Forestry@Bangor
Newsletter 2026

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- Celebration of 120 years of Forestry@Bangor: 1904 – 2024.
- Bangor Forestry Students' Association.
- Alumni come together to establish new Association.
- Forestry@Bangor research, reunions and recognition

and much more.

Foreword

In the early autumn sunshine of 2024, on the terrace at Neuadd Reichel, it was a pleasure and an honour to greet and meet so many of our wonderful Forestry@Bangor alumni. Thanks to all those who made the effort to join us. The celebration of 120 years of forestry at our University was a truly special event, bringing together graduates from every one of the last seven decades. Inside this newsletter, you'll find a report of this special event, as well as news of exciting developments that have followed since, led by a dedicated group of forestry alumni.

The newsletter highlights examples of the exceptional efforts and achievements of our students, staff and alumni. Our Bangor Forestry Students' Association continues to go from strength to strength, organising a range of high quality extra-curricular activities on behalf of their fellow students. Honorary degrees have been awarded to two Forestry@Bangor alumni since the last newsletter, Dr Susan Chomba and Alison Field. Moreover, Dr Jo Clark has been awarded a Gold Medal by the Royal Forestry Society. Our teaching in the forestry subject area is now ranked Number One in the UK across the whole agriculture and forestry subject area in the well-established Times/Sunday Times league tables for 2026. Our staff continue to actively address some of the most pressing global research topics, including the conservation and restoration of temperate and tropical rainforests. The University continues to treasure forestry as one of its most distinctive and valued pinnacles of excellence.

Whether you are one of our alumni, a prospective student or colleague, or someone who shares our passion for forestry at Bangor University, I'm sure you'll find that this newsletter brings you optimism and inspiration. As always, we are indebted to so many of our alumni for their continuing and invaluable support. Thank you very much,

Professor Edmund Burke

Vice Chancellor, Bangor University

January 2026

From the Head of School

The School of Environmental and Natural Sciences is highly supportive of the Forestry Group, not only because of their longevity but also their ongoing contributions to teaching, research, impact and outreach. We are a relatively large school with diverse interests and it is gratifying to see that Forestry@Bangor continues to flourish, as evidenced in the current edition of the Newsletter.

Professor Nia Whiteley

Head of the School of Environmental and Natural Sciences

FORESTRY@BANGOR

From the Editor

With significant input, support and encouragement from John Healey, Professor of Forest Sciences, I started putting together the biennial Forestry@Bangor newsletter in 2018, making this the sixth such newsletter. It's been a pleasure and a privilege compiling these newsletters and I hope you enjoy reading it just as much as I enjoyed putting it together. Many thanks to all those who contributed.

This newsletter is particularly special, as it includes news of our hugely successful 120th anniversary and news of exciting developments that have followed on from this. Elsewhere, the newsletter highlights various achievements, awards and accolades, reports on an exciting discovery in Ecuador, an enduring partnership with Uganda, student adventures in Poland, youth camps in Wales, plus updates from the very special student society BFSA. And much, much more!

If you'd like to engage more frequently with Forestry@Bangor, then please do join the private Forestry@Bangor LinkedIn group (https://www.linkedin.com/groups/7497997). Its purpose: to connect alumni, former staff, current staff and current students with each other and to share relevant news, insights, opinion, opportunities and more. Membership now stands at well over 550 members and is growing steadily.

Dr James Walmsley MICFor

Senior Lecturer in Forestry, Bangor University

January 2026

FORESTRY@BANGOR

Celebrating 120 years of Forestry at Bangor University

Across two days in early September 2024, the School of Environmental and Natural Sciences was delighted to host a gathering of many wonderful forestry 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. Guests were warmly welcomed to the Thoday building – the 'home' of forestry since 1954. The programme included presentations by:

- Shireen Chambers MBE FICFor (Honorary Fellow 2015; BSc Forestry and Soil Science, 1985)
- Geraint Richards MVO FICFor (BSc Forestry 1992).
- Morag Mcdonald, Pro Vice-Chancellor for Science & Engineering / Head of College / Professor of Ecology and Catchment Management
- John Healey, Professor of Forest Sciences

Guests were also able to gain insights into what studies are like for current students and recent graduates, through a round table discussion which was hosted by Michael Cresswell, FICFor, and which featured panellists Lamorna Richards (BSc Forestry 2022); Tonthoza Uganja (MSc Tropical Forestry 2019) and current PhD student; Jamie Pengilley, President of Bangor Forestry Students' Association (2024-25).

Attendees also enjoyed an exhibition of rare archive materials, a speech from the Vice Chancellor followed by an evening meal in Reichel hall and a visit to the spectacular Treborth Botanic Gardens hosted by the Curator, Natalie Chivers.

Guests at Treborth Botanic Garden

A total of 53 guests participated in the two-day event. We received lots of lovely messages 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.*"

See https://www.bangor.ac.uk/alumni/celebrating-120-years-of-forestry-at-bangor-university-6th-and-7th-september-2024 for more information, including many photos as well as web links to recordings of the presentations given by Shireen Chambers, Geraint Richards and John Healey, plus the roundtable discussion.

We are grateful to many Forestry@Bangor alumni for their donations to

Recent graduates and current students took part in a fascinating roundtable discussion

the 120th Forestry Anniversary Fund, which continues to provide us with unrestricted funds that we can use to support our students.

The 120th Forestry Anniversary Fund remains open and you can donate via the following link, if you would like to:

https://www.bangor.ac.uk/giving/how-to-give

Bangor Forestry Students' Association (BFSA): Update from the 2025-26 committee

By Alex Carragher, Lucy Mwale and Sophie Gammon

BFSA has had a super busy autumn semester! Volunteer days have been both successful and well attended, and have included tree planting, ecological surveying, ancient tree inventory identification, invasive species removal, and much more. We spent time this autumn at the Bangor Forest Garden, preparing garden beds and helping with apple pressing. The group went out to Llyn Parc Mawr on Anglesey to help with vegetation and path clearing. We also went to Coed Llwynnon (Anglesey) to help with various path improvement and structure building projects.

Vegetation Clearance at Llyn Parc Mawr

Structure Building at Coed Llwynnon

Lunch Break after another busy morning in the woods

A highlight was a huge bounty of fungi, gathered at the hugely popular annual Fungal Foray, held at the University's very own Botanic Gardens at Treborth.

Fungal foray at Treborth

BFSA has also started an extracurricular talks series. BFSA volunteer director Sophie Gammon ran a two-part series on Tree Alert: a practical surveying demonstration at Treborth and another via a MS Teams call with some other TreeAlert members. BFSA has also been working with the Alumni Association to put on events with esteemed alumni including Michael Cresswell FICFor and Gary Kerr FICFor. We also had a fantastic talk by Dr. Ed Pyne on his PHD research about fungus, particularly honey fungus, which included a quiz about the '*humungous fungus*'! the BFSA committee is very much looking forward to exciting things to come in the new year!

The Bangor University Forestry Alumni Association

Long mooted in successive reunions (2004, 2014) of Bangor's forestry graduates, the urge to form an alumni association (AA) was raised again at the well-attended and highly successful forestry reunion in September 2024, which marked 120 years of continuous forestry and related studies at Bangor and coincided with the University's 140th birthday (reported on earlier in this newsletter).

In strong follow-up, the forestry community in Bangor's School of Environmental and Natural Sciences, in concert with *The Development and Alumni Relations Office* (DARO), laid firm foundations throughout 2025: firstly, identifying the graduate network from university records, which (for those we have contact details for) consists of some nearly 3,000 people globally; secondly, extending the existing Forestry@Bangor LinkedIn group amongst forestry-related graduates.

The third step, in September 2025, was to host an on-line meeting of a "coalition of the willing" from known graduates who had expressed firm interest in an alumni group and who were in plugged in to relevant sectoral organisations likely to be of help to the cause. In their meeting, the decision was taken to form the alumni association, based on that group as the *ad interim* "Committee", with tasks distributed for: membership outreach; finance and drafting a foundational "constitution", even though the AA would initially be an informal, unregistered body.

Subsequent such meetings throughout the autumn confirmed the "constitution" and heard feed-back from the Bangor Forestry Students Association (BFSA), via a meeting of the Institute of Chartered Foresters (ICF) (Wales), and directly from an in-depth on-line meeting with the BFSA committee. Both confirmed not only a strong interest to form the association but to have it actively assisting in mentoring and specialised training for both undergraduates and young post-graduates. It was also agreed to launch the AA in spring 2026.

Meanwhile, a smaller "task force" are (as we go to press) exploring the possibilities of a Bangor alumni presence at the Royal Welsh Agricultural Show, to be held between 20-23/07/2026 at the showground near Builth Wells. 22/07/2026 (tbc) is pencilled in as a "Bangor Day", open to all alumni, staff and, most importantly, prospective students from amongst schoolchildren, school leavers and graduates in Wales and beyond. Close co-operation has been sought, not only with the Royal Welsh Agricultural Society and Confor (Confederation of Forest Industries, who will host us) but also with the ICF, the Royal Forestry Society, particularly on their learning platforms, and other sponsors.

Forestry@Bangor alumni are an incredible wealth of global forestry expertise, knowledge and inspiration, and we are committed to supporting our *alma mater* as best we can. We invite you to 'watch this space' for more details about the Alumni Association, including contact points and how to get involved.

Alumni Association ad interim "Committee":

Dr Anna BROWN; Michael CRESSWELL; Alison FIELD; Prof. John HEALEY; John HUGHES; Dr Gary KERR; Trefor OWEN; Bethan PERKINS; Geraint RICHARDS; Dr James WALMSLEY; Jeremy WALL.

Forestry@Bangor alumni: helping to shape and enrich Forestry@Bangor teaching

By Dr Marielle Smith, Lecturer in Forest Sciences

Academic year 2025-26: our 2nd year undergraduate Silviculture & Inventory module has undergone a series of exciting improvements, not least thanks to the generous involvement of four Bangor Forestry alumni who are prominent figures in the forestry profession. Our primary goal was to ensure students can seamlessly apply theoretical

Trefor Owen back in action in the Thoday building, 40 years after his (first) graduation.

principles to real-world scenarios, equipping them with the practical skills and technical confidence required for a successful career in forestry.

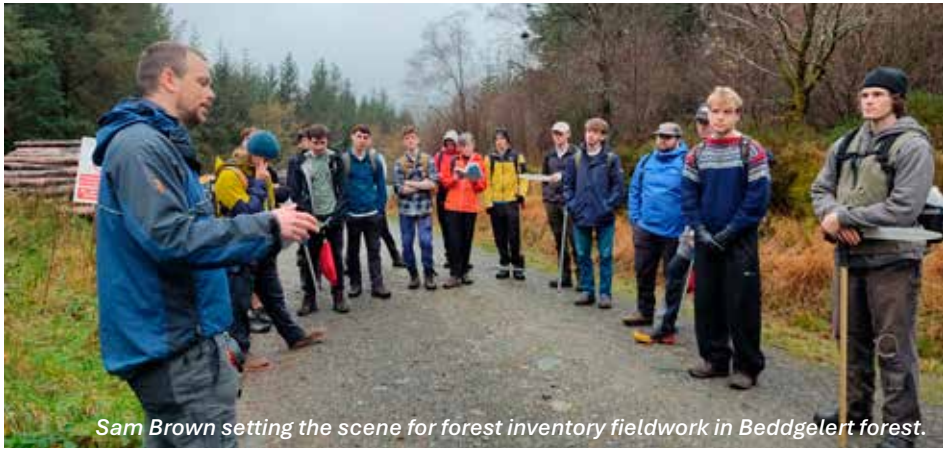
We are very grateful to Trefor Owen FICFor (Former Director of Land Management & Regions, Forestry and Land Scotland, awarded Honorary DSc by Bangor in 2023) for providing invaluable input on the module's content and assessments. Trefor also delivered an engaging guest lecture on the "The importance of accurate timber measurement," highlighting the real-world stakes of collecting high quality forest data.

Dr Gary Kerr FICFor (Former Principal Silviculturist at Forest Research and current Vice President of the Institute of Chartered Foresters) also contributed to curriculum development and shared his insights with the students during a guest lecture on "Continuous cover forestry and silvicultural systems."

Dr Alec Dauncey MICFor, Honorary Lecturer in Forestry, added his considerable expertise in silviculture to the module and gave a number of guest lectures, including a new practitioner-focused session on silvicultural practices.

Alec Dauncey leading discussions on restocking at Clocaenog forest.

Sam Brown FICFor (Forest Operations Team Leader, NRW) brought the forest inventory content to life by leading an intensive fieldwork day at Beddgelert Forest. Under Sam's expert instruction, students gained hands-on experience in conducting a forest inventory to current professional standards (and despite very damp conditions, the class measured over 250 trees!).



Sam Brown setting the scene for forest inventory fieldwork in Beddgelert forest.

We are very grateful to Trefor, Gary, Sam, and Alec for their invaluable contributions to the module, and the feedback from the cohort so far has been very positive. Engaging directly with forestry profession experts provides our students with a unique window into the realities of the sector. Through these interactions, students can ask questions about modern best practices and gain a first-hand perspective on the diverse career paths that are open to them.

If you would like to share your expertise with the next generation of forestry professionals at Bangor, please get in touch!

Forest Research Chief Scientist appointed Honorary Professor of Bangor University

Bianca Ambrose-Oji, Chief Scientist, Forest Research, has been appointed as an Honorary Professor by Bangor University.

This prestigious title has been awarded in recognition of Professor Ambrose-Oji's major achievements during her academic and research career, which includes her previous role as a researcher and lecturer at Bangor University.

Professor Ambrose-Oji's career in forestry spans more than 30 years, working across the UK, Europe, Africa and Asia as a social forester, action researcher, consultant, practitioner, professional trainer and educator. Bianca gained a Master's degree in Forestry from the University of Oxford and a doctorate in Tropical Forestry and Environmental Sociology from

Imperial College, University of London. She was appointed as the Chief Scientist of Forest Research in June this year.

Professor Ambrose-Oji, Chief Scientist, Forest Research said: "*I am delighted and immensely proud to be appointed Honorary Professor in Bangor University. I have worked closely with the School of Environmental and Natural Sciences team at the University for many years and admire the innovative and world-leading programmes of research and education which the faculty deliver*."

Bianca continued: "*I very much enjoyed my time teaching at the University, encouraging others to develop a passion for forestry and forest science, as well as more recent opportunities to facilitate connections between FR and University scientists. I look forward to the opportunities that my appointment brings, further building research collaboration with the University and strengthening Forest Research's partnerships in Wales. Cross-disciplinary partnerships are immensely important as we continue to develop leading science for the forestry sector to thrive – science that delivers solutions which are practical, realistic and work for everyone*."

John Healey, Professor of Forest Sciences at Bangor University said: "*I am delighted about the University's appointment of Bianca as Honorary Professor. This is a very appropriate recognition of her huge achievements as a researcher and leader of the Society and Environment Research Group of Forest Research, culminating in her ground-breaking appointment as a social scientist to the post of Chief Scientist*."

John added: "*In the University, while we have a strong and proud track-record of collaboration with Forest Research, we welcome the potential for new and strengthened cooperation that Bianca's appointment will bring. This will include building the impact of our mutual research on policy development at this time of heightened recognition of the importance of woodlands and trees in meeting the major challenges of climate change, biodiversity conservation and human wellbeing. We also look forward to the valuable contribution that Bianca will make to the social forestry component of our flagship MSc forestry degree programmes, our postgraduate research students and our ongoing research projects*."

Forest Research is Great Britain's leading organisation for forestry and tree-related research.

Welcoming Tonthoza Uganja to the Forestry@Bangor staff team

A very warm welcome to Tonthoza ('Tontho') Uganja, who has recently joined the Forestry@Bangor staff team.

Tonthoza received a prestigious Commonwealth Scholarship Commission scholarship to enable her to complete the MSc Tropical Forestry (distance learning) programme whilst based in her home country of Malawi. She graduated in 2019 and received the Peter Henry Award for her MSc dissertation "*Examining whether the gender composition of community management groups influences forest condition and governance outcomes of village forest areas in Lilongwe, Malawi*". Since then she has been busy founding and directing the work of Sustainable Farming Solutions Malawi, leading a capable and dedicated team in Malawi. She is proving agroforestry targeted at some of the poorest farmers, in one of the most degraded landscapes in the world can not only work, but can raise farmer incomes and restore land at the same time. Tontho is currently in the final stages of her PhD at Bangor University, supervised by Dr James Gibbons and Dr Eefke Mollee. Tontho will be contributing to various BSc and MSc modules, including Urban Forestry, Natural Resource Management, study tours and more, and we are delighted she is joining us. Croeso mawr, Tontho!

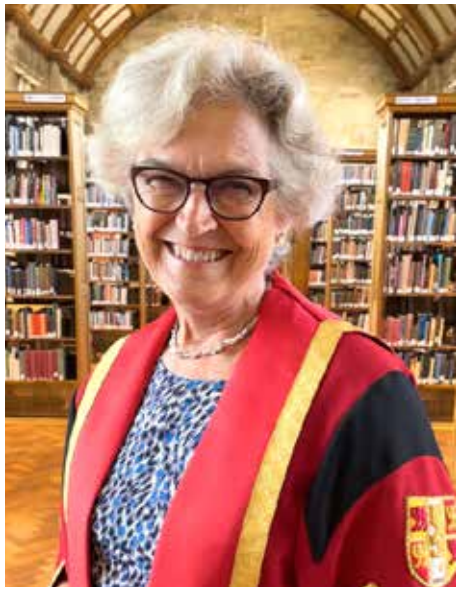
FORESTRY@BANGOR

Honorary degrees

2024: Dr Susan Chomba (MSc Sustainable Tropical Forestry, 2008)

Alumna Dr Susan Chomba, one of the first-ever graduating European Masters in Sustainable Tropical Forestry graduates is now a distinguished global ambassador for the Race to Zero and Race to Resilience under the UN High-Level Champions for Climate Action. She was named one of the Global Landscapes Forum's '16 Women Restoring the Earth' in 2021 and featured on the BBC list of 100 inspiring and influential women from around the world in 2023.

2025: Alison Field (BSc Forestry, 1978)



In 2024, Alison Field became the 77th President and Chair of the Royal Forestry Society, marking a distinguished 50-year career in forestry across the public and private sectors. A trailblazer for women in the profession since graduating from Bangor (BSc Forestry 1978), she is one of the few to have reached its highest levels. Her leadership spans the Forestry Commission, National Forest, English Woodlands Forestry Ltd, and other key organisations. Known for her commitment to diversity, public service and enterprise, Alison has made a lasting impact across the UK, with notable contributions to woodland management in Wales and beyond.

Gold Medal for Dr Jo Clark

Forestry@Bangor alumna Dr Jo Clark (PhD Forestry, 2010) became the first person for nearly five years to be awarded the Royal Forestry Society's (RFS) Gold Medal for distinguished services to forestry. Jo is Head of Research at the Future Trees Trust and also the first woman to receive the award.

The award was made in 2024 at a presentation by the then President of the Royal Forestry Society Ben Herbert, at the Future Trees Trust Supporters Day at Buscot and Coleshill Estates in Oxfordshire. Future Trees Trust is the only UK charity dedicated to improving broadleaved trees.

Presenting the award he said: "*I am delighted to award the Royal Forestry Society's Gold Medal, which is rarely and sparingly given, to Dr Jo Clark. Her contribution and knowledge of the future trees we should plant is immeasurable and without her and her work I think we would be at a loss to find what trees we should be planting for the future.*"

Future Trees Trust Chair John Leigh Pemberton, said: "*I am absolutely delighted Jo has been awarded this medal, She has been working largely on her own for 25 years and it takes a very special kind of person to do this. Her contribution to the UK's forestry is huge. There is probably nobody now who is going to have such a beneficial effect on UK forestry.*"

image courtesy of Royal Forestry Society

The citation for her award reads: "*Jo has been tireless in her work to improve our timber species. Starting with liaison with landowners and foresters to find the very best "plus trees", working with nurserymen, finding sites for progeny trials and working with their owners.*

"*That is just the beginning. From there grafted material is planted out in carefully laid out and recorded trial plots. Years of data is collected and analysed before sites can be rogued to produce seed orchards of the finest genetics from which the ultimate "Tested" quality seed is eventually produced.*

"*This is a Herculean task and one that goes on to a large extent "under the radar", for it is future generations that will really benefit from Jo's painstaking work. It is her work that will ensure that our woodlands will be capable of producing better timber.*"

Jo Clark joins an exclusive group of Gold Medal holders. Hers was the first Gold Medal to be presented since 2019 when Geraint Richards MVO FICFor (BSc Forestry 1992), Head Forester for the Duchy of Cornwall, received the award from the then Prince Charles.

The text has been adapted from a RFS press release which is available here: https://rfs.org.uk/news-list/gold-for-jo-recognising-a-herculean-task/

FORESTRY@BANGOR ALUMNI – FUNDING STUDENT PROJECTS

Forestry@Bangor alumni Ken McNamara (Postgraduate Diploma in Tropical Forestry, 2022) and Will Baxter (MSc Forestry, 2021) demonstrated their appreciation and commitment to forestry@bangor by generously donating funds to support postgraduate forestry and agroforestry student projects. Successful applicants to the Baxter-McNamara fund have supported dissertation research projects in places as diverse as Kenya, Panama, Canada, Uganda and Wales. Since the 2024 newsletter, two further projects have been supported: one in Chile and the other in Malawi. These are reported on below.

Baxter-McNamara awardee: Tim Brewer (MSc Forestry, 2024)

Tim Brewer spent the first years of his Msc Forestry degree studying via distance learning whilst based in Chile, a country with a controversial and complicated history regarding the use (and abuse) of it's native forest resources. With the Chilean Forestry Research Institute he found an opportunity to do a MSc thesis exploring the different perceptions of forest degradation between foresters and owners of native forest; with a specific interest to see if the owners' Sense of Place was influencing their forest management decisions. Thanks to the generous donation from the Baxter and McNamara fund as well as support from the Forestry Research Institute, sufficient funds were obtained to conduct a two week long field work campaign, involving in-depth interviews with forest owners in the Los Rios and Los Lagos regions of Chile, where forest degradation is a significant threat to native forest resources. This study revealed various case studies where the perceptions of forest degradation were found to be both extremely similar and extremely different between foresters and forest owners, and contributed to the continuing development of methodologies to study Sense of Place in working forest landscapes.

Vanessa Simwela

Baxter-MacNmara awardee: Vanessa Simwela (MSc Agroforestry and Food Security, 2025)

I am honoured to have received the Baxter-McNamara Award, which provided crucial funding for my dissertation research on soil degradation and maize yield in Malawi. My study focused on evaluating the effectiveness of biochar as an organic fertilizer alternative to improve maize yields, a staple food in Malawi.

The research was conducted at the Kasinthula research station, where

biochar was compared with other readily available amendments, including cattle manure, NPK fertilizers, and Mbeya fertilizer (a blend of cattle manure, maize bran, and NPK fertilizer). Key parameters such as plant height, leaf area, cob length, grain weight, yield, and affordability were monitored.

The findings revealed that while biochar has potential benefits, its effectiveness in enhancing maize yield does not match that of NPK fertilizers and Mbeya fertilizers. This insight is vital for guiding future agricultural practices and policies in Malawi, aiming to combat soil degradation and improve food security.

Additionally, I had the opportunity to present these findings at a data symposium focused on Malawi's fertilizer and soil health plan, further contributing to the dialogue on sustainable agricultural practices.

I am grateful for the support provided by the McNamara Award, which made this research possible.

Eds note: the Baxter-McNamara fund has now closed: all funds have been disbursed.

Vanessa's maize field trial at the Kasinthula research station, Malawi

If you are interested in establishing your own award for the benefit of current students, please contact Emma Marshall, Head of Development and Alumni relations (e.marshall@bangor.ac.uk / alumni@bangor.ac.uk) for further information.

Forestry@Bangor Students: the Stars of the 2025 ICF Wales Annual Conference

A conference on forestry at Bangor University that brought together more than 100 experts and policymakers has been hailed as an "enormous success".

Over 100 people attended the Institute of Chartered Foresters Wales Centenary Conference *Forestry at 100: A Century of Growth, A Future of Possibility*, which was held in Reichal Hall, Bangor University.

Attendees included senior figures from the Institute, as well as senior staff from Welsh Government, Natural Resources Wales and the private sector.

The highlight of the event was the session featuring a panel of final year Bangor BSc forestry students, who were Llanw Dawson-Stanley, Dan Gittins, Holly Bramley and Penny Newton.

The session, titled *Future Forests, Future Voices: Student Insights on Wales's Woodland Future*, was chaired by Lecturer in Land Management Planning and Economics, Dr Ashley Hardaker with support from Lecturer in Woodland Management Dr Tim Peters.

On the stage in Neuadd Reichel Hall. From left to right: Dr Ashley Hardaker, Penny Newton, Holly Bramley, Dan Gittins and Llanw Dawson-Stanley.

Professor John Healey, from the School of Environmental & Natural Sciences said, *"I would like to thank all who contributed to make the conference such an enormous success. This was an opportunity for*

academics and policymakers to discuss the big challenges confronting forestry, which have huge implications for the environment and for society. I'm especially proud of our students who were incredibly impressive in their panel session. They were clearly very well prepared, and they did a fantastic job of a tackling a series of challenging questions about the future of forestry. We received a considerable amount of positive feedback on the session. It's clear we've got a great deal of talent graduating from Bangor University and I look forward to seeing what our students accomplish in future."

Bangor University was the first in the UK to teach degrees in forestry – in 1904. It was recently ranked in first place amongst all universities in the Agriculture and Forestry subject league table of the Times and Sunday Times UK University Rankings for 2026.

Forestry@Bangor Ranked Number One in the UK for Forestry

Bangor University has been ranked number one in the UK for Agriculture & Forestry in The Times and The Sunday Times Good University Guide 2026.

Bangor University has been ranked first amongst all UK universities in the «Agriculture and Forestry» subject area in the new 2026 Times and Sunday Times UK University Rankings.

This top ranking in such a well-regarded national guide confirms Bangor's outstanding excellence in conservation, forestry, and land management education and research. The result is based on measures including student satisfaction, teaching quality, graduate employability, research impact and entry standards.

Bangor has a long-standing reputation for Agriculture & Forestry, previously ranking second in the 2024 Guide. Achieving the top spot this year confirms the University's position as one of the UK's leading institutions in these fields.

John Healey, Professor of Forest Science at Bangor University, commented:

"The forestry group at Bangor University are delighted that the excellence of our forestry, agroforestry, conservation and land management teaching has been recognised by this fantastic outcome. Bangor was the first University in the UK to teach degrees in forestry, starting more than 120 years ago. Our teaching is built on world leading research to address the challenges of sustainable forest management and conservation in the face of huge threats to the global climate and biodiversity. Our ranking of first in the UK by the Times and Sunday Times is matched by a record number of students since the 1990s starting their BSc degrees in forestry subjects in Bangor this week."

Professor Nia Whiteley, Head of School of Environmental and Natural Sciences, added:

"This recognition is a tribute to the vibrant community of students and staff, which along with our research expertise, makes Bangor such an inspiring place to study forestry, conservation, land management."

World-class teaching and research

Students in the School of Environment and Natural Sciences benefit from hands-on fieldwork in one of the UK's most diverse landscapes, ranging from coastal ecosystems to upland forests. Our teaching is informed by our research excellence brought together in two interdisciplinary research areas Conservation and Restoration of Resilient Ecosystems (drawing on expertise across ecology, oceanography, remote sensing, policy and economics to tackle the climate and biodiversity crises) and Sustainable Food Production (which focuses on improving the sustainability of agricultural, agroforestry, fisheries and aquaculture systems through resource-efficient production and supply chains).

Bangor University also boasts its own research farm, Henfaes Research Centre, which is often the focal point of activity. Henfaes Manager and Professor of Agriculture & Environment, Prysor Williams, commented:

"Henfaes offers students and researchers unrivalled opportunities to study contrasting environments from sea-level to amongst the highest land in Wales, with diverse soils, habitats, climate, and management. We have a host of cutting-edge trials and experiments that generate great research outputs but also serve as inspiration for our student visits."

Dr Leejiah Dorward, director of the Environmental Conservation course, which contributed to the ranking added:

"As the UK's top university for Agriculture & Forestry, Bangor will continue to lead the way in sustainable land management and conservation science."

Forestry@Bangor Research Review: 2024-25

By John Healey, Professor of Forest Sciences

Bangor University staff and students authored 77 peer-reviewed papers on forest, tree or wood science topics published during calendar years 2024 and 2025. Here, I summarise the findings of a selection I consider to likely be of most relevance to those with an interest in Forestry@Bangor, classified into 12 subject areas. Hypertext links are provided to each published paper, rather than a traditional reference list.

A major research focus has been the **ecology of Amazonian tropical rainforest**, where integration of remotely sensed indicators of photosynthetic rate with ground-measured tree demography demonstrated major variation in forest vulnerability to drought across the Amazon Basin. Drought response is structured by water-table depth in higher-fertility Southern Amazonia, whereas in lower-fertility Northern Amazonia, where the trees tend to be slower-growing but hardier or taller with deep-rooted water access, the forests are more-drought-resilient, independent of water-table depth. This shows the vulnerability of Amazonia's most productive forests to future climate change-linked droughts. Ecophysiological research and modelling showed the relative roles of direct temperature effects and indirect effects of vapor pressure deficit (VPD), a measure of the atmospheric demand for moisture, in projecting the resilience of tropical forests in a globally warmed future. Tropical forests are characterized by a complex vertical canopy structure. In a functional ecology study of 10 tree species, height of measured branches/leaves had a significant effect on relative tree growth, leaf size and specific leaf area, with trait-growth correlations increasing in number and strength with increasing height.

A major focus has been the direct and indirect **impacts of climate change on forest ecosystems**. High profile collaboration with the Birmingham Institute of Forest Research and other partners produced landmark papers showing enhanced woody biomass production in a mature oak-dominated temperate forest under elevated CO_2 and a cascade of below-ground effects including increased fine root standing crop, carbon exudation flux, soil nitrogen mineralization and microbial activity. However, tree seedlings were more susceptible to powdery mildew and insect herbivory. In a global study, transformation of natural forests to cropland as well as forest degradation were found to substantially enhance the strength of soil compound drought-heatwaves, which jeopardize the health and carbon neutrality of soil ecosystems.

Collaboration with Bangor's partner in China, the Central South University of Forestry and Technology, provides important evidence for predicting the impact of climate variation on subtropical forests showing a strong "vegetation growth carryover" effect on annual tree ring widths, strongest in the first year and declining in strength to the fourth year. The same growth carryover was also detected over a shorter timescale (96 days) in forest canopy condition. In an experimental study in subtropical forest in China, environmental effects on wood decomposition due to termite feeding were found to be mediated both by wood traits directly and by their interaction with wet-dry seasonal change and forest microclimate. The results indicate that reduced soil waterlogging during future droughts may accelerate termite activity and the decomposition of lower density wood. which risks the loss of deadwood carbon stocks. Bangor College China forestry staff edited a journal special issue on Sustainable forest management under climate change conditions, with a focus on biodiversity conservation and forest restoration.

The **role of afforestation in mitigating the effects of climate change** through reduction in net greenhouse gas emissions was demonstrated through two contrasting UK-focused studies using advanced carbon modelling. The importance of rapid increase in domestic wood production through increased forest area and productivity, and circularity of wood use, to meet rising wood demand was demonstrated as greater reliance on imports carries a serious risk of increased global warming. Separately, afforestation on a substantial proportion of the land area of livestock farms was shown to be an important component of the measures needed for them to reach net zero targets.

Other research focused on **UK forest policy, management and silviculture** included a horizon scan to identify the top 15 issues likely to affect UK forest management with the next 50 years. These spanned a wide range of themes, within a spectrum of influences from environmental shocks and perturbations to changing political and socio-economic drivers, with complex emerging interactions between them. Development of a theory of change for UK forests identified four areas for action: transformative governance, knowledge exchange and skills development, innovative financing, and research and data access. In a long-term silvicultural experiment in the North York Moors, the effects of species mixture (of Scots pine and silver birch) varied between different variables, with the benefits for Scots pine diameter varying with the proportion of each species in the mixture.

Two social research studies investigated firstly how forest managers assess the health of their forests and secondly their attitudes towards pest and disease risks

to oak in Britain. It found that the majority of respondents believe their forests to be healthy or very healthy, although vulnerable to future threats. The biggest reported threat to oaks was browsing and bark stripping by mammals. It also demonstrated how highly oaks were valued as iconic cultural species in the landscape and for their timber, and the willingness of managers to spend resources to try and save trees from the impact of acute oak decline disease. The complex interaction of traditional ecological knowledge, the governance system and the level of trust in the relationship between forest managers and moss harvesters were found to determine the sustainability of commercial moss picking from forests in Wales.

New insights into the **ecology of deer** in British and Irish forests were obtained through a scoping review of the evidence of the effects of the seven native and naturalised deer species on woody vegetation, which exposed key knowledge gaps on the ecological influence of such damage. A key implication is the importance for research and for forest management of differentiating between the impacts of each deer species due to the large variation in their body size, sociality, physiology and behaviour. Focusing on fallow deer, innovative genetic sequencing ("DNA metabarcoding") research on their faeces showed that their diet had a high proportion of bramble across the seasons, especially in winter. This has notable implications for the complexity of managing the interaction of forest canopy cover, tree regeneration, bramble cover and deer populations.

The **impacts of deforestation and forest degradation** on multiple components of forest function remains a major research focus. While artisanal and small-scale mining has been identified as an important localised cause of deforestation in specific hotspots, rigorous research in one such area, Madagascar's eastern rainforests showed that, in reality, here it had limited impacts on the surrounding forest loss and degradation relative to other threats. LIDAR survey quantified the complexity of effects of understory fire on the vertical structure of Amazonian forest. Three years after fire, delayed and ongoing large-tree mortality was evident, as well as reduced understory regrowth (as measured using leaf area density). These results show how pervasive fire impacts may increase rainforest sensitivity to climate change. A combination of tree demographics and soil charcoal evidence shows that highland forests in Mozambique have long been strongly influenced by human activities, however the fire disturbance regime has changed during the past millennium, with important implications for conservation of these forests' high biodiversity and water resources.

In Bornean tropical forest, while selective logging was not found to affect most soil properties, including soil microbial biomass, it did impact soil microbial

community composition and some functioning. After 20 years of subsequent passive and active forest restoration, through natural regeneration and enrichment planting respectively, it was found that some attributes of key soil microbial groups had still not converged on those of unlogged forest, with a particular divergence linked to enrichment planting. In a chronosequence of subtropical forest restoration in China, a significant increase was found in soil organic carbon and total nitrogen stocks. However, nutrient limitations, particularly of phosphorus, was found to have an important role in determining the stability of soil food webs. In Northeastern China, experiments in natural and afforested stands showed notable seasonal shifts in rates of plant uptake from ammonium, nitrate and organic soil nitrogen pools, with implications for species selection in afforestation practice to facilitate plant species coexistence and productivity. An influential analysis showed that, while ecosystem restoration has a broad range of benefits, the potential impacts on the risk from zoonotic diseases (pathogens in wildlife species that can infect humans) needs critical consideration.

Research related to tropical **forest conservation** led to an important commentary making the case that the recent scandal about methods used in the voluntary carbon market needs to be addressed so that it does not impede tropical forest conservation. In Indonesia, multidisciplinary research showed that forest protected areas were effective at maintaining forest cover and were not detrimental to local people's overall well-being, however impacts varied greatly with local context and between different components of well-being. Socio-economic research at the Gunung Leuser National Park in Sumatra showed that water availability was the strongest factor positively influencing local people's decisions to clear protected forest, with access to land titles, meeting basic needs and behaviour of others also contributing. A third study found that, while wild meat can play a crucial role in the food system of rural communities residing near tropical forests, rates of consumption in Central Kalimantan were limited by availability and cost, reflecting the multiple environmental and anthropogenic stressors concurrently affecting both terrestrial and aquatic animal populations, with significant implications for the sustainability of wild meat and wider food security. In seasonally dry forest in southern Ecuador a new tree species was discovered.

In Epirus, Greece multidisciplinary research explored the spatial and temporal resilience of sacred forests. Linking dendrochronology to historical records showed how rates of tree establishment were linked to the intensity of past human disturbance events, pointing to the importance of understanding the social component of these systems. The utility of the spiritual status of

these forests for their past conservation, leading to the protection of scarce water supplies, mitigation of risks from landslides, and provision of natural resources at times of conflict, was demonstrated.

Research on **urban trees** in Debrecen, Hungary, identified the factors influencing their susceptibility to storm damage were determined including components of size and position relative to buildings. In combination with perceptions of residents, this evidence was used as the basis for recommendations on urban forestry planning and tree management. The well-being benefits of trees and other elements of nature in the urban environment was demonstrated through innovative research using eye-tracking technology with participants instructed to direct their visual attention to green, grey or a mix of both infrastructures.

Research on **forest soils** had a major focus on collaborative research in China. This included experimental results showing the distinct preferences of different ectomycorrhizal fungi for different phosphorus-containing substrates in pine plantation forests, which indicates the importance of recognizing these preferences to enhance forest management in low P environments. The respiration and carbon use efficiency characteristics of soluble protein-derived carbon by soil microorganisms was found to vary little between different plantation forest types. In a subtropical forest, tree diversity was found to affect the temperature sensitivity of soil organic matter decomposition in the rhizosphere, while maintaining bulk soil carbon pool stability under warmer conditions.

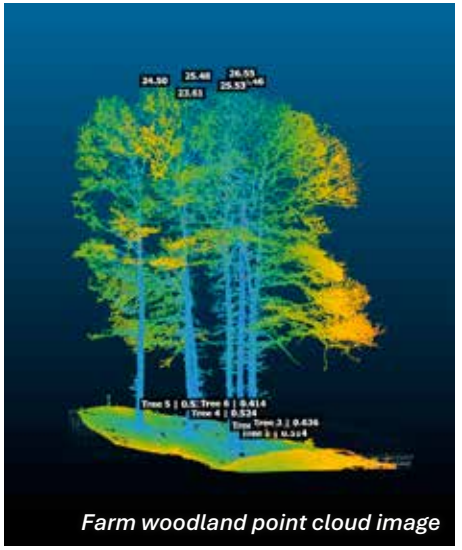
Modelling research in China demonstrated that combining long-term disturbance history with multi-source **remote sensing** and growth models provides a robust and scalable solution for age estimation across human-impacted forest landscapes. This methodology offers a transferable approach for creating reliable forest age estimation for ecological monitoring and management. A separate study used machine learning and the incorporation of spectral indices and phenological data derived from a four-year time series of multisource remote sensing to enhance the accuracy of remote-sensing-based tree species identification at scale.

Agroforestry research in the context of tropical countries focused on the nexus between agroecological transitions that involve trees and the encompassing of agroecological principles in agroforestry. In the UK, a survey of consumers showed a willingness to buy, and even pay more for agroforestry produce.

In 2025 the Biocomposites Centre was incorporated into the School of Environmental and Natural Sciences, bringing all the University's forestry and **wood science** research into the same academic unit for the first time since 1989. The Centre's research during the past two years focused on wood modification, and important reviews on wood product service lives and carbon residence time, and on recycling of wood and wood fibre, two key components of maximising the contribution to climate change mitigation.

Postgraduate forestry research by Heddwyn Bye

In Autumn 2025, Heddwyn Bye successfully completed his MSc by Research project entitled 'Quantifying timber value and carbon in structurally complex woodlands using terrestrial laser scanning (TLS)'. Heddwyn's research demonstrates that the measurements derived from TLS data can accurately estimate timber value and carbon content of trees in UK farm woodlands. This offers opportunities for unlocking greater value from underused and structurally complex woodlands, while enabling smarter woodland management and improved carbon accounting. Heddwyn was co-supervised by Marielle Smith, John Healey, and Matthew Drummond (University of Wales Trinity Saint David) and conducted his project in partnership with Woodknowledge Wales, who funded his work as part of their Home-Grown Homes 2 project. The latter is aimed at promoting the expansion of Wales' home-grown timber resource and developing a thriving timber economy in Wales. Since finishing his MSc by research, Heddwyn is working as a freelance climbing arborist and arboricultural consultant.



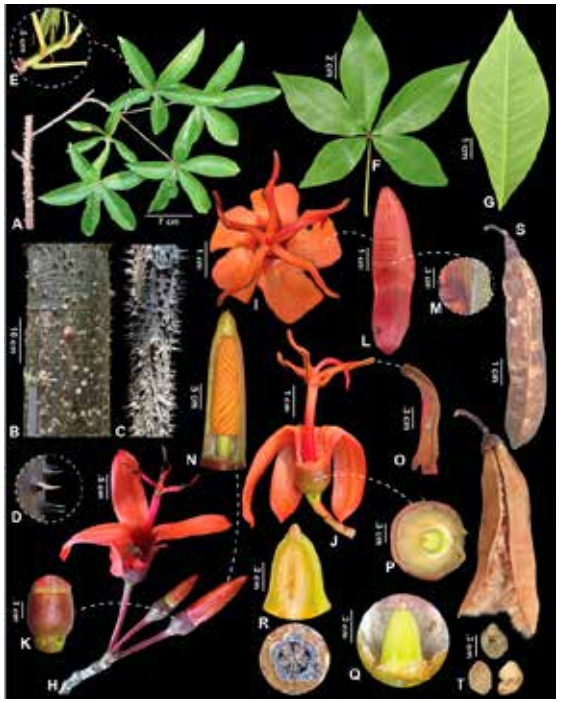
Farm woodland point cloud image

For more info, see Heddwyn's report for Woodknowledge Wales: https://woodknowledge.wales/estimating-timber-value-and-carbon-in-complex-woodlands-using-laser-scanning/

A new tree species discovered in Ecuador's disappearing dry forests

By Dr Lars Markesteijn - Senior Lecturer in Forest Science at Bangor University / Associate Professor of Ecology at Universidad Rey Juan Carlos.

Hidden in the rugged, seasonally dry forests of southern Ecuador, a striking tree has been quietly growing in plain sight for decades. Leafless for much of the year, armed with sharp spines, and usually mistaken for a familiar kapok tree (Ceiba sp.), it took a rare moment of flowering - and careful, long-term field observation - to reveal that this was something entirely new to science.



Composite plate of vegetative and reproductive structures. The vivid red flowers enabled PhD researcher Jorge Armijos-Barros to recognise the species as new to science in southern Ecuador.

That moment came during ecological surveys in the Zapotillo region of southern Ecuador, when Ecuadorian botanist Jorge Armijos-Barros, Director of the UTPL Herbarium and PhD researcher in Dr Lars Markesteijn's lab at Universidad Rey Juan Carlos (URJC), encountered several of these spiny trees in full bloom. Their vivid red flowers (Fig.1) immediately stood out as unusual and hinted that the trees might not belong to any known species.

The discovery led Armijos-Barros to carry out detailed comparisons with herbarium collections and historical records, working with colleagues from Ecuador, Spain, and Bangor University. These efforts led to the species being officially recognised as new to science, *Spirotheca zapotillana* sp. nov. (Malvaceae), published in the taxonomy journal PhytoKeys (Armijos-Barros et al., 2025).

S. zapotillana was found in the Tumbesian Dry Forest, a narrow band of seasonally dry tropical forest stretching across southern Ecuador and northern Peru. Although often overshadowed by tropical rainforests, these tropical dry forests are global biodiversity hotspots, harbouring exceptionally high numbers of endemic species found nowhere else on Earth. At the same time, they are among the most threatened tropical ecosystems in the Neotropics, having suffered extensive loss and fragmentation due to agriculture, grazing, and land-use change.

S. zapotillana in its natural habitat. (A) Mature individual in the Tumbesian Dry Forest during the wet season. (B) Individuals growing on rocky slopes in seasonally dry forest. (C) Clumped growth with probable clonal offshoots at the base of mature trees (circled), a growth form typical of this species."

For decades, trees like *S. zapotillana* had been overlooked or misidentified. They remain leafless for much of the year and flower only briefly, making them easy to miss and difficult to recognise (Fig. 2). This also helps explain why a single specimen collected in Ecuador in the late 1970s puzzled botanists for years: it appeared to belong to a Spirotheca species otherwise known only from dry forests in eastern Brazil, more than 4,000 kilometres away.

The new study shows that this apparent mystery was the result of misidentification rather than an extraordinary long-distance distribution. That ambiguous specimen was, in fact, an early and unrecognised collection of the new *S. zapotillana*. By formally describing the species, the researchers resolved a long-standing biogeographical puzzle and clarified the true distribution of the genus.

Based on currently known populations, *S. zapotillana* has been provisionally assessed as Endangered (EN) according to IUCN Red List criteria. Only a handful of small populations have been documented so far, each containing few mature trees, yet no regeneration has yet been observed. However, the researchers do note an important caveat: because the species is

leafless for much of the year and flowers unpredictably, it is very easy to overlook. Large areas of adjacent or connected suitable dry-forest habitat remains poorly surveyed, meaning the species may ultimately prove to be more widespread than current records suggest.

Regardless of its final range and distribution, this discovery highlights how much remains to be learned about the Tumbesian Dry Forest - and how quickly species may be lost from these ecosystems before they are even recognised and properly studied. For the researchers involved - and indeed the Bangor alumni reading this - *Spirotheca zapotillana* should be a powerful reminder that careful fieldwork, taxonomic expertise, and international collaboration remain essential for understanding and conserving our world's threatened forests.

Reference

Armijos-Barros, J., González-Sánchez, D., Nole-Nole, D., Markesteijn, L., Escudero, A., Jara-Guerrero, A. & Espinosa, C.I. (2025). A new tree species from seasonally dry tropical forest in southern Ecuador, Spirotheca zapotillana sp. nov. (Malvaceae), resolves a putatively disjunct distribution. **PhytoKeys**, 265, 181–192.

Forestry Youth Camp opens doors for young people

By Dr Bid Webb, Lecturer in Agroforestry

Day hike to Pen Carreg Gopa. Left to right: Kamron Roberts, Gwennan Hoskins, Bid Webb, Kwesia, Isabella Lynch, Daniel Rust, Mikhayla Vera-Warith, Giovanni Johnson, Mubarak Bishara Mohammed Suleiman, Anwar Basher Ali Noor

This summer, a group of young people from took part in a unique residential camp designed to inspire the next generation of forestry professionals. The Forestry Youth Camp, led by Bangor University and supported by Welsh Government and the Scottish Forestry Trust, aims to address the UK's growing skills shortage in the forest industry by engaging young people who are currently under-represented in the sector.

With the UK facing ambitious tree cover targets as part of its net zero commitments, the forest industry needs to grow its workforce by up to 72%. Meeting this challenge will require not only more people, but a broader range of skills and greater diversity across the sector.

The week-long camp offered participants a fully funded opportunity to explore how forests and woodlands connect to everyday life and global issues. Through outdoor learning, hands-on activities and conversations with professionals, the camp helped young people build confidence, develop new skills and consider careers in forestry and forest science.

One participant, Damyan, shared his experience of the camp:

"*From 23rd to 29th July, I had the chance to take part in a rare opportunity especially for someone like me. Accessing nature in the UK can be difficult and expensive, but this camp gave me the chance to stay in the outdoors, completely free of charge.*

The camp was run by a group of dedicated facilitators who helped us reconnect with nature and learn about forestry practices. I've always been interested in the natural sciences but seeing things in action like someone harvesting and using willow bark made the theory come alive.

Camp participants learning practical woodland management. Mubarak Bishara Mohammed Suleiman (left) using a pole saw watched on by Damyan Korada (right).

I enjoyed being trusted with responsibilities like preparing firewood and managing campfires. It helped me build confidence and feel more capable.

Everyone took away something different from the experience. For me, it was the chance to explore a new place, see new landscapes, and learn about forest management from professionals. I even made some useful contacts that could help me in my future career.

The camp offered a mix of practical and theoretical activities, and the isolation from phone signal gave us a rare chance to disconnect and reflect. The facilitators were passionate and supportive, and their guidance was invaluable.

Overall, I'd recommend the Forestry Youth Camp to anyone who wants to reconnect with nature, learn new skills, and broaden their horizons."

The organiser of the camp Dr Bid Webb, said: "*Forestry is relevant to all young people, whether they realise it yet or not. Forests are at the heart of some of the biggest challenges we face, from climate change to biodiversity loss, and we need a wide range of voices and perspectives to help tackle them. The camp is about opening that door, showing young people that they belong in these conversations and that their ideas and experiences matter*."

Check out the following press release for more information, including a link to a stunning short film:

https://www.bangor.ac.uk/news/2025-10-22-forestry-youth-camp-opens-doors-for-young-people

Bangor University's Forestry MSc Programmes Branch Out with Unprecedented Flexibility and Cutting-Edge Modules

Building on its impressive ranking of 2nd in the UK for Agriculture and Forestry in The Times/Sunday Times Good University Guide 2024, the university is now offering unparalleled flexibility and a suite of innovative modules designed to cultivate the next generation of forestry and agroforestry leaders.

With a rich history in forestry dating back to 1904 and over 4,000 graduates from more than 100 countries, Bangor University stands out as a beacon of excellence in forestry education. Its four prestigious MSc programmes – MSc Agroforestry and Food Security, MSc Forestry, MSc Environmental Forestry, and MSc Tropical Forestry – are all accredited by the Institute of Chartered Foresters, signifying their reputation for quality and relevance.

Reflecting on her experience, recent graduate, Rebekah D'Arcy, said *"It has been very rewarding to journey through my MSc with fellow students from all over the world learning about different perspectives and practices in forestry. I particularly enjoyed modules that pushed me out of my comfort zone."*

Following a comprehensive review and revalidation, Bangor University is delighted to announce a significant expansion in MSc study options. Students can now pursue their MSc degrees in person (on campus) or through distance learning, with flexible durations of 1, 2 or 3 years. This allows individuals from all walks of life, whether they prefer on-campus immersion or the convenience of remote study, to tailor their education to their unique needs.

"We understand that today's students require flexibility," says Dr Eefke Mollee, director of MSc Agroforestry & Food Security. *"Our enhanced MSc programmes are designed to empower students to achieve their academic and professional goals, regardless of their circumstances. Whether you're a working professional, a parent, or located overseas, you can access our world-class forestry education."*

Furthermore, each MSc programme has been enriched with a range of new, cutting-edge modules, ensuring graduates are equipped with the latest knowledge and skills for a career in which they can play a leading role in tackling the climate and biodiversity crises, while sustaining wood and food production, and human wellbeing. These include:

- **Fundamentals of Soil and Water:** "Mastering key soil and water management principle to conserve carbon, reduce flood risk and make informed land management decisions"
- **Timber and Wood-Based Products:** Exploring the sustainable utilization of timber resources within a circular economy in the context of rapid technological innovation.
- **Ecological Restoration:** Learning to restore and revitalize degraded ecosystems.
- **Forest Protection:** Understanding and mitigating threats to forest health.
- **Business Planning for the Green Economy:** Developing entrepreneurial skills for sustainable ventures.
- **GIS for Forestry and Land Management:** Harnessing geospatial technologies for effective management to maximise the delivery of ecosystem services at a landscape scale.

These build on our existing set of modules delivering learning in core components of:

- Forestry, including Silviculture; Forest Inventory, Assessment and Monitoring; Forest Management Planning; Forest Ecology; Social Issues in Forest Management; Forest History, Policy and Management; Urban Forestry,
- Agroforestry including Agroforestry Systems and Practices; Natural Resources Management; Global Food Security; Agriculture and the Environment, and
- MSc Dissertation research project.

Notably, the pioneering MSc Agroforestry and Food Security degree directly addresses the grand challenge of combining the global imperative of food security with maintaining the crucial benefits provided by trees and forests. Likewise, the MSc Environmental Forestry places a strong emphasis on woodland management practices that prioritise resilience and biodiversity conservation, as evidenced by the in-depth exploration of forest ecology and ecological restoration within its curriculum.

Regardless of study mode, all students participate in a residential study tour, providing an invaluable opportunity for hands-on learning and networking. These immersive experiences foster a strong sense of community and enhance the practical application of theoretical knowledge.

"The residential study tours are a cornerstone of our programmes," adds Dr Bid Webb, director of MSc Environmental Forestry and MSc Tropical Forestry. *"They bring together students from diverse backgrounds and locations, creating a truly global learning experience."*

"We are incredibly proud of the comprehensive and forward-thinking nature of these programmes," states Dr James Walmsley, director of MSc Forestry. *"The new modules and flexible study options reflect our commitment to providing students with the skills and knowledge they need to make a real difference in the world of forestry and sustainable land management."*

Bangor University's commitment to excellence and innovation ensures that its MSc forestry programmes remain at the forefront of education, preparing graduates to tackle the critical challenges facing our planet's forests.

UK- based forestry study tour. How do land managers decide which silvicultural system to use to meet management objectives, whilst caring for the environment?

(photo credit: James Walmsley / Bangor University)

Tropical study tour. What field-based tools can be used to measure soil quality in agroforestry systems?

(photo credit: Bid Webb / Bangor University)

A photo can tell a thousand words" - The multicultural and international nature of our MSc students makes for a truly unique and hugely positive learning atmosphere!

(photo credit: Eefke Mollee / Bangor University)

Bangor University spearheads UK research into restoring vital temperate rainforests

Bangor University has launched a pioneering programme of research into the restoration and regeneration of the UK's rare and ecologically rich temperate rainforests, in partnership with The Wildlife Trusts and funded by Aviva.

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The work forms part of a landmark £38 million commitment by Aviva to help tackle the climate and nature emergencies by restoring rainforests across the British Isles. As part of this, funding has been allocated to cutting-edge academic research at leading institutions with Bangor University at the forefront.

Temperate rainforests, sometimes called Atlantic rainforests, are among the most biodiverse habitats in the UK, but they have been reduced to a fraction of their former extent. Researchers at Bangor are now asking key questions about how we can restore these forests more effectively and inclusively, and the contribution that this will make to combatting climate change.

In their first project, the Bangor research team are investigating the overlooked role of mosses, lichens and other plants that grow on the trunks and branches of trees in combating climate change. They will measure the rate at which these plants absorb the greenhouse gases that cause global warming from the atmosphere. This will fill an important gap in existing knowledge about the overall contribution of temperate rainforest systems to the global carbon cycle. This project is closely linked to the PhD research of Tilly Edwards.

We're proud to be leading this project at Bangor. Temperate rainforests are magical, complex ecosystems. There's so much more to discover and so much at stake.

***Dr Karina Marsden**, Lecturer in Soil and Environmental Science at Bangor University*

The Bangor researchers are also exploring the best ways to restore rainforest habitat, including how to establish trees in sites currently dominated by invasive species like bracken, and comparing approaches such as planting, directly sowing seeds, or letting trees establish from naturally dispersed seeds. They will also research a set of restored

Epiphytic ferns and mosses growing on a veteran tree, a characteristic feature of temperate rainforest habitats. Photo Credit:Ben Porter

rainforests of different ages to find out the rate at which they are recovering as resilient ecosystems. This is the PhD project of Sophie Higgett and is a collaboration with the Wildlife Trust of South and West Wales – keeping reading to find out more about Sophie's research!

This project is about building the scientific foundations to restore one of our most endangered habitats at scale. We need to understand how these forests grow, how they function, and how they can help us meet biodiversity and climate targets.

***Professor John Healey**, Professor of Forest Sciences at Bangor University*

Ensuring the Temperate Rainforest project works for both people and nature is a key aim for The Wildlife Trusts. Therefore, in a third project the Bangor team will explore the best way to work with land managers and communities to enable tree planting and restoration work. Their research will explore the costs and benefits to stakeholders and the resulting motivations and barriers they perceive and will explore how best to engage and collaborate with people. This work is be carried out by Becca Funnell, through a doctoral studentship funded through the Welsh Graduate School for the Social Sciences.

The vital funding from The Wildlife Trusts and Aviva will enable the team's findings to make an important contribution to realising the 100-year vision to restore temperate rainforests across suitable areas of the UK.

Restoring these beautiful, ancient habitats to our countryside is an absolute vocation amongst the team here at The Wildlife Trusts – but our work on the ground needs to be underpinned with the highest quality scientific evidence. We have so much to learn about how moss and lichen absorb greenhouse gasses, for example, and its these details which will make a world of difference to our ambitious programme. We're grateful that our partners Aviva recognise this and are helping us to develop a critical mass of world leading expertise at Bangor University.

Dr Ruth Swetnam, *Carbon & Research Manager for The Wildlife Trusts' Atlantic Rainforest Programme*

At Aviva, we recognise that tackling the climate and nature crises requires long-term investment in both ecosystems and evidence. That's why we're proud to support Bangor University's pioneering research into temperate rainforest restoration. This work will not only deepen our understanding of these rare and vital habitats but also shape practical solutions that build resilience against climate change, protect vital ecosystems, and reduce the risk of flooding to homes and businesses, helping the UK get ready for the future. This is another step forward as part of our £38million 100-year programme to help reintroduce lost rainforests of the British Isles with The Wildlife Trusts.

Claudine Blamey, *Chief Sustainability Officer at Aviva*

Introducing Sophie Higgett, Temperate Rainforest PhD researcher

Sophie began her PhD in Conservation at Bangor University in October 2025 as part of the Wildlife Trust's Temperate Rainforest Restoration Programme, in partnership with Aviva. Her research focuses on developing effective and ecologically-based methods for woodland restoration that deliver biodiversity recovery, carbon sequestration and long-term ecosystem resilience. Temperate rainforests are among the most biodiverse habitats in the UK, yet they are now one of its most depleted woodland ecosystems with only small fragments remaining in the western parts of the country. As a result, they are a key focus of current restoration efforts.

PhD researcher Sophie Higgett collecting soil samples as part of a woodland establishment experiment.

Sophie's PhD project explores how best to restore temperate rainforest on land with low agricultural value, specifically bracken-dominated abandoned pasture. Her research trials different methods of tree establishment, including comparisons of site preparation techniques, tree planting, direct seeding, and natural colonisation, and examines their impacts on above- and below-ground carbon.

Fieldwork in bracken-dominated pasture at Trellwyn Fach, a site managed by the Wildlife Trust of South and West Wales in Pembrokeshire.

The project will also develop monitoring methods to assess trajectories of carbon sequestration, biodiversity recovery and ecological resilience across a chronosequence of restored temperate rainforest sites of different ages. A particular focus is the use of mobile laser scanning, compared with conventional plot-based forest inventories. The project is in collaboration with the Wildlife Trust of South and West Wales. Sophie is supervised by Professor John Healey, Dr Marielle Smith and Dr Bid Webb (Bangor University).

Sophie graduated from Bangor University in 2020 with a BSc in Applied Terrestrial and Marine Ecology, before completing a Masters by Research in Environment at the University of York. Her master's research focused on the impact of spatial variability on soil organic matter in alpine ecosystems. She then spent three years working as a Natura 2000 Sustainable Management Advisor for Natural Resources Wales. Alongside her academic work, Sophie has a keen interest in combining science, adventure, and environmental stewardship, and has led youth expeditions in the UK and Canada.

Student Prizes and Awards

Royal Forestry Society North Wales Division Bangor Bursary

Roll of Honours for the 'Royal Forestry Society (RFS) 'Bangor Bursary' for the best final year 'forestry project'

2004	**Christopher Guest**	**2015**	**Byron Braithwaite**
2005	**Clive Ellis**	**2016**	**Robert Turner**
2006	**Andrew Smith**	**2017**	**Felix Gregory**
2007	**Ikuyo Ishikawa**	**2018**	**Zac Blow**
2008	**Simon Morath**	**2019**	**John Trimble**
2009	**Sebastian Nehve-Rogers**	**2020**	**George Dennison**
2010	**Marc Brouard**	**2021**	**Karen Batten**
2011	**Sam Brown**	**2022**	**Will Daniel**
2012	**Amy Lotay**	**2023**	**John Hughes**
2013	**Daryl Hughes**	**2024**	**Tomos Jones**
2014	**Tim Peters**	**2025**	**Gregor Landsdown-Roger**

2024 – Tomos Jones

Our nomination for the 2024 RFS Bangor Bursary for the best final year forestry project was Tomos Jones. Tomos undertook an ambitious remote sensing and GIS mapping project to identify areas of forest in Wales where Continuous Cover Forestry is most desirable, using an approach known as Multi-Criteria Analysis. He created a single map of the forests of Wales, ranked using a colouring system according to CCF management desirability.

Tomos found that 26 % of forest in Wales is moderately to highly desirable for CCF management, and that a large proportion of this (41 %) is located in the North-West Wales Area Statement area. This is explained in part by the benefits that CCF could bring to acid-sensitive catchments.

Tomos completed his project to the very highest standards. The level of ambition, originality, commitment and organisation he demonstrated throughout was highly praised by his examiners.

Tomos is now on the graduate programme with Tilhill, based in Inverness. Tomos undoubtedly has a bright future in the forestry profession and we wish him every success in the future.

Tomos attended the Royal Forestry Society North Wales Division AGM and field meeting held at the Hawarden Estate on the 18th July 2024. where he was presented with his award by the North Wales Division Chairman, Mr Simon Miller.

Simon Miller (left) presenting Tomos Jones with the RFS Bangor Bursary

Tomas Jones RFS Bangor Bursary 2024

Tomos also attended his graduation ceremony at Bangor University, where he was presented with his award by Senior Lecturer in Forestry, Dr James Walmsley MICFor

2025 – Gregor Landsdown-Roger

Our nomination for the 2025 RFS Bangor Bursary for the best final year forestry project was Gregor Lansdown-Rodger. Gregor undertook an ambitious forest sciences project to assess how well the Canadian site index system could predict tree height in forests on Vancouver Island. He carried out rigorous statistical analysis of silvicultural information of forest stands on Vancouver Island.

Gregor found that the site index system is a useful indicator of site productivity, but it lacks the precision needed for reliable prediction of growth in mixed-species forest systems with diverse structures. He found that statistical models that include additional ecological and structural factors are more accurate and reliable for predicting future forest growth as part of adaptive forest management techniques.

Gregor completed this topical and useful project to a very high standard. The level of ambition, originality and knowledge he demonstrated throughout was highly praised by his supervisor and the course team here at Bangor.

Gregor has accepted a graduate position with Strategic Natural Resource Consultants based in Canada, and unfortunately departed Bangor for Canada before his award could be presented to him in person. Instead, he received his award certificate in the post, alongside a generous cheque and a year's membership to the Royal Forestry Society.

Gregor is going to be a great asset to the forestry profession, and we wish him all the best for his future career.

Institute of Chartered Foresters Best Student Award

Roll of Honours for the Institute of Chartered Foresters (ICF) 'Best Student Award'

2009	Anthony Pigott
2010	William Malcolm
2011	Scott Jackson
2012	Richard Belcher
2013	Joseph White
2014	Joanna Jervis
2015	Robert Evans
2016	Sam Huddleston
2017	Samantha Howard
2018	Gabriel Hibberd
2019	John Trimble
2020	Yaseen Esprit
2021	Sam Rowley
2022	Bob Case
2023	Samarth Koul
2024	Laurence Slade
2025	Taran Fox

We are very grateful to the Institute of Chartered Foresters for their continued support of the 'Best Student Award', which is given to the student who shows the greatest improvement in their grades between 2nd year and final year. Winners receive a years' worth of annual membership of the ICF at Associate level, which is significantly more valuable than annual student membership.

[insert Laurence Slade ICF most improved student year 2 to year 3 2024.jpg] with the caption 'Laurence Slade (left) being presented with the ICF Best Student Award by Dr Alec Dauncey MICFor"

FORESTRY@BANGOR

Mary Sutherland Award

Roll of Honours for the Mary Sutherland Award for the 'best female undergraduate student on one of the forestry programmes'

2016	No award (*no female finalists*)
2017	Samantha Howard
2018	Elinor Dobie
2019	Jemima Letts
2020	Sarah Ellis
2021	Catherine Pearson
2022	Lamorna Richards
2023	Esther Bloor
2024	Han Huang
2025	Ildi Kocsondi

Mary Sutherland was the first female forestry graduate in the world in 1916 which was of course at a time of great suffering and social change during the First World War. She went on to a distinguished forestry career and her memory is very much still alive today, including the publication of a biography celebrating her life in 2019, and we unveiled a new portrait of her in the Bangor University Council Chamber following the forestry cohort degree ceremony in July of 2022.

Han Huang started her forestry@bangor degree at Bangor College China, in Changsha, and then transferred to Bangor to complete her BSc Forestry degree. Han adapted admirably to the significant changes in climate and culture, and consistently excelled in her academic studies. In recognition, she was awarded the Mary Sutherland Award in 2024.

Han Huang being presented with the Mary Sutherland Award by Professor Morag McDonald

The 2025 winner was Ildi Kocsondi, also a truly deserving winner of this prestigious award. Ildi was recognised for her outstanding academic achievements as well as her positive contributions to the life and culture of her university.

Ildi Kocsondi being presented with the Mary Sutherland Award by Alison Field FICFor, FRSA, DSc (BSc Forestry 1978; Honorary Degree 2025)

ROYAL FORESTRY SOCIETY STUDENT OF THE YEAR AWARD

Roll of Honours for the Royal Forestry Society Student of the Year Award

2023	Tom Chance
2024	Jamie Pengilley
2025	Jodie Pemberton

We were pleased to nominate Jodie Pemberton, a BSc Woodland Management and Conservation student at Bangor University, for the RFS Student of the Year Prize 2025. During the first two years of the degree, Jodie showed strong academic ability and initiative, particularly through her excellent dissertation proposal: *Naturalisation and Native Identity in a Changing Climate: A Comparative Analysis of Fagus sylvatica in UK Woodlands*. Her project will examine the health, regeneration, and ecological role of *F. sylvatica* in both southern England and north Wales, assessing its suitability for future woodland restoration in a changing climate. Jodie's thoughtful approach to her studies and clear understanding of current challenges in woodland management make her a worthy nominee.

Jodie Pemberton receiving her RFS Student of the Year Prize

Peter Henry Award

Peter Henry graduated in BSc Forestry from Bangor University in 1948 and enjoyed a highly distinguished career as a Forestry Advisor for the UK Overseas Development Administration. He has a particular interest in tropical dry forests, and the **award is made to the postgraduate student who gains the highest mark for a dissertation relevant to dry forest research**.

Roll of Honours for the Peter Henry Award for the 'postgraduate student who gains the highest mark for a dissertation relevant to dry forest research'

YEAR	NAME (*COUNTRY*)	TITLE
2014	Mokolwane Mokolwane (Botswana)	*Opportunity for Community Based Forest Management in Botswana; The Chobe Enclave Case in Chobe Forest Reserve*
2016	Christopher Mkwalula (Malawi)	*Assessing Natural Regeneration Status of Miombo Woodland in Dzalanyama Forest Reserve, Malawi: Implications for Forest Recovery*
2019	Tontho Uganja (Malawi)	*Examining whether the gender composition of community management groups influences forest condition and governance outcomes of village forest areas in Lilongwe, Malawi*
2020	Patience Olesu-Adjei (*Ghana*)	*Cocoa Production in Ghana: A Comparative Analysis of The Impact of Adverse Climate on The Yields of Cocoa Produced Under Shade and Full Sun Systems*
2021	Habtamu Wakshum Sibilu (*Ethiopia*)	*Carbon Stock Assessment and Climate Change Mitigation in Juja, Central Kenya*
2022	Edward Meleki (*Malawi*)	*Do agroforestry interventions lead to increased farm level agroforestry practice adoption and adaptation, tree density and species diversity? An inventory of agroforestry trees and practices on smallholder farms in Salima District, Malawi.*
2023	Emmanuel Otuko (*Uganda*)	*Integrating agroforestry into the urban forestry governance and policy framework of Kampala*
2024	Enoch Amponsah (*Ghana*)	*Growth response of Eucalyptus pellita provenances to variability in soil and climatic conditions in Ghana*

Phil Johnson Memorial Award

Phil Johnson worked for Tilhill for many years and was Regional Manager for England and Wales when he passed away following a short but valiant battle against cancer eight years ago. During his career he made a huge contribution to the company and forestry alike, including setting up the UK's largest privately owned mountain bike centre at Coed Llandegla, Wales.

As part of the company's work to strengthen links with students, Tilhill offers awards to top performing forestry students at leading universities which offer degrees in Forestry. The Phil Johnson Memorial Award was set up in 2015 and is awarded to the best performing student on the MSc module in Silviculture, which students on the various postgraduate forestry@bangor programmes complete.

Roll of Honours for the Phil Johnson Memorial Award

2015	Patrick Duffy
2016	Mary Crossland
2017	Harry Thomas
2018	Maaike Felstead
2019	Ed Lewis
2020	Cameron Pellet
2021	Chris Rawlinson
2022	Kate Palmer
2023	Gregory Adamson
2024	Millie Toft
2025	Carol Finch

FORESTRY@BANGOR

Celebrating Our First Graduates of Woodland Management and Conservation

By Dr Tim Peters, Lecturer in Woodland Management

We are thrilled to announce a major milestone for Bangor University and our partnership with the Woodland Trust: the first cohort of students has successfully graduated from the BSc **Woodland Management and Conservation** degree programme!

This innovative degree programme was designed to equip future professionals with the skills and knowledge needed to manage and conserve woodlands in a changing world. Developed in collaboration with the Woodland Trust, the programme combines academic excellence with practical experience, ensuring graduates are ready to make a real impact on woodland ecosystems and biodiversity.

In July 2025 we proudly celebrated the achievements of **five pioneering graduates – the first students to successfully** complete the programme. Their dedication and passion for sustainable woodland management sets a strong example for future cohorts. These graduates represent the next generation of conservation leaders, ready to tackle challenges such as climate resilience, habitat restoration, and sustainable forestry.

As Course Director, I am immensely proud of their achievements and excited to see how they will shape the future of woodland conservation. Congratulations to all our graduates – you are trailblazers in every sense!

BSc Forestry@Bangor staff with graduands (including the 5 from the BSc Woodland Management and Conservation degree) in the bright Bangor sunshine at the 2025 graduation ceremony

Polish Forestry Summer Camp

By James Bainbridge-Craig, BSc Woodland Management and Conservation, year 2

From the 10th to the 25th of August 2025, I partook in a forestry summer camp in Poland. This summer camp was organized by the Lasy państwowe, which translates to 'State forests' - the government agency that manages the public forests in Poland. Nearly all the forests in Poland are owned and managed by the state and are divided up into forest districts. Within these districts are smaller sections that each have their own individual Forest manager.

Nearly 65% of Polish state forest tree species comprise of Scots pine. This is the most optimum commercial timber they can grow efficiently due to the soil composition. The soil is mostly very sandy dry soil which surprises people because even though Poland is located next to the Baltic sea and might be expected to receive high levels of rainfall, , this is not the case: Poland has a largely continental climate. Any rainwater soaks away through the sandy soils, meaning that the soil layer stays dry and rendering Scots pine the most suitable species in many areas.

View of Polish forests from fire watch tower

Due to the continental and warming climate, there is an every increasing risk and likelihood of forest fires. To overcome this, fire watch towers are located around the forests with cameras that can zoom in up to 150 km to monitor the forests and alert the fire service if there is an indication of a fire. The relatively flat landscape across much of Poland makes this possible.

These towers are 140 m tall and used to have forests scouts occupying them but due to technological advances, people are not required in the tower as the camera's get operated from an office nearby.

Forest fire watch tower

Fire monitoring control centre using images from the forest fire watch tower

During a visit to the Krotozyn forest district, we were taken to 120 yr old oak plantation which was planted on deep clay soil with an understory of Hornbeam to improve the oak's quality by preventing branches forming in oak lower down. The timber that gets harvested from this plantation gets laid out in 8ft lengths and is auctioned off to buyers in Germany and other parts of Europe which then use the timber to make furniture. A much better use of timber than just firewood I would say!

A fine stand of oak, improved using a hornbeam understory

The other students on the Summer Camp were all from different countries including Germany, Ghana, Portugal, Albania, Spain and USA. It was a great opportunity to hear about forestry from their perspectives and how it is conducted in their relative countries.

Overall, the camp I went on was the fourth edition of the summer camps which take place every 4 years. The whole trip was very well organised, and we were all exceptionally accommodated for, and I could not have asked for a better experience and would highly recommend it to anyone interested in learning about forestry abroad.

Antonin forest district centre welcomes international students with their respective flags

FORESTRY@BANGOR

Forestry@Bangor study tour with University of Freiburg: England and Wales 2024

By Dr Ashley Hardaker, Lecturer in Land Management Planning and Economics

In May 2024, Dr Ashley Hardaker, Dr Tim Peters and Dr Tim Pagella along with 10 first year students joined staff and students from the University of Freiburg to network, build friendships and exchange knowledge and learning about forests and woodland in Britain and Germany. The Bangor Fund was critical in enabling Forestry and Woodland Management students from the School of Environmental and Natural Sciences to join students from the Chair of Forestry Economics and Forest Planning at the University of Freiburg on this weeklong tour of woodland sites in the South-west of England.

In short. Six days. Eight visits. So many trees. A great new friendship formed with the forestry staff and students at the University of Freiburg, who we hope to see again soon! Here follows the longer story of our week in the woods.

Winding the clock back to the summer of 2023, 'Forestry@Bangor' staff were contacted by staff from the University of Freiburg who were interested in setting up a platform for international exchange of forestry and woodland management learning. The initial discussions led to an ambitious idea for a joint study tour of the south-west of England visiting woodland sites hosted by alumni and contacts of both the Bangor and Freiburg staff. We were buoyed by the Freiburg staff's enthusiasm and can-do attitude to making a venture happen. But the big question of how this could be funded to make it an accessible trip for all students regardless of background loomed. In a flash of inspiration.....what about the Bangor Fund? Now the real planning had to start. The itinerary was drafted, accommodation identified, the budget calculated, approval from our Head of School sought and application to the Bangor Fund submitted. A few weeks passed. Our Freiburg colleagues keen to find out if the plan could be put into action. Success, our project received funding, and we could make it happen!

Fast forward to May 2024, a sunny Saturday morning in the Carpark at Ffriddoed campus. Two minibuses awaited us for the long drive down to the Wye Valley. That night we would meet our guests from the University of Freiburg at Hereford Train Station to begin the tour with a stay at the Wye Valley Youth Hostel.

That evening, the trepidation of spending a week with a group of strangers dissipated quickly over food, drink, and conversation into the night.

The next day, the group awoke to a new day of opportunity for exchange of ideas, new friendships, and good times. First stop on our tour was a gentle day of getting to know each other and delivering the first set of group presentations, TED-talk style in the woods.

Figure 1: Roderich from Freiburg kicking off the week with a rallying speech about the upcoming visits

Mondays visit was the Cyril Hart Arboretum and the Forest of Dean, where the morning was spent trying to find identify the tree which was from the most distance place in the world from the arboretum, followed by presentations from the first two groups of Bangor and Freiburg students. We heard the first 'scene setting' talk comparing forests/ woodlands in Britain and Germany. This provided some initial the context for our tour. We then took in a 4-mile route around the forest of Dean, with exclamations from one of the Freiburg lecturers of 'this looks so German, I did not expect to see all kinds of German forestry in England'.

Over lunch we enjoyed a second scene setting talk comparing the forestry sector in Britain and Germany. This stimulated some lively discussion whilst munching on sandwiches by a lake. Later that afternoon, while enjoying the shade of a stand of Norway spruce, we heard about land use conflicts in Britain and Germany. Something we would hear lots more about later in the week. A drink by the river Wye concluded proceedings for day one.

Figure 2: Discussing rural land use conflict under the canopy of a fine stand of Norway spruce.

Day two featured two visits, both showstoppers for very different reasons. In the morning, we were hosted by Andrew Sowerby of Pryor and Ricket Silviculture at Cwm Fagor. Cwm Fagor is a 215-acre woodland creation project in the Wye Valley owned by THORLUX lighting and has seen over 150,000 trees planted since 2009. The company has been planting native broadleaf species including oak, birch, ash, willow, hornbeam, and cherry. The project is designed to neutralise the CO_2 emissions from lighting installations all over the UK. We enjoyed topical discussions on delivering woodland creation at scale, red-tape and tree planting,

Andrew Sowerby discussing broadleaf silviculture

stakeholder engagement and private sector forestry in the UK. We are extremely grateful to Andrew Sowerby for kindly hosting us.

That afternoon we were hosted by the eminent woodland ecologist George Peterken at Lady Park Wood. Located in the gorge of the river Wye on the boundary between England and Wales, Lady Park Wood is a 36-hectare wood which has been completely unmanaged since 1944. Some parts of the wood have remained untouched by people since 1870. The trees and shrubs in several 20m wide transects were mapped and measured in 1945 and at irregular intervals since. The results of this long-term experiment have allowed ecologists to track changes in vegetation and natural woodland processes. We were thrilled to gain access to this site: normally the public are not allowed in, and to discuss woodland ecology, succession, and vegetation dynamics with George. The students particularly enjoyed his knowledge or near on every tree in the wood. We are extremely grateful to George Peterken for hosting us and to Natural England for allowing us permission to visit.

Taking in the natural woodland processes and Lady Park Wood

Day three saw our transition from the Wye Valley down to the next base in Minehead and Exmoor. On the way we stopped in to visit Ed Green at Banks Farm. Ed is the seventh Generation of

custodians looking after the land at Banks Farm. However, unlike the six preceding generations he is doing things a little different. He has given up farming cattle on the land and now focusses on managing it to sequester carbon, hold water, deliver wildlife habitat, and reconnect people with nature. This shift in direction has involved creating ponds and wetlands, allowing hedgerows to flourish, and planting trees and encouraging woodland to naturally regenerate across the land. Over 200 species of plants have now been recorded across the farm along with a multitude of insects, amphibians, birds, and mammals. Farm buildings have been put to use housing small businesses and craftspeople and creators, helping boost the local rural economy. The students and staff enjoyed debating the role of farmers and land managers in the 21st century, the potential for other approaches to woodland creation and alternative philosophies about land management and husbandry. We are grateful to Ed for giving up his afternoon to talk to us. We also had a quick run up Glastonbury tor, then fish and chips on the seafront in Minehead. Delicious.

Hearing about alternative approaches to woodland creation and managing farmland from Ed Green.

On Wednesday we took in a 15 km stretch of the North Devon Coastal Path from Lynmouth to Woody Bay. After navigating the 1 in 4 Porlock Hill in slightly underpowered minibuses, the group set off to walk this very agreeable and picturesque piece of coastline which is

scattered with small patches of ancient woodland clinging to the cliffs above the Bristol channel. A day to relax, enjoy the scenery and talk to new friends. Over lunch we heard another talk about conservation issues affecting woodlands and forests in Britain and Germany. At woody bay, the brave among the group stripped off for an impromptu dip, followed by a drink at the Hunters Inn. Discussing focused on the skills and knowledge needed for future foresters and woodland managers.

Day five. The National Trust kindly hosted us on the Thursday. Today we were discussing moorland management, upland farming, and broadleaf/ancient woodland management. Meeting on the Blustery Dunkery Beacon, we were greeted by Rob Manicom and colleagues from the National Trust. Here we took a short walk to the trig point at the top of the beacon and enjoyed the full 360 panorama overlooking Somerset, Exmoor and as far as the south Devon coast. We discussed why upland areas of the UK look the way they do and the integral role of human intervention in maintaining the way these landscapes look and function. We talked about the pressure facing farming landscapes and the tensions of managing land in the National Trust Estate. We enjoyed a long walk down from the Beacon down into Horner woods, one of the largest and most stunning ancient Oak Woods in Britain. We also stopped off and marvelled at a 600-year-old Oak! Rob gave us great insight into the realities of managing such important habitats and how to carefully balance conservation and management. Afternoon tea was consumed with delight at the pleasant little tea rooms in the village of Horner. Many thanks to Rob Manicom and the National trust team for hosting us.

A rather unpleasant 6:30 start for the team on day six. We were due in Cornwall at half past nine. Foresters from the Duchy of Cornwall were expecting us to show us round the Woodlands at the Restormel Castle estate. George Shortman, Woodland Creation Officer (and Bangor Alumni) met and gave us a tour of the productive broadleaf stands, enormous Douglas firs and their woodland creation activities. We discussed the Duchy's approach to forest management, relationships with tenants and the realities of woodland creation projects. The Duchy kindly provided us with Pasties and cakes in the sun to round off our visit. Many thanks to George Shortman and the Duchy of Cornwall for hosting us. To round off our tour on the afternoon of Day Six we stopped in at the National Trust's Landhydrock House. We were shown parts of the 360 hectare site, some of which are designated as an 'important plant area' for its ancient woodland and internationally important lichen assemblages. We discussed the ins and outs of managing designed landscape, veteran parkland trees

600 year old oak tree in Horner Woods

The great group of students from Bangor and Freiburg!

along with balancing conservation and access for people. Many thanks to the National Trust for hosting us at Lanhydrock. The tour was drawn to a close with a night enjoying the sights and sounds of Okehampton (including but not limited to the Wurzels on repeat on a pub jukebox).

As Saturday rolled around the group splintered for the return journeys to our respective parts of the planet. For the Bangor students the long drive back up to our part of North Wales. For the Freiburg contingent the 12-hour train journey through three countries. The long drive was an opportunity to reflect on the last 7 days and the places we got to show the students. Places they wouldn't have seen without the support of the Bangor Fund. For that we would like to finally thank the Bangor Alumni for kindly supporting this tour through their kind donations. Diolch yn fawr iawn!

Agroforestry and Tropical Forestry Learning Comes to Life in Uganda

By Dr Bid Webb, Lecturer in Agroforestry

May 2025 saw fifteen Bangor University students embark on an unforgettable study tour to Uganda as part of their MSc programmes in Tropical Forestry and Agroforestry & Food Security. The experience exemplifies several of our key values in forestry education: rigorous field-based learning and research, international collaboration, and the forging of professional relationships that span continents.

This was the fifth study tour to Uganda and builds on Bangor's strong partnership with Makerere University, Uganda's premier institution for forestry education. Leading the collaboration are two proud alumni Professor Philip Nyeko (Forestry@Bangor PhD 2001) and Professor John Boscoe Okullo (Forestry@Bangor PhD 2022), who demonstrate how our global network continues to create opportunities for future generations. Three Makerere MSc students also joined the study tour, enriching the cross-cultural exchange and providing invaluable in-country insights.

For students on MSc distance learning programmes the study tour offers something invaluable: the chance to finally meet course mates and staff face-to-face. These bonds, formed while conducting field research across Uganda's diverse landscapes, endure long after the tour concludes, strengthening our worldwide alumni community.

Working in research teams, students investigated critical challenges in ecology, soil and water management, and food security across Uganda's climatic gradient. The tour culminated in a conference where groups presented their findings, an experience that sharpens research skills, problem-solving abilities, teamwork, and professional communication.

Site visits spanned the spectrum from research institutions to grassroots practitioners. Students engaged with forestry professionals at leading institutions including the National Coffee Research Institute (NACORI), Budongo Forest Reserve's research station and Nyabyeya Forestry College. They conducted research with practitioners pioneering coffee agroforestry systems, mixed and plantation forestry, Farmer Managed Natural Regeneration (FMNR), shea butter community initiatives, and sustainable charcoal and biochar production.

We extend our heartfelt thanks to the Commonwealth Scholarship Commission (CSC) for their ongoing and generous support of our high-calibre postgraduate students. This study tour transforms distance learning into lived experiences and helps cement a strong, enduring global learning community that shapes sustainable agroforestry and tropical forestry practices for decades to come.

Bangor and Makerere students and staff unite for 2025's tropical forestry and agroforestry & food security study tour in Uganda

Professor Philip Nyeko, Makerere University and Bangor alumnus, shares insights on Ugandan plantation forestry.

Bangor students, Fernando Bamba (DRC), Nosipho Mdluli (Eswatini) and Bernard Atarigiya (Ghana), test soil infiltration as they collaborate on field research.

Further reading:

https://www.bangor.ac.uk/sns/commonwealth-scholarship-commission

Commonwealth Scholarship Commission: https://cscuk.fcdo.gov.uk/

Young Forest Conservation Leaders Receive Awards

Bangor University, in partnership with the Conservation Foundation, is delighted to announce that three currently enrolled MSc students have been chosen to receive the **Young Conservation Leaders Award**. The awards support candidates with a demonstrable track-record of local innovation in conservation. These awards are designed to support short research projects, field studies or work experience and have been established to enable more young people to take up learning and development opportunities irrespective of their financial circumstances.

The Conservation Foundation recognises the significant financial commitments that students face and expressed a strong desire to support current and future conservation leaders with their postgraduate studies, in recognition of these challenges.

Commenting on these new awards, Dr James Walmsley, a senior lecturer at Bangor explained, “Following an internal application and selection process, we’re delighted to announce the recipients of the 2025-26 Young Conservation Leaders Award, each of whom will receive a £1,000 bursary, kindly donated by The Conservation Foundation. I’ve no doubt that this award will make a huge difference to the three awardees and give a huge boost to their self-belief and motivation. This new partnership with the Conservation Foundation is yet further recognition of the transformative nature of our MSc programmes.”

Jacob Main, who is currently enrolled on MSc Agroforestry and Food Security said: ‘I am delighted and very grateful to be a recipient of this award and am very excited to get started on our various conservation projects at Coed Llynnonn, in Llanfair PG (Anglesey), working alongside Calon-y-Coed CIC. In partnership with our community of Forest Schoolers and woodland users - we plan to identify and undertake various positive habitat interventions and will begin by exploring options for resuscitating our large but now empty pond aswell as

Jacob Main

identifying other appropriate habitat interventions such as dead hedging and bat/bird boxes. As a community, we are dedicated to helping connect people to the woods and look forward to welcoming volunteers to join us in these special woodlands.’

Will Tanner

Will Tanner, currently studying MSc Forestry by distance learning said: “When I found out that I had been

chosen for this award, I was filled with both joy and excitement. It felt like a weight being lifted off my shoulders, because this award will not only enable me to focus more on my studies and also allow me to follow opportunities that otherwise I could not. I am feeling both very chuffed and very grateful. Thank you, Conservation Foundation!"


Joel Foreman

Joel Foreman, a current student on MSc Environmental Forestry by distance learning said: "It's amazing to win the Young Conservation Leaders Award. I have so many ideas I would like to explore, and this grant will help support me in this. I would like to thank everyone at the Conservation Foundation, as well as the staff at Bangor University for making this happen. This will push me to keep learning as I pursue my career in conservation."

David Shreeve, Director at the Conservation Foundation said "When I read the submissions, I was really impressed with what these three students had already achieved. Hopefully, the Young Conservation Leaders Awards will help them do even more great things"

FORESTRY@BANGOR

Forestry@Bangor alumni leads the procession

Prof Phil Evans Bangor alumnus leading the graduation ceremony procession at UBC June 2024.

Phil Evans (BSc Wood Science, 1984, and PhD Wood Science) is now Professor and BC Leadership Chair at the Faculty of Forestry, University of British Columbia, Vancouver, Canada. He got in touch with us to let us know he led his school graduation procession, proudly wearing his Bangor University PhD robes. We love to see the Forestry@Bangor influence around the world! If you've got a story to share, do get in touch.

Eds note: these robes are no longer awarded, as they are from the time of the University of Wales, Bangor. Bangor University has had it's own degree awarding powers since 2008 and the PhD gown is now a striking red and yellow.

Julian Evans presents a Bangor Forestry Society tie to Sir Williams Worsley

An event was held to mark the retirement of Sir William Worsley, chair of the Forestry Commission. To mark the occasion, Professor Julian Evans (Forestry@Bangor BSc 1968; PhD 1972; DSc 1988; Honorary Fellow 2017) presented him with the Bangor Forestry Society tie, which he promptly put on.

Sir William Worsley (left) with Professor Julian Evans.

‘Class of ‘85’: 40 years Celebration

By Trefor Owen

Some of the Forestry ‘Class of ‘85’ recently returned to Bangor to celebrate 40 years of fellowship after graduation in 1985. We gathered in the Thoday Building’s F1 room, on a glorious Friday afternoon, for tea, cake and lots of chat with Professor John Healey and several colleagues who kindly popped in on what was an important last day of their academic year. We were thrilled that some retired staff from our time at Bangor also joined us, with one of our group still seeking an extension for an unfinished essay!

After checking in at the University’s Management Centre, we dined on fish and chips, accompanied by plenty of ‘Purple Moose’ beer at Tafarn y Garth on Friday evening.

Some of the group walked along the Wales Coastal Path from Bangor to Aber on Saturday morning, before meeting up with the others for a very enjoyable tour, tasting and light lunch at the Aber Falls Distillery. This was followed by an afternoon ‘forestry’ walk in nearby Coedydd Aber.

Class of ’85 about to embark on a woodland walk up to the spectacular Aber Falls, near Bangor.

We concluded the programme with a lovely dinner at the Management Centre on Saturday evening, in the company of Professor Healey and Dr Christine Cahalan. John kindly brought us to date with the work of the thriving Forestry Department and suggested different ways alumni can support him and the team.

We intend to meet again on 11-12 June 2027.

Class of '85 in Thoday, catching up with current and retired staff, refreshed by tea and bara brith.

FORESTRY@BANGOR

IN MEMORIAM

John Campbell OBE (1932-2025)

John Campbell OBE was an International Forester of repute, a successful and respected businessman, a Rotarian, a man of integrity, kind and generous and a loyal and loving family man. He was a professional and visionary leader in diversified and integrated Forestry in the 1960s to 1990s and was a passionate advocate for planting trees and economic sustainability.

John Campbell OBE

John Campbell was born in Sunderland in 1932. He attended grammar school in County Durham and then went to Bangor University where he obtained a BSc (Hons) in Forestry in 1954. He met his wife, May, in Bangor Teaching Training College studying Music and Teaching and they married in 1955. John was so proud of Bangor University and its excellence in Forestry.

After a short spell with the Forestry Commission, he devoted his working life to creating the Economic Forestry Group which became the largest private Forestry organisation in the UK. He was Group Chief Executive for over twenty years until his retirement in 1991.

In 1987, John Campbell received national recognition by being honoured with the O.B.E for his services to Forestry. John served on the university advisory boards for Oxford and Aberdeen Universities and as a member of the Council of The Royal Forestry Society for over 25 Years. He served on The European Forestry Committee in Brussels and published many papers and gave many lectures including a key-note speech at the International Forestry Conference in Australia to celebrate the Bi-Centenary in 1988. The following year he was to become the first person outside North America to be invited to give the University of California annual Forestry lecture at Berkley, after suffering a heart attack only 6 months before!

He was a Fellow of the Institute of Chartered Foresters and served on the National Council for the Timber Growers UK, of which he was a Life Member. He served on the Board of the Institute of Directors and was a Fellow of the Royal Society of Arts.

Once retired he became a Commissioner of Taxes but devoted his service mainly through Rotary. He became a Rotary member in 1974 and was President in1989. He will be remembered for “Operation Tree-Link” which started in 1991 bringing schools and tree planting together around the World. He also established an avenue of trees called “Rotary-Way” across Hughenden Park, High Wycombe and the club won The Rotary Presidential award for its contribution to the Environment.

John Campbell helped shape the private sector’s role in Woodland Management, Biodiversity, Education and Climate Change. His impact wasn’t just in the trees he planted, it was in the roots he laid for future generations. John and his EFG Group of companies have been an important influence on UK forestry policy and current forestry practices. John’s legacy will endure in the forests he nurtured, the lives he touched and the values he instilled in all of us.

Ian Campbell (Son) FInstD , MInstM

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“Forest to Family”

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(this is a private group: membership is restricted to current students and alumni as well as current and former staff)

About Bangor University:

Bangor University has a long and proud tradition of academic excellence dating back to 1884. With a strong commitment to teaching and research, the university is dedicated to providing students with a transformative educational experience

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