

# THE DEINIOL

SPRING 2025

News from the  
School of Environmental  
and Natural Sciences



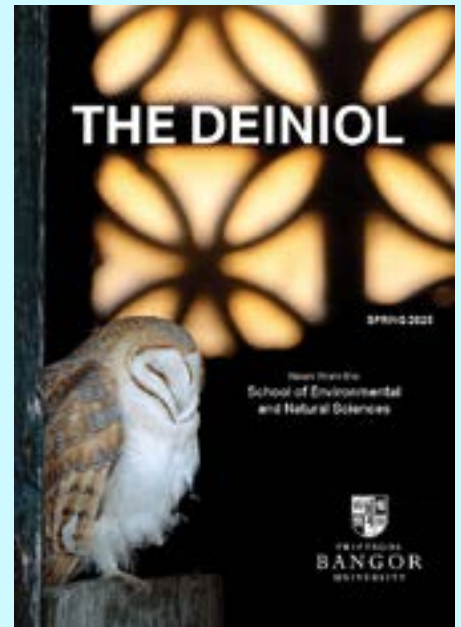
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## The Deiniol Spring 2025



Please send your news to:  
[sens@bangor.ac.uk](mailto:sens@bangor.ac.uk)

## The Deiniol

The newsletter of the School of Environmental and Natural Sciences and our alumni.

Aiming to keep all those interested informed of developments both in the School in Bangor and globally through our vast network of alumni. By linking past, present and future potential students we hope to facilitate a network of natural scientists working together to inspire others and making an impact worldwide



## 2025 OPEN DAYS

Saturday 5th July  
Sunday 17th August  
Sunday 12th October  
Saturday 1st November  
Saturday 22nd November

Cover photo is by Jake Brass.  
for more info and images go to [www.jakebrass.co.uk](http://www.jakebrass.co.uk)

# MESSAGE FROM HEAD OF SCHOOL



## Welcome to the Spring 2025 edition of "*The Deiniol*" - Your School of Environmental and Natural Sciences newsletter!

It has been a busy and exciting few months since our Summer edition. September marked the arrival of a new cohort of enthusiastic undergraduate students and once again, we've seen strong growth in numbers. Our postgraduate community is also thriving, with students embarking on a wide range of courses and research projects alongside our world-leading academics.

Our students come to us with the dream to make a positive difference to our natural world, and together we continue to achieve some great things! Bangor's unique setting and outstanding opportunities to study environmental and natural sciences provide the perfect backdrop for our students to address the critical environmental challenges of our time, and it is a privilege to

help them on their journey.

Of course, we always want to hear from you, our alumni. Whether it's updates on your career, reflections on your time at Bangor, or simply a fond memory you'd like to share, we welcome your stories. Photos, anecdotes, and milestones all help us stay connected as a community.

Please don't hesitate to get in touch with our editor, Professor Christian Dunn, at [c.dunn@bangor.ac.uk](mailto:c.dunn@bangor.ac.uk). We look forward to hearing your news and sharing it with the wider Bangor family.

Looking forward to hearing from you!

Best regards,

**Professor Nia Whiteley**

Head of School  
School of Environmental and Natural Sciences  
Bangor University

Check out the profiles of our academic staff members, and see the diverse expertise and experience they bring to the School of Environmental and Natural Sciences.

<https://www.bangor.ac.uk/staff/sens/en>

## Keeping in Touch

To find out more about the School and keep up to date with our news, follow our socials:

**Instagram** <https://www.instagram.com/bangor.sens>

**X** <https://x.com/BangorSENS> and <https://x.com/BangorBioZoo>

**Or email:** [sens@bangor.ac.uk](mailto:sens@bangor.ac.uk)

We are also on

**Facebook** <https://www.facebook.com/BangorUniversity.NaturalSciences>

or to join our **alumni community** go here

<https://www.bangor.ac.uk/alumni/update.php.en>

# TREBORTH WINS GOLD AT CHELSEA



In May 2024, a team from Bangor University botanic garden helped with growing and set up of a garden which was displayed at the annual Royal Horticultural Show in Chelsea.

The idea of the garden (designed by Studio Bristow) was that it was designed in the shape of Wales around the idea of the size of Wales often being used as a gauge of scale in de-forestation. The garden went on to win a gold medal! Congratulations to the Size of Wales & Studio Bristow on their Gold and 'Best in Category' Award! With 300 plant species the 'size of Wales' Garden is thought to be the most biodiverse entry in the RHS Chelsea show's history. Its aim is to raise awareness of the need to protect the world's rainforests. After the show in July the garden was moved in its entirety to live on, at the university Botanic Garden at Treborth. Its now open and free to visit any time.

Read more about the garden and the show here

<https://www.bbc.co.uk/news/articles/c3gvz3pjnx0o?>

Natalie Chivers shown below is the Botanic Garden curator and helped with both the growing of and installation of the prize winning garden.



You may recognise Alex Burnett from our first issue winning a 'prize for substantial contribution to practical conservation during their degree'

## 120 YEARS OF FORESTRY

### James Walmsley

Our school (SENS) was delighted to host a gathering of many wonderful alumni, former staff, current staff and students to the University to celebrate this momentous occasion, coinciding with the 140th anniversary of Bangor University.

Graduates from every one of the last seven decades attended, ranging from 1968 to 2023. The programme included presentations from current students, alumni, two current Professors, as well as an exhibition of rare archive materials, a speech from the Vice Chancellor, an evening meal and a visit to the spectacular Treborth Botanic Gardens hosted by the Curator, Natalie Chivers.

The event was a huge success, evidenced not only by the photos but also by the many messages that we received shortly afterwards, including:

*"It was a lovely atmosphere and the sights and sounds were so evocative and brought back many happy memories."*

*"I enjoyed the visit to Treborth enormously, it was so good to catch up with so many forestry friends!"*

*"What a hugely successful event you put on for. Everything worked out well and even the sun shone!! I particularly appreciated*

*the student input and also the compliments the Vice Chancellor paid to forestry (and natural resources) on the terrace at Reichel. I'm sure we will have all left Bangor feeling that forestry is not only in good heart but in safe hands."*



Photos of the forestry alumni coming together to celebrate 120 years of forestry teaching here at Bangor

## FIELD TRIPS

### Tenerife Field course Nov 2024

Here are some photos from our annual natural science field course to the environmentally diverse islands of Tenerife and La Gomera.



Students go to a variety of sites which demonstrate a range of rock, soil and vegetation types, landscapes, volcanology and a range of conservation and sustainability issues. We get the help of local experts and students also get to dig a big hole!

Have you got pictures of your course trips? Send them in [sens@bangor.ac.uk](mailto:sens@bangor.ac.uk)



Who remembers this scene and the wistful Prof Graham Bird?



## Canada Field course

The Canadian field course run by Dr Ewa Krzyszyk introduces students to the flora and fauna of Algonquin Provincial Park in Ontario, Canada.

Students looked at the park's natural history and how a variety of unique strategies are employed by different species to survive in the harsh conditions of a variety of habitats. Students created natural history notebooks to record their observations, developed their own research projects, and collected data for research question.

Ewa posted on X 'From big animals (moose and wolf) to small (salamanders and baby turtles) we learned loads, laughed tons, and hiked our feet off. Thank you @Algonquin\_PP, @AlgonquinPark'



# LYNX RESEARCH

Dr Axel Barlow

## Work to recover DNA (whole genome data) from ancient Iberian lynx bones revealed a surprising result.

Academics including Dr Axel Barlow from Bangor University analysed and compared the DNA of ancient bones with that of modern Iberian lynx. 'To our surprise, the ancient lynx showed even lower genetic diversity than their modern descendants. Given the sharp decline in their populations over the past few centuries, this finding was both unexpected and puzzling.

....

The missing piece of the puzzle came with the discovery that modern Iberian lynx populations share more genetic variants with the closely related Eurasian lynx than their ancient counterparts did. This suggests that the two species successfully interbred within the past 2,500 years, boosting the genetic diversity of today's Iberian lynx.' The species had provided its own safety net against extinction but is still facing a very uncertain future. Read the article here

<https://www.bangor.ac.uk/news/2024-09-29-ancient-dna-helped-us-uncover-the-iberian-lynxs-potential-secret-weapon-against>





# HOW DO BIRDS NAVIGATE?

Migratory birds are known for their ability to traverse thousands of kilometres to reach their breeding or wintering grounds.

Research by Bangor University published in [Proceedings of the Royal Society B: Biological Sciences](#) found that these birds, in this case, Eurasian reed warblers (*Acrocephalus scirpaceus*) are using only the Earth's magnetic inclination and declination to determine their position and direction.

The new findings challenge the long-held belief that all components of the Earth's magnetic field, especially total intensity, are essential for accurate navigation as the research suggests that birds can extract both positional and directional information from magnetic cues, even when other components of the Earth's magnetic field, such as total intensity, remain unchanged.



*“What’s interesting is that these findings reveal that the birds don’t necessarily need all components of the Earth’s magnetic field to determine their position,”* said Professor Richard Holland, who specialises in animal behaviour and led the study.

*“They can rely solely on inclination and declination, which are also used in compass orientation, to extract their location.”*

*“It remains to be seen whether birds use the total intensity of the Earth’s magnetic field for navigation in other contexts, but what we’ve shown is that these two components—magnetic inclination and declination—are enough to provide positional information,”* explained Richard.

This discovery advances the understanding of avian navigation and supports the theory that birds possess a complex and flexible internal navigation system. This mechanism allows them to adjust for changes in their environment, even when encountering conditions they’ve never experienced before.

The findings open new avenues for research into animal navigation and may hold implications for broader biological studies, including how animals interact with and interpret their environment.

<https://www.bangor.ac.uk/sens/news/study-challenges-long-held-theories-on-how-migratory-birds-navigate>

read the paper here <https://royalsocietypublishing.org/doi/10.1098/rspb.2024.1363>

# WHERE ARE THEY NOW?

## Andrew J Lunn and partner Jenny Jarman – Bangor graduates

Andrew recently got in touch and we were able to ask him about his experience at Bangor. Not only did he publish papers and win an academic prize but he met his partner Jenny here as they both followed the MZoology and Animal Behaviour degree (graduating in 2021)

'When I applied for university, Bangor was actually my insurance choice! However, I struggled to get it out of my head and fortunately (as it would turn out), I did end up coming to Bangor and I honestly couldn't be happier! The scenery - gorgeous, the course and the way it was assessed- fascinating and accessible, the student life - just my speed... but above all, was just how kind and lovely every single person was. Whether it was staff, previous students, new students, or even the locals - everyone treated each other with kindness, and there was a deep respect for everyone's interests and personalities.

After I left Bangor, I continued to do a bit of work with Isabelle Winder and Vivien Shaw where we published three abstracts and two book chapters! While this was ongoing, I got a temporary job before I started at the Animal and Plant Health Agency (an executive agency of the Department for Environment, Food and Rural Affairs) as a laboratory technician. Since I joined a year ago, I've been fortunate enough to be promoted to Lab Manager and, more recently team leader overseeing the Brucella, Equine ELISA and UKs (serology) Emergency response labs. Before I got here, I had not considered working in a lab environment... but it's surprised me and I am really, really enjoying it! Bangor played no small part in helping shape who I am today, and not only taught me how to be a good student and scientist, but also, how to be the best version of myself.

Jenny had more of a lab focus to her work while at Bangor and did really interesting work on sperm chemotaxis with Dr John Mulley and Microbiome studies with Prof James McDonald. She even won the Sir Robert Edward's Prize for her studies. After taking a temporary job for a short time, she secured a job at the Animal and Plant Health Agency starting as an animal technician for the animal sciences unit. Jenny has since been promoted to an animal technologist and plays a big part in animal welfare and the safety of the staff.

Jenny commented;

"I came to Bangor after finishing A-levels and taking a year out to decide what I wanted to do. I was already familiar with Bangor, and the variety of modules, ranging from behaviour to lab work to human evolution really allowed me to explore my interests fully, and discover areas I had not previously considered. While at Bangor, I did my first dissertation on sperm chemotaxis and my second on Oak tree microbiome studies, which were both really interesting and a testament to the wide ranging and cutting-edge research taking place at Bangor. When I left university I eventually secured a job at the Animal and Plant Health Agency as an animal technician for the animal sciences unit and had a lot of hands on experience with different animals (chickens, pigeons, cows, pigs, sheep, ferrets etc.) and the different studies APHA run. Some of the work I have been involved with is stuff you'll see all the time in the media and includes (but is not limited to), Bovine TB vaccines, Foot and Mouth, avian Flu etc. Recently, I was promoted to an animal technologist and I help play a part in supporting, planning, and making sure animal welfare and the safety of the staff is at the forefront of the studies!"



Andy Lunn and Jenny Jarman (graduated Zoology 2021)

## Ryan Eddowes at Wildscreen

Recent graduate Ryan Eddowes was spotted at the Wildscreen event this year. We asked him to tell us all about it.

*"Wildscreen is an iconic celebration of wildlife filmmaking, established in 1982 in Bristol, UK—aptly known as "Green Hollywood" for its dedication to this craft. Created by Sir Peter Scott, WWF founder, and Christopher Parsons OBE, former head of the BBC Natural History Unit, this biannual event brings together a passionate global community. Attending Wildscreen has been a lifelong dream of mine, driven by my deep passion for natural history broadcasting and the inspiring work of Sir David Attenborough. With over a decade of experience working with wildlife, I've long aspired to become a wildlife presenter. During my Zoology with Herpetology studies at Bangor University, I picked up a camcorder and embarked on a journey that led me to Africa twice, including a month-long filmmaking course with National Geographic producer Ryan Johnson. There, I refined my presenting skills and discovered a love for sharing the wonders of nature through the camera lens. Navigating the wildlife film industry comes with unique challenges, especially as I was born with bilateral clubfeet and recently underwent a below-the-knee amputation. Yet, I'm more determined than ever to blaze a trail for individuals with disabilities, showcasing the importance of inclusivity in conservation and wildlife media.*



*Despite initially doubting my industry experience, I applied to volunteer at Wildscreen and was thrilled not only to be accepted but to receive the role of team leader. My responsibilities included moderating the virtual audience, ensuring engaging interactions with speakers and panellists, and helping create an inclusive festival experience. This event brought so many inspiring moments. I had the honour of meeting (a fellow Bangor alumni) Hamza Yassin, a wildlife cameraman and honorary lecturer at Bangor University, with whom I share both dyslexia and a deep commitment to nature storytelling. Meeting Steve Backshall, whose dedication to wildlife inspired my own, was another profound highlight, as he once cheered me on in my own filmmaking journey.*



*Wildlife presenter Dan O'Neill shared words of encouragement, assuring me that my unique perspective could offer a new way of telling nature's stories. Lizzie Daly, TV presenter and explorer, chatted to me about accessibility in the industry, she been a wonderful mentor, supporting my journey and championing greater inclusivity in wildlife media. Wildscreen also went above and beyond to ensure accessibility, setting up ramps and creating a welcoming environment. The warmth and support from fellow volunteers and organisers made every part of the experience unforgettable.*

Ryan is currently working with BugLife to help raise funds and awareness for our invertebrates. He also hosts a podcast 'Two Ryans one planet' full of positive wildlife stories with his friend Ryan Parker. Ryan would love to be a wildlife presenter and has started a Ranger Ryan series, also on YouTube

# BANGOR SWITCHES ITS DEFAULT SEARCH ENGINE TO ECOSIA

In a move aimed at supporting global reforestation efforts and promoting sustainable practices, Bangor University has switched to *Ecosia* as its default search engine.

The move, which went live on 1st November, followed a student suggestion during the University's launch of the [25by25 campaign](#).

Initial research on the subject, led by Dr Edward T Jones at the Bangor Business School, was conducted, followed by consultation with staff and students, which was overwhelmingly positive.

Ecosia, is the world's largest not-for-profit search engine, dedicating 100% of its profits to climate action, primarily through reforestation projects worldwide. To mark the occasion a Hamamelis Intermedia Firecracker tree was planted in the Outer Quad.

As of today, Ecosia has planted more than 218 million trees in over 35 countries. By using Ecosia, each search conducted on University devices will help contribute to Ecosia's mission of restoring biodiversity hotspots and combating deforestation.

Professor Oliver Turnbull, Deputy Vice-Chancellor and lead for Sustainability at Bangor University, stated, "*This partnership with Ecosia aligns perfectly with our sustainability goals. Ecosia's track record of responsible environmental action made it an ideal choice as we strive to make a positive impact not only locally but globally. We are thrilled to support an organisation that prioritises the planet.*"

Professor Christian Dunn, Associate Pro-Vice-Chancellor for Sustainability, added, "*I'm looking forward to seeing the University's Ecosia dashboard which will show us just how many trees we've all helped plant from our office chairs. Switching to Ecosia is a small step for us, but with big results for the world.*"

Fred Henderson, User Success Manager at Ecosia, said, "*By making Ecosia their default search engine, Bangor University is demonstrating a significant commitment to environmental responsibility and inspiring others in the academic sector.*"

This initiative reflects the University's ongoing commitment to sustainability and reinforces its role as a leader in environmental responsibility within the academic community.



From left: Professor Nichola Callow (Pro-Vice-Chancellor - Education & Student Experience), Natalie Chivers (Curator, Treborth Botanic Garden), Professor Oliver Turnbull (Deputy Vice-Chancellor, Global Engagement), Nida Ambreen (President, Undeb Bangor), Rose Pugh (VP Education, Undeb Bangor), Gwion Rowlands (President, UMCB), Simone Barbaresi (Director of Digital Services), and Professor Christian Dunn (Associate Pro-Vice-Chancellor - Sustainability)

# MARCH FOR CLEAN WATER

In November a group of students from across the university travelled to London to take part in the 'March for Clean Water' spearheaded by River Action and Feargal Sharkey.

Professor Christian Dunn, said, "I was delighted when River Action approached me to see if we'd support the march. "As this is a non-party political event we were more than happy to get involved. Here at Bangor University we're leading the way in our research and teaching on monitoring various pollutants in water and, crucially, discovering ways of removing them from our rivers using natural processes, or nature-based solutions, like wetland habitats.

"We organised a bus to travel down with a group of students and staff with the specific aim of showing how important science is in tackling this problem."

Former 'Undertones' frontman, and now river health campaigner, Feargal Sharkey, praised Bangor University for being the first university to support the March for Clean Water. "Bangor University has been doing some fantastic research looking at the health of our rivers and how we can improve them," Mr Sharkey said. "It's great to have Bangor supporting the march – it's a credit to the university that its staff and students are so proactive in trying to do something about the crisis our rivers are facing."



# MORE ALUMNI NEWS

Prof Philip D Evans from the University of British Columbia, Faculty of Forestry recently got in touch to let us know he led his school graduation procession proudly wearing his BangorUni robes (Philip did his PhD in Forest Science here) We love to see the Bangor influence around the world!



# HOLIDAY SNAPS

Joshua Horn in Latvia

Nice holiday snap from MScRes student Josh in Latvia! "Thought I'd share something just done on my holidays thanks to being inspired by the 'Life in wetlands' module this year.....

Did have a nice bog swim too" The module on wetlands is an optional module, open to most zoology students in year 3 and is led by our editor (and mud fanatic) Prof Christian Dunn. He's all about changing perceptions on this niche topic!



Apologies to staff and students we haven't had space to include in this issue. So much goes on we have only been able to provide a snapshot of the 2023/4 academic year events. There are lots of other great stories happening all the time. Follow our social media to get the full picture bangor.sens (Insta) or @bangorsens (X) and @BangorBioZoo (X).

## Contact Us

If you have any enquiries about the school, our staff or our courses, or if you would like to be included in the next issue of The Deiniol please contact us;

[sens@bangor.ac.uk](mailto:sens@bangor.ac.uk).

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