

Organisms and the Environment Newsletter 2020

List of Courses

BSc

Animal Behaviour
 Biology & Climate Change
 Ecology
 Marine & Freshwater Biology
 Wildlife Conservation
 Zoology
 Life Sciences

MBiol

Zoology
 Marine & Freshwater Biology

Interested?

Phone Helen Marshall on
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IBERS Institute of Biological,
 Environmental and Rural Sciences

Engineering to protect coasts and increase biodiversity

During summer 2019 a team of BSc Marine and Freshwater Biology and BSc Zoology undergraduates helped deploy a large-scale experiment as part the Ecostructure project. Ecostructure is a €3.5 million project investigating ways to make space for nature in marine engineering. For this experiment, tiles based on natural rocky shore topography were created using photogrammetry, 3D printing, and more environmentally friendly concretes, and then our team of students helped attach the tiles to coastal defence structures off Borth. The team were blessed with one of the best weeks of the summer, so in addition to getting plenty of DIY skills practice they also got to top up their tans! Some of the students even made it onto BBC News Wales. The tiles will be monitored over the next few years and it is anticipated that these more natural tiles will support more diversity than the less complex coastal structures that are generally placed in our marine environments.



Volunteering on the Kalahari Meerkat Project, by Zoe Turner



Since graduating from Aberystwyth with a BSc Zoology degree, I am now spending a year working in South Africa with meerkats. I am collecting behavioural ecology and life history data on meerkat groups, and this is enabling me to apply the skills and knowledge learnt at university to enter field work roles and be a part of wider research opportunities.

Student internship success

Charleigh (photo) is one of the original intake into our new Wildlife Conservation Scheme, which was introduced in 2018-19.



As a student on the integrated year in industry version of this degree, she will shortly be starting a twelve-month internship with the Archipelagos Institute for Marine Research in Greece.

Charleigh will be working on various aspects of marine mammal research, including surveying and identification, strandings, coral restoration, and lab-based work on the impacts of microplastics.

Animal Behaviour Field Course Report

The 2019 Animal Behaviour Field Course went to Slapton Ley for the first time, and students thoroughly enjoyed the 490 acre nature reserve owned and run by Whitley Wildlife Conservation Trust (who also run Paignton Zoo). The new venue proved to be ideal for studying the behaviour of a number of animal species including bats, bees, grasshoppers, sticklebacks, corvids, ducks, and freshwater snails. Slapton Ley is also one of the last stops for many of the migratory bird species heading to Africa for the winter, and the September trip saw a huge number of birds stopping to increase fat stores to complete the journey, all of which was very kindly explained and demonstrated early one sunny morning by the Slapton bird ringing group. The area is also home to one of the largest dormouse populations, the discovery of which only happened by chance due to a January storm in 2001 (read more about it here <https://ptes.org/wp-content/uploads/2014/09/2010-Spring-Dormouse-Monitor.pdf>), and the group saw some fantastic dormouse nests during a show and tell session from the Devon Mammal Group. This was shortly followed that evening by a talk on the behaviour of flamingos from a world expert who lives in the area. Next year the field trip heads east to investigate the flora, fauna and behaviour of the animals and birds of Suffolk



Aber graduate becomes field leader of Kakamega Monkey Project

After graduating from Aberystwyth University with a first class degree in Animal Science, and with the wealth of knowledge and experience that comes with it, for the last year Koro Vogt has been field leader for the Kakamega Monkey Project in Kenya. There she has been managing a team of 6 researchers studying the social behaviour of free living blue monkeys in the easternmost relic of the Guineo-Congolian rainforest known as Kakamega forest. Some days are 8+ hours filled with sunshine spent watching individually identified monkeys (you know them better than your friends and family at this point) feed, sleep, groom, play and fight (nothing like trying to keep up with monkeys during full scale battles between study groups!), while other's you're being tripped up by every single vine in the forest, battling flies who've taken to dive bombing your eyes, and trying not to fall into the random holes in the forest floor. Is it worth it? Absolutely. With this foundation of serious field experience soon she will be heading off to start her Master's in Tropical biodiversity and ecosystems as part of the Tropimundo Erasmus mundus program, with a focus on wildlife biology and conservation.



Guest lecture by TV entomologist Dr Ross Piper

Staff and students enjoyed another enthralling talk by zoologist, author, and TV presenter Dr Ross Piper. Ross, whose work includes the acclaimed multi-episode BBC2 wildlife documentary "Wild Burma", and his stunning book Animal Earth, regularly visits Aberystwyth to deliver lectures and seminars. Ross's association with Aberystwyth stretches back to 2013 when he first



visited to contribute to our Invertebrate Zoology module and he is now an important part of our teaching team that travels with students on our Tropical Zoology Field course in the Peruvian Amazon, or Costa Rica. Ross has an extraordinary knowledge of natural history, but specialises in entomology – the study of insects – and he has helped numerous Aberystwyth Zoology students with their projects working on this bewilderingly diverse and interesting animal group, from butterfly collections, jumping spider ecology, leaf-cutter ant behaviour, to dung beetle biology! The images show Ross demonstrating to Aberystwyth undergraduates how to deploy insect traps in the rainforest canopy (Peruvian Amazon).

Aberystwyth's second Rocketman

We would probably associate 'Rocketman' with the Elton John song and recent film starring Taron Egerton (a native of Aberystwyth). However, IBERS and Aberystwyth has a second Rocketman. Gianmarco Sanfrantello is originally from Palermo, Sicily, and is completing a PhD on a different type of rocket. Generally known as salad rocket (*Eruca sativa*) or Arugula this member of the cabbage family can often be found mixed with other leafy salads.



The value of this Mediterranean plant has a long history, dating back to the Hellenist period (320 BC). Selected and propagated for flavour, nowadays Rocket is a globally enjoyed leafy salad. Gianmarco is studying novel ways of growing these plants using low carbon, indoor 'pop up' production systems. Gianmarco said "Rocket is a great salad, it has intense taste and flavour and is high in antioxidants. Before coming to Aberystwyth, I never thought it was possible to sustainably produce high quality Mediterranean crops in Wales".



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