmann to study two little-known eurypterid genera, *Moselopterus* and *Vinetopterus*. These too have a pediform appendage VI with 7a, and also share characteristics such as serrate posterior margins to the postabdominal segments, an oval metastoma with anterior notch and anterior 'ears' on the coxa of appendage VI.

This information points to *Moselopterus*, *Vinetopterus* and the new genus being very closely related. Rather than being stylonurines, they resolve instead at the base of the Eurypterina (swimming forms), a poorly-understood phase of eurypterid evolution. *Vinetopterus* and the new genus are the most primitive Eurypterina known, probably belonging in a family separate to *Moselopterus*. The redescription of the Pentland species will offer insight into the plesiomorphic character states within the Eurypterina and (by comparison with basal stylonurines) the Eurypterida as a whole, along with the environment and mode of life that basal eurypterids occupied and may help resolve the identity of the eurypterid ancestor.

Now that the initial study is complete, the results are being written up in the form of a monograph, consisting of a redescription of all known specimens of '*D. bembycoides*', '*D. lobatus*', and '*N. conica*' and a discussion on the relationships and character acquisition of the basal Eurypterina, to be submitted as a Palaeontographical Society Monograph by the end of the July 2010. My visits to Scotland and Germany have also led to a number of ancillary discoveries also being prepared for publication, including a new genus of carcinosomatid from the Pentland Hills and a redescription of *Moselopterus*. All this research would not have been possible without the generous support of the Palaeontographical Society.