



CONGRESS OF THE EUROPEAN MALACOLOGICAL SOCIETIES

7th – 11th September 2014-08-11
St Catharine's College, Cambridge

The Malacological Society of London and the Congress Organising and Scientific Committees warmly welcome you to EuroMal 2014, a meeting that brings together malacologists from across the globe. This exciting interdisciplinary conference will showcase current malacological research across 12 lecture sessions and a poster session incorporating the following themes:

- (Molecular) Taxonomy and Phylogenetics
- Molluscan Biology and Physiology
- Biogeography, Ecology and Conservation
- Climate, Palaeontology and Archaeology

We are fortunate to be able to hold the conference at St Catharine's College, an historic venue in the heart of Cambridge ideal for scientific debate, discussion and social interaction. We hope that you find the conference enjoyable and would like to thank you for your contribution to making the meeting a success.

ORGANISING COMMITTEE

Jon Ablett

Natural History Museum, London

David Aldridge (Chairman)

University of Cambridge

Katrin Linse

British Antarctic Survey, Cambridge

Richard C. Preece

University of Cambridge

Tony Walker

Kingston University

Tom S. White

University of Oxford

SCIENTIFIC COMMITTEE

David Aldridge

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Fred Naggs

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Richard Preece

David Reid

Tony Walker

Tom White

Rowan Whittle

Suzanne Williams

CONFERENCE PROGRAMME



Sunday 7th September

15.00 to 17.30 **Registration opens**

Foyer of the McGrath Centre, St. Catharine's College

18.00 to 20.00 **Welcome Reception**



Sedgwick Museum of Earth Sciences

Sedgwick Museum
of Earth Sciences

The Welcome Reception, including wine and soft drinks, will be held in the galleries of the Sedgwick Museum of Earth Sciences. The Museum is located a short walk from St Catharine's on Downing Street (see Map on the previous page).

We are fortunate to be able to open the conference in the historic Sedgwick, the oldest of the University of Cambridge museums, amongst the original walnut cabinets that housed Dr John Woodward's fossil collection in 1728.



Monday 8th September

- 08.15 – 08.50 **Registration**
Foyer of the McGrath Centre, St. Catharine's College
- 08.50 – 09.00 **WELCOME:**
Tony Walker, President of the Malacological Society of London
David Aldridge, Chairman of the EuroMal Organising Committee

Theme 1: Biogeography, Ecology & Conservation Part I

Session 1

Chair: Jon Ablett, Natural History Museum, London

- 09.00 – 09.40 **KEYNOTE:**
Tom Wilke (Justus Liebig University, Giessen, Germany)
Catastrophic events shape patterns of mollusc biodiversity in ancient lakes
- 09.40 – 10.00 **Robert Cameron** (University of Sheffield, UK)
The fashion in traits: how to unpick land mollusc diversity
- 10.00 – 10.20 **Dinazarde Raheem** (Royal Belgian Institute of Natural Sciences)
A systematic revision of the land snails of the Western Ghats of India
- 10.20 – 10.40 **Martina Ilarri** (University of Porto, Portugal)
Empty bivalve shells as a physical substratum to the associated fauna:
potential scenarios prior to and after *Corbicula fluminea* invasion

10.40 – 11.10 Coffee and biscuits

Session 2

Chair: David Reid, The Natural History Museum, London

- 11.10 – 11.30 **John Grahame** (University of Leeds, UK)
Shell phenotypes, adaptation, and trade-offs in rough periwinkles
- 11.30 – 11.50 **Archer Tik Long Wong** (University of Hong Kong, China)
A comprehensive biodiversity study on sub-tidal benthic molluscs in the
marine environment of Hong Kong
- 11.50 – 12.10 **Hanieh Saeedi** (University of Auckland, New Zealand)
Global biodiversity and biogeography of razor clams (Bivalvia: Solenidae)
- 12.10 – 12.30 **Jesús Troncoso** (University of Vigo, Spain)
The molluscs of a tropical oceanic island (Isla del Coco, Costa Rica)
- 12.30 – 12.50 **Suzanne Williams** (Natural History Museum, London, UK)
Diversification in the deep sea

12.50 – 14.20 Lunch

Theme 2: (Molecular) Taxonomy and Phylogenetics

Session 3

Chair: Suzanne Williams, The Natural History Museum, London

- 14.20 – 14.40 **Julia Sigwart** (Queen's University Belfast, UK)
Chiton phylogeny (Mollusca: Polyplacophora) and the placement of the enigmatic species *Chorioplax grayi* (H. Adams & Angas)
- 14.40 – 15.00 **Alexander Fedosov** (Severtsov Institute of Ecology & Evolution, Russia)
Phylogeny and relationships of mitriform gastropods (Gastropoda: Neogastropoda)
- 15.00 – 15.20 **Marina Panova** (Gothenburg University, Sweden)
Genome sequencing project for *Littorina saxatilis* (Gastropoda: Littorinidae)
- 15.20 – 15.40 **Pedro Romero** (Goethe University, Frankfurt am Main, Germany)
Molecular adaptations in Euthyneura mitogenomes: Possible clues to land colonization

15.40 – 16.10 Tea and cake

Session 4

Chair: Katrin Linse, British Antarctic Survey, Cambridge

- 16.10 – 16.30 **António de Frias Martins** (University of the Azores)
Unravelling the taxonomy of *Myosotella* (Gastropoda: Ellobiidae): penial structure is the key
- 16.30 – 16.50 **Joanna Pienkowska** (University of Poznan, Poland)
Insight into water transport proteins of terrestrial and freshwater gastropods based on their transcriptome NGS-sequencing
- 16.50 – 17.10 **Inga Reich** (NUI Galway, Ireland)
The Lusitanian species *Geomalacus maculosus* - a 'native' Irish slug?
- 17.10 – 17.30 **Amaia Caro** (University of the Basque Country, Spain)
Molecular systematics and population structure of the genus *Pyrenaea* (Stylommatophora: Helicoidea)

18.00 – 20.00 **Poster Session**

Elementary Laboratory, Department of Zoology
Wine and soft drinks will be served.

Tuesday 9th September

Theme 3: Climate, Palaeontology and Archaeology

Session 5

Chair: Richard Preece, University of Cambridge

- 09.00 – 09.20 **Kirsty Penkman** (University of York, UK)
Marking time at a snail's pace: million year-old amino acids
- 09.20 – 09.40 **Paul Butler** (Bangor University, UK)
Malacology and marine climate: using mollusc shells to investigate the history of the marine environment during the past 1,000 years
- 09.40 – 10.00 **Alejandro Román-González** (Bangor University, UK)
Yoldia eightsi as a scleroclimatological proxy for Antarctic coastal waters
- 10.00 – 10.20 **James Scourse** (Bangor University, UK)
The marine radiocarbon bomb-pulse across the temperate North Atlantic
- 10.20 – 10.40 **Ricardo Fernandes** (University of Kiel, Germany)
Bivalves as an important source of isotopic and radiocarbon archaeological data

10.40 – 11.10 Coffee and biscuits

Session 6

Chair: Tom White, University of Oxford

- 11.10 – 11.30 **Frank Wesselingh** (Naturalis Biodiversity Centre, Leiden, Netherlands)
The rise and demise of the Ponto-Caspian biota
- 11.30 – 11.50 **Elisavet Georgopolou** (Natural History Museum Vienna, Austria)
Exploring patterns of freshwater gastropod diversity in European lakes
- 11.50 – 12.10 **Nicole Limondin-Lozouet** (CNRS-Université Paris I, France)
The Quaternary history of non-marine molluscs in the Somme valley, northern France, during the last 1 Myr
- 12.10 – 12.30 **Alistair Crame** (British Antarctic Survey, Cambridge, UK)
The origin of the Antarctic marine molluscan fauna
- 12.30 – 12.50 **Elizabeth Harper** (University of Cambridge, UK)
The drillers and the drilled: molluscan predator-prey interactions over the K-Pg mass extinction of Antarctica

12.50 – 14.20 Lunch

Theme 4: Biogeography, Ecology & Conservation Part II

Session 7

Chair: Robert Cameron, University of Sheffield

- 14.20 – 14.40 **Rosa Freitas** (University of Aveiro, Portugal)
Spatial distribution and bioaccumulation patterns in three Veneridae clams from a low contaminated ecosystem
- 14.40 – 15.00 **Alexandra Richter** (University of Oviedo, Spain)
The alien slipper limpet *Crepidatella dilatata* (Lamarck, 1822) in northern Spain: a multidisciplinary approach on its biodiversity and invasive biology
- 15.00 – 15.20 **Ronaldo Sousa** (University of Porto, Portugal)
Invasive bivalves as an unusual resource for terrestrial invertebrates
- 15.20 – 15.40 **Janhavi Marwaha** (University of Bergen, Norway)
Is juvenile mussel growth rate related to time on gills?

15.40 – 16.10 Tea and cake

Session 8

Chair: David Aldridge, University of Cambridge

- 16.10 – 16.30 **Kevin Cummings** (Illinois Natural History Survey, USA)
The Freshwater Mussels (Bivalvia: Unionoida) of Northern South America and the Amazon
- 16.30 – 16.50 **Iara Rocchetta** (University of Buenos Aires, Argentina)
Environmental conditions shape molluscan lifespan: comparing markers of cellular fitness and aging in two populations of the freshwater bivalve *Diplodon chilensis*
- 16.50 – 17.10 **Rebecca Kyle** (Queen's University Belfast, UK)
Conservation strategies for the Freshwater Pearl Mussel, *Margaritifera margaritifera*, involving habitat restoration and release of captive-bred juveniles
- 17.10 – 17.30 **Joaquim Reis** (Instituto Português de Malacologia, Albufeira, Portugal)
Restoration of an endangered *Unio tumidiformis* population

There are no formal arrangements for this evening

Wednesday 10th September

Theme 5: Molluscan Biology and Physiology

Session 9

Chair: Tony Walker, Kingston University

- 09.00 – 09.20 **Antonio Checa** (University of Granada, Spain)
Chamber formation and calcification in the cuttlebone of *Sepia officinalis*
- 09.20 – 09.40 **Katja Trübenbach** (University of Lisbon, Portugal)
Hypoxia-driven protein regulation in muscle tissue of jumbo squids during diel migration to the oxygen minimum zones
- 09.40 – 10.00 **Michael Vendrasco** (University of Granada, Spain)
Periostracum of the chiton *Lepidozona pectinulata* and homology with the Bivalvia
- 10.00 – 10.20 **Lauren Sumner-Rooney** (Queen's University Belfast, UK)
Chitons that live in the dark can see light (Polyplacophora: Lepidopleurida)
- 10.20 – 10.40 **Aleksandra Skawina** (University of Warsaw, Poland)
The probable circadian rhythms in serotonin levels in hemolymph of *Unio tumidus* and tissues of *Pisidium casertanum*

10.40 – 11.10 Coffee and biscuits

Session 10

Chair: Tony Walker, Kingston University

- 11.10 – 11.30 **Alexandre Lobo-da-Cunha** (University of Porto, Portugal)
Comparative microscopy study of the digestive gland in cephalaspideans (Gastropoda, Euopisthobranchia)
- 11.30 – 11.50 **Fathia Gawish** (Theodor Bilharz Research Institute, Giza, Egypt)
Assessment of certain food preservatives on biological and biochemical parameters of *Biomphalaria alexandrina* snails, as a biological model
- 11.50 – 12.10 **Coen Adema** (University of New Mexico, USA)
Somatic diversification of immune factors in *Biomphalaria glabrata* (Hygrophila: Planorbidae), insights from targeted approaches and genome assembly
- 12.10 – 12.30 **Daniel Lawson** (European Bioinformatics Institute, Cambridge)
The genome of *Biomphalaria glabrata* (Gastropoda, Mollusca) and the data base VectorBase

12.30 – 12.50 **Tony Walker** (Kingston University, UK)
Modulation of *Biomphalaria glabrata* immunity by excretory-secretory products of invading *Schistosoma mansoni*

12.50 – 14.20 Lunch

Theme 6: Miscellaneous Highlights

Session 11

Chair: Rowan Whittle, British Antarctic Survey, Cambridge

14.20 – 14.40 **Chong Chen** (University of Oxford, UK)
The heart of a dragon: extraordinary circulatory system of the scaly-foot gastropod revealed

14.40 – 15.00 **Serge Gofas** (University of Málaga, Spain)
MolluscaBase – announcing a World Register of all Molluscs

15.00 – 15.20 **Manuel Lopes-Lima** (University of Porto, Portugal)
Conservation of European freshwater mussels: historical background, challenges and future perspectives

15.20 – 15.40 **Winfried Peters** (Indiana/Purdue University, USA)
Strange snails indeed: Swash-Surfers, Self-Mutilators, Wave-Combers and Cannibals that dominate Panamic sandy beaches

15.40 – 16.10 Tea and cake

Session 12

Chair: David Aldridge, University of Cambridge

16.10 – 16.50 **KEYNOTE:**
Lloyd Peck (British Antarctic Survey, Cambridge, UK)
Marine molluscs at high latitude

16.50 – 17.10 Closing remarks and awarding of prizes
Tony Walker and David Aldridge

Conference dinner

Corpus Christi College, Cambridge

19.00 Drinks reception on Old Court lawn, Corpus Christi College

19.45 Dinner in Corpus Christi College Dining Hall

Thursday 11th September

Excursions in Cambridge

Three activities are available to those who registered for the Congress excursion:

Cambridge University Botanic Garden

The original Botanic Garden of Cambridge University was founded in 1762 in the centre of the City, in the area now known as the New Museums Site. This small Garden was conceived as a typical Renaissance physic garden, inspired by the Chelsea Physic Garden in London. It grew herbaceous plants used in the teaching of medical students at the University. The much larger Botanic Garden that exists today was laid out by John Stevens Henslow, Professor of Botany at Cambridge from 1825 - 1861 and mentor to Charles Darwin.

The visit to the Garden will be the best opportunity during the meeting to collect British non-marine molluscs, although we politely request that this is done in accordance with the rules of the Garden. A survey in 2011 recorded 16 freshwater gastropods and bivalves, 19 land snails, and 8 slugs living in the various habitats around the 40 acre site. In addition, 5 alien species were discovered living in the hothouses. The full list of species known from the Cambridge Botanic Garden (Preece & White, 2012) is reproduced at the back of this volume.

The Garden have kindly agreed to waive the entry fee for EuroMal delegates, but a small charge will be made for guided tours.



Blue badge tour of the City of Cambridge

Blue badge guide tours are led by highly qualified guides and are the best way to see Cambridge, the University and its historic colleges. Some colleges only allow entry to members of the public if they are accompanied by a blue badge guide.



Punting on the River Cam

The River Cam runs through the heart of Cambridge enabling you to enjoy fantastic views of the world famous Cambridge college 'Backs' from the comfort of a traditional Cambridge Punt. King's College Chapel, The Wren Library at Trinity College and the Bridge of Sighs are just some of the famous Cambridge landmarks you can expect to see.