Opportunities open for new staff appointments in forest sciences and social sciences at Bangor University

Forestry is a major focus of the current investment by Bangor University to recruit four new lecturers to the School of Natural Sciences. We seek to appoint applicants who work in forest environments across a range of disciplines within Environmental biology (such as forest ecology, genetics, entomology, pests, pathogens, wildlife or conservation biology in a forest context). In addition, within the theme of Sustainable natural resources development, we see great potential to appoint in disciplines that are key to forest management and policy, including forest economics and a range of other analytical and modelling approaches including life cycle assessment, as well as qualitative research with forest stakeholders. The role of forests in mitigating and adapting to climate change, as well as the delivery of the full range of other ecosystem services remains a key research focus. We place an emphasis on 'whole-systems' assessment, not just at the ecosystem level but also up to the scale of the landscape, socio-ecological systems and the value chain, including the processing and utilization of land-use products as a key component of the bioeconomy.

Bangor’s research and teaching in forestry has a global perspective and we welcome applicants whose expertise relates to any forest types across the range from tropical to temperate and boreal, from moist to dry, and from natural forests to plantations, urban forests or agroforestry. We have a passion to advance and teach understanding of the world’s forest resources to underpin their sustainable management and related policy.

The Bangor forestry group and its research

Bangor University is a leading UK and international academic centre in the field of forestry, with a strongly upward trajectory.

The forestry group comprises 12 academic staff, with other Bangor staff working in fields, such as conservation, microbiology, environmental geography, hydrology, human geography and wood science, closely associated with the group. More than 20 PhD students are researching forest projects and form the core of our frequent forest research seminars.

The group is carrying out high-profile research across a range of subjects, with an important inter-disciplinary component, including:

- tropical and temperate forest ecology, biogeochemistry and soil function; forest restoration and resilience
- biophysical and socio-economic aspects of agroforestry systems and non-timber forest products
- forest conservation including the impact of forest operations and effectiveness of conservation interventions (from both biodiversity and social equity considerations)
- broad applications of remote sensing, in particular lidar, to inventory and monitoring of forest structure, biomass, dynamics and management
- tree pathogen microbiology and mitigation of disease impacts
- impacts of forest management, agroforestry and land use change on water resources
- landscape-scale modelling of deforestation and forest degradation impacts on biodiversity and ecosystem function
- economic and systems modelling of ecosystem service delivery
- social science of forest governance, management (including participatory forest management) and wildlife (including rewilding).
A key link that we are restrengthening, to enable full system assessment of the forest production value chain, is to the University’s Biocomposites Centre, which specialises in biorenewable products, with a strong tradition in wood science.

Key cross-cutting themes are:
- climate change mitigation through forest carbon sequestration and production
- elevated CO$_2$, climate change and disturbance impacts on forest ecosystems.

We have very strong national and international networks that play a key role in facilitating Bangor’s forestry research and education. Bangor University is a partner in the Natural Environment Research Council Doctoral Training Partnership ‘Envision’, with Lancaster and Nottingham Universities and three other research organisations, that is funding multiple PhDs in tropical and temperate forest sciences, many based in Bangor. Bangor University leads the Welsh National Research Network for Low Carbon, Energy and Environment. Of rapidly growing importance is our partnership with the Central South University of Forestry and Technology in Hunan, China (where Bangor University has its China campus), which is fostering a rapidly expanding set of collaborative research projects (including access to their large research forest). In addition, we have well-established collaborative partnerships with both the World Agroforestry Centre (ICRAF) and the Tropical Agricultural Research and Higher Education Center (CATIE), resulting in many joint PhDs, as well as project collaboration with the Center for International Forestry Research (CIFOR). We are members of the International Union of Forest Research Organisations (IUFRO), the UK’s forest industry confederation (CONFOR) and are currently applying for membership of the European Forest Institute (EFI).

**Forestry students and teaching at Bangor**

Bangor University is both the first and largest educator of students in the forestry subject area in the UK, spanning a big group of PhD students, full-time and part-time distance-learning MSc degrees, and BSc degrees. These are characterised by highly motivated cohorts of students, many with considerable existing experience, and highly innovative teaching, with many new opportunities. Bangor’s excellence in education in forestry is recognised by its overall ranking of 3rd in the UK for Agriculture and Forestry and 1st for teaching quality and student experience ([Times/Sunday Times Good University Guide 2021](https://www.thetimes肴times.co.uk/student/2021/rankings/directions/education/guides/)).

At the MSc level, our part-time distance-learning degrees in Forestry, Tropical forestry, and Agroforestry and food security have experienced an increase in recruitment of more than 100% over the past ten years up to a current level of 70 students per year. The Commonwealth Scholarship Commission has recently renewed its award of prestigious studentships for the highest quality applicants to the MSc in Tropical Forestry and recognises the international leading status of this innovative degree programme. Delivery of these innovative degrees is blended with our full-time MSc degrees, including the long-established course in Environmental Forestry. A notable feature is the composition of the student body on our MSc degrees, which is highly international (from more than 20 countries across 5 continents), including many professionals from government forest departments, NGOs and research organisations, creating excellent opportunities for collaboration.

At the BSc level our degrees in Forestry, and Conservation with forestry have a more UK focus, yet attract a student intake with a notably global perspective on the subject. Bangor alumni are becoming increasingly prominent in leading positions across the whole range of UK forestry/woodland organisations. Student recruitment averages 25 per year, though application numbers for entry in 2021 have more than doubled over the level in recent years.
We are also in the process of introducing a new BSc degree in Woodland Management and Conservation. At Bangor College China we teach a very successful and expanding BSc degree in Forestry and environmental management.

We have a very active student-led society (the Bangor Forestry Students Association) and an outstanding network of forestry alumni who work in key roles across a wide range of forestry organisations worldwide. Our biennial newsletters communicate developments in forestry@bangor to our alumni and other stakeholders.

**Bangor as a location for forestry research and education**

Bangor is a major institutional location for environmental sciences and natural resources management. One of the four units of the NERC UK Centre for Ecology and Hydrology is located on the university campus, forming the joint Environment Centre Wales with the School of Natural Sciences, which also hosts the Head Office of the Forest Research agency in Wales. The Welsh Government’s Natural Resources Wales agency (responsible for conservation, environmental regulation and management of the public forest estate) has one of its largest offices and scientific centres in the City. We have a growing portfolio of collaborative research with all these partners.

Bangor is adjacent to the Snowdonia National Park and within 30 km of Bangor there is a wide diversity of different forest ecosystems providing excellent opportunities for research and education, including the [Bangor DIVERSE](#) tree diversity experiment and large silvopasture experiment at the University's [Henfaes Research Centre](#); the adjacent internationally important Coedydd Aber woodland National Nature Reserve (an EU Special Area of Conservation); and the 18 ha of high canopy forest, including ancient woodland, at the University’s [Treborth Botanic Garden](#) on the outskirts of the City of Bangor.

**Further information**

If you want to discuss this opportunity you are welcome to contact John Healey, Professor of Forest Sciences ([j.healey@bangor.ac.uk](mailto:j.healey@bangor.ac.uk); [https://www.bangor.ac.uk/natural-sciences/staff/john-healey/en](https://www.bangor.ac.uk/natural-sciences/staff/john-healey/en)).