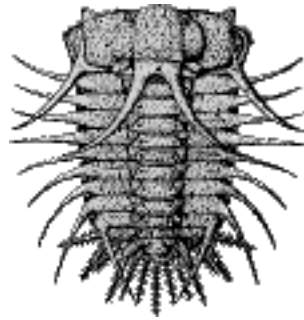


PALAEONTOLOGICAL ASSOCIATION



40th Annual Meeting

Lapworth Museum, University of Birmingham

16-19 December 1996

Programme

Compiled and edited by M. Paul Smith and Alan T. Thomas

www version by Mark Purnell

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Acknowledgements

We gratefully acknowledge financial support from Elf Exploration UK plc. The reconstruction of *Ceratocephala barrandii* is published by kind permission of the Council of the Palaeontographical Society.

Monday 16 December

11.00 - 6.00 [BMS Conodont Group meeting](#)

2.00 - 6.00 Registration at Lapworth Museum, School of Earth Sciences

6.00 Registration at Chamberlain Hall

7.00 Dinner

Morning, Tuesday 17 December
Lecture Theatre, School of Mechanical Engineering

* indicates a candidate for the President's Award; + indicates the speaker in multi-authored contributions if not a candidate for the President's Award.

Evolution

Chairman - Prof. D. Edwards

9.00 Welcome

9.10 [P. R. Sheldon](#)

Plus ça change - a model for stasis and evolution in different environments

9.30 [Sue Rigby⁺](#) & [C. Milsom](#)

Benthic origins of zooplankton: an environmentally determined macroevolutionary effect

9.50 [P. D. Butler](#)

Exploration of a new method to assist in phylogenetic analysis and evolutionary pathway reconstruction

10.10 [Jane Wares^{*}](#)

Microevolution and environmental change in bivalves of the Oxford Clay

10.30 [Kenneth G. Johnson](#)

Sampling error and the interpretation of evolutionary patterns

10.50 Coffee in the Lapworth Museum

Extinctions

Chairman - Prof. A. Hallam

11.20 [Gail Radcliffe^{*}](#)

Biotic recovery after the end-Ordovician glaciation - evidence from the conodont and sedimentary record of Anticosti Island, Québec

11.40 [Paul Wignall](#)

The end-Palaeozoic double whammy

12.00 [Richard Twitchett*](#)

A new model for the recovery of the soft-bodied marine community following mass extinction events

12.20 [Charlotte H. Jeffery](#)

A tale of two clades: differential survivorship of holasteroids and spatangoids at the Cretaceous- Tertiary boundary

12.40 Lunch in the Lapworth Museum & poster session

**Afternoon, Tuesday 17 December
Lecture Theatre, School of Mechanical Engineering**

Vertebrates I

Chairman - Prof. D. E. G. Briggs

2.00 [Phil Donoghue*](#)

Mammal-like occlusion in conodonts

2.20 [Mark A. Purnell](#) and [P. C. J. Donoghue](#)

Squashed heads and soft sea-beds: taphonomy of conodont apparatuses

2.40 [Jan Audun Rasmussen](#)

Relationships between Early Ordovician conodont provincialism and palaeoecology

3.00 [Gilles Cuny](#)

Could we still study isolated primitive shark teeth without a SEM?

3.20 Tea in the Lapworth Museum

Vertebrates II

Chairman - Prof. R. J. Aldridge

3.50 [Liz Cook](#)

Vertebrates from the Tetori Formation (Lower Cretaceous) of Japan

4.10 [Michael J. Benton[±], E. Cook, D. Grigorescu, E. Popa & E. Tallodi](#)

Dinosaurs and other tetrapods in an Early Cretaceous bauxite paleosol, NW Romania

4.20 [J. L. Wright](#)

Fossil vertebrate trackways from the Purbeck Limestone Group of Dorset

4.50 [R. A. Kemp[±]& D. M. Unwin](#)

The skeletal taphonomy of *Archaeopteryx*: a quantitative approach

5.10 [Colin McHenry, David Martill, Leslie Noe and Arthur Cruickshank[±]](#)

Just when you thought it was safe to go back to the water - the biggest pliosaur yet

5.30 Reception in Lapworth Museum

6.30 Return to hall of residence

7.30 Annual Dinner

**Afternoon, Tuesday 17 December
Dome Lecture Theatre, School of Earth Sciences**

Palaeobotany

Chairman - Dr J. E. Francis

2.00 [C. Wellman[±]& D. Edwards](#)

Exceptionally preserved early land plants with in situ spores: integrating and interpreting the early land plant megafossil and microfossil records

2.20 [E. A. B. Jarzembowski[±], P. Austen, J. Austen & C. Hill](#)

Quillworts from the Wealden of the Weald

2.40 [Christopher M. Berry*](#)

Architectural innovations in trimerophyte derivatives in the Middle Devonian flora

3.00 [Peta Hayes*](#)

Late Cretaceous angiosperm leaf floras of the Antarctic Peninsula

3.20 Tea in the Lapworth Museum

The palaeontology of molluscs

Chairman - Dr J. A. Crame

3.50 [Hywel M. I. Stone*](#)

Experimental observations on predator deterrence by pronounced shell ornament in epifaunal bivalves

4.10 [Andrew L. A. Johnson](#)

On the small size of Bathonian (Middle Jurassic) bivalves in southern England

4.20 [Malcolm Hart⁺, A. Tewari & M. Watkinson](#)

Teredolites-infested log-grounds from the Cretaceous of the Cauvery Basin, South-East India

4.50 [John C. W. Cope](#)

A phylogenetic classification of the Bivalvia

5.10 [Neale Monks*](#)

Taxonomy and evolution of the Cretaceous ammonite genus *Hamites*

5.30 Reception in Lapworth Museum

6.30 Return to hall of residence

7.30 Annual Dinner

Morning, Wednesday 18 December
Lecture Theatre, School of Mechanical Engineering

Trackways & taphonomy

Chairman - Dr M. J. Benton

9.00 [J. E. A. Marshall](#)

Differential transport of spores within a single Devonian lake

9.20 [Jane Francis](#)

Paddling in the Portlandian: A new record of dinosaur footprints from the Purbeck/Portland transition, Portland

9.40 [David M. Unwin](#)

Two legs bad, four legs good: the truth about pterosaur tracks

10.00 [Patrick J. Orr](#)

Bioturbation and the closure of the deep-marine taphonomic window: evidence for the prosecution

10.20 [Sarah Gabbott*](#)

The taphonomy of the Soom Shale (Ordovician, South Africa): how geochemistry affects preservation

10.40 Coffee in the Lapworth Museum

Ocean chemistry & biotas

Chairman - Dr T. J. Palmer

11.10 [Rachel J. Heath[±]](#), [P. J. Brenchley](#) & [J. D. Marshall](#)

A carbon and oxygen stable isotope stratigraphy for the early Silurian of Estonia

11.30 [Sara J. Metcalf*](#), [Torsten W. Vennemann](#), [Elisabeth Stephan](#) & [Timothy P. Jones](#)

Oxygen isotope composition of fossil shark teeth as a palaeoclimate proxy

11.50 [Jon Hickson](#)

Stable isotopes in the shell of the queen scallop *Aequipecten opercularis* (L.) as indicators of Holocene palaeoenvironments in the North Sea

12.10 [E. M. Harper[±]](#), [T. J. Palmer](#) & [J. R. Alphey](#)

Evolutionary response by bivalves to changing Phanerozoic sea-water chemistry

12.30 [Robert Riding](#)

Stromatolite decline: reassessment of the concept of Metazoan competition

12.50 Lunch in the Lapworth Museum & poster session

Morning, Wednesday 18 December
Dome Lecture Theatre, School of Earth Sciences

Early Palaeozoic faunas I

Chairman - Dr E. N. K. Clarkson

9.00 [B. Lefebvre*](#), [P. Racheboeuf](#) & [B. David](#)
Homologies in stylophoran echinoderms

9.20 [Mark D. Sutton](#)
Functional morphology and the burrowing habit in Lower Palaeozoic linguloid brachiopods

9.40 [L. E. Holmer](#), [L. E. Popov](#) and [Michael J. Bassett](#)[±]
Origin and radiation of the Trimerellida (Brachiopoda, Craniiformea)

10.00 [Kathleen Histon](#)
Silurian nautiloids from the Carnic Alps

10.20 [David H. Evans](#)
Orthoconic nautiloid accumulations in the upper Ordovician of Cumbria

10.40 Coffee in the Lapworth Museum

Palaeobiology

Chairman - Dr P. Selden

11.10 [N. J. Butterfield](#)
Guts and guano: a record of Cambrian alimentation

11.30 [Jonathan A. Todd](#)
The Ctenostomata - the historical importance of a forgotten major clade

11.50 [Cris Little](#)
Between a rock and a hot place: The fossil record of hydrothermal vent communities

12.10 [Giles A. Smith*](#)
Studies on the postulated Jurassic-Cretaceous boundary mass extinction

12.30 [Gary S. Aillud*](#) and [M. P. Watkinson](#)

A coral-algal reef from the Lower Cretaceous of Portugal

12.50 Lunch in the Lapworth Museum & poster session

**Afternoon, Wednesday 18 December
Lecture Theatre, School of Mechanical Engineering**

Arthropod palaeobiology I

Chairman - Dr David J. Siveter

2.00 [T. McCormick*](#) & [R. A. Fortey](#)

Function and development of the eye in pelagic trilobites - evidence from a lower Ordovician genus

2.20 [Graham Jay Knight](#)

How eurypterids swam

2.40 [Jason A. Dunlop*](#), [L. I. Anderson](#) & [S. J. Braddy](#)

Chasmataspids - not the ancestors of arachnids

3.00 [Robin J. Smith](#)

Cretaceous ostracods with preserved appendages from Brazil

3.20 Tea in the Lapworth Museum

Arthropod palaeobiology II

Chairman - Dr P. D. Lane

3.50 [Hou Xianguang](#), [David J. Siveter[±]](#), [M. Williams](#), [D. Walossek](#) & [J. Bergstrom](#)

Appendages of the arthropod *Kunmingella* from the early Cambrian of China: its bearing on the systematic position of the Bradoriida and the fossil record of the Ostracoda

4.10 [D. E. G. Briggs](#), [David J. Siveter](#) & [Derek J. Siveter[±]](#)

Soft-bodied fossils from a Silurian volcanoclastic deposit

4.20 [Jonathan M. Adrain](#)

Trilobites, phylogenetic context, and the Palaeozoic evolutionary fauna

4.50 [Alan W. Owen & M. Romano](#)

A deep shelf trilobite fauna from the Ashgill of eastern Ireland and its palaeobiogeographical significance

5.15 Return to hall of residence

7.00 Dinner

**Afternoon, Wednesday 18 December
Dome Lecture Theatre, School of Earth Sciences**

Early Palaeozoic faunas II

Chairman - Dr S. Rigby

2.00 [D. Bates](#)

Ultrastructure of a Silurian dendroid

2.20 [R. B. Rickards[±], S. Rigby, J. Rickards and C. Swale](#)

The hydrodynamics of the graptolite rhabdosome recorded by laser doppler anemometry

2.40 [Olga K. Bogolepova](#)

Anaspyroceras pseudocalamiteum (Barrande, 1852) (Cephalopoda) in the Scyphocrinites Bed of the Carnic Alps

3.00 [Lesley Cherns](#)

Gotland chitons and Silurian rocky shores

3.20 Tea in the Lapworth Museum

5.15 Return to hall of residence

7.00 Dinner

Thursday 19 December

9.00 Field trip departs from hall of residence

The field excursion is to the Much Wenlock Limestone Formation (Wenlock, Silurian) of Shropshire. The trip will examine the classic reefal Wenlock Limestone localities in Coates and Shadwell quarries. Lunch will be obtained in the Wenlock Edge Inn and is inclusive in the fieldtrip price of £15. The trip will return to Birmingham by 5.30 pm and people can be dropped off at Birmingham New Street Station or Birmingham International Airport if they wish.

Back to the [Palaeontological Association homepage](#)

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