

## Notice of Annual General Meeting and Annual Address

The 166<sup>th</sup> Annual General Meeting will be held in the Flett Lecture Theatre, Natural History Museum, London SW7 5BD on Wednesday, 24<sup>th</sup> April, 2012 at 4.00 pm. The Annual Report of Council will be presented, along with Income and Expenditure Accounts for the year ended 31<sup>st</sup> December 2012, and Council Members and Officers will be elected for the ensuing year. Tea and coffee will be available from 3.30 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 Seventh Annual Lecture, to be given by Dr. Andrew B. Smith (Department of Earth Sciences, the Natural History Museum, London) on "Sea urchins in the Mesozoic – adaptation and survival". The event will be held in the Flett Lecture Theatre, Natural History Museum, Cromwell Road, London, SW7 5BD at 4.15 pm. This event is open to members of the Society and other interested parties.

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## NEWSLETTER 29

**1 Publications:** Volume 166 was published in November 2012.

**Vol. 166, 2012 (for 2012) (£240):**

638. The British Silurian Crinoidea, Part 3, addendum to Parts 1 and 2, Camerata and columnals, by S. K. Donovan, R. E. Widdison, D. N. Lewis and F. E. Fearnhead (pp. 135-259, pls 37-62, final part. £115.00).
639. British Cretaceous Echinoids, Part 9, Atelostomata, 2. Spatangoida (2), by A. B. Smith and C. W. Wright (pp. 635–754, pls 210-253, final part. £125.00).

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 2013** were considered due on 1st January 2013 and will entitle subscribers to Volume 167. Individual subscriptions are £35.00. Institutional subscriptions are £125.00, though if paid through an agency are £240.00. The Student rate remains at half the individual rate, £17.50. There is a surcharge of £1.50 when subscriptions are paid through PayPal.

Subscriptions can be 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 2013 (Volume 167) was enclosed with the recent mailing of Volume 166. 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 2013 subscriptions form or visit the Society's website ([www.palaeosoc.org](http://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](mailto:mhowe@bgs.ac.uk).

**3 The Society's Web Site ([www.palaeosoc.org](http://www.palaeosoc.org)) and Online Shop** was launched in 2009 and continues to be an effective tool for posting new information on the Society (including progress reports for Palaeontographical Society Research Grants and other announcements), and for selling Society publications and enabling credit card payments for membership renewals. 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 have yet to be issued with your personal password, please contact the President ([a.smith@nhm.ac.uk](mailto:a.smith@nhm.ac.uk)), who will be pleased to issue you with one.

**4 Research funds:** The Palaeontographical Society Research Fund scheme was renamed the Richard Owen Research Fund from 2012. It aims to provide awards in the region of £500 for research on the UK fossil flora and fauna. Please see the website or contact the Secretary ([Steve.Donovan@naturalis.nl](mailto:Steve.Donovan@naturalis.nl)) for further information. The next closing date for applications is 28<sup>th</sup> February 2013 and the successful applicant(s) will be announced at the AGM. Three grants were awarded in 2012:

F.E. Fearnhead (The Natural History Museum, London). British Devonian Crinoidea.

B. Moon (University of Bristol). The British Late Jurassic Ichthyosaur *Ophthalmosaurus*.

M. O'Sullivan (University of Portsmouth). Pterosaurs in the British Jurassic.

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

**5 The Edward Forbes Prize:** The Society invites applications for the newly instituted Edward Forbes Prize, which aims to recognise outstanding contributions by early career researchers in the field of taxonomic and systematic palaeontology (encompassing invertebrates, vertebrates, palaeobotany and microfossils). The Prize, which is to be awarded for publication

excellence, comprises £250 and a one-year membership of the Society. The Prize will be awarded at the Society's Annual General Meeting each year. Full criteria for eligibility are posted on the Society's website.

We invite submissions for the 2013 award on the basis of any eligible article that was published in 2012. Applications should be addressed to the Secretary, Dr. Steve Donovan ([Steve.Donovan@naturalis.nl](mailto:Steve.Donovan@naturalis.nl)), and must be received by the closing date of 25<sup>th</sup> February 2013. The decision of the Prize Committee will be announced at the Society's AGM. The successful applicant will be informed in advance, so that they may attend the meeting if they wish.

**6 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](mailto:mhowe@bgs.ac.uk)).

**7 Society Archives:** Members of the Society wishing to view the archives of the Palaeontographical Society should write to the Secretary ([Steve.Donovan@naturalis.nl](mailto:Steve.Donovan@naturalis.nl)).

**8 Annual Address:** The subject of the Seventh Annual Address is "Sea urchins in the Mesozoic – adaptation and survival". This year's speaker is Dr. Andrew B. Smith, our outgoing President, who recently retired from the Department of Earth Sciences at the Natural History Museum, London. Andrew Smith is an internationally acknowledged expert on the echinoderms, particularly the Echinoidea, and is co-author of the Society's monograph, *British Cretaceous Echinoids*, the last part of which was published in November. This promises to be an absorbing talk, and details of the meeting venue and date are given above. The abstract for the Address will be available on the front page of the Society's website ([www.palaeosoc.org](http://www.palaeosoc.org)).

**9 Lyell Meeting:** The Society is a sponsor of the Lyell Meeting, which will be held in the Meeting Room of the Geological Society (Burlington House) on Wednesday, 13<sup>th</sup> March, 2013. This year's Lyell Meeting is being convened by Professors David A.T. Harper (Durham University) and M. Paul Smith (University of Oxford), and is entitled: "The Cambrian Explosion – understanding Earth systems at the origin of modern ecosystems".

**10 Nominations for Council:** The Palaeontographical Society is open for nominations to council for 2013–16. 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 AGM. Members should nominate a candidate by sending an email to the Secretary ([Steve.Donovan@naturalis.nl](mailto:Steve.Donovan@naturalis.nl)) together with a statement from the candidate that he/she is willing to be considered.

**11 Behind-the-scenes at the Natural History Museum, London:** Depending upon demand, the Society will arrange one or more behind-the-scenes tours in the Department of Earth Sciences, the Natural History Museum, London, in June 2013. Further details will be posted on the Society's website.

**12 Financial advisor:** Council is still 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. Please contact the Treasurer ([mhowe@bgs.ac.uk](mailto:mhowe@bgs.ac.uk)) if you would be interested in taking on such a role.

**13 Murray Mitchell:** The former President and Editor of the Society, Dr. Murray Mitchell, died in March 2012. Dr. Mitchell was an officer of the British Geological Survey for 30 years. He was a noted expert on the Lower Carboniferous geology, particularly the corals. Following retirement, he was active in various local geological societies in the north of England, teaching evening classes and writing, with F.G. Dimes, 'The Building Stone Heritage of Leeds' (1996), which went to a second edition in 2008.

**14 Adrian Ruston:** At the April 2012 meeting of Council, it was resolved to elect Dr. A.W.A. Rushton as an Honorary Member in recognition of his many services to the Society. With Adrian's kind permission, we reproduce below part of his letter of acceptance for the light it throws on the history of the Society.

"Editing the Society's monographs was, for me, both a rewarding occupation and highly educational. How else would I have got involved with Eocene otoliths and learnt so much about cycads?"

If I may reminisce, it was my former colleague, the late Murray Mitchell, who, as the Pal Soc editor in the late 1960s, drew me into editing as an informal assistant. During that period I valued his advice and guidance and recognised his meticulous approach, which was something I tried to emulate.

Editing in those days was very different from what it has since become. The authors' texts were typewritten. Once duly edited, they were completely retyped in the printing house, to yield a pink ticker-tape version that could then be printed by monotype 'hot metal' machines (astonishingly noisy!). First corrections were made on long proof sheets ('galleys') while the text-figures were proofed separately. The plates were printed elsewhere by the excellent, but sometimes wayward, collotype process. The editors spent a lot of time and ingenuity deciding how the pages should be 'made up' for the second proof stage. This was an anxious moment because during make-up human errors supervened: odd letters or whole lines might get missed off, and occasionally one had a 'printer's pie', when the type in the galley got upset. Corrections to the text were potentially expensive, so we distinguished author's afterthoughts, editor's errors and printer's blunders, in order to apportion the cost – a task I preferred to leave to my incisive colleague Peter Warren. Coordinating the 'book-production' was a tense moment. The collotype plates had to be delivered to the printer, who would set up teams to paste, by hand, all the plates into the finished volume.

During the 1970s the offset litho process replaced monotype. The Society agonised somewhat over what was to replace collotype, and I remember having several versions of Bob Owens's Proetids, Plate 1 (originally in collotype), reprinted by various firms competing for our custom. Happily, by the time I returned to co-editing the monographs in the 1990s, the system had settled down and the production side seemed much smoother, so although the editors remained very busy, they could concentrate more on the monograph itself."

**15 New members:** We extend a warm welcome to the following recent new members of the Society: Andrea Di Cencio, Judyth Sassoon, Peter Buster and Nicholas Cottard.

**16 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 Steve Donovan (Steve.Donovan@naturalis.nl).

S. K. Donovan  
Secretary  
January 2013

c/o Department of Geology,  
Naturalis Biodiversity Center,  
Postbus 9517,  
2300 RA Leiden, THE NETHERLANDS.

**British Devonian Crinoidea: fresh results from the field**

**Fiona E. Fearnhead**

The Natural History Museum, Cromwell Road, London, SW7 5BD

E-mail: [F.Fearnhead@nhm.ac.uk](mailto:F.Fearnhead@nhm.ac.uk)

Whittaker & Leveridge (2011) recently noted that the Valley of Rocks, Lynton Formation, contains “a variety of fossil forms amongst which bivalve, brachiopods, bryozoans and crinoid debris are relatively common together with bands rich in *Modiomorpha*”. This proposal was for support to collect this crinoid material for description and inclusion in a forthcoming *Monograph of the Palaeontographical Society*, ‘British Devonian Crinoidea’ (Donovan & Fearnhead, research in progress).

The Valley of Rocks GCR site, Lynton Formation, and its fossils played a key role in the definition of the Devonian System and in the stratigraphic correlation of the marine Devonian stratigraphy of southwest England with the Old Red Sandstone. Originally designated as Cambrian or Silurian age by Sedgwick and Murchison, the sequences contributed significantly to the scientific debate with De la Beche and Greenough (Rudwick, 1985).

The principal aim of this fieldwork was to collect crinoid material (both articulated, if available, and disarticulated columnals and pluricolumnals) from the Valley of Rocks. This field research was undertaken in late July 2012, resulting in a large collection filling four large shoe-boxes with natural moulds of fossil crinoids. Material includes crinoid columnals, with at least two new, as yet undescribed morphogenera. Associated trace fossils and brachiopods were also collected.

Identification and description of this new crinoid material is ongoing. The columnals collected at the Valley of Rocks show that there was a wider diversity of crinoids from this site than first thought. There are at least five distinct morphospecies awaiting description. Unexpectedly, none of the more distinctive columnal morphologies commonly associated with Devonian strata, such as *Cupressocrinites* Goldfuss, *Hexacrinites* Phillips or *Floriacrinus* (col.) Stukalina, are present in this collection. A manuscript is being prepared for publication (Fearnhead & Donovan, research in progress), the results of which will contribute to Part 2 of ‘British Devonian Crinoidea’.

In addition to the objectives stated above, I visited Combe Martin and identified a thin, crinoid-rich horizon containing small disarticulated ossicles. My reconnaissance also extended to David’s Hole and Sandy Cove, but with less success. I also noted and reported to Mr. J.S.H. Collins (the Natural History Museum, London) on the presence of the Recent pedunculate barnacle *Lepas fascicularis* (Ellis & Solander), a small clump of five specimens linked together by their float. Useful contacts were made with the local museum.

I thank the Palaeontographical Society for the financial support of this grant which made this short field season possible.

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WHITTAKER, A. & LEVERIDGE, B.R. 2011. The North Devon Basin: a Devonian passive margin shelf succession. *Proceedings of the Geologist Association*, **122**, 718-744.

**The British Middle and Late Jurassic ichthyosaur *Ophthalmosaurus***

**Benjamin Moon**

School of Earth Sciences, University of Bristol, Wills Memorial Building, Queen’s Road, Bristol, BS8 1RJ

E-mail: [benjamin.moon@bristol.ac.uk](mailto:benjamin.moon@bristol.ac.uk)

The Middle and Upper Jurassic strata of Great Britain are dominated by two great clay formations, the Oxford and Kimmeridge clays. The fine-grained nature of the matrix, and the hypoxic/anoxic seafloor conditions, has led to the exceptional preservation of many different animal groups. Much of the vertebrate material was collected by Mr Charles Leeds and his son Alfred between 1867 and 1917 (Leeds, 1956). This was sold in two collections, the first entirely to the British Museum (Natural History) (now Natural History Museum), London (BMNH), in 1890–1893 and the second to several museums, including the BMNH and the New Walk Museum, Leicester (LNWM).

Among the collections was a significant amount of ichthyosaur material. The distinct morphology of this, compared to the better known Liassic material, led Seeley (1874) to erect the new genus and species, *Ophthalmosaurus icenicus*. Importantly, *Ophthalmosaurus* was only the second ichthyosaur genus to be named, after *Ichthyosaurus* (König, 1818). The preservation of the material is largely three-dimensional, unlike the more familiar Liassic type specimens, which are commonly preserved flattened on slabs. This is compromised by the material mostly being disarticulated to a lesser or greater extent (e.g., Martill, 1987).

The purpose of the present study was to examine and re-describe the British material of *O. icenicus*. Much of this is derived from the Callovian (Upper Jurassic) Peterborough Member of the Oxford Clay Formation (Andrews, 1910; Hudson & Martill, 1994). A certain amount of material has been collected from the more recent Kimmeridge Clay, particularly from the Jurassic Coast of Dorset, and Wiltshire and Cambridgeshire. Complete descriptions of this taxon are few (Andrews, 1910; Kirton, 1983) and there are a few more partial descriptions (Seeley, 1874; Appleby, 1956).

The material held in the BMNH includes the type specimens of *O. icenicus* (BMNH UK R2133 and R2134), along with several others. The designation of holotype in the original publication is unclear and will be rectified following consultation with the International Code of Zoological Nomenclature. The LNWM contains many more specimens from the Leeds collections,

including the type of *Ophthalmosaurus monocharactus* Appleby, 1956. These two species were diagnosed on solely on the number of notches present on the coracoids; *O. icenicus* possesses two notches – anterior and posterior – and *O. monocharactus* has a single anterior notch. Examination of the material confirms the diseased nature of part the type specimen (BMNH UK R2133) and the significant amount of intraspecific variation present. This condition corroborates previous hypotheses on the synonymy of these taxa. There have also been questions on the generic separation of *O. icenicus* and the American species “*Ophthalmosaurus*” (*Baptanodon*) *natans* (Marsh, 1879). Comparisons between descriptions (Gilmore, 1905; Appleby, 1956; Kirton, 1983) suggest that there is no material referable to “*O.*” (*B.*) *natans* from the British Middle and Upper Jurassic.

To quantify this variation, landmark morphometric techniques will be used. These will focus upon the humerus and scapula of several specimens. These elements were chosen because of the number of well-preserved, uncrushed specimens available and for the ease of landmark recognition, and were photographed comprehensively for this purpose. In particular, there is a noticeable difference in the relative sizes of the distal humeral facets, for articulation with the ulna, radius and a preaxial accessory element. The ratios between these have been used as diagnostic characters, as for *Acamptonectes densus* Fischer *et al.*, 2012. Morphometric analysis will aim to show the total variation of the material assigned to *O. icenicus*; however, it is expected that the sample size will be too small for certain hypotheses to be drawn on, for example, sexual dimorphism.

This study is part of a larger project on the taxonomy of British Middle and Upper Jurassic ichthyosaurs. Completion of a manuscript is expected in October 2013.

I and gratefully acknowledge the Society’s support in completion of this study. I thank Dr Mark Evans (LNWM) and Ms Sandra Chapman (BMNH) for allowing access to the relevant collections, and for their help during this research. My thanks go to Dr Angela Kirton, whose materials form the basis of this project, and Professor Mike Benton as my supervisor.

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## Pterosaurs of the British Jurassic

Michael O’Sullivan

School of Earth and Environmental Sciences, University of Portsmouth, Portsmouth, United Kingdom, PO1 3QL  
E-mail: [michael.osullivan@port.ac.uk](mailto:michael.osullivan@port.ac.uk)

During the Mesozoic, pterosaurs were the dominant volant vertebrates. Arising in the Middle-Late Triassic, they were spread globally by the Lower Jurassic, occurring from Europe to Antarctica. They appear to have undergone a speciation event in the Late Jurassic, leading to a boom in diversity throughout the Early Cretaceous (Butler *et al.*, 2009). They became less numerous in the Late Cretaceous, reduced to only two groups in the Maastrichtian (Witton & Naish, 2008).

Within the United Kingdom, pterosaur fossils are limited to Lower and Middle Jurassic strata. Only two families with three taxa are known: the Dimorphodontidae (*Dimorphodon macronyx* Owen, 1859); and the Rhamphorhynchinae (*Parapsicephalus purdoni* Arthaber, 1921, *Rhamphocephalus* Seeley, 1880). *Dimorphodon* from the Blue Lias Formation (Sinemurian) of Lyme Regis is one of the earliest pterosaurs to have had a formal description (Buckland, 1829). It possesses a highly distinctive, extremely deep skull and robust forelimbs. *Parapsicephalus* from the Alum Shale Formation (Toarcian) of Whitby was described on a single, near complete skull (BGS GSM 3166), missing only the anterior portion of the rostrum. BGS GSM 3166 is preserved in 3-D and, after preparation, was shown to possess an endocast (Newton, 1888), one of the few pterosaur brain casts on record (Unwin, 1996). *Rhamphocephalus* from the Taynton Limestone Formation (Bathonian) of Oxfordshire was erected for a skull table preserved in dorsal view. The name was later applied to hundreds of partial Middle Jurassic pterosaurs collected from what is colloquially called the Stonesfield Slate.

Over four hundred pterosaur fossils are known from the Stonesfield Slate, with collection dating to the mid-18th century

(Anon, 1757), making them the first pterosaur fossils to be mentioned in the formal literature, even if the pterosaurian nature of these remains would not be formally recognised for many years (Buckland, 1836). Over the next century, hundreds of isolated pterosaur remains were collected. These consisted almost entirely of isolated appendicular elements, with only a handful of cranial and axial fossils. Wingspan estimates suggest some of these pterosaurs reached ~2 m, large for Jurassic pterosaurs, which rarely exceed 1.6 m (Hazelhurst & Rayner, 1992). Despite the huge number of fossils (well over 400), only one genus has been erected, *Rhamphocephalus*, which has three species: *R. prestwichi*, the type species; and *R. bucklandi* and *R. depressirostris*, both erected for isolated mandibles. *Rhamphocephalus bucklandi* was first described as *Pterodactylus bucklandi* Meyer, 1832. Huxley (1859) re-appraised the taxon, diagnosing it as *Rhamphorhynchus bucklandi* and erected a second species, *R. depressirostris*. Seeley (1880) erected *R. prestwichi*, identifying it as a pterosaur (based on the thin bone wall) with an overall crocodylian arrangement of the bones. Lydekker (1888) placed *Pt. bucklandi* and *Rh. depressirostris* in *Rhamphocephalus*, and advocated that all pterosaur material from so-called Stonesfield Slate lithologies be placed in either one of the existing species or *Rhamphocephalus* sp. Several authors (Unwin, 1996; Buffetaut & Jeffrey, 2012) have expressed doubt over the pterosaurian nature of *R. prestwichi*. As part of a large, monographic review of the pterosaurs of the Lower and Middle Jurassic of England, the type specimen is currently being re-evaluated. Early results suggest the arrangement of the bones visible across the dorsal aspect of the skull does not correspond to that of any known pterosaur. Similarities have been found with several marine reptiles, including sauropterygians and thalatosuchians. The specimen remains in review. Regardless of the nature of the type material, given the lack of any analogous or comparative material in any Stonesfield collections, the genus *Rhamphocephalus* cannot be assigned to any other fossil. Therefore, a major re-evaluation of the isolated appendicular material has been undertaken. Preliminary results suggest more than one pterosaur family is present, although how diagnostic the material is remains to be seen.

While this project is a review of established collections, it has included a newly discovered fossil (BMNH PV R36634) from the Alum Shale consisting of an associated humerus and scapulocoracoid. The humerus is 100 mm long and, as such, is one of the largest known for any Jurassic pterosaur. Analysis suggests it is a large (~2 m or more) rhamphorhynchine. While there is no comparable material with the BGS GSM 3166, bivariate morphometric analyses suggest the humerus is approximately the size of one predicted for a rhamphorhynchine as with a skull the size of that specimen. Intriguingly, the humerus has a paedomorphic morphology. Pterosaur humeri become more robust relative to their length as they grow, yet the humerus of PV R36634 is highly elongate. This condition is only present in ontogenetically immature rhamphorhynchines and has never been seen previously in a humerus of this size. A manuscript is currently in preparation.

Hundreds of specimens remain to be examined in greater depth, most critically the holotypes of the various species of *Rhamphocephalus*. A re-appraisal of *Parapsicephalus purdoni* is also in its early stages. Preliminary data suggests that pterosaurs from the Lower and Middle Jurassic were larger than previously believed, and may have possessed unique morphologies.

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CATALOGUE OF MONOGRAPHS  
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Volume 166 (for 2012) published November 2012 (£240):

638. **Donovan, S.K., Widdison, R.E., Lewis, D.N. & Fearnhead, F.E.** The British Silurian Crinoidea, Part 3, addendum to Parts 1 and 2, Camerata and columnals. 135-259, pls 37-62, final part. £115.00.
639. **Smith, A.B. & Wright, C.W.** British Cretaceous Echinoids, Part 9, Atelostomata, 2. Spatangoida (2). 635-754, pls 210-253, final part. £125.00.

Volume 165 (for 2011) published December 2011 (£230):

637. **Evans, D.H.** The Lower Ordovician cephalopod faunas of the Durness Group, north-west Scotland (Complete). 131 pp., pls 1-15. £140.00.
636. **Lamsdell, J.C.** The eurypterid *Stoermeropterus conicus* from the Lower Silurian of the Pentland Hills, Scotland (Complete). 84 pp., pls 1-15. £90.00.

Volume 164 (for 2010) published December 2010. £230, complete.

- 635 **Donovan, S.K., Widdison, R.E., Lewis, D.N. & Fearnhead, F.E.** 2010. The British Silurian Crinoidea. Part 2, Addendum to Part 1 and Cladida. 47-133, pls 7-36. £105.00.
- 634 **Hooker, J.J.** 2010. The mammal fauna of the early Eocene Blackheath Formation of Abbey Wood, London (Complete). 162 pp., pls 1-4. £125.00.

Volume 163 (for 2009) published December 2009. £210, complete:

- 633 **Edmunds, M.** 2009. A revision of the Lower Jurassic ammonite genus *Eoderoceras* Spath and its immediate descendants and other relatives (Complete). 89 pp., pls 1-40. £140.00.
- 632 **Donovan, S. K., Lewis, D. N., Fearnhead, F. E. & Widdison, R. E.** 2009. The British Silurian Crinoidea. Part 1, Introduction and Disparida. 1-45, pls 1-6. £70.00.

Volume 162 (for 2008) published December 2008. £210, complete:

- 631 **Brusatte, S. L., Benson, R. B. J. & Hutt, S.** 2008. The osteology of *Neovenator salerii* (Dinosauria: Theropoda) from the Wealden Group (Barremian) of the Isle of Wight (Complete). 75 pp., pls 1-45. £120.00.
- 630 **Smith, A. B. & Wright, C. W.** 2008. British Cretaceous echinoids. Part 8. Atelostomata, 2. Spatangoida (1). 569-635, pls 183-209. £90.00.

Volume 161 (for 2007) published December 2008. £210, complete:

- 629 **Cocks, L. R. M.** 2008. A revised review of British Lower Palaeozoic brachiopods (Complete). 276 pp., pls 1-10. £125.00.
- 628 **Vandenbroucke, T. R. A.** 2008. Upper Ordovician chitinozoans from the British historical type areas and adjacent key sections (Complete). 113 pp., pls 1-31. £85.00.

Volume 160 (for 2006) published February 2008. £200, complete:

- 627 **Sadleir, R., Barrett, P. M. & Powell, H. P.** 2008. The anatomy and systematics of *Eustreptospondylus oxoniensis*, a theropod dinosaur from the Middle Jurassic of Oxfordshire, England. (Complete). 82 pp., pls 1-20. £110.00.
- 626 **Nikolaeva, S. V.** 2008. The Carboniferous ammonoids from the Gilbertson Collection described by John Phillips. (Complete). 70 pp., pls 1-17. £90.00.

PALAEONTOGRAPHICAL SOCIETY

Established 1847

Registered Charity No. 228372

ANNUAL REPORT FOR 2011-12

The following volumes appeared in 2012:

Volume 166 (for 2012) published November 2012 (£240):

638. **Donovan, S.K., Widdison, R.E., Lewis, D.N. & Fearnhead, F.E.** The British Silurian Crinoidea, Part 3, addendum to Parts 1 and 2, Camerata and columnals. 135-259, pls 37-62, final part. £115.00.
639. **Smith, A.B. & Wright, C.W.** British Cretaceous Echinoids, Part 9, Atelostomata, 2. Spatangoida (2). 635-754, pls 210-253, final part. £125.00.

The Palaeontographical Society exists for the purpose of figuring and describing British fossils. It publishes monographs to this end; these may be restricted geographically, stratigraphically or palaeontologically. Intending contributors may obtain a copy of the Society's 'Notes for Authors' from the Secretary, Editor or directly from the Society website ([www.palaeosoc.org](http://www.palaeosoc.org)).

An Annual Volume is published, consisting of a number of complete monographs or individual part monographs.

Each person subscribing £35.00, each *bona fide* student subscribing half that amount, and each Institution subscribing £125.00 (£240.00 via an agency), is considered a Member of the Society and is entitled to the volume issued for the year to which the subscription relates. Subscriptions are considered due on 1<sup>st</sup> January of each year. Applications for membership (and renewals) can be completed online ([www.palaeosoc.org](http://www.palaeosoc.org)) or via the Treasurer ([mhowe@bgs.ac.uk](mailto:mhowe@bgs.ac.uk)).

Many monographs are not now available in original print, but some out-of-print monographs have been reprinted. Full details of the reprinted publications may be obtained from the Society website. Many monographs are also available in micro-edition (5x3) as diazo or as silver halide microfiche from Microform Ltd., Main Street, East Ardsley, Wakefield, Yorkshire WF3 2JN.

Published volumes, monographs or individual parts may be obtained through the Society website ([www.palaeosoc.org](http://www.palaeosoc.org)). Members of the Society are entitled to a minimum 50% discount on all publications. Published prices do not include postage and packing.

Thanks to the generosity of the publishers, a set of volumes up to 1972 of the *Treatise of Invertebrate Paleontology*, editor R. C. Moore, is available for Members' reference in the D. M. S. Watson Library, University College, London.

**Secretary:** Dr. Stephen K. Donovan, Department of Geology, Naturalis Biodiversity Center, Postbus 9517, 2300 RA Leiden, The Netherlands.

February 2012

## **REPORT OF THE COUNCIL**

for the year ending 31<sup>st</sup> December 2011

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Read and adopted at the 165<sup>th</sup> Annual General Meeting held in the Flett Lecture Theatre of the Natural History Museum on the afternoon of 18<sup>th</sup> April 2012, Dr Andrew B. Smith, The President, in the Chair.

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One volume was published in 2011 (165) for the year 2011, comprising the following parts:

Volume 165 (for 2011) published December 2011, £230, complete.

636. **Evans, D.H.** The Lower Ordovician cephalopod faunas of the Durness Group, north-west Scotland (Complete). 131 pp., pls 1–15. £140.00.
637. **Lamsdell, J.C.** The eurypterid *Stoermeropterus conicus* from the Lower Silurian of the Pentland Hills, Scotland (Complete). 84 pp., pls 1–15. £90.00.

During the year, £4286.52 was received from the sales of back-stock held by the Society.

The balance shown in the Statement of Accounts stands at £66032.36. The Income and Expenditure Account for 2011 is annexed.

One grant was awarded from the Palaeontographical Society Research Fund in 2011, to Mr. D. Carpenter (University of Bristol).

The Fifth Annual Address of the Society was delivered by Professor Jim Kennedy (University of Oxford) on “William Buckland: caves, coprolites, dinosaurs, a red Lady and the dawn of palaeoecology” on 12<sup>th</sup> April 2011 at the Natural History Museum.

### **COUNCIL 2012–2013**

Following the Annual General Meeting, held on Wednesday 18<sup>th</sup> April 2012, Dr S.J. Braddy retired as Vice-President, and Professor D.A.T. Harper was elected as a new Vice-President. Dr M. P. A. Howe was re-elected as Treasurer, Drs D. Loydell and B. Cox were re-elected as Editors, Dr M. Munt was re-elected as Marketing Manager and Dr. S.K. Donovan were re-elected as Secretary. Dr M. Richter retired from Council. Dr A. Butcher was elected a new member of Council.

<b>President</b>	Dr A. B. Smith
<b>Vice-Presidents</b>	Dr. P.M. Barrett and Professor D.A.T. Harper
<b>Treasurer</b>	Dr M. P. A. Howe
<b>Secretary</b>	Dr S. K. Donovan
<b>Editors</b>	Dr D. Loydell and Dr B. Cox
<b>Marketing Manager</b>	Dr M. Munt
<b>Other Members</b>	Prof. R. J. Aldridge, Dr. A. Butcher, Mr. R. Chandler, Prof. M. Collinson, Dr M. Friedman, Dr M. J. Simms and Dr. Y. Candela.

**Income and Expenditure Account for the Financial Year 2011 (year ending 31/12/11)**

<b>Income (£'s)</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Members Subscriptions <sup>1</sup>	22752.25	27478.97	22715.49
Stocks and Shares Dividends	6500.77	6135.52	5039.27
G.W. Young Bequest	359.22	881.55	-
Backstock Sales <sup>2</sup>	4286.52	5926.87	10421.93
Interest from Deposit Accounts	128.73	128.45	399.63
Repayment of grants & other items	-	38.96	975.00
Subscription to Graptolite Atlas	-	-	-
Donations	-	-	1.22
Reclaimed Tax	-	-	-
Repayment of Treasury 5½% Stk 2008/12	-	-	-
	<b>34027.49</b>	<b>40590.32</b>	<b>39552.54</b>
<b>Expenditure (£'s)</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Vol 164 Origination, printing, post & packing	26,572.10	-	-
Vol. 163 Origination, printing, post & packing	-	19626.87	-
Vol. 162 Origination, printing, post & packing	-	-	25540.68
Vol. 161 Origination & printing	-	-	33528.00
Printing Annual Report <sup>3</sup>	256.00	243.60	286.04
Administrative Expenses	1890.52	1669.87	1128.17
Graptolite Atlas Printing & Expenses	-	-	-
Bank Charges	91.00	94.25	62.99
Annual address	212.33	100.00	114.37
Returned cheque unpaid/Subscription refund	17.00	-	-
Donation to Paleontological Institute, Kansas	-	-	1027.00
Donation to IPC3/Lyell Symposium	-	1000.00	-
Research Fund grants	130.00	2027.00	1550.00
Website design and maintenance	-	-	891.74
Diagram production (Bulman Fund)	-	600.00	502.50
Subscription to M&G Charifund	3000.00	27500.00	-
	<b>32168.95</b>	<b>52861.59</b>	<b>64631.49</b>

**Liabilities arising in 2011 Financial Year and falling due in the 2012 Financial Year**

Publication of Vol. 165	<b>£25,076.82</b>		
	<b>2011</b>	<b>2010</b>	<b>2009</b>
Balance C/F (from Last Account)	89250.64	101521.91	126600.86
Income (From Above)	34027.49	40590.32	39552.54
	<b>123278.10</b>	<b>142112.23</b>	<b>166153.40</b>
Expenditure (From Above)	32168.95	52861.59	64631.49
Balances on 31/12:			
Current	22519.92	22677.95	32576.19
Deposit	64439.48	64310.75	64182.30
PayPal	4149.78	2261.94	4763.42
	<b>123278.10</b>	<b>142112.23</b>	<b>166153.40</b>
Income over Expenditure	<b>1858.54</b>	<b>(-12271.27)</b>	<b>(-25078.95)</b>
Adjusted balance <sup>4</sup> C/F to following year	<b>66032.36</b>	<b>62678.54</b>	<b>81895.04</b>

**Schedule of Investments and Income for 2011**

	<b>Cost (£'s)</b>	<b>Market Value* (£'s)</b>	<b>2011 Income (£'s)</b>
<b>Wide Range</b>			
7848 units M&G Charifund <sup>5</sup>	57645.78	85550.26	4462.87
2565 units M&G Fund of Investment Trust Sterling Class A Income	1187.70	31178.34	209.66
868 Shires Income plc, 50p Ordinary Shares	910.51	1528.55	104.16
5920 Securities Trust of Scotland plc Ordinary Shares, 25p.	655.27	6734.00	334.48
	<b>60399.26</b>	<b>124991.15</b>	<b>5111.17</b>
<b>S.R. Units</b>			
3126.21 COIF Charity. Invest. Inc.	20061.55	29854.06	1389.60
	<b>77460.81</b>	<b>154845.21</b>	<b>-</b>
<b>Total Investments</b>			
	-----	-----	<b>6500.77</b>
<b>Total Income from Investments</b>			
			<b>128.73</b>
<b>Deposit Account(s) Interest</b>			
			<b>6629.50</b>
<b>Income from Bulman Fund (extracted from above account)</b>			
719.69 units M&G Charifund <sup>6</sup>	7807.77	7845.27	409.26
639 units M&G Charifund	748.91	6965.67	363.38
	<b>8556.68</b>	<b>14810.94</b>	<b>772.64</b>

\* Market Value on 31<sup>st</sup> December 2011

I have examined the above account, have compared it with the vouchers, books and records presented to me, and find it to be correct.

Dr S.G. Molyneux, Examiner, 2012

**Notes to Accounts**

- Subscriptions are accounted for in the year in which they are credited to the current account.
- NHM bookshop payments during year totalled £945 (in 2010, £2730; in 2009, £1400; in 2008, £0).
- Annual report figure includes annual report printing, membership form printing and newsletter printing.
- Adjusted Balance represents actual amount carried forward (on 31/12/11) minus liabilities due on this figure, i.e. current accounts + deposit account, (on 31/12/11) minus total liabilities.
- Includes 1106 units purchased on 20/01/2004 for £12,000, 817 units purchased on 30/08/2006 for £12,000, 717 units purchased on 03/02/2010 for £7,500, 1752 units purchased on 16/04/2010 for £20,000 and 257 units purchased on 05/05/2011 for £3000.
- Replaces £7807.77 Funding 3½% Stock 99/04, redeemed in 2004.