



UNIVERSITY OF  
CAMBRIDGE

Department of Zoology



**Alumni Day**

Saturday 7 September 2019

## Event Schedule

All tours start in Reception in the main Zoology building  
Please arrive with plenty of time to spare for your booked events so we can start promptly.

### **10:45 - 11:40 and 15:00 - 15:55**

Tour of the New Display Galleries of the University Museum of Zoology  
*or*

Tour of three laboratories

*or*

Teaching Zoology at Cambridge: past, present and future

### **12:00 - 12:55**

Lecture by Nick Davies (Part II 1972-73) *Curious Naturalists: watching and wondering* (Part II 1972-73), Main Lecture Theatre, Ground Floor.  
Introduced by Naomi Langmore (PhD 1991-94)

### **13:00 - 14:00**

Lunch (the Whale Café will be open)

### **14:00 - 14:55**

Lecture and video presentation by Tom Mustill (Part II 2004-05).  
*Fascinating beasts and how to film them.* Main Lecture Theatre.  
Introduced by William Foster (Part II 1967-70).

### **15:00 - 15:55**

Tours (as above)

### **16:00 - 17:00**

Tea and cake in the Part II Suite with past and present members of the Department, including a short talk from Head of Department, Dr Howard Baylis

- In case of emergency contact Security on **01223 318318** –

***Professor Rebecca Kilner (PhD 1993-96)***

**Professor of Evolutionary Biology**

Old Metallurgy Building



Our group investigates how animal behaviour changes the course of evolution, using experiments in the lab and the field - most of which are now focused on burying beetles.

Burying beetles are sometimes known as sexton beetles because their habit of burying the dead. A pair of beetles converts the body of a small vertebrate, like a mouse or a bird, into an edible nest for their developing larvae by scissoring off the fur or feathers, rolling the flesh into a ball and



burying it in a shallow grave. The parents then tend their larvae after hatching, feeding them and defending them from attack. In one line of work, we have exposed different populations in the lab to different levels of parental care for successive generations, and observed the evolution of new adaptations in both parents and larvae in response to our manipulations of care.

***Dr David Aldridge (Part II, 1992-93)*****Senior Lecturer in Aquatic Ecology**

Basement, David Attenborough Building



The Aquatic Ecology Group studies applied questions relating to the management and monitoring of aquatic ecosystems. Current research interests include the conservation of endangered freshwater mussels across the world, understanding the impacts and management of invasive non-native species

in the UK and Antarctica, the development of stable synthetic communities to manage eutrophic freshwaters in the UK and Bangladesh, sustainable restoration of urban waters in China, and the sustainable use of waste streams to produce artificial diets for global aquaculture systems.



*Invasive killer shrimps mimic invasive zebra mussels to avoid predation. An  
Example of invasional meltdown*

***Dr Berthold Hedwig***

**University Reader in Neurobiology**

2<sup>nd</sup> Floor, Main Zoology Building



Insects that sing, such as crickets, enable us to explore the neural basis of behaviour associated with hearing. Male crickets produce a song pattern that attracts females, which - when they are ready to mate - will move towards the singing males. We play computer-generated song patterns to females and study their orientation behaviour, while they are walking on a trackball. We also record the activity of her brain neurons so that we can understand how

the nervous system processes the sounds to allow the cricket to recognize song patterns and move towards the male. In this way, we can investigate fundamental problems of insect neuroscience.



*Cricket walking on trackball*



## Tour of the New Display Galleries of the University Museum of Zoology

10:45/15:00

The renovated University Museum of Zoology opened on Saturday 23 June 2018. It is one of Cambridge's major attractions. Our brilliant new galleries showcase the diversity of animal life, from marsupials to monkeys, mammoths to manatees.



# Teaching Zoology at Cambridge: Past, present and future

10:45/15:00

***Dr William Foster (Part II 1969-70) and Dr Howard Baylis, Head of Department***

Elementary Lab, Main Zoology Building



We will talk, and attempt to answer your questions, about the current teaching of Zoology across the three years of the Natural Sciences Tripos; how it has changed, or indeed not changed, over the years; and the prospects for the future.

**Lecture**

**12:00**

## ***Curious Naturalists: watching and wondering***

Main Lecture Theatre

**Professor Nick Davies FRS (Part II 1972-73)**

Professor of Behavioural Ecology



For many of us, our interests in biology began as a passion for natural history and were then enriched by evolutionary wondering. In this talk I follow Darwin to the Galapagos and Wallace to the Malay Archipelago to show how their curiosity and ideas are still inspirational for naturalists today.

**Lecture**

**14:00**

## ***Fantastic Beasts and how to film them***

Main Lecture Theatre

**Tom Mustill (Part II 2004-05)**



Tom is a wildlife and science film producer, and a director with production company Gripping Films. He won his spurs on the BAFTA-winning anatomy series Inside Nature's Giants, one programme of which featured Malcolm Burrows.

The BBC Natural World films he has directed, including The Bat Man of Mexico and Giraffes: Africa's Gentle Giants with David Attenborough, have won more than 30 international awards. In 2015 Tom was almost killed when a humpback whale leapt onto his kayak in California – a tale told in most recent BBC film: Humpback Whales: A Detective Story. Watch his [Climate Change film](#) on YouTube



At the end of a busy day, enjoy a cup of tea and a slice of cake in the Part II Suite with other alumni and friends.

Listen to a short talk by Dr Howard Baylis, Head of Department, about events in Zoology over the past year and the year to come.

Dr William Foster will talk briefly about fundraising and Alumni development.

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### Keep up to date with Department news online:

**Web:** <http://www.zoo.cam.ac.uk/>

**Twitter:** @CamZoology

**Facebook:** @ZoologyCambridge

**Instagram:** <https://www.instagram.com/camzoologyfield>

**YouTube:** <https://www.youtube.com/channel/UCXqgenk2cx8xawB7OT66S5Q>



## **Special discount for Alumni and Friends in the Museum of Zoology Gift Shop**

On Saturday 7<sup>th</sup> September 2019, between 10.00am and 4.30pm

10% discount on all shop purchases on presentation of this voucher

