

**62nd Symposium on Vertebrate Palaeontology and Comparative Anatomy
23rd Symposium of Palaeontological Preparation and Conservation
with the Geological Curators' Group**

York: 1st to 6th September 2014

Third Circular

The SVPCA and SPPC/GCG meetings are just over a month away, and we hope you're all looking forward to it as much as we are in York. This circular will provide, we hope, most of the information you will need about the conference. If you have any questions that aren't answered by this circular, then please contact the organisers via email: york2014@svpca.org

EVENTS AND FIELD TRIPS

Monday 1st September - Field Trip to Saltwick Bay

The coach for the fossil-hunting trip to Saltwick Bay will leave at **10.30am** from the bus stop in front of the York Art Gallery and the King's Manor on St Leonard's Place. Delegates should bring a packed lunch with them as there are no nearby places for purchasing food. Wellingtons or walking boots are recommended. We will spend the afternoon on the beach and aim to be back in York between 5 and 6pm. There are a few spaces left on the coach if delegates who haven't already signed up would like to join the trip. If you wish to do this, please email the organisers by 15th August.

Tuesday 2nd September - Ice-breaker Event

We are pleased to announce that the ice-breaker event will take place at the Yorkshire Museum and will be run in conjunction with the Yorkshire Philosophical Society. The museum will be open to delegates from 6.30pm for registration and a glass of wine. There will then be a lecture in the museum lecture theatre at 7.30pm entitled 'Yorkshire and Palaeontology'. This will be given by Stuart Ogilvy and Sarah King, curators of natural history at the museum, and will be a look at the importance of Yorkshire to the field of palaeontology. Stuart and Sarah will also have some of the museum's recently acquired specimens on display.

Wednesday 3rd September - Real Ale Tasting Event

Following on from last years' highly successful whisky tasting event, we will be holding a Real Ale Tasting event at which there will be the opportunity to sample a number of local ales. Tickets for the event will be £5 and will be available from the registration desk on arrival. The event will take place in the King's Manor, hopefully in the courtyard if the weather is good.

Thursday 4th September - The Jones-Fenleigh Memorial Fund Auction

The auction for the Jones-Fenleigh fund will take place in the York Medical Society Rooms. As always, we rely on the generosity of delegates donating items for the auction, so please bring along any suitable books, reprints and so on. You will be able to drop off your items at the registration desk when you arrive.

Friday 5th September - Conference Banquet

The annual dinner will take place in the Merchant Taylors Hall on Friday 5th September, 7 for 7.30pm. A cash bar will be available at the hall.

Saturday 6th September - Field Trip to Rotunda museum, Ravenscar alum works and Whitby museum

The coach for the field trip to the quarry and the museums will leave at **10.00am** from the bus stop in front of the York Art Gallery and the King's Manor on St Leonard's Place. The coach will first head to the Rotunda museum in Scarborough. From there we will proceed to the Ravenscar alum works, and lastly on to the Whitby museum. We aim to be back in York at 4pm. Delegates should bring a packed lunch and wear walking boots or strong shoes. There are one or two spaces left on the coach if delegates who haven't already signed up would like to join the trip. If you wish to do this, please email the organisers by 15th August.

VENUES

The King's Manor (*yellow on map*)

The SVPCA talks will take place in the Rahtz Lecture Theatre (K/133) in the King's Manor (YO1 7EP). The poster session and the coffee breaks will take place in the Huntingdon Room (K/122), also in the King's Manor. The entrance to King's Manor is on St Leonard's Place, near the junction with Gillygate and Bootham, just next to the York Art Gallery.

York Medical Society Rooms (*blue on map*)

The SPPC/GCG talks and the Jones-Fenleigh Memorial Fund auction will take place in the York Medical Society Rooms, 23 Stonegate (YO1 8AW). The entrance to the Medical Society Rooms is on the right hand side of Stonegate as you head towards the Minster just before the banner advertising Ye Olde Starre Inne.

The Yorkshire Museum (*orange on map*)

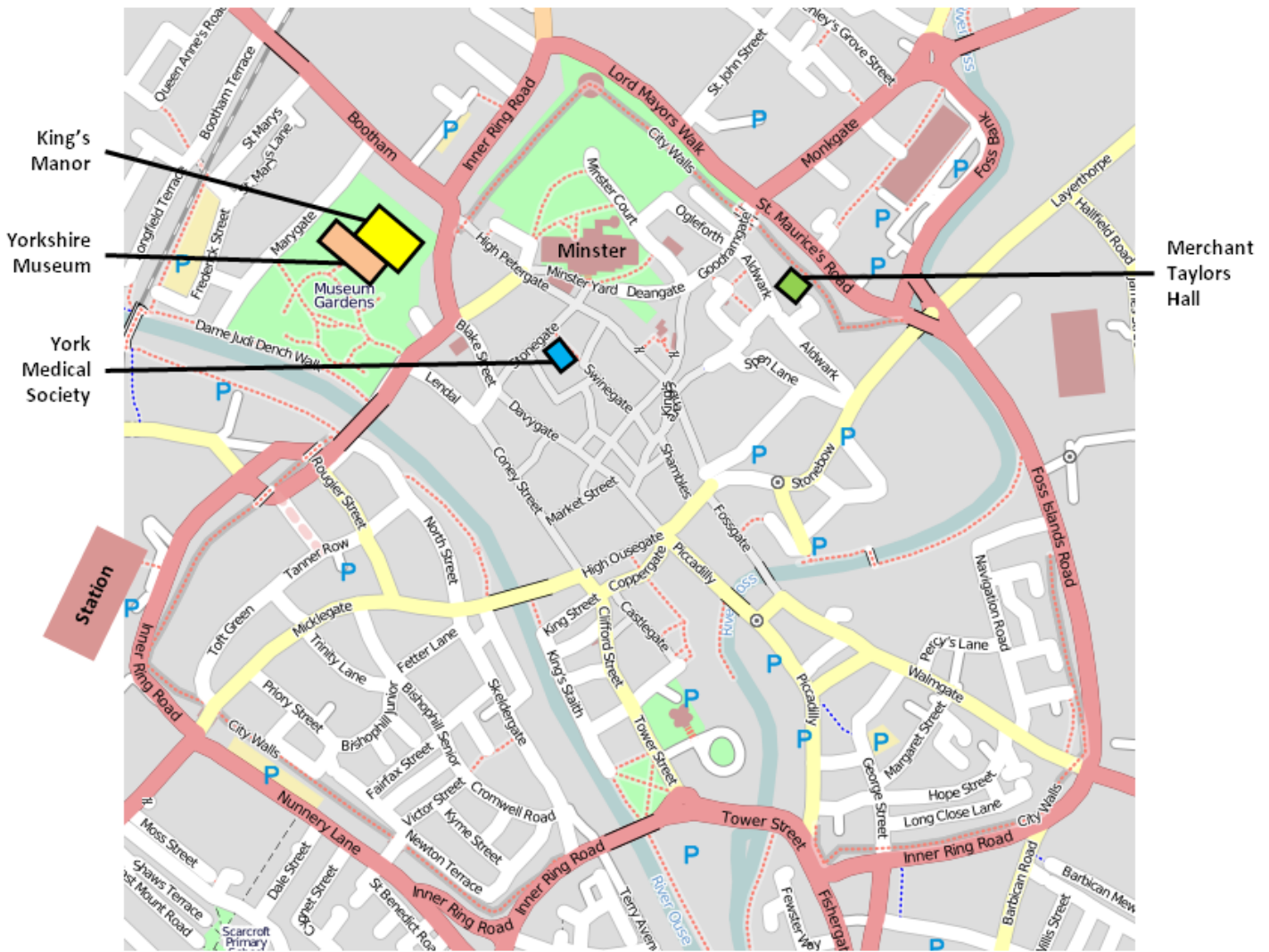
The icebreaker event and the SPPC stores tours will take place in the Yorkshire Museum (YO1 7FR). The museum should be accessed via the museum gardens. The entrance to the gardens is on Museum Street opposite Lendal.

Merchant Taylors Hall (*green on map*)

The conference banquet will take place in the Merchant Taylors Hall on Aldwark (YO1 7BX). From Goodramgate, the hall is about halfway along Aldwark on the left-hand side, just before the turning for St Andrewgate on the right.

ACKNOWLEDGEMENTS

Thanks are due to Hester Baverstock for the design of the 2014 logo and to the Palaeontological Association for a generous grant-in-aid towards the funding of this meeting.



SCHEDULE

Monday 1st September

10:30-18:00 Field trip to Saltwick Bay, led by **Dean Lomax**

Tuesday 2nd September

13:00-14:00 SPPC/GCG Registration in the **York Medical Society Rooms**

SPPC/GCG talks in the **York Medical Society Rooms**

Chair – Mark Evans

14:00-14:20 **Mark Graham* & Lu Allington-Jones***

Challenges encountered during the preparation by acid-resin transfer of fossil fish from Monte Bolca, Italy.

14:20-14:40 **Mike Howe et al.**

GB/3D fossil types online - not only the largest collection of 3D digital fossils, but also of major format, schema and vocabulary conundrums.

- 14:40-15:00 **Jeff Liston**
Resourcing palaeontological collection care in a time of crisis: The legacy of the Earth Science Review, twenty years on.
- 15:00-15:20 **Frank Osbæck**
Preparation of *Ardiodus* sp? from the Eocene Moclaj in Denmark: New approaches in acid preparation.
- 15.20-15:40 **Aubrey Jane Roberts et al.**
The Upper Jurassic marine reptiles from Spitsbergen: from field conservation to laboratory preparation.
- 16:00-17:00 Tours round the collections of the **Yorkshire Museum**, led by Sarah King
- 18:30-19:30 SVPCA registration and ice-breaker event at the **Yorkshire Museum**
- 19:30-20:30 Plenary talk “**Yorkshire and Palaeontology**” by Stuart Ogilvy, Assistant Curator of Natural Sciences, **Tempest Anderson Hall, Yorkshire Museum**

Wednesday 3rd September

- 08:15-09:00 SVPCA registration in the **Huntingdon Room, King’s Manor**
- 09:00-09:10 SVPCA Presentations in the **Rahtz Lecture Theatre (K/133), King’s Manor**
Welcome by **Professor Trevor Sheldon**, Dean of the Hull York Medical School
- 09:10-09:30 *Chair – Roger Benson*
Davide Foffa et al.
A new metriorhynchid from the Oxford Clay Formation and its implications for the evolution of Geosaurinae.
- 09:30-09:50 **Michael Benton et al.**
Nothosaur foraging tracks from the Middle Triassic of southwestern China.
- 09:50-10:10 **Dean Lomax & Judy Massare**
Ichthyosaurus from Somerset: One variable species or more?
- 10:10-10:30 **Richard Forrest**
A plesiosaur from the Aalenian of Ormalingen, Switzerland — or — How a creationist website contributed to science.
- 10:30-11:00 *Coffee break*
- 11:00-11:20 *Chair – Jenny Clack*
Thomas Fletcher et al.
The evolution of speed.
- 11:20-11:40 **Tim Smithson et al.**
Chondrichthyan diversity in the early Carboniferous: new evidence from the Tournaisian of northern Britain.
- 11:40-12:00 **Roger Close & Matt Friedman**
Probing the third dimension: are morphospaces derived from 2D and 3D fossil fish crania congruent?
- 12:00-12:20 **Tom Challands**
Opening up the dipnoan brain: new insights from the cranial endocast of *Dipterus valenciennesi*.
- 12:20-12:40 **Per Ahlberg et al.**
A Devonian tetrapod-like fish from China reveals parallelism in stem tetrapod evolution.

- 12:40-14:00 *Lunch break*
- 14:00-14:20 *Chair – Susan Evans*
Mark Bell et al.
 Extratropical peaks in Cretaceous terrestrial vertebrate diversity: the influence of primary producers on vertebrate species distribution.
- 14:20-14:40 **Marianne Pearson et al.**
 Testing a morphological dataset for the robustness of fossil placement: a case study using salamanders.
- 14:40-15:00 **Alexander Tinius & Anthony Russell**
 3D geometric morphometric analysis of the breast-shoulder apparatus: implications for the locomotor kinematics of anole (Squamata: Dactyloidae) ecomorphs on Caribbean islands.
- 15:00-15:20 **Neil Brocklehurst et al.**
 A re-description of *Mycterosaurus smithae*, an Early Permian eothyridid, and an examination of the phylogeny of pelycosaurian-grade synapsids.
- 15:20-15:40 **Ian Corfe et al.**
 Testing developmental biology predictions with fossils - dental complexity and evolutionary rates of the Multituberculata.
- 15:40-16:10 *Coffee break*
- 16:10-16:30 *Chair – Pam Gill*
Roger Close et al.
 A new representative of stem-lineage Zatheria (Mammalia) from the Middle Jurassic (Bathonian) of the Isle of Skye.
- 16:30-16:50 **Joanna Baker et al.**
 Bridging the divide between studies of extant and extinct diversity.
- 16:50-17:10 **Robert Sansom et al.**
 Dental morphology of mammals is less reliable than osteology: Phylogenetic differences align with taphonomic biases.
- 17:10-17:30 **Thomas Halliday et al.**
 Palaeocene taxa support a Cretaceous origin and Cenozoic diversification of placental mammals.
- 18:00-20:00 Real Ale Tasting Event in the **King's Manor courtyard**

Thursday 4th September

- 08:45-09:10 SVPCA registration in the **Huntingdon Room, King's Manor**
- SVPCA Presentations in the **Rahtz Lecture Theatre (K/133), King's Manor**
Chair – Laura Fitton
- 09:10-09:30 **Gertrude Rössner et al.**
 The gerenuk's reversal: an integrative approach to the evolutionary history of the giraffe-necked antelope.
- 09:30-09:50 **Anneke van Heteren**
 Life history of Pleistocene dwarfed hippopotami from Cyprus and Crete.
- 09:50-10:10 **Nicola Heckeberg et al.**
 Evolutionary history of antlers in Cervidae (Ruminantia, Artiodactyla, Mammalia).
- 10:10-10:30 **Tara Thean & Robert Asher**
 Cranial development in marine and terrestrial mammals.

- 10:30-11:00 *Coffee break*
- Chair – Paul O’Higgins*
- 11:00-11:20 **Lionel Hautier & Robert Asher**
Dental development in sloths and armadillos (*Xenarthra*).
- 11:20-11:40 **Stuart Humphries & Joe Tomkins**
Thermoregulation and scaling of ear size in the Proboscidea.
- 11:40-12:00 **Fay Penrose et al.**
The jaw adductor muscles of wild canids.
- 12:00-12:20 **Anjali Goswami et al.**
Developmental integration channelled morphological response to environmental stress in Late Pleistocene carnivorans.
- 12:20-12:40 **Nick Crumpton & Robert Asher***
Convergence vs. specialization in the ear region of moles.
- 12:40-14:00 *Lunch break*
- Chair – Robert Asher*
- 14:00-14:20 **Ricardo Godinho & Paul O’Higgins***
Do the large browridges in *Homo heidelbergensis* have a mechanical role?
- 14:20-14:40 **Elizabeth Kerr et al.**
Variation of *Apodemus* mandibular morphology: functional implications.
- 14:40-15:00 **Hester Baverstock & Samuel Cobb**
Functional maintenance and variation in cranial length of the mouse masticatory system.
- 15:00-15:20 **Helder Gomes Rodrigues & Lionel Hautier**
Chisel-tooth digging behaviour strongly constrains cranial shape: the case of African mole-rats (*Bathyergidae*, *Rodentia*).
- 15:20-15:40 **Andrew McIntosh & Philip Cox**
The effect of digging on craniodental form in subterranean rodents.
- 15:40-16:10 *Coffee break*
- 16:10-17:10 Poster session in the **Huntingdon Room, King’s Manor**
- 18:00-20:00 Auction in aid of the Jones-Fenleigh Fund in the **York Medical Society Rooms**

Friday 5th September

- 08:45-09:10 SVPCA registration in the **Huntingdon Room, King’s Manor**
- SVPCA Presentations in the **Rahtz Lecture Theatre (K/133), King’s Manor**
- Chair – Emily Rayfield*
- 09:10-09:30 **Roland Sookias et al.**
First evidence for a monophyletic, non-monospecific *Euparkeriidae*, and a reassessment of the Chinese euparkeriids.
- 09:30-09:50 **Colin Palmer**
A three dimensional structural model of a large pterosaur wing: implications for the membrane properties.
- 09:50-10:10 **David Unwin et al.**
Hatchling pterosaurs: still in the air, or back on the ground.
- 10:10-10:30 **Roger Benson et al.**
Dinosaur body size maxima driven by global temperature.

- 10:30-11:00 *Coffee break*
- Chair – Jeff Liston*
- 11:00-11:20 **Chris Venditti et al.**
The evolutionary dynamics of dinosaurian body size.
- 11:20-11:40 **Mathew Wedel et al.**
Pneumatic diverticula associated with the spinal cord in birds, sauropod dinosaurs, and other ornithodiran archosaurs.
- 11:40-12:00 **Robert Nicholls & Donald Henderson**
SVPOTW – Sauropod Victim Picture of the Week.
- 12:00-12:20 **Michael Taylor & Mathew Wedel**
Slender giants.
- 12:20-12:40 **Donald Henderson & Mathew Wedel**
The long tails of sauropods did not evolve to counter-balance their long necks.
- 12:40-14:00 *Lunch break*
- Chair – Michael Benton*
- 14:00-14:20 **Jeff Liston et al.**
Hettangian Lufeng predation: more teeth, more taxa?
- 14:20-14:40 **David Button et al.**
Biomechanical trends and functional shifts in sauropodomorph craniodental evolution.
- 14:40-15:00 **Emily Rayfield et al.**
Morphological and functional variation in the theropod dinosaur mandible.
- 15:00-15:20 **Tony Thulborn**
Some unusual sauropod dinosaur tracks in the Broome Sandstone (Lower Cretaceous) of Western Australia.
- 15:20-15:40 **Peter Falkingham & Stephen Gatesy**
The birth of a dinosaur track: sub-surface 3-D motion reconstruction and discrete element simulation reveal footprint ‘ontogeny’.
- 15:40-16:10 *Coffee break*
- Chair – Sam Cobb*
- 16:10-16:30 **Eric Buffetaut & Delphine Angst**
Gastornis island: the peculiar composition of the Palaeocene terrestrial vertebrate faunas of Europe.
- 16:30-16:50 **Jen Bright et al.**
Ecomorphological and functional convergence in extant birds of prey.
- 16:50-17:10 **Stig Walsh & Carl Jones**
By the mouse divided: testing sub-segmentation volume values in avian endocasts.
- 17:10-17:30 **Elizabeth Martin-Silverstone et al.**
The relationship between skeletal mass and total mass in birds.
- 19:00-23:00 Conference banquet in the **Merchant Taylors Hall**

Saturday 6th September

- 10:00-16:00 Field trip to the Rotunda Museum, Scarborough, Ravenscar alum works and the Whitby Museum, led by **Will Watts**