



Newsletter of the British Herpetological Society

Established 1947

BHS/Thames and Chiltern Herpetological Group Amersham Meeting 2022

Written by Suzie Simpson

On Sunday 2nd October, the annual Amersham meeting was held at the leisure centre. Simon Townson and Colin Melsom chaired the meeting. The first speaker was Rachel Gardner (Marwell Wildlife Conservation Associate, Marwell Wildlife) with her talk 'Sand Lizard *Lacerta agilis* Captive Breeding and Reintroduction; Optimisation of Protocols'. Marwell Zoo has taken part in lots of

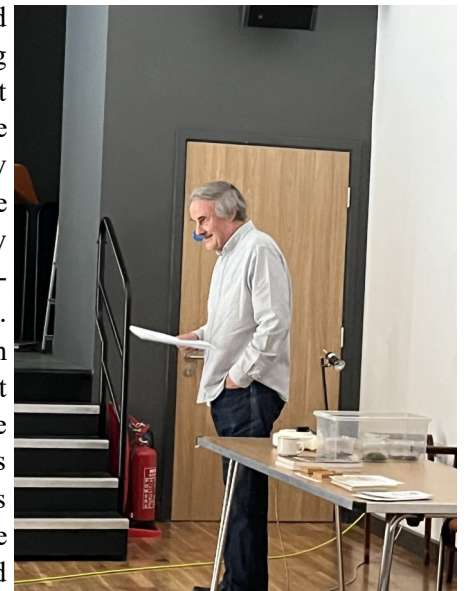


projects over the last 50 years restoring habitats and reintroducing sand lizards primarily in the New Forest. They estimate that approximately 80% of these animals were released by Marwell Zoo. The zoo has outdoor rearing and research areas and the lizards emerge in March, lay eggs around

May time and staff remove eggs to incubate in order to increase success. This mitigates seasonal fluctuations that may occur in the outdoor enclosures. The adults will dig burrows to test conditions in order to lay eggs and when they are noted to back fill the hole, the staff know where the eggs are in order to remove. Often they will lay after a stormy period and the change in humidity allows the eggs to swell. The eggs take 4-6 weeks to hatch and the juveniles are moved outside till they are ready to be released. The team carries out screening on individuals for viruses and do faecal screening for parasites. They also make sure

that the habitat in-situ is appropriate prior to release. Rachel was assessing spatiotemporal behaviour of the lizards, the preferences regarding microclimate and micro-habitat choices and to determine demographics alongside individual factors leading to recommendations for reintroduction protocols in the future.

The second speaker was Thomas Fry (Durrell Institute for Conservation and Ecology, University of Kent). Tom was speaking on his research titled the 'Long-Term Population Ecology of Great Crested Newts (*Triturus cristatus*) on the University of Kent Campus'. The research and surveying being carried out at DICE overseen by Professor Richard Griffiths is a long running one. Great crested newts are fully protected by UK law and are widespread. They lay eggs in March-April each year. Torch surveys can be carried out at night to see the numbers of newts in the pond but this is not an accurate way to understand numbers. Bottle



trapping is another technique used to look at varying life stages and gives a better historical background. Netting can be used but this destroys the vegetation which can decrease over time. There have been links between this kind of disturbance and the eggs laid in folded leaves

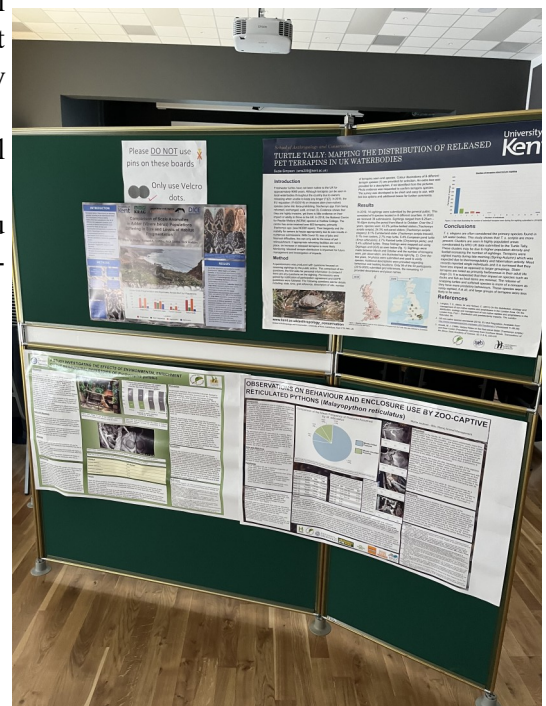
resulting in them not hatching. In 1998, 4 ponds were created and in 2008, 4 more were added. Surveys are carried out on individuals found in the ponds. Photographs of belly patterns are recorded for identification as these are similar to a fingerprint. One of the males, Clint, considered famous due to him being found there every year for the last 14 years. Not all individuals will return to the ponds each year and some females were recorded to come back every 2 years. Tom used digital software, Wild ID software, to identify individuals which resulted in it matching up to the photos used. He also noted that there was a clear increase in the population between 2000-2020 after the additional 4 ponds were added and that desiccation of the ponds was also a factor. A very interesting talk by Tom.

The next speaker was Thomas Major from University of Bangor and his talk was on the 'Secretive Settlers; Behaviour and Genetics of the Introduced Aesculapian Snake in North Wales'. Tom had been radio tracking the Colwyn Bay population over 2 years. This is a non-venomous species that can grow up to 1.5m in length. They are a widespread European species and have been introduced here in the UK. There are 3 populations found: Colwyn Bay, on the grounds of the Welsh Mountain Zoo; along a canal in a London area; and Bridgend (one found in a garden but none confirmed since). PCR analysis has been carried out to look at the genetic similarities between the individuals found in the UK and the clades in Europe. Currently results are inconclusive but this is ongoing work with further analysis of samples. Tom used trackers to track the movements of the snakes. He also used leafletting in order to get the public to submit sightings but he admits this was not very successful. Tom spent the Summer tracking the snakes 11 hours a day to find them. Inserting the trackers was a minor surgical procedure which Tom was trained to carry out. Twenty-one adults, with a mix of males and females, were tracked. Often individuals were found basking on hedgerows and sitting on rubbish piles or stone walls. Females showed larger movements compared to males. One female moved 600m to lay eggs in a dung pile in the zoo. Male's proved to be very active moving 100's of metres a day during the Summertime. Otherwise, females often did not move other than to make these large movements to nest. They breed in May-June, lay eggs in July and hatch in September. Tom said that they proved to be 'creatures of habit' by revisiting the same spots and houses on a weekly basis. There were individuals that they found dead. Reasons for death included being hit by cars, eaten by stoat or buzzard, strimmers and there was a case of cannibalism by another Aesculapian snake (named 'Hannibal'). Otherwise, they found that

the snakes diet comprised of small mammals ie. Moles, mice and, on occasions, eggs and birds.

Ellie Dobbs was the final speaker from DICE at the University of Kent. Her talk was called 'An Analysis of the Distribution of the Native and Non-Native Snake Species on the Maltese Islands'. Ellie carried out her research work out in Malta where there are 4 species of snake, both native and non-native. Her methods included fieldwork and the use of citizen science to notify of locations of snakes. Photos were sent by members of the public and she mined social media for information. Some of the main threats to these species include human persecution, road kill and cat predation. Ellie carried out statistical analysis and GIS mapping showing habitat types, water features and population density. She wanted to show snake presence in relation to habitat type across the Maltese Archipelago in her mapping. Although Malta is small there are many different types of habitat. Ellie found there was no significance regarding proximity to water sources. It was also found that snakes could tolerate urbanised areas but not highly urban population dense areas and they were commonly found near roads. Road kills were found to be common and this can be linked to the snakes relying on the warmth of the roads at night. The concern currently is the future development of the road networks. This has the potential to increase the number of deaths but also, snakes were found in cars and this could result in them being found in further locations away from initial sites. An extremely interesting insight into the herptofauna in Malta.

We also had several students showcase their research posters for delegates to view which was very successful and overall the event was very informative and well attended. Thank you to all involved.



Reptile and amphibian conservation training in prisons

Written by Dave Willis



The Ministry of Justice (MOJ) is one of the largest governmental land owners in the United Kingdom, second only to the Ministry of Defence (MOD). Due to the variety of these sites, and their geographical spread, there is a great deal of habitat for reptiles and amphibians

At the same time, there is an opportunity to provide a useful activity for prisoners and staff to really help monitor reptiles and amphibians and develop and improve habitat for them.

In each prison, involved there was an enthusiastic member of staff, who, in addition to all their other duties, would be keen to help with this project. They would be the point of contact who would advertise courses and provide information to those people who might be interested in attending.

The course programme follows that of many herp field courses. There is a class room session, with an informal PowerPoint session, followed by an evening torching, egg-checking and putting out newt traps. The following morning, the group will reconvene, check the traps and discuss the next steps.

The first such course was trialled at HMP Springhill in May 2017. The following year, 2018, saw me return there. I also ran courses at HMP Prescoed, North Sea Camp, Hollesley Bay and The Cottage approved premises in Norwich. Often I would take a tent and pitch it nearby so I could return in the morning!

By 2019, others from ARG UK had got on board and we were able to deliver training at Edith Rigby House (another approved premises or hostel) and a number of prisons in the north of England this time. I delivered a talk to a receptive crowd at the Herp Workers meeting 2019, and the south east England regional ARG UK meeting.

As with so much, Covid-19 put paid to visits and travel connected to this project until very recently. August 2021 saw our first course undertake at HMP Springhill, this time aimed at staff from 3 different establishments. A similar number of establishments (HMP Bedford, HMP Leyhill and Newbold Revel were represented at the course run at HMPPS training college, Newbold Revel. HMP Kirkham and HMP Bure hosted more training for staff in September. Overall,

It was hoped that 2022 would see a return to the direct training of prisoners! Which it did.

There are a few considerations when working in these environments. Phones can't be taken in, for example, and some of the participants might have had bad experiences in traditional learning environments. Taking photographs is difficult, which is why there aren't many in this article!

This project is managed at the Ministry of Justice by the incredible Anna Bright, indomitable Bea Finch and indispensable Greg Kellman. Following in the footsteps of the indefatigable Phil Thomas, their enthusiasm and expertise has kept momentum. Many NatterJack readers will know Angie Julian from ARG UK who has been incredible in supporting and championing this project from the start. Dave Orchard has also enthusiastically volunteered his time to help with local establishments, including constructing a pond at an approved premises, a "half way house" for women leaving prison.

This project would not work without the staff at prisons across the country who are joining in – too many to mention by name here, but their support is invaluable. Watch this space for more news!

If you would like to get involved in you local area, please email me at Davewillisbhs@yahoo.co.uk



Observations of released terrapins

Written by Suzie Simpson

I started the Turtle Tally UK citizen science project with Paul Eversfield (BHS council member) in 2018. The issue of released pet terrapins had not been researched in any depth but was discussed within conservation organisations as to their impacts on native fauna and flora. The most common comment we hear from the public regarding terrapins is, 'They eat ducklings'. This is not the only case here in the UK but whilst abroad, I have heard the same thing. This is not entirely untrue but it is dependent on the species and the circumstances. For example, common snapping turtles (*Chelydra serpentina*) and softshell turtles are more carnivorous in dietary preferences so are much more likely to predate on birds and fish. Snapping turtles exhibit a behaviour by lying in wait in the warm shallow water to grab prey animals passing them by. You can look up videos and see this to be the case as it is widely documented. Yet, the commonly sighted species of released terrapins found here in the UK are the slider and cooter species ie, red eared slider and the yellow bellied-slider. Research on wild diets have shown that these animals are opportunistic omnivores but primarily feed on vegetation as adults. Whereas, when they are juveniles they tend to be more carnivorous. If a duckling was injured, sick or dead then they would probably feed on this animal. Terrapins are documented to feed on detritus and contribute to aquatic ecosystems clearing decaying matter in waterbodies.

This has always been something that I wanted to find more evidence on and my PhD on released pet terrapins in the UK has certainly enabled me to observe and investigate further. This Summer, I have spent many hours watching terrapin behaviour and there is one individual, I wanted to highlight. I have named her Miss E. Eliot (excuse the pun) as she lives in Upper Eliot Pond at the University of Kent campus. She has been noted to have lived here for numerous years and both staff and stu-





dents are aware of her presence there. She clearly spends her summer eating duck weed amongst other food sources dwelling in the water, basking then brumating over winter to re-emerge in the Spring the following year. This terrapin has evaded capture by me on numerous occasions and has stared at me clearly thinking I was ridiculous to think that a basking trap would work.

On the 11th May 2022, whilst visiting Miss E, I found a pair of moorhens inhabiting the pond with their six young chicks. The next day, I returned and spent four and a half hours in the morning just watching how she would behave around these small vulnerable chicks. Often a chick would be separated and isolated from the parents which would be considered a perfect time for the terrapin to move in. I returned later in the afternoon for several hours to continue observations. Miss E moved around the pool, taking breaks on occasions to look around. One lone chick seemed to struggle getting caught in the vegetation, isolate from the parents and vocalising. On five separate occasions, single chicks were noted to be separated, and the terrapin only noted making movements towards one, twice. The chick, balanced on a floating branch, ran to the other end by which time the terrapin was approximately two feet away and stopped in the water. It was unclear whether the terrapin was motioning to the chick. The next time the terrapin made a motion towards a lone chick was later in the day (13.12pm). Video footage was captured of the terrapin

moving towards the chick which was located a foot away and then swam past the chick to climb over a submerged branch. This was possibly a failed attempt to bask on the branch resulting in the Miss E. toppling over the other side. The chick stayed in position on a branch for the duration, not moving, and the terrapin proceeded to leave towards the back of the pond. The video can be accessed on the Turtle Tally UK website or the YouTube channel (www.turtletally.co.uk).

On the 13th May 2022, the pond was revisited to check the number of chicks and both adult moorhens and their chicks were not present any longer. There was one dead chick floating in the middle of the pond above the surface. The terrapin was located basking in the sun on a branch just two feet from the dead chick. There was no sign of the terrapin moving towards the chick or eating it. It was floating and the feathers were dry indicating it had not been dragged under the water if an attempt had been made that morning. The questions here are: 'Did the chick die as a result of something the terrapin did? If so, why did she not eat the chick? Or at least, surely the chick would have been dragged under the water and would not be present at the surface when I returned?'. Hopefully, by collecting faecal samples, we will be able to dispel any myths surrounding these animals in time. If you would like to submit sightings of released terrapins to help our data set, please head to the website and keep you eyes peeled during the Spring/Summer months.

The British Herpetological Society's Student Grant Scheme



In 2021, the BHS research council were pleased to award a student grant of £300 to Aabha Pokharel who applied looking to study frog assemblages in Madi Valley, Nepal. The primary aims of Aabha's research were to assess frog abundance and diversity in cultivated and non-cultivated areas, to analyse environmental factors



linked to these and to assess body size and diet of individuals. Clearly amphibians face devastating impacts due to the a changing environment and every threatening diseases. Habitat loss is one of the major impacts causing great declines in populations and this can be impacted by a lack of numbers and research of certain species. Overexploitation is another factor linked with the demands for medicines and food etc. This is no different in Nepal, where frogs are important with regards to aiding in controlling pests and insects in rice fields and acting as a bio-indicator. Although beneficial, frog populations face issues here such as the increase in pesticide use and chemical fertilisers which also aid in the increase in crop

production. This relationship is understudied and so Aabha's research is important in investigating the effects of landscape change on frog populations. In addition, the work will shed further knowledge on their use of farmland, showing their presence in Madi municipality. This will build foundations for future work and help to understand the current status of these animals. We're excited to hear the outcome of the research and are very pleased to have assisted the work.

The BHS Student Grant Scheme is open to applications twice a year, in June and December. If you are considering applying, please find further information here: <https://www.thebhs.org/funding/bhs-student-grant-scheme>. We're also looking for corporate sponsors to offer help with funding: please contact Research Committee Chair Chris Glead-Owen by email: chris@cgoecology.com.





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at Drayton Manor Park

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- Jonathon Howard
- Mark O'Shea
- Roman Muryn
- Fraser Gilchrist
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Free conference tickets awarded to students presenting research posters.

You can download forms and guidance at: www.thebhs.org or use the QR code:
For further poster queries contact: suziesimpson@northkent.ac.uk



FULL CONFERENCE PROGRAMME COMING SOON!

Student presentations 2022
photo (c) 2022 Frances Baines



Have you seen turtles in the UK?



Take part in our research on the distribution of released pet turtles in UK waterbodies. Submit your sightings of turtles to our survey and find out more on our website: www.turtletally.co.uk

Turtle Tally UK Citizen Science Project



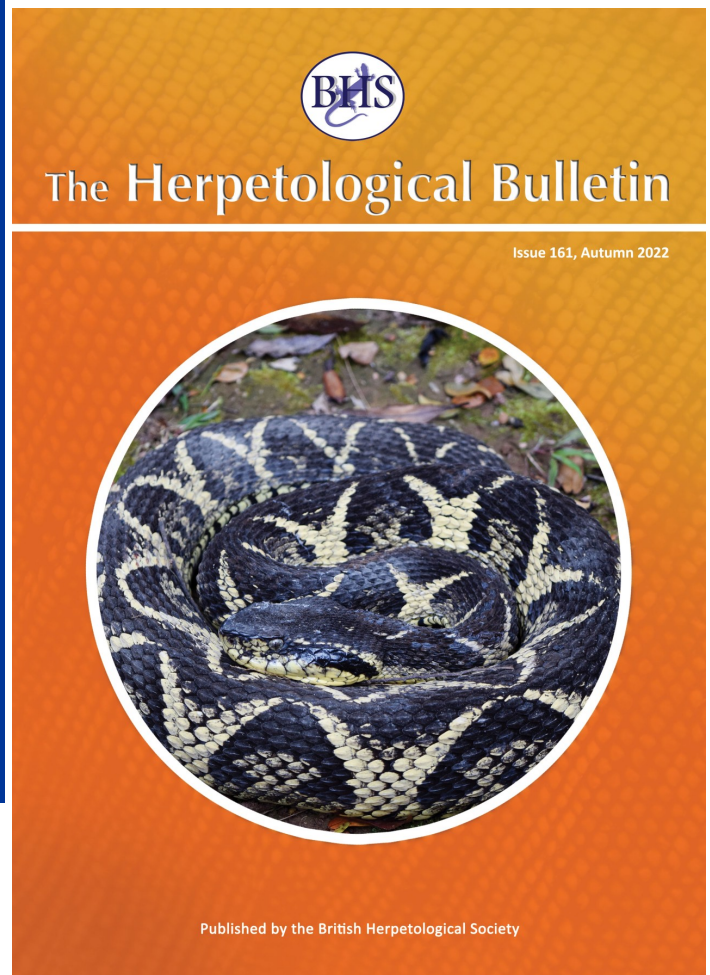
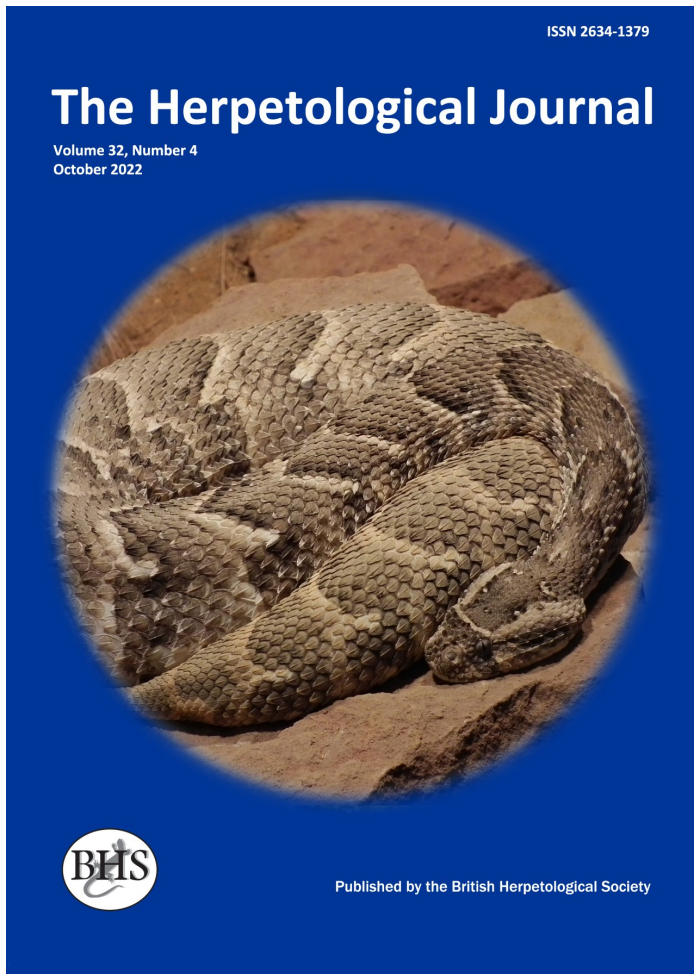
Website: www.turtletally.co.uk

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Why not take a look at our other publications?



Membership with the British Herpetological Society
gives access to all three publications for just
£25 a year (student members, £18).



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

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<https://thebhs.org/>

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