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**Newsletter of the British Herpetological Society** 

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# ARC/ARG UK Herpetofauna Workers Meeting 2021



The 2021 Herpetofauna Workers Meeting was held on the 6th-7th February online for the first time. We have all become very aware of the issues involved in being online but the event went extremely well. We started with introductions with Dr Tony Gent (in feature photo above) from Amphibian and Reptile Conservation providing the welcome address. He was in a studio in front of a large screen throughout the event and we would see different speakers appear through this medium. There were three session chairs overseeing the conference. The first being Chris Cathrine from Caledonian Conservation and ARG UK, the second was Alice Pawlik from University of Exeter and ARG UK and the third was Chris Monk from ARG UK.

With 270 attendees, the online conference format allowed participants to chat and discuss topics, say 'hi' to friends and take part in polls. Clearly, this was highly popular as there were over 4,400 messages sent throughout the duration of the conference. Networking would not be missed as a part of the event being online! Also, we wondered how would the workshops be run as this could be a challenge considering

the format. But the ones that I visited were well organised and participants were actively a part of a process. One session had a polling system to actively engage attendees and keep it somewhat interactive. As more information was discussed, it was clear that the data being collected from the polls was changing and it was a very enjoyable process. We were able to join the 'main stage' to see the speakers talk about their topics and join the workshop rooms when they were active. They also included different areas you could go to such as the shop which you could view different suppliers or organisations and the poster room. The poster room had a screen with the student research posters that had been submitted. Although, there were issues with viewing some of these, the organisers were really responsive and tried other measures to make it work. The posters were then sent out to all delegates for viewing after the event which was great.

During the lunchtime session, rooms were opened up providing the opportunity to go in to talk to various professionals from the sector about different topics. These are just a few of the topics discussed in the chatrooms: Biodiversity

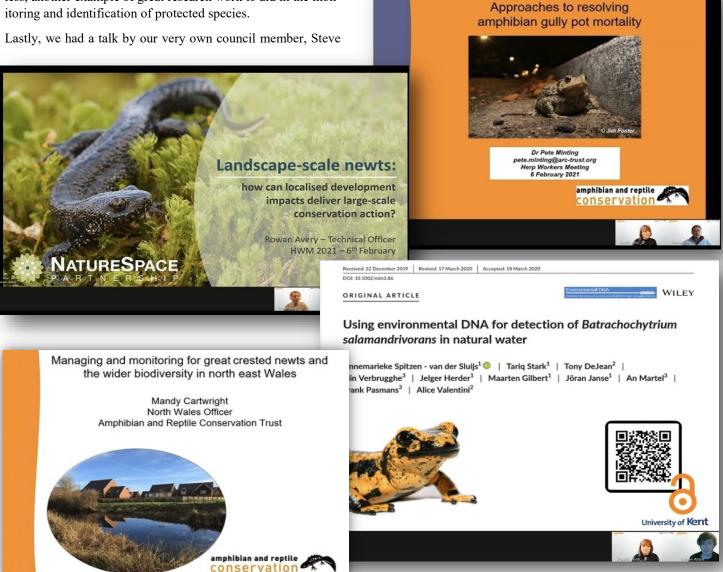


Net Gain (Kevin Morgan from Natural Explorer), 'Snakes & ladders: the ups and downs of volunteer survey' (Sophie Lake of BftB's Dorset Heathland Heart), 'Looking for better reptile exclusion fencing?' (Steve Bega at Animex International) and 'Pond-related activities for primary school children' (Dr David Orchard from ARG Lancashire). These provided a great range of subjects that covered various interests so you could say 'there was something for everyone' to get excited about.

One of the talks that seemed to spark everyone's excitement though was the NEWTRAP by Xavier Mestdagh at Luxemberg Institute of Science and Technology. He gave his talk on the use of a piece of technology they had created that could be left submerged in ponds and had a camera to ID newts that passed through a tube. This piece of equipment worked for long periods and provided excellent footage of, not just newts, but multiple other species of amphibians. The camera was place on the underside so that when the newt walked through the trap, the camera could clearly record the belly pattern. The images shown were impressive and it was clearly a piece of kit that a lot of attendees wanted on their Christmas list. This is not something that is readily bought though so it may be a while till we are able to purchase to use ourselves. Nevertheless, another example of great research work to aid in the monitoring and identification of protected species.

Allain (DICE University of Kent), who had a unique slot to fill. Steve's talk, 'Hop off the press 2020: Academic papers relevant to British herpetofauna' showcased the latest published articles on herptofauna and provided a short synopsis. He had provided a slide for each with the title, authors, where the paper could be found and a QR code for those of us who use these frequently to find sources. This was a fantastic set of summaries and regarding this being a virtual event, I found it easy to use my phone camera to scan the screen QR and gain access to the paper I was particularly interested in. This gained great approval amongst the delegates as they too saw the value in someone providing a quick overview. Often reading through lengthy papers and trawling journals and search engines can be time consuming so Steve's presentation did win favour with many. Participants asked that this be done every year at the event as it was extremely useful so let's hope this will be a firm fixture to the line up. With moving to more virtual forums, we have certainly learnt a lot about being more effective with what we have using technology. Although, it does have its issues, this event was very successful.

Written by Suzie Simpson



## 'Once in a Blue Moon' Blue Iguana Conservation (BIC)



The arrival of twin blue iguanas was a special highlight of the recent breeding season at Blue Iguana Conservation facility. This is a rare occurrence in reptiles and, although not the first time for blue iguanas, it is still a special occasion. As hatchlings, the twins were very vulnerable due to their small size, weighing less than 15 g at the point of hatching, the equivalent weight of one AAA battery! Now 6 months on, the twins have steadily grown and become stronger, surviving the heavy rains during hurricane season and now have their own personalities. Iguana Warden, Peri Smalldon, expressed his excitement: 'The twins were a real surprise for the team as you can never expect two hatchlings in the same egg. The survival of the twins given their small size was against the odds, particularly during the 2020 hurricane season, however, we are very proud of this achievement by the BIC team and it is a positive news story to share during what has been a tough year for everyone'. The twins of Grand Cayman's endemic blue iguanas can only be viewed during the guided tours at the Blue Iguana Conservation facility, which includes special access to the Blue Nursery. Please note, self-guided tours of the facility do not include nursery access. Guided tours: Adults CI\$20.00 and Children CI\$10.00. Proceeds from ticket sales directly benefit Blue Iguana Conservation. Tour pass includes access to the QEII Botanic Park.

Stay connected with all things Blue Iguana Conservation and for updates on the twins by following Blue Iguana Conservation on Facebook and Instagram: @blueiguanaconservation. If you are interested in supporting our Blue Iguana Conservation work whether through a monetary donation or as a volunteer please email Luke Harding at bic@nationaltrust.org.ky



# Population of wall lizards (*Podarcis muralis*) in Hertfordshire, UK

#### Written by David Willis

The wall lizard (*Podarcis muralis*) is a widespread, successful and highly variable species of lacertid from mainland Europe. Physically, it is characterised by the speckling of the *Podarcis* genus and is distinguished by blue ventral blotches in the males. There is mild sexual dimorphism, with females being smaller with brown dorsal panels. Insectivorous, diurnal and a common sight in dry sunny spots, these colourful lizards are often found in close association with humans (Arnold and Ovenden, 2004; Lever 2009; Speybroeck et al. 2016).

Weytemore Castle in Bishops Stortford is fortification of some 12.6m OD elevation (GPS 50° 48'66.0" N 23° 48'23.00" W). It dates from the at least 1086 ACE and the Norman conquest, with a square tower probably constructed in the 12<sup>th</sup> century (Ailey, 2004). The foundations of this tower provide the observable habitat (see Fig. 1) Constructed from the vernacular materials of the area, principally flint and chert nodules in a calcareous anthropogenic matrix (see Fig. 1). There is extensive cover from common and widespread British



Fig 1. Weytemore Castle ruins, Bishops Stortford showing habitat type wasteland plants, such as Ivy (*Hedera* sp.), Bramble (*Rubus* sp.) various grasses and wasteland plants such as Greater Mullein (*Verbascum thapsus*). There is a notable invertebrate population, with orthoptera being particularly evident on warm days. The area is accessible to the public and is well used.

In June 2020, a member of the public contacted Hertfordshire Amphibian and Reptile Group (HertsARG) reporting the presences of what she believed to be an Italian Wall Lizard



Fig 2. Podarcis muralis basking, Bishops Stortford, Hertfordshire

(*Podarcis sicula*) and sending a photograph. *Podarcis* has not been formally recorded as present or breeding in Hertfordshire, and there is no mention of them in the last published survey of the county's fauna (Clark, 2001) or the National Biological Network (NBN) (National Biological Network, 2020).

On 20<sup>th</sup> June David Willis visited the site, accompanied by the original informant. One adult was seen, in overcast conditions, with surface temperatures on the ruins 17-20°C, as measured by handheld infrared thermometer.

On 25<sup>th</sup> June 2020, Dave Clemens and Lloyd Rose visited the site and estimated that there were 22 animals seen, both adults and juveniles. Surface temperatures were over 27 °C. Predictably, there were higher levels of activity when sur-



face and air temperatures were higher.

On June 28<sup>th</sup>2020, an early morning visit resulted in lizards active once the rock surfaces obtained 17°C, although numbers were significantly reduced from the previous visit by Dave Clemens and Lloyd Rose, 4 individuals were observed.

The nature of the site and continuing presence of so many adults suggests that successful breeding is likely. Eggs deposited in the protected crevices of the ruins are likely to successfully incubate. The same structure suggests itself as an effective hibernaculum. It is not known how long the population has been there, or whether the animals have survived a previous winter. A tentative identification of this group to subspecific level as *Podarcis muralis nigriventris* is offered.

There will be repeated visits to the site over the course of 2020 on suitable days until no animals are seen, and visits will resume from March 2021. No animals were re-released. Common Lizards (*Zootoca vivipara*) are recorded from the area, according to National Biological Network (2020) and previous county recorder for reptiles (Jenny Jones, pers.comm.) There is concern that there could be direct competition or transmission of diseases, especially if these were released by someone who houses other reptiles. Lever (2009) cites several studies of the impact of populations in Dorset, indicating that the presence of wall lizards can oust others. Furthermore, there have been recent observations of direct

predation of *Zootoca vivipara* by *Podarcis muralis* in Dorset (Thomas *et al.* 2020). In turn, the location of this population would seem to present several threats, from rodents, domestic cats, birds of prey and collection by reptile keepers. Ongoing observations are required to monitor these animals.

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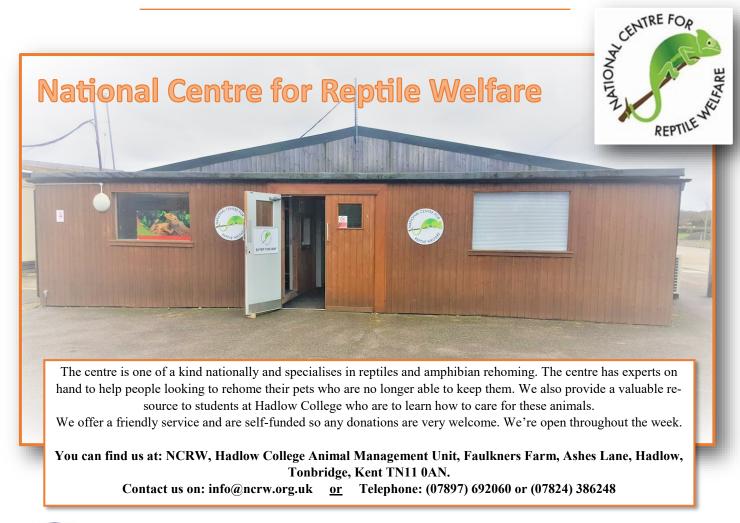
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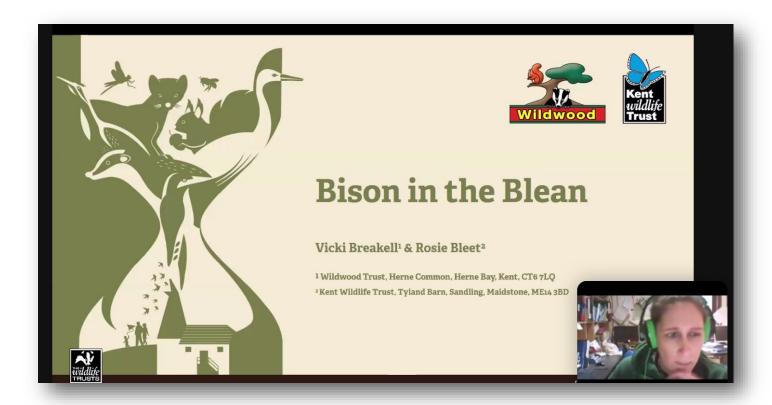








# Rewilding and Introductions: Working together



Now you may have read the title and thought 'What do Bison releases at Blean have to do with a herp conservation?'. Well, collaborative work is important in linking together with all elements of an ecosystem. There are various levels to an ecosystem and niches. These all intertwine and rely on each other for certain biological processes. So you can imagine how this topic relates to all manner of species if introduced or the land is managed differently. Rewilding is a very current topic right now and there are lots of talks and events featuring it. It's great to see more information being provided from past, present and future management implementation. We can all too often think of mammals being the main focus here but you will see how this relates to herptofauna and how reptile surveys play a part.

I was pleased to attend the Kent Reptile and Amphibian Group (KRAG) AGM earlier this year which featured a talk on the 'Bison in the Blean' with Rosie Bleet (KWT) and Vikki Breakell (Wildwood). The Blean Woodland is approximately 3000 hectares and located near Canterbury in Kent. Wildwood is placed on the edge of this area so it makes for an

excellent partnership with Kent Wildlife Trust. There are a range of species that inhabit this area already including butterflies i.e. heath fritillary (Melitaea athalia), dormice, the whitespotted sable moth (Anania funebris), blood bees and minotaur beetles (Typhaeus typhoeus). The site is a Special Site of Scientific Interest (SSSI) designated for several species such as nightingales and dormice. Many common lizards, slow worms and amphibians are found here too. The habitat is a diverse mix with coppice (mainly sweet chestnut). There are many open areas with pools and heathland so it's a great spot for herptiles. Konik ponies are used for grazing at certain times of year and thinning is carried out alongside coppicing and scalloping. This management is resource heavy, so it takes a lot of manpower and time to carry out. So the aim to reinstate grazing management using bison is the key to assist in the maintenance of this area. Long horn cattle are also a part of the plan alongside iron-age pigs (cross of wild boar and Tamworth pigs).

The stimulus for this project has been the report on The State of Nature biodiversity report on the decline of British



biodiversity. Worst affected species include the turtle doves and hedgehogs. Some of the biggest drivers for this include woodland management amongst many others. Steppe bison used to roam here in the UK and these herbivorous animals no longer roam here so this changes the woodland management. Kent Wildlife Trust and Wildwood are working on the Wilder Blean Project aiming to restore the natural process to lowland English woodland. This includes reintroduction of large herbivores to woodlands as natural engineers. To build a more biodiverse and resilient ecosystem, with multi-levels of advocates.

The plan is for three assemblages: bison assemblage (200 hectares), longhorn assemblage (250 hectares), control assemblage (no grazing 100 hectares). There will be an extensive monitoring programme looking at biodiversity and bio abundance. Looking at natural processes, vegetation, and habitat structure. A drone will also be used to look at habitat structure using remote sensing. The biodiversity and bio abundance monitoring will include a standardised invertebrate survey, a breeding bird annual survey, monitoring flagship species and other species in the ecosystem. The animals will have GPS collars to monitor movement and used just in case they escape. The soil health is important in this project so soil samples will be collected for carbon content and microbial communities linked to dung from the bison's. Pollinators will also be monitored as part of the invertebrate surveys. Collaborations are important such as linking with KRAG to monitor changes in reptile abundance and habitat suitability.

European bison are being introduced in place of previous large herbivores that used to graze centuries previously. They need little human intervention and their interactions are different to other browsing animals. They will disturb the environment in a positive way such as rubbing trees with their horns and debarking trees. A trip to the Netherlands to see how the work out there was going occurred in 2019. Magpies were seen interacting with the bison collecting parasites, maple trees have had their bark stripped leaving dead wood, bald pits created on the ground clearing grass opening areas for other animals and faeces being left where microfauna can utilise them and thrive. You can just imagine the benefits for herptofauna with the presence of these animals. Bison are classed as dangerous wild animals so a DWA licence is needed to keep them. Wildwood have looked at the infrastructure with some differences in Europe compared to the UK considering signage, a double fence system, deer fencing, electric fencing for a large 200-hectare area. Health and safety must be considered regarding visitors and walkers. Husbandry and welfare of the bison will need to be considered so additional ponds need to be put in place alongside browse and plants. The plan is not to provide supplementary feeding but is an option. Recall protocols will be put in place to call back the Bison and body condition scoring will be used to monitor their health. Veterinary care is considered regarding TB testing and vaccines ensuring they are protected when on site. This will also include checking faecal matter regularly to check parasite load and minimise interventions by providing anti-parasitic medication. Emergency protocols, risk management, signage and safety instructions will be in place to ensure safety for all and manage public interactions. Kent Police are already in communications with Wildwood and this relationship stands them in good stead if a bison does breach the fence.

KRAG was very much interested in getting involved in the project. Reptile survey work will start in Spring 2021 to generate baseline data on habitat suitability and reptile abundance. Refugia will be placed in all three areas to monitor the effects of this reintroduction. There are already records for Thorndon Woods such as grass snakes, slow worms and viviparous lizards. An adder sighting has been reported but more monitoring will need to be done to confirm this. All the ponds have palmate newts present so it will be interesting to see if other newt species are present too or become present there. Involving people is essential in aiding the monitoring and surveying to help understand the effects of this project. There are volunteer opportunities available so that people can get involved to help survey and details can be found on the organisers websites. It is clear that monitoring is needed and it is important that multiple animal interest groups work in collaboration to monitor impacts of biodiversity in the area. The hope is that by re-establishing larger herbivores will increase bioabundance within those landscapes and benefit the ecosystem as a whole.

If you're interested in working with your local reptile group, take a look and get in contact as there will always be something to help out with. The Toad Patrol is a great activity to take part in during the early part of the year. You can go to the Froglife website and look up your nearest toad crossing at: https://www.froglife.org/what-we-do/toads-on-roads/tormap/You can register your details and a patrol manager will contact you so you can arrange to help out by moving toads off roads to safety. A great family activity which the kids enjoy too!

If you would like to report on your local reptile and amphibian group meetings, workshops, and conferences, please do write up and send to us at: natterjack@thebhs.org

Written by Suzie Simpson



## 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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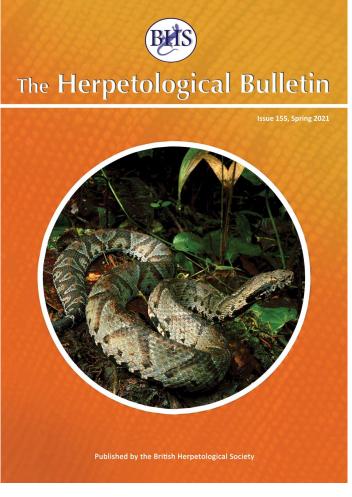






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To our BHS members,

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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