

Amersham Meeting 2019

Joint BHS/Thames and Chilterns Herpetological Group Meeting



On the 8th September 2019, we had another event in Amersham with numerous excellent talks from great speakers. We started with a talk from Matthew Rendle from Wildlife Vets International. He has carried out varied work throughout the world but primarily in India. He has been working with Naja India to take care of White-rumped vultures improving anaesthesia and wound management. During this time he found that Indian pythons were in trouble due to the loss of habitat and the lack of understanding by locals of how they impacted this species. The farmland is made up of land locked areas with multiple roads and several water stations. When the monsoons arrive, they flood the fields and irrigation pipes are installed to aid in water management. These irrigation

pipes are often home to the pythons and the team wanted to look at the temperature, UV, proximity to water, presence or absence in tunnels and communal occupancy. Students have taken part in the project collecting data to date and so far there has been several realisations regarding the research. It seems near half of individuals found were on their own and half were found with others. There are issues with the pipes as the researchers are only able to see so far and use phones to take photos. Matt applied to the BHS for a conservation grant to aid with this research work which was granted. It is great to hear that Matthew has used those funds to buy high viz jackets for volunteers to wear and monitor roads ensuring pythons are not hit by cars. Future plans are to purchase data logger buttons to gain continual readings and see what the movement patterns are. Provision of more dens and housing for individuals and more public engagement to increase local support.



The next speaker was a masters student from Durrell Institute for Conservation and Ecology, University of Kent, Louise Masters talking about movement and refuge use by slow worms. Louise gave a introduction on slow worms and where they live, some natural history surrounding the species. She explained that she surveyed a site where 12 pairs of refugia were placed, both tins and felts in addition to log piles made by the conservation group. The surveys took place from April—July and were carried out every 2—8 days. Data was collected on temperature, weather, soil temperatures, humidity and presence of individuals under refugia. Data loggers were also placed under refugia to measure temperatures every hour over a continual period of time. The findings concluded that slow worms tend to be under felt rather than tin. Felt tends to get hotter for longer periods so they retain the heat more than tins do. Individuals were found particularly in certain locations on a regular basis. More productive surveys tended to be when the weather had been warmer



24 hours prior. The assumption made that when the weather had been damper or raining, there were less presence of slow worms. Louise explained that it is hard to tag slow worms so photos were taken for identification purposes. Future projects would focus on spatial use using capture/recapture techniques to show what kind of movements individuals are making.

The next speaker was Karen Haysom from the Amphibian and Reptile Conservation Trust talking about the UK Pool frog re-introduction project. Karen discussed how after a decline of this rare species, a reintroduction strategy was put in place. The publications were produced in 2005. Individuals were taken from founder populations in Sweden that were considered closely related to UK pool frogs. Licences were needed to do so and enabled the capture and breeding of these wild individuals in captivity to be released later. Between 2005-2008, 4 releases occurred and from this, original animals from this site were then translocated to another site without harming the original population. In 2015-2016, the head-start program develops with better equipment and biosecurity put in place. A dedicated facility was put in place to aid the running of the project. Funding was gained and tanks



were provided by the BHS in addition to advice given by Chris Michaels from London Zoo. There are challenges in this process. It is hard to find the spawn to collect and additionally, 2019 has had variable weather leading to a poor breeding year. When spawn is found, it is brought in and acclimatised which involves syphoning water over the spawn to help them adjust. Feeding, cleaning and record keeping are important daily tasks alongside ensuring correct biosecurity protocols are followed. Vet checks are carried out which includes checking tadpoles, swabbing for rana virus and chytrid fungus. The project is promising and there are continual developments and improvements. For more details, there is an article regarding this in the Herpetological Bulletin.

Our final speaker was George Lonsdale from Centre for Applied Zoology, Cornwall College Newquay. Georges talk called 'Snakes in the Clouds: Assessing the Cloud Forest Snake Community of Cusuco National Park, Honduras'. He has been carrying out research for his masters thesis over the last 5 years and is looking to write this up this year. He showed various maps explaining the differ-

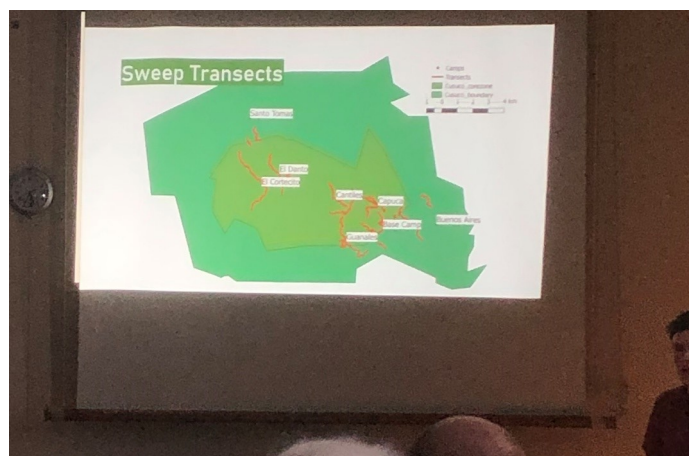


ences in areas and the different terrain and elevations. The area is split into areas with various sites that he visited to carry out his work. He talked about the areas where there is logging and the cloud forest where there is high precipitation and temperatures range lower. The Elven forest, in comparison, has harsher conditions, trees stay smaller and is more mossy with bromeliads present. Cusco is protected due to its high biodiversity as a result of the water sources present. George explained that cardamom growing is the main reason for deforestation rather than coffee as there is a higher demand for this. The locals use a slash and burn technique to grow the cardamom. Chytrid was detected there in 2007 but is assumed to have been present since the 1990's. There is monitoring of chytrid fluctuations as to the biotic factors.

The east side of the area is mostly pine oak forest

(threatened habitat) and cloud forest whereas the west side, there is no forest excepts around the rivers and this is highly diverse. Cusucos biodiversity includes the giant parrot snake *Leptophis ahaetulla*, Mexican jumping viper *Atropoides nummifer*, Redback coffee snake *Ninia sebae*, Variable coral snake *Micrurus diastema*, Twin false coral snake *Erythrolamprus bizona*, El cusuco graceful brown snake *Rhadinella godmani*, Exquisite spike thumb frog *Plectrohyla exquisita*, Mossy red-eyed frog *Duellmanohyla soralia*, El cusuco mushroom-tongue salamander *Bolitoglossa dunni* and Emerald palm pit viper *Bothriechis lateralis* to name a few.

Georges thesis focused on March's Palm Pit Viper *Bothriechis marchi* looking at home range and habitat use, test fast attachment methods and building a knowledge base of arboreal viper spatial ecology. The methods included sweep transects on a daily basis looking at snake communities, river transects looking at amphibian diversity and catching amphibians to swab for chytrid alongside viper



surveys. Other opportunistic surveys were carried out such as pit fall traps and observations. His results showed a few species detected a couple of time e.g. brown water snake but a large number of montane pit vipers were detected. Through these observations and findings, the list of species has been doubled since 2007. As expected, an increase in elevation led to a decrease in diversity but a larger number of vipers seen (due to montane habitat). George admitted that looking at the movements of species did not result in any significant data. One snake that he was monitoring, hardly moved whilst located in a tree. George will be completing his write up when he returns to university. We were happy to talk to numerous members of the society both old and new and several attendees enjoyed the publications that were on the BHS stand. We look forward to the next one.

Photos and written by Suzie Simpson



Drayton Manor AHH/IHS/BHS Event

‘Bridging the Gap’

We had another successful event at Drayton Manor this spring where people attended from all over the world to listen to some great speakers sharing their knowledge and research. We had handling venomous snake demonstrations showing equipment use and protocols, further insight into the UV and heating research, field work being carried out in various locations. Sam Perrett talked through enclosure design and how to build enclosures to





be more naturalistic looking. A fascinating talk from Paul Tapley regarding Bumblebee toads showing how to care and breed them, what requirements they have. Tariq Abou-Zahr discussed common conditions associated with lizards in the veterinary practice and explained how these can occur and the treatment. PALS also presented discussed pathological issues due to poor husbandry and this included not thoroughly cleaning enclosures such as the runners where the glass sits on vivariums. The use of correct cleaning products to address bacteria etc. The conference was finished by Stephen Spawls who gave an excellent and witty talk about his work with African snakes



both in Africa and in captivity.

The venue gave us the opportunity to view the zoo and the animals they keep. Attendees stayed after closing time to talk with keepers and Chris Mitchell about the changes to enclosures and the animals requirements.

We also had multiple students enter the student research competition and the winner presented at the conference (you can read more on the next page). To our surprise, Tell Hicks and Roman Muryn, had recorded a video to announce the winner and runner up. This was a wonderful moment, as unfortunately Tell Hick was not able to be there in person so the video was a wonderful surprise to all. As you can see in the far right top picture, Tell donated his artwork and there were books provided to the winning students. A fabulous set of prizes.

Please do join us at the next event. It is one to not miss. We will be at Drayton Manor in the spring next year with a whole plethora of speakers and talks that will focus on 'The Future of Herpetological Husbandry'. Please check the BHS website for more details and instructions on how to book tickets.



A large event poster for 'The Future of Herpetological Husbandry' held at Drayton Manor, Tamworth, UK, from 28th-29th March 2020. The poster features a green background with a large image of a lizard in the foreground. At the top, there are logos for 'ADVANCING HERPETOLOGICAL HUSBANDRY' and 'BHS'. The title 'The Future of Herpetological Husbandry' is prominently displayed in white text, followed by the dates '28th-29th March 2020'. At the bottom, the location 'Drayton Manor Tamworth, UK' is written, along with the 'Drayton Manor THEME PARK' logo.





Leah Cunningham (Harrow College) and Sophia Barton (Nottingham Trent University).

BHS/AHH 2019

Student Competition at Drayton Manor

This year we had several submissions for the student competition and thank you to UFAW for provided a grant to assist students in attending. The aim of the organisers is to encourage herptofauna research and explore the subject to uncover information not currently held. First place went to Leah Cunningham (far right) with her poster on 'An investigation into how the use of foreground colour can improve welfare in *Pogona vitticeps*'. And congratulations also goes to Sophia Barton, from Nottingham Trent University who won the runner-up prize. We need more research in herpto-culture so let's encourage students to take part and apply for grants. This competition will be running again in our 2020 conference at Drayton Manor so if you would like further details please contact the BHS for further information through the website or on our Facebook messenger. Look forward to seeing the submissions! Again, thank you to UFAW for their contribution!



BHS and AHH

Student Competition Submissions at Drayton Manor 2020



The AHH and the BHS will be running their annual symposium at Drayton Manor on the 28th and 29th March 2020.

As part of the event, there will be the student competition that is open to all levels providing they are completing some form of research or a project on reptile and amphibian husbandry/conservation etc.

If you know anyone who would like to submit a poster or you yourself want to share your work, then contact us at **The NatterJack** via **email** stated on the last page of this newsletter. You can also ask for further details through our **website** or **Facebook** page.

The top 10 entries will be invited to attend the event for free, and funding has been offered by UFAW to support travel/accommodation costs.

As a part of the weekend, students can present their posters around the facility and the winner will be offered the opportunity to present their work at the conference.

We are contacting universities and colleges directly with instructions and proposal forms but you can contact us directly.

We look forward to seeing your submissions!



The Pearl of Jersey

Written by Paul Eversfield

Along with a couple of friends, we continue an annual summer cruise in a yacht in Sa Punta and this June the trip has included a visit to the island of Jersey. Through chance and the consequence of Atlantic storm Miquel, our stay on the island was extended and gave us the opportunity of spending a few very pleasurable hours in the company of curator of Herpetology at Durrell Wildlife Conservation Trust's Jersey Zoo, Matt Goetz. Matt, in the tradition of the founder Gerald Durrell has huge passion and enthusiasm for the work at the Zoo and it's numerous conservation projects across the globe. Our visit, my first since 2007, was a real treat and catching up with projects known to me and others planned for the coming years gave a fascinating and at times of course, disturbing insight into the plight of species throughout the globe. Continued work with the Angonoka, ploughshare tortoise, (*Astrochelys yniphora*) was both enlightening and hugely frus-

trating. The loss, through poaching and smuggling activities in Madagascar are heart breaking. When one considers the





effort the Durrell has put into in country conservation, to see that Government inability to protect those specimens identified decades ago as severely threatened is a blight on the modern world. With this, and the demands and temptations for changes in land use, the outlook remains very bleak for sustainable natural populations in this species and their cousins in the South of Madagascar, the Radiated Tortoise, (*Astrochelys radiata*).

This aside, one of the founding traditions at Durrell/ Jersey Zoo is the advocacy for species in the LBJ (Little brown job) category and few better exemplify this than the continued successful work with species such as Kapidolo (*Pyxis planicauda*), the Orange tailed skink (*Gongylomorphus spp*) and of course, the native frog on the island of Jersey; the Agile frog (*Rana clamatina*).

Work in these, all too often undefended species is a cornerstone of the Durrell mission and has in my opinion underpinned the huge conservation success stories undertaken in the last forty to fifty years. The Rewilding of Round island and adjacent islands off Mauritius in the Indian Ocean as a clear

example. Work and the vision at this amazing zoo remains strong and its presence on the island of Jersey is a pearl, which is to be treasured.



Photos by Paul Eversfield

NERC GW4+ DTP CASE studentship: Competition amongst endemic lizard species on a tropical island (Round Island, Mauritius) ★

Cardiff University | Cardiff School of Biosciences | Cardiff | United Kingdom



Prof W Symondson
Dr I Vaughan
Dr P Orozco Ter Wengel




Monday, January 06, 2020



Competition Funded PhD
Project (European/UK Students
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About This PhD Project

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Project Description

Round Island, Mauritius, hosts a community of rare endemic lizard species. Their environment was cleared of most vegetation by introduced goats and rabbits (now eliminated). A partnership between the Durrell Wildlife Conservation Trust, Mauritian Wildlife Foundation and the Government's National Parks and Conservation Service has permitted the restoration of habitat and with it the recovery of the reptile-dominated vertebrate community (Cole et al. 2018). The reptile species occupy a landscape going through plant community recovery, but little is known about availability of the invertebrate prey. The skinks and geckos have proved to be remarkably resilient to environmental change, although some species were extirpated from the island's reptile community. It is likely the reptiles originally adapted to different niches, including trophic niches that allowed them to avoid direct competition. One species, the Telfair's skink, is a generalist, consuming a wide range of different taxonomic groups (Brown et al. 2014). Other species may have narrower niche axes and be more specialised. Understanding the feeding niche of the reptiles may help explain differences in population recovery and guide restoration management to enhance the success of planned reptile reintroductions.

Chester Zoo Job Vacancy

Keeper - Lower Vertebrates and Invertebrates

Reference: OCT20191772
Expiry date: 23:59, 04 November 2019
Location: Chester
Salary: £21,356.63 Per Annum
Benefits: Excellent benefits package

Keeper – Lower Vertebrates & Invertebrates

Permanent – 40 hours per week

We are Chester Zoo, and for over 80 years we've been a leading conservation and education charity, and an amazing, award-winning visitor attraction.

We're also a team of passionate, talented, enthusiastic and expert people, doing everything we can to keep the zoo going, from feeding the animals to discovering new conservation ideas, and giving our 1.9 million visitors an inspirational day out.

We work hard because we love animals, we care about nature, we love Chester Zoo and we want to be the best zoo in the world!

If you think you can help us to achieve that, then we'd love to hear from you.

We currently have an exciting vacancy for a Lower Vertebrates & Invertebrates Keeper to join our busy and diverse section on a permanent basis. We are looking for someone to work specifically with Amphibians and have knowledge regarding husbandry on Reptiles and Invertebrates too.

For the right candidate, this post offers a fantastic opportunity to work with a variety of amphibians species including Mountain chicken frogs, Montseny brook newts, Titicaca frogs, poison frogs, achoques, caecilians to name a few.

The successful candidate will assist in all aspects of animal welfare, hygiene and life support. They will ensure that all exhibits are of an excellent standard for both animals and visitors alike, and provide outstanding customer care. Direct participation in the species conservation and research programmes ex and/or in situ will be also part of the daily duties.

The successful candidate will have:

- A HND or degree level qualification in a zoological related science or equivalent experience
- Proven experience of working in a Zoo or Aquarium setting with relevant Lower Vertebrate or Invertebrate species and in particular amphibians
- Outstanding observational skills, attention to detail and be committed to ensuring the highest possible standards of animal health and welfare are met
- A thorough understanding of the contribution that ex situ populations can make to education, science and conservation
- Excellent exhibit theming skills
- Strong teamwork abilities adapted to work in group and independently
- Good competence in internal and external communications

Ideally, the successful candidate will also have:

- Experience of working in field conservation and conducting research projects
- Competency in the use of computers and basic software packages, including ZIMS software, in order to maintain accurate records
- Experience in conducting and publishing scientific research

Hours of work are 40 hours per week, worked 10 days out of 14, including weekends and Bank Holidays as rostered.

The salary for this position is £21,356.63 per annum based on a 40 hours and in addition we offer a range of amazing benefits which can be found at <https://www.chesterzoo.org/work-with-us/staff-benefits/>





- 08:30 – 09:30 Registration
- 09:30 – 09:35 Welcome
- 09:35 – 10:10 **Anna Nekaris** *Risky business: how venomous animals learn to play*
- 10:10 – 10:35 **Kevin Arbuckle** *Radiating pain: can venom help explain why there are so many fishes and insects*
- 10:35 – 11:00 **Rhiannon Williams** *Radio telemetry of a medically important snake: Russell's viper in India*
- 11:00 – 11:35 Refreshments
- 11:35 – 12:05 **Carol Trim** *Venom: kill or cure*
- 12:05 – 12:25 **Dan Hawthorn** *Antipredator defence mechanisms in cobra (Naja) species*
- 12:25 – 12:45 **Bryony Jones** *Snakes behaving badly: spitting, hoodies and spectacles in cobras*
- 12:45 – 13:10 **JP Dunbar** *The false widow spider Steatoda nobilis: Investigating Ireland & Great Britain's "most venomous spider"*
- 13:10 – 14:25 Lunch
- 14:25 – 14:50 **Ronald Jenner** *Do centipedes shoot with borrowed bullets?*
- 14:50 – 15:15 **Eivind Undheim** *Convergent evolution of venom and defensive secretions in the common rock centipede sheds light on the origins of an evolutionary novelty*
- 15:15 – 15:40 **Anna Trelfa** *Health system preparedness for snakebite: opportunities and challenges*
- 15:40 – 16:05 **Catherine Klein** *A slither through time: the evolution of snakes*
- 16:05 – 16:40 Refreshments
- 16:40 – 16:55 **Harry Ward-Smith** *Fangs for the memories, a survey of pain in snakebite patients*
- 16:55 – 17:25 **Wolfgang Wüster** *Murder most foul? Sally Clark, the framing of Varanus bengalensis and the importance of asking the right questions in science*
- 17:25 – 18:15 **Anita Malhotra, Stuart Graham & Shaleen Attre** *Multi-disciplinary efforts to tackle snakebite in India*
- 18:15 – 19:45 Drinks Reception & Poster Session

Bangor University, UK. Registration is ESSENTIAL and must be completed through the the Eventbrite website - <https://tinyurl.com/y4bzzm4o>, where further details are available. Poster presenters – £15;

Bangor University & University of Wolverhampton staff/students, and BHS members – £20; non-members – £30. To present a research poster email venomday2019@gmail.com with a short abstract. Poster submissions end 8th Nov. 2019. Registration closes 29th Nov. 2019.





Venom Day

7th December 2019

POSTER ABSTRACT SUBMISSIONS

Submission deadline: Friday 8th November

Submission format:

Title
Authors
Affiliations

Maximum 250 word abstract

Email Word document to venomday2019@gmail.com

CITIZENS,



WE NEED YOU!

...to contribute to Hadlow College's National
'Turtle Tally' Citizen Science Project

Help us collect data on introduced turtle and terrapin species:

We are keeping the webpage open for sightings to be added throughout the year. Watch out for news on the 2020 Turtle Tally.

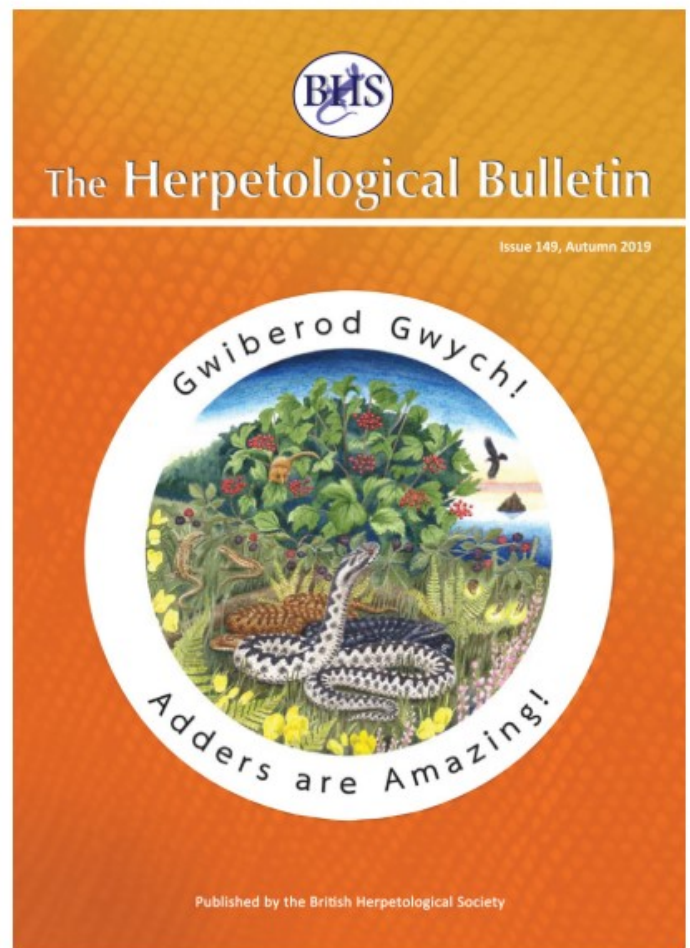
Visit ***hadlow.ac.uk/turtletally***
for more details on how to get involved.



0719



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THE NATTERJACK



Newsletter of the British Herpetological Society *Established 1948*

To our BHS members,

We are always interested in hearing from you. Please feel free to contact me if you would like to share anything regarding herps. We would love to hear about your animals, your experiences, their care and husbandry, ideas, training, research and more.

It is important to us that you have that opportunity to share with the wider community, as we all benefit from sharing knowledge and experience.

Kind regards,

Suzie Simpson

Email: natterjack@thebhs.org

**Find out more about The British Herpetological Society
on our website at:**

<https://thebhs.org/>

Check out our social media pages too:

<https://www.facebook.com/The-British-Herpetological-Society-BHS-295241210567422/>

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Twitter: @britishherpsoc

